<table>
<thead>
<tr>
<th>Document Number</th>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.P.(48) 442</td>
<td>United States Coloured Troops in the United Kingdom: Memorandum by the Secretary of State for the Colonies.</td>
<td></td>
</tr>
<tr>
<td>443</td>
<td>Naval, Military and Air Situation: Weekly Resume.</td>
<td></td>
</tr>
<tr>
<td>444</td>
<td>Admission to the United Kingdom of children from Unoccupied France: Memorandum by the Home Secretary.</td>
<td></td>
</tr>
<tr>
<td>445</td>
<td>Treatment of War Criminals: Memorandum by the Secretary of State for Foreign Affairs.</td>
<td></td>
</tr>
<tr>
<td>446</td>
<td>India: Indian States: Request by Chamber of Princes for Statement of Policy by H.M. Government: Note by the Secretary.</td>
<td></td>
</tr>
<tr>
<td>447</td>
<td>India: Indian Sterling Balances: Memorandum by the Secretary of State for India.</td>
<td></td>
</tr>
<tr>
<td>448</td>
<td>Extra-Territoriality in China: Memorandum by the Secretary of State for Foreign Affairs.</td>
<td></td>
</tr>
<tr>
<td>449</td>
<td>Despatch of additional Chinese Troops to India: Report by the Chiefs of Staff.</td>
<td></td>
</tr>
<tr>
<td>450</td>
<td>French Morale: Memorandum by the Secretary of State for Foreign Affairs.</td>
<td></td>
</tr>
<tr>
<td>451</td>
<td>Relations with Canada: Memorandum by the Secretary of State for Dominion Affairs.</td>
<td></td>
</tr>
<tr>
<td>452</td>
<td>Naval, Military and Air Situation: Weekly Resume.</td>
<td></td>
</tr>
<tr>
<td>453</td>
<td>Exchange of Technical Information with the Soviet Government: Memorandum by the Secretary of State for Foreign Affairs.</td>
<td></td>
</tr>
<tr>
<td>454</td>
<td>Report on Home Opinion: Memorandum by the Minister of Information.</td>
<td></td>
</tr>
<tr>
<td>455</td>
<td>United States Coloured Troops in the United Kingdom: Memorandum by the Lord Chancellor.</td>
<td></td>
</tr>
<tr>
<td>456</td>
<td>United States Coloured Troops in the United Kingdom: Memorandum by the Home Secretary.</td>
<td></td>
</tr>
<tr>
<td>457</td>
<td>Prisoners of War: Note by the Secretary of the War Cabinet.</td>
<td></td>
</tr>
<tr>
<td>458</td>
<td>Prisoners of War: Note by the Secretary of Dominion Affairs.</td>
<td></td>
</tr>
<tr>
<td>459</td>
<td>United States Coloured Troops in the United Kingdom: Memorandum by the Minister of Information.</td>
<td></td>
</tr>
<tr>
<td>460</td>
<td>United States Coloured Troops in the United Kingdom: Note by the Secretary.</td>
<td></td>
</tr>
<tr>
<td>462</td>
<td>Constitutional Position of the Government of Burma: Memorandum by the Secretary of State for Burma.</td>
<td></td>
</tr>
</tbody>
</table>
W.P.(42) 463 - Proposed Scheme for Reception in Switzerland of Children from Occupied Europe: Memorandum by the Secretary of State for Foreign Affairs.

464 - Summary of Operations of Bomber Command for Fortnight ending 1200 hours, Sunday, September 27th: Memorandum by the Secretary of State for Air.

465 - Report on a Visit to North-west Canada and Alaska: Memorandum by the Secretary of State for Dominion Affairs.

466 - Mr. Myron Taylor's visit to Rome: Memorandum by the Secretary of State for Foreign Affairs.

467 - India: Connection of Enemy Agencies with the recent Disturbances: Memorandum by the Secretary of State for India.

468 - Supply of Books and Magazines for The Middle East: Memorandum by the Secretary of State for War.

469 - Morale in Italy: Memorandum by the Secretary of State for Foreign Affairs.

470 - The Russian Convoys: Note by the Secretary.
WAR CABINET.

INDIAN STERLING BALANCES.
(Reference: W.M. (42) 125th Conclusions.)

NOTE BY THE CHANCELLOR OF THE EXCHEQUER.

I circulate herewith the draft of a telegram to the Viceroy which has been agreed by the Lord Chancellor, the Secretary of State for India and myself.

Treasury Chambers, S.W. 1, September 21, 1942.

Draft Telegram from the Secretary of State for India to the Viceroy.

The War Cabinet have given further consideration to the question of the War Financial Settlement of 1940 and have reached the following general conclusions:

The War Cabinet fully recognise that a considerable proportion of the expenditure so far incurred by the Government of India and recoverable by India under the 1940 settlement contributes to the general war effort but otherwise bears no relation to the defence of India. They recognise also that the spread of the war to the Far East has meant that India is now incurring far more expenditure in her own local defence than was contemplated when the settlement of April 1940 was concluded. They also wish to acknowledge the extent of the resources in men and material which India is making available as part of the common war effort of the United Nations.

The War Cabinet nevertheless feel that they should put on record their view that the entry of Japan into the war, finally revealing the war as a world struggle against the forces of tyranny and reaction, has fundamentally changed the situation since the financial settlement of 1940 was negotiated. Great changes in the scope and character of the war have taken place since then, and even greater changes may take place. At that time the war was being waged between European Powers alone. To-day no country can afford to take a limited view of the nature of the struggle in its entirety, nor of the measures required for its own defence. This changed situation calls for a wider conception of India's partnership in the general war effort of the United Nations, and therefore of the contribution she needs to make in her own defence. While the financial settlement as it stands leads to the United Kingdom accumulating large indebtedness to India on expenditure, much of which has been incurred in India's defence (largely because British industry, instead of meeting the adverse balance by exports, is absorbed in the output of munitions to use in the common cause), President Roosevelt has recently enunciated the principle that none of the United Nations should end the war with a monetary war debt to any of its partners: His Majesty's Government are impressed alike with the general wisdom of this objective and with the necessity to bear it in mind in the relations between this country and India.
It will be recalled that, at the time when the financial settlement of April 1940 was under discussion, the Chancellor of the Exchequer stipulated that the possibility of India’s making some payment towards the general cost of the war should be considered from time to time as circumstances permitted.

His Majesty’s Government do not suggest that a new settlement should be negotiated at the present juncture, and they agree that arrangements should accordingly continue for accounts to be kept on the basis of the settlement reached in April 1940. A further review and an eventual adjustment of financial relations between the United Kingdom and India will assuredly be required, whether at the end of the war or upon some earlier appropriate occasion, in the light both of the general financial settlement between the Allied Nations and of the vital importance for all concerned of the speedy restoration of the maximum volume of world trade.
WAR CABINET.

INDIAN STERLING BALANCES.

NOTE BY THE PRIME MINISTER.

WITH reference to W.P. (42) 421, I circulate for consideration a revised draft of the proposed telegram to the Viceroy about the War Financial Settlement with India. New or amended passages are printed in italics.

W. S. C.

10 Downing Street, S.W. 1, September 22, 1942.

Draft Telegram from the Secretary of State for India to the Viceroy.

The War Cabinet have given further consideration to the question of the War Financial Settlement of 1940 and have reached the following general conclusions:

The War Cabinet fully recognise that a considerable proportion of the expenditure so far incurred by the Government of India and recoverable by India under the 1940 settlement contributes to the general war effort but otherwise bears no relation to the defence of India. They recognise also that the spread of the war to the Far East has meant that India is now incurring far more expenditure in her own local defence than was contemplated when the settlement of April 1940 was concluded. They wish to acknowledge the extent of the resources in men and material which India is making available as part of the common war effort of the United Nations.
The War Cabinet nevertheless feel that they should put on record their view that the entry of Japan into the war, finally revealing the war as a world struggle against the forces of tyranny and reaction, has fundamentally changed the situation since the financial settlement of 1940 was negotiated. Great changes in the scope and character of the war have taken place since then, and even greater changes may take place. At that time the war was not being actively waged in the Eastern hemisphere, nor was India exposed to imminent danger of invasion. To-day no country can afford to take a limited view of the nature of the struggle in its entirety, nor of the measures required for its own defence. This changed situation calls for a wider conception of India’s partnership in the general war effort of the United Nations and, therefore, of the contribution she needs to make in her own defence. The financial settlement as it stands leads to the United Kingdom accumulating large indebtedness to India on expenditure, much of which has been incurred in India’s defence and in the common task. British industry, instead of meeting the adverse balance by exports, is absorbed in the output of munitions, and three-quarters of British shipping is carrying troops and war supplies. President Roosevelt has recently enunciated the principle that none of the United Nations should end the war with a monetary war debt to any of its partners. His Majesty’s Government are impressed alike with the general wisdom of this objective and with the necessity to bear it in mind in the relations between this country and India.

It will be recalled that, at the time when the financial settlement of April 1940 was under discussion, the Chancellor of the Exchequer stipulated that the possibility of India’s making some payment towards the general cost of the war should be considered from time to time as circumstances permitted.

His Majesty’s Government do not suggest that a new settlement or new account keeping should be negotiated at the present juncture with the Government of India. We are, however, also keeping our own account, which may eventually serve as the basis of a counter-claim, in which such items as the naval, air and military defence of India by British forces will play their part. A further review and an eventual adjustment of financial relations between the United Kingdom and India will assuredly be required, whether at the end of the war or upon some earlier appropriate occasion, in the light and in the framework both of the general financial settlement between the Allied Nations and of the vital importance for all concerned of the speedy restoration of the maximum volume of world trade.
WAR CABINET

Compensation for War Damage in Malta.

Memorandum by the Secretary of State for the Colonies.

1. A question has arisen relating to the problem of compensation for War Damage in Malta. It involves somewhat wide issues, and I have therefore thought it right to bring it before the War Cabinet for their consideration.

A War Damage Bill is at present before the Malta Legislature. This Bill follows the lines of the United Kingdom War Damage Act 1941. As regards buildings, it provides for contributions from owners, and as regards personal belongings and business equipment, it provides for insurance schemes on the United Kingdom model. It throws formally, upon the Malta Government a liability for meeting any excess of the cost of compensation over the receipts from contributions and premiums. The bulk of this cost of compensation will of course fall to be paid after the war, when the Malta Government will be faced with heavy liabilities for reconstruction over the whole field of administration. If normal financial procedure were followed, all these liabilities, including the liability for war damage compensation, would remain, in form, a charge on the Malta taxpayer. But, in fact, the United Kingdom Exchequer would make up, by means of a grant in aid to the Malta Government, the difference between the total expenditure and the total revenue of the Colony.

2. The Governor is not happy about the effect of such proposals as those upon the people of Malta at the present time, and he has recommended, as an alternative, that war damage compensation in Malta should be dealt with as a separate issue, and that His Majesty's Government should give an immediate undertaking that the whole cost, less the contributions and premiums, will be borne by the Imperial Government.

3. I fully recognise that the Governor’s proposal raises wide issues. Malta is not the only Colony that has suffered from the war, and the financial implications of war damage throughout the Colonial Empire are so vast that I recently agreed with the Chancellor of the Exchequer, on a general proposition, that no promises of financial support by the Imperial Government towards the cost of compensation schemes should be given to Colonial Governments until the end of the war, when liabilities can be defined. This general rule does not indeed cover the case of Malta, which has already been recognised as being in a special category. But, if a public guarantee, such as the Governor suggests, is given to Malta, an Act of Parliament will be needed to implement it, and this is no doubt likely to bring to the fore, both in Parliament and in the Colonies themselves, the position of other areas which have also suffered. I am indeed already being subjected to pressure to provide, in advance, a guarantee in respect of war damage in Malaya. Finally, the absence of a guarantee to Malta will not in practice mean that the Imperial Government will not provide the funds to defray the costs of compensation beyond what Malta can pay.
pay. On the contrary, this will in any case be provided by grant in aid, and a public statement to this effect has already been made.

4. These arguments are no doubt formidable. But there are, I submit, at least equally strong considerations on the other side. If it could be argued that there was any likelihood of the Malta Government being able to make any substantial contribution to the cost of war damage, no doubt the case against the Governor's proposal would be overwhelming. But there is no such likelihood. Malta is not, like Malaya, an area with immense natural resources. It is a very small island with a very large population. As the Governor has pointed out, it is certain that all, and more than all, the revenue which can be raised after the war from local sources will be required for other purposes, social services, education and so on. The damage to property as a result of enemy attacks is enormous. It is estimated that it already amounts, in respect of buildings alone, to the sum of £6,500,000 as against a total value of contributory property of £22,000,000, and this proportion may easily be increased before the war is over. It may be taken as certain that nine-tenths of the cost of war damage will in any case have to be borne by the Imperial Government. We shall therefore, financially, lose nothing by giving the proposed guarantee. And, politically, we shall gain enormously by a generous gesture. Indeed, the Governor has indicated that a failure on our part to give the guarantee will be likely to have a deplorable effect on the morale of the Maltese. They will not understand it. It may even be difficult to pass the legislation without it, and, he says, a refusal on our part will at best lead to bitter controversy and debate. This is borne out by others whom I have consulted. I can imagine nothing more unfortunate in the present situation of Malta than that, after all the island has endured in the Allied cause, we should give an impression of meanness towards her.

5. Weighing therefore the arguments on both sides, I am clear in my own mind that this is a case where we should make an exception to the general rule. Malta, at the present time, stands in a class entirely by itself. The very special services which the island and the Maltese people have rendered to the Allied cause, their magnificent resistance and endurance under much suffering and hardship, the scale of the damage inflicted by the enemy, and the poverty of the island's natural resources surely justify the grant of a special concession which may well have to be withheld or reserved in other cases.

6. I therefore ask my colleagues to agree:

(i) that the Governor may be authorised to announce in Malta that it is the intention of His Majesty's Government to invite Parliament to pass legislation whereby the whole cost of war damage compensation in Malta which may fall to be borne by public funds will be paid by the Imperial Government;

(ii) that a similar announcement should be made simultaneously in Parliament in this country;

(iii) that the necessary legislation should be prepared for introduction into Parliament as soon as possible.

Colonial Office,
September 22nd, 1942.
SECRET.

W.P. (42) 424.

September 23, 1942.

TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document

WAR CABINET.

THE 1943 PRODUCTION PROGRAMME.

Memorandum by the Minister of Production.

TWO groups of problems are raised in the memorandum of the Joint War Production Staff on the 1943 Production Programme (J.W.P.S. (42) 50 (Final)), circulated under cover of W.P. (42) 416.

On the one hand, there are many steps which can and should be taken to increase the effectiveness with which the resources already devoted to the prosecution of the war are used. On the other hand, we have very shortly to decide in what proportions the last margin of additional resources is to be divided between fighting and fabrication. The fact that we are nearing the stage of complete utilisation of our man-power means that the distribution now made—whether it be done deliberately or in a haphazard way—will be irrevocable. If the best use is to be made of the resources of the United Nations as a whole, the decision should be taken in conjunction with a similar and complementary decision in the United States.

2. One of the major premises of both sets of problems is the Manpower Survey, which will shortly be presented by the Minister of Labour and National Service. There are, however, certain steps which may be taken on the recommendations in paragraph 8 of J.W.P.S. (42) 50, without waiting for this survey.

3. The Report recommends:

(i) The maximum comb-out of non-munition occupations, including National and Local Government and other Services, combined with the training of the older men for munitions.

This is a task which primarily concerns the Ministry of Labour and the Board of Trade. I contemplate that as a result of the Survey, the War Cabinet will give an indication of the numbers which must be found from this source. Meanwhile, I suggest that the Lord President's Committee should consider, in respect of each of the main occupations, how much further restriction of civilian supply and convenience is possible.

4.

(ii) The most drastic steps to get the best results from labour in the munition industries, including better utilisation of existing manufacturing facilities.

I propose that a Board of five persons representing the three Supply Departments and the Ministry of Labour, together with my representative, should be set up to initiate and co-operate with the appropriate authorities in carrying out the detailed suggestions in paragraphs 31 to 34 of J.W.P.S. (42) 50.

[24387]
5. (iii) The urgent reconsideration by each Service Department of its scales of equipment, establishment and reserves, in the knowledge that the alternative to economy will be a reduction in Service man-power.

Many aspects of this matter are already being examined as a result of recent direction from the Prime Minister. In order to deal with matters where parallel action by the services is required or there is a joint interest, it may be desirable that an authority should be set up similar to that mentioned in the previous paragraph, under a representative of the Minister of Defence. It would be an advantage if the members of this body, though doubtless drawn from the three Services, should not be regarded as representatives of their Services, but that they should be charged, severally and collectively, with the duty of proposing economies of man-power in all the Services.

6. (iv) The placing of as many orders as is practicable in overseas countries, especially Canada.

This policy is already being applied in part. It would be helpful if the War Cabinet could give its approval to the policy (set out in J.W.P.S. (42) 52) of keeping existing Canadian capacity fully employed and of placing additional orders there whenever possible, and particularly for stores to be shipped to overseas theatres. "It should be considered an achievement to transfer any item of production to Canada." If the War Cabinet will give its approval to this policy, I will take the opportunity of Mr. Howe's visit to explain it to him.

7. (v) An attempt to secure agreement with the United States on a combined production programme and on the long-range assignment of finished munitions.

The attempt to produce a combined production programme is running into difficulties. For the last four months we have been working on the assumption that the Combined Chiefs of Staff would provide an Order of Battle from which requirements on a strategical basis could be calculated. We should then have an assurance that, in planning production and in allocating finished munitions, British requirements would not be subordinated to demands of lower strategic importance and urgency. More than that we cannot ask.

This plan of action is now threatened with breakdown—or at least with postponement for several months—since the United States Chiefs of Staff have declared themselves unable to base their requirements on any strategic plan. We are thrown back to the position in which our requirements compete with those for an American army swollen beyond the size that could ever be moved out of the United States. It is still not too late to reverse this decision. The C.P.R.B. has drawn the President's attention to its consequences, and he may act. But in the meantime we have our own decisions to make, and they will have to be made without knowledge of what we shall receive from America in 1943.

In these circumstances, the best that we can do is to lay our plans, not on a self-sufficiency basis—for that is impossible—but on a basis which assumes the receipt from America only of the most vital necessities. If this is approved, I should propose to explain to the American authorities the quandary in which we are placed by the lack of precision in their plans, and attempt to secure some assurance, even if less than a firm commitment, that we shall receive at least what we need on this minimum basis.

This purpose could be served by a report, based on J.W.P.S. (42) 50, but re-drafted to emphasise the choice that is before us in allocating the final margin of our man-power between fighting and producing. The report would argue that we would rather take this decision as a result of a combined study, leading to a combined programme of provision of forces and munitions, but that as this is not likely to be carried through in reasonable time we cannot afford to wait, and must make the best decision possible on our own. We must ask that, if the time is not yet ripe for the United States to make a final ear-marking of all its resources, our decision should nevertheless be made with the knowledge and consent of the President and of the Chiefs of Staff, which would carry with it the undertaking that American production will be so planned that the needs of the British Services will be fully met.
8. The recommendations of the Joint War Production Staff conclude as follows:—

There should be a prompt study of the man-power survey with a view to making a comprehensive allocation of the man-power of the country, taking into account the decisions reached in the combined planning of production and making full allowance for all the economies obtained. This allocation should determine the ceiling of man-power for the munition industries, and should lead to a decision on the final scale of the Services.

I propose that this study of the man-power shortage should be carried out by the Lord President’s Committee on Man-power at the earliest possible date and a statement of the alternatives drawn up. From this it should be possible to take our decision on how best to dispose of our remaining resources and to see what effect this will have upon our war plans. The same Committee is being asked to consider the man-power aspects of the specific proposals in this paper.

(Initialled) O. L.

Ministry of Production,
Great George Street, S.W. 1.
September 23, 1942.
The memorandum by the Secretary of State for the Colonies (W.P. (42) 423) sets out fully the arguments for and against the giving of a guarantee that the whole cost of war damage payments in Malta, so far as it falls on public funds (i.e., so far as it is not met by contributions) will be borne by the Imperial Government. I confirm that the giving of such a guarantee would require the authority of legislation in the Imperial Parliament.

I fully recognise the difficulties which the Secretary of State and the Governor feel on this subject and the unexampled services which the island has rendered and is rendering to the cause of the United Nations. I entirely agree that large sums generously given will be necessary for the rebuilding of Malta and for the development of its services generally.

I feel, however, considerable misgivings about expressing our intentions in a form which requires statutory authority in Parliament. There has been and still is strong pressure from those with property in Malaya and other territories which have been overrun by the enemy in the Far East that we should undertake a definite liability for the restoration of their property. The sums at stake in these areas are far greater than those involved at Malta and are indeed such that any guarantee in their case would create alarming financial problems for us at the end of the war when we shall in any event have a difficult financial situation to face. We have felt bound to resist claims in these cases and to take the line that no promises of financial support to war damage schemes can be given to Colonial Governments until the end of the war when liabilities can be defined.

I fear that discussion in Parliament of a guarantee to Malta would be bound to bring this pressure to a head and that neither the services of Malta nor the greater potential wealth of the other areas would be regarded as adequate ground for differential treatment for the financial consequences of war damage.

I should add a word on the true nature of the action which is proposed. The Bill we are asked to guarantee is not technically a bill for rebuilding Malta. It is a bill for paying compensation to owners of property and the fact that they will get this compensation is no guarantee that a better Malta will arise. I am in full sympathy with the idea that we should be generous in helping to rebuild a finer Malta but that is not the proposal in the present Bill. We have not even been told whether the landlords of Maltese properties who would receive most of the compensation are themselves resident in Malta or not.

I would press that while we should give a general undertaking of specially generous assistance, we should not go to a point which would involve us in legislation here.

Treasury, S.W.1,
32nd September, 1942.
WAR CABINET.

SUPPORT FOR GENERAL DE GAULLE IN FRANCE AND VICHY COLONIES.

NOTE BY THE SECRETARY.

THE annexed Memorandum, by the Chairman of the Committee on French Resistance, is circulated by direction of the Prime Minister.

(Signed) E. E. BRIDGES.

Great George Street, S.W. 1.
September 23, 1942.


By direction of the Prime Minister I have studied evidence put at my disposal on the degree of support for General de Gaulle in France and Vichy Colonies. In reaching the following conclusions, I have regarded the question of French support for the Americans or for ourselves as lying outside the terms of my enquiry, and have tried to set aside any knowledge of present British policy.

2. Meaning of "support for" de Gaulle.

"Support for" de Gaulle means different things to different Frenchmen at different times. The extent of their support for him varies with their thought of him as a symbol of resistance, as a military chief or as a political leader. Unless helped to clear their own minds, Frenchmen often confuse the issue by giving a false impression of their attitude when they really support de Gaulle in one capacity, but condemn him in another. A further source of confusion is the term "Gaullisme," purposely applied by Vichy and the Germans to any sort of resistance to collaboration. "Gaullisme" is not necessarily "de Gaullisme."

A majority of the French people support de Gaulle as a symbol of their own desire to see French soil cleared of the enemy, though there is a new tendency to substitute the Croix de Lorraine for the person of de Gaulle. Some who declare their disapproval of de Gaulle now wear this symbol. A recovery in morale is giving rise to a feeling that Frenchmen who have suffered alongside the majority of their countrymen must regain their liberty by their own efforts.

Were Frenchmen sure that de Gaulle, or for that matter any other potential leader, had no ulterior personal motive, but was devoted solely to the task of driving the enemy out of France, they would rally behind him almost to a man. As it is, few Frenchmen believe this of de Gaulle, or of any other candidate for leadership.

On the other hand, no Frenchman, unless committed to work for an Axis victory, would approve should the British seem to abandon de Gaulle or his Movement. On the contrary, there is the strongest evidence that such an act would alienate French sympathy for Great Britain even more sharply than would our sinking the French warships at Alexandria, drowning their crews.

[24382]
3. Support for de Gaulle as a symbol.

Support for de Gaulle as a symbol of resistance varies in different districts. The nearer the German the greater de Gaulle's popularity is a general rule. This does not imply that where de Gaulle is popular his supporters are better organised or are ready to give him active help. To cry for de Gaulle is one thing; to die for him, another. Over 30 million Frenchman and women might shout, "Vive de Gaulle." It would be very surprising if anything like 30 thousand would take a serious risk to do that.

De Gaulle is most popular in Occupied France. However, even in Brittany, where resistance is solid and courage high, he has failed to create either a para-military or a political organisation. Aware of this, though unwilling to admit it, de Gaulle has recently concentrated upon improving his contacts in Vichy France, where his symbolic value is far less than in Occupied Territory. In Vichy France, German and Vichy propaganda, together with the rise in morale already mentioned, have reduced passive enthusiasm for de Gaulle. On the other hand, these same factors have developed a readiness in certain circles to consider collaboration with him.

The degree of approval for de Gaulle is not the same in Morocco, Algeria and Tunis. Broadly speaking, civilians in Algeria, whether French or native, are anti-de Gaulle, fearing lest he force them back into a war they wish to forget. The same is true of French West Africa. There is some sympathy for de Gaulle in Morocco. It is doubtful, however, if civilian opinion counts for much. In North Africa the Army holds the power and despises the French colonial. The Army does not approve of de Gaulle as a symbol of resistance.

4. Support for de Gaulle as a Military Commander.

There is good first-hand evidence that the Armée de l'Armistice, the Air Force and the Navy give no support to de Gaulle as a military or political leader. They look on themselves as the Armed Forces of France. Their Generals and Admirals jealously guard that position. If there be question of a temporary military dictatorship, it is the senior officers now in France who intend to form it.

Junior officers and men will follow the orders of their own chiefs in action for or against de Gaulle or his Forces, despite some real admiration for de Gaulle's courage and initiative.

Officers and men now on the Reserve are more favourable to de Gaulle than are those serving. Were they to be reincorporated into the Vichy Forces on mobilisation, they might affect the attitude of the whole. The reverse is more likely, save in the circumstance, regarded as impossible by most officers, that the Forces should be mobilised to resist an Allied landing in Occupied France. Were this to happen great confusion would result.

The attitude of the Navy is the same everywhere, but that of the Army and Air Force in Africa may differ a little from that of the Forces in Vichy France. Evidence suggests that there is some real support for de Gaulle in the Army in Morocco, though it is doubtful if it would materialise in action. The Army in Algeria, reinforced by Vichy troops from Syria, is openly hostile to de Gaulle and to the Fighting French.

At the same time, recent information indicates that the Generals now at the head of the French Army recognise power in the name of de Gaulle. They are reported to contemplate offering him a post as their chief military representative with the Allies in the event of a successful Allied landing in Occupied France. What other inducement they have to offer or what de Gaulle will be asked in return is as yet unknown.

5. Support for de Gaulle as a Political Leader.

There are no effective political organisations in Occupied France. There is no organised following for de Gaulle in North Africa. In West Africa, Governor Boisson and his staff are hostile to de Gaulle.

In Vichy France political organisations are far too many, while their effective membership is not what their leaders claim. Were men free to make public speeches or to print their views, some of these potential political leaders would gain a following. Meanwhile, having collected a few friends, they pose as already representing the views of many. The more important anti-Vichy Associations calculate their political supporters by the circulation of their illegal newspapers. This is misleading if support is to be interpreted as readiness to act. Trades Union officials have no full record of their members, and cannot
canvas the views of those they know. Yet they do not hesitate to number their followers by highly questionable statistics and to pledge this stage army to action. Nevertheless, these various leaders of political bodies, especially the better disciplined, as are the Communists, can probably depend on a certain following which future events might swell. The present value to de Gaulle of their support may be little, but it should not be dismissed as inconsiderable. Future events may enhance its value.

Some of these potential political figures now conclude that effective resistance to collaboration is impossible without a suitable figurehead. In their opinion, no one inside or outside France possesses the necessary popular appeal, except perhaps de Gaulle. They know little of his real political views. There is, therefore, a growing tendency to negotiate with him. If they can bind him to terms, they may agree to give him their active support. The evidence available on this new tendency suggests that de Gaulle has so far enjoyed a partial, but only a partial, success. Various emissaries have visited him, but it is uncertain what advice they have subsequently given to those who sent them. There is reason to believe that not all have been satisfied, especially those of the extreme Left. de Gaulle may have other irons in the fire. He is certainly trying to use these men, as they are hoping to use him. Again, he may merely be playing his political cards ineptly. The movement is of too recent growth to assess its real effect.

6. Final Conclusions.

The following final conclusions are submitted:

(i) Although Axis and Vichy propaganda, together with a rise in home morale, has tended to reduce his popular appeal in Vichy France, General de Gaulle still retains the support of a considerable majority of the French people as a symbol of their desire to see the Axis driven out of French territory. This is important in helping to maintain French morale, but so long as it stops short of readiness to give active help to the Fighting French, its practical value to General de Gaulle or to the Allies is limited.

(ii) General de Gaulle has so far failed to obtain substantial support in Occupied or Unoccupied France as a Military Commander, Paramilitary Chief or Political Leader; but it is not yet impossible for him to gain political support from certain groups, principally of the Left. His claim already to have a considerable political following in Vichy France cannot be accepted: it is, however, true that he has begun to negotiate with some potential political leaders. It is also reported that the French General Staff, with whom General de Gaulle has been trying to get into touch, without our knowledge, may not now refuse to hear what he has to say.

(iii) General de Gaulle's future in French public life will depend largely on relations between himself and the Generals at the head of the French Army, who will probably control the military and the immediate political situation when the time for action comes. These Generals, whoever they may be, will probably be ready to accept General de Gaulle's co-operation if they think it of value to their own plans. At present the most they are likely to offer him is a post as their representative with the Allied Armies. They will not offer him a High Command of French Forces. Their acceptance of him at a later date as a political leader in France will depend largely on the political support he can obtain outside the Army, and to no small extent on the support given him meanwhile by the British and American Governments. The belief persists that he is an instrument of British policy.

(iv) Meanwhile there is no doubt that, although General de Gaulle at present carries little weight in France, save as a symbol of resistance, any action by His Majesty's Government interpreted by the French people as an unjustified betrayal of General de Gaulle, would seriously alienate French sympathy for this country.

I would emphasise that although these conclusions may be correct to-day, the shifting sands of French public opinion may invalidate them a few weeks hence. The situation should be kept under close review.

(Signed) D. MORTON
Strong representations have been made to me that in view of the danger and suffering to which Jewish refugees in unoccupied France are exposed as a result of the decision of the Vichy Government to deport numbers of them to Poland, consideration ought to be given to the possibility of admitting to this country some at any rate of the children and the older people.

Sir Herbert Emerson, who is the Chairman of the Advisory Council on Aliens, came to see me in his capacity as the League of Nations High Commissioner for Refugees and asked that the question of admitting say, 1,000 children should be considered. His information is that the Vichy Government will not, as a general rule, grant exit permits to persons over the age of 15 or under the age of 60 but that they might be willing to grant such permits for the children and older people.

The Chairman of the Jewish Committee for Refugees (Mr. Otto Schiff) has also told me that harrowing stories of the ill-treatment of the Jews in unoccupied France have aroused the strongest feelings amongst the Jewish community and amongst other people in this country, and has urged that public opinion here would be in favour of the admission of children and elderly people who have near relatives in this country. He recognises that it is not possible for us to admit large numbers of these unfortunate people and that if any were admitted it would be necessary to draw a strict line of demarcation for the purposes of limiting the number. He has suggested as a possible line of demarcation that admission should be granted to children and to persons over 60 who have close relatives in the United Kingdom, and that the limitation to those who have "close relatives" should be defined as meaning children who have a parent, brother, sister or grandparent in this country and persons over 60 who have a child, grandchild, brother or sister in this country. Exact figures as to the number of cases which would be included in these categories cannot be obtained, but the Jewish Refugee Committee calculate that the total number of such children and such persons over 60 would not exceed 300 or 350.

If this scheme were accepted, the Jewish Refugee Committee would make itself responsible for ascertaining the facts about each application, and the Home Office on being satisfied that the application falls within the category would authorise our representative in Lisbon to grant a visa. The Portuguese authorities would, it is believed, then grant a transit visa and arrangements would be made for the children and elderly persons in respect of whom such transit visas were granted to travel from unoccupied France through Spain to Lisbon.

The Jewish Refugee Committee have guaranteed that there
would be no question of any such children or persons over 60
becoming a charge on public funds. Most of them would be
maintained by the relatives who apply for their admission, and
as regards any exceptional cases the Jewish Refugee Committee
would raise any necessary funds from voluntary sources.

There are many foreign persons, both Jews and others, in
Portugal, in other parts of Europe, and in North Africa, who are
anxious to come to this country, and the general policy has
been not to admit during the war additional refugees to the
United Kingdom unless in some quite rare and exceptional cases
it can be shown that the admission of the refugee will be
directly advantageous to our war effort. Any departure from
this rigid policy is liable to lead to fresh claims and
additional pressure for the admission to the United Kingdom of
persons who are in danger or distress, and I am convinced
that it would not be right to make any general departure from
the principle that the United Kingdom is unable, during the
period of the war at any rate, to accept additional refugees.

Apart from other considerations there is the risk that
any relaxation of United Kingdom policy will facilitate the
deporation policy of the Vichy Government. The Vichy
Government might find it easier to deport Jewish parents if it
were recognised that the United Kingdom would allow children
who are stranded as a result of this policy to be dumped here.

Moreover, we already have a very large body of refugees
here and not all sections of public opinion are enthusiastic
about their presence; pressure on accommodation, especially
as more and more United States troops arrive, steadily increases;
and if we get beyond a point in the admission of foreign
refugees we may stir up an unpleasant degree of anti-Semitism
(of which there is a fair amount just below the surface) and
that would be bad for the country and the Jewish community.
Discretion is therefore necessary.

On the other hand, representations made by refugees in this
country who have children and close relatives in unoccupied
France will make a very strong appeal to the humanitarian
feelings of large numbers of our people, including no doubt
many M.P.'s, and in some individual cases at any rate it may be
extremely difficult for the Government to maintain what would
appear to be a hard-hearted rigidity.

On the whole, therefore, I am inclined to think that the
balance of advantage would lie in acceding to the request of
the Jewish Refugee Committee that sympathetic consideration
should be given to the special cases, which will certainly be
comparatively few in number, of children and persons over 60
who have close relatives here. No doubt there will be pressure
to enlarge the limited category suggested, and it is possible
that representations may be made by some of the Allied
Governments that if this concession is made to Jewish refugees
in unoccupied France similar concessions ought to be made to
some of their nationals who are in danger or distress.
Nevertheless I think a distinction can be drawn between the
position of these children and elderly persons in unoccupied
France who are exposed to special suffering and danger as a
result of the recent Vichy policy and the position of other
refugees, and that the limited concession proposed could be
justified on the ground that while it is not practicable to
admit all the refugees who have relatives here the Government
are reluctant on this account to refuse admission to any, and that if any are admitted priority can properly be given to those who have near relatives in this country. Those relatives are, generally speaking, persons who are helping us in the war effort and to reunite them with their families is desirable not only on humanitarian grounds but on the ground that such a procedure would help to improve their morale.

If this policy is approved, I would propose to refuse all further concessions. For instance a special appeal has been made to me to admit 28 children who are in a Jewish Home in unoccupied France and have guarantees for admission to Palestine as soon as transport is available. I have been asked to allow them to come to this country until such time as they can be sent to Palestine. If, however, I were to agree to this course representations will no doubt be made that there are many other persons in unoccupied France who either already have certificates for admission to Palestine (or elsewhere) or can count on such certificates at an early date, and it would become impracticable to draw a line of demarcation. I shall also, no doubt, have appeals as regards various adults in unoccupied France who are under the age of 60 and have relatives in this country, but it will be necessary to resist all such appeals.

H.M.

HOME OFFICE.

23rd September, 1942.
SECRET.
W.P.(42)428.
23RD SEPTEMBER, 1942.

WAR CABINET

INDIAN STATES: REQUEST BY CHAMBER OF PRINCES FOR STATEMENT OF POLICY BY HIS MAJESTY'S GOVERNMENT.

Memorandum by the Minister of Economic Warfare

Great Britain's reputation as a loyal observer of treaties is our trump card in international affairs and its importance transcends even that of the Indian problem.

Not only the Princes, but also many other people in India and elsewhere are in genuine doubt whether we intend to implement our treaty obligations to the Rulers of the Indian States. The Lord Privy Seal's statement in the House of Commons complained of, would appear to be open to the misinterpretation which has been placed on it in some quarters, that we intend to bring pressure to expedite the constitutional development of the States.

In these circumstances it seems desirable that the Viceroy's reply to the Chancellor of the Chamber of Princes should contain no qualification of our treaty obligations and that it should be made public. The nettle has to be grasped sometime. It is better that there should be no misunderstanding of the fact that Britain intends to honour all her obligations to the Indian States, and that therefore, their participation in any Indian Union will have to be a genuinely voluntary one and not as a result of our coercion - direct or indirect.

S.

Ministry of Economic Warfare, W.l.
SECRET.

W.P. (42) 429
(Also C.O.S. (42) 410)

September 24, 1942

TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document

WAR CABINET

WEEKLY RÉSUMÉ

(No. 160)

of the

NAVAL, MILITARY AND AIR SITUATION

from 0700 September 17th, to

0700 September 24th,

1942

[Circulated with the approval of the Chiefs of Staff.]

Cabinet War Room.
NAVAL SITUATION.

General Review.

1. Twenty-seven ships of the convoy to Russia have arrived at Archangel. A convoy from Russia has reached Home Waters with the loss of four ships and two of the escorting vessels sunk by U-boats.

A number of attacks on enemy shipping have been reported by our submarines in the Mediterranean. Two U-boats have been sunk. Shipping losses, chiefly due to U-boat attacks, have been lighter than of late.

Home Waters and North Atlantic.

2. In an attack on Dartmouth by enemy aircraft on the 18th, H.M. Minesweeper Selkirk was slightly damaged and a collier and two lighters were sunk. H.M. Armed Boarding Vessel Alouette was torpedoed and sunk early on the 19th south-west of Lisbon. Twenty-seven of the crew were rescued. During the week some 18,000 tons of enemy merchant shipping was sunk or seriously damaged by our aircraft.

Northern Waters.

3. Twenty-seven ships of the convoy to Russia arrived at Archangel on the 21st. In view of the importance of this operation the following detailed account of the passage of this convoy has been extracted from a signal from the Senior Naval Officer in charge of the escort:

4. A promising attack was carried out on a U-boat on the 9th, after which the convoy was continuously shadowed by enemy aircraft and U-boats. On the 12th several attacks were made on U-boats, including a very promising one by H.M. Destroyer Faulknor.

5. On the 13th two ships were torpedoed by U-boats. Minelaying by enemy aircraft was carried out ahead of the convoy without any effect. On the same day the first air attack took place in the form of high-level bombing by about six Ju. 88's, which came through gaps in the clouds. There were no casualties on either side. The second attack was made by between 40 and 50 torpedo bombers. Despite intense fire by all ships the attack was most courageously pressed home by the destroyers' gunfire, resulting in torpedoes being dropped at long range well outside the screen. Two bombers were seen to crash. One Hurricane which attacked a shadowing He.115 was shot down in flames. There was further minelaying by a large number of enemy aircraft ahead of the convoy, again without result.

The fourth attack was at dusk by twelve torpedo bombers and was again frustrated by gunfire of the destroyer screen and H.M.S. Avenger's fighters. Six enemy aircraft were seen to crash.

6. On the 14th the R.F.A. tanker Atheltemplar was torpedoed by a U-boat and subsequently sunk by our forces. Swordfish sighted a U-boat six miles distant. After H.M. Destroyer Onslow had carried out an attack, oil, air bubbles and wreckage were reported. The fifth attack was in the early afternoon by 22 torpedo bombers and was pressed home, but no ships were hit. H.M. ships Avenger and Scylla were the chief targets. The sixth attack, by twelve Ju. 88's, closely followed. This consisted of high-level bombing lasting about one and a half hours and, although several ships of the escort had near misses, no damage was done. The seventh attack was by twelve Ju. 88's through clouds. The eighth attack by Ju. 88's through clouds there were few opportunities for defensive fire and heavy bombs were dropped close to H.M. ships Scylla, Avenger and escorts, which appeared to be the chief target.
From detailed analysis 24 enemy aircraft were seen to crash during attacks on the 14th. H.M.S. *Avenger* sighted 17 torpedoes, and her pilots claim five enemy aircraft certainly destroyed, three probable and 14 damaged.

7. On the 16th 443 survivors of ships sunk were transferred to ships of the convoy force, but 24 Russian survivors and 11 British cases were left in the rescue ship. In the ninth attack high and low level bombing were experienced for three hours, 50-70 aircraft taking part and attacking mainly from above low clouds. The enemy was harassed by our Hurricanes above the clouds and by intense gunfire by escorts whenever they appeared below. Many bombs were dropped, including some very heavy ones. One bomber was seen to crash.

There were many U-boat hunts during the day, which included a promising attack by H.M. Destroyer *Impulsive*.

8. An attack by high level and torpedo bombers was made on the 18th when off Cape Kanin. One ship was sunk, but at least four enemy aircraft were destroyed. The convoy was again attacked by 24 Ju. 88s on the 20th when weatherbound on the Dvina bar. This attack was driven off and two enemy aircraft were destroyed.

9. Preliminary figures show that the enemy lost 38 aircraft in the attacks, during the passage of the convoy, and many others were probably damaged. Promising attacks were made on four U-boats. The R.F.A. *Atheltemplar* (8,992 tons) and 12 other ships totalling 65,410 tons were lost. Of the latter six were United States, three British, two Russian and one Panamanian.

10. Fourteen ships of a homeward bound convoy which left Archangel on the 18th have reached Home Waters.

11. On the 18th shadowing aircraft appeared for a short time and several icebergs were sighted.

12. On the 19th two ships of the convoy were unsuccessfully attacked by U-boats. During the night numerous attacks were made on U-boats, and early on the 20th H.M. Minesweeper *Leda* in the rear of the convoy was torpedoed and sunk. A Swordfish and H.M. Destroyer *Aslanti* both report very promising attacks on U-boats which continued to shadow the convoy throughout the remainder of its passage. One ship was hit by two torpedoes, and H.M. Destroyer *Somali* was hit in the engine room and subsequently sank after being towed for three days.

13. On the 21st H.M. Ships *Bramble* and *Worcester* carried out a promising attack on a U-boat. A Catalina was shot down while attacking a U-boat.

14. On the 22nd the R.F.A. *Gray Ranger* (3,813 tons) and two merchant ships were torpedoed and sunk. The rescue ship picked up 280 survivors.

**Mediterranean.**

15. H.M. Submarines have reported the following attacks: *Traveller* sank a heavily laden ship off Derna on the 6th and claimed to have torpedoed another vessel of 8,000 tons. *P. 44* sank two small ships in Ziliten Roads (east of Tripoli (L)) on the 17th. Two schooners were sunk and others damaged by *P. 212* alongside the wharves at Buggerru (West coast of Sardinia). *Thrasher* torpedoed a 5,000-ton southbound ship off Tohruk, and *P. 46* torpedoed one ship of 8,000 tons and one of 5,000 tons in the Gulf of Hammamet on the 22nd. All three ships are believed to have sunk.

16. H.M. Submarine *Talisman* on passage to Malta is overdue and must be presumed lost.

17. During the week 19,292 tons of French merchant shipping westbound and 20,514 tons eastbound passed Gibraltar under escort.

**East Indies.**

18. The Vichy French s.s. *Marechal Gallieni* (1,559 tons) was intercepted by H.M. Destroyer *Nizam* east of Lourenzo Marques, after being sighted by South African aircraft, and is being escorted to Durban.
19. U.S.A. submarines have sunk three merchant ships and two large transports and have also damaged a tanker, all in areas other than the Solomon Islands.

20. A Japanese force which included two battleships, an aircraft carrier, three heavy and three light cruisers were sighted east of the Solomons on the 14th and was attacked by U.S.A. aircraft. It is possible that the battleships were hit. In an attack on cruisers and destroyers on the following day U.S.A. aircraft claim to have torpedoed one cruiser and damaged another by bombs. A cruiser was reported to have been damaged by dive-bombing north-west of Guadalcanal on the 20th.


**Anti-Submarine Operations.**


In addition, at least four promising attacks have been carried out: by U.S.A. surface craft escorting a convoy in the Caribbean, by aircraft south of the Faroes and in the West Atlantic, and by destroyers and aircraft off Tobago.

**Enemy Intelligence.**

**German.**

23. The positions of German main units are substantially unchanged since last week. It is believed that the *Scharnhorst* is now working up and that the *Prinz Eugen*, with her new stern fitted, is now ready for trials.

**Italian.**

24. The 8" cruiser *Bolzano* has arrived at Naples with damage to the starboard side, extending from the upper deck to the waterline, and with one funnel displaced.

The two *Cavour* class battleships have been exercising during the week and have now returned to Taranto.

There has been an increase during the week of almost 100 per cent, in the traffic to North Africa, and an increased use of Tripoli (L) has been noted.

**U-boats.**

25. Ninety U-boats are estimated to be operating in the Atlantic. Activity was greatest to the south-east of Greenland, in the area to the eastward of Trinidad, in the St. Lawrence River and between Freetown and Ascension Island. A Japanese U-boat has been operating in the Indian Ocean.

**Protection of Seaborne Trade.**

26. During the week ending 20th–21st, 1,093 ships have been convoyed. Of these 249 were in ocean convoys and 844 in British coastal convoys. One cruiser, one auxiliary aircraft carrier, one armed merchant cruiser, four anti-aircraft ships, 93 destroyers (including three United States destroyers), 106 sloops, cutters and corvettes (including three United States cutters) and two submarines were employed on escort duties, which included the two Russian convoys.

During the week, 139 ships in five ocean convoys arrived in Home Waters with the loss of three ships.

27. Imports into the United Kingdom by ships in convoy during the week ending the 19th totalled 910,000 tons compared with 529,000 tons during the previous seven days and an average of 667,000 tons for the past ten weeks. Of the week's imports 239,000 tons were mineral oil of various grades.

**Enemy Attack on Seaborne Trade.**

28. Apart from those ships attacked in the convoys to and from Russia, 11 ships are reported to have been attacked by U-boat and of these six, including one tanker, are known to have sunk.
Four ships, including two stragglers, from a homeward bound convoy from Canada, were torpedoed S.E. of Greenland. Three ships were attacked off the coast of British Guiana, one off Martinique, two in North-West Approaches and one in the Indian Ocean.

One ship was sunk by aircraft in Dartmouth harbour.

**British Minelaying.**

29. Mines were laid by ships off the Norwegian and French coasts. Aircraft laid mines in the Baltic, along the German North Sea coast, and in the Channel and Bay of Biscay.

**Enemy Minelaying and British Minesweeping.**

30. Minelaying by E-boats was suspected in the Channel late on the 19th, and a few aircraft may have laid mines off the East Coast on the same night. Aircraft were suspected of minelaying in the White Sea on the 16th, and Archangel was closed temporarily on the 22nd.

Seventeen mines were destroyed during the week. The totals to date are: acoustic 1,317; magnetic 2,634; moored 1,673.

**Enemy Merchant Shipping.**

31. Activity has lately been shown by some of the ships which have been running the blockade to and from Biscay. The ex-Dutch s.s. Kota Nopan (7,322 tons), which was seen at St. Nazaire on the 8th, and the German s.s. Ermland (6,528 tons), which was last seen at Bordeaux, are both reported to have sailed before the 16th. It is thought that the Kota Nopan may be a supply ship. The German s.s. Rio Grande (6,062 tons), the Italian s.s. Pietro Orseolo (6,344 tons), and the Norwegian s.s. Silvaplana (4,793 tons) were all seen at Bordeaux on the 16th, when the first two were fully loaded and ready for sea. On the same day the German s.s. Burgenland (7,320 tons), which had arrived at Bordeaux at the end of July, was seen to be anchored off Le Verdon and a tanker was in La Pallice Roads.

The Italian tankers Albaro (2,104 tons) and Celeno (3,741 tons) have sailed from Istanbul and entered the Ägean on the 15th.

**Vichy French Shipping.**

32. Reports have been received of German demands for the requisitioning of French shipping, or Allied shipping under Vichy French control.

**Russian Intelligence.**

33. Two Russian submarines have been operating in the Gulf of Bothnia, and by the 12th September had claimed to have sunk two Finnish ships and possibly a third.

On the night of 18th/19th a fleet minesweeper bombarded enemy positions in the Novorossisk area. The units of the Black Sea Fleet have also been engaged in transporting troops to that area.

**MILITARY SITUATION.**

**The Russo-German Campaign.**

**Northern and Central Sectors.**

34. The Russians continue to attack locally south of Lake Ladoga and, in greater strength, in the Rzhev area. They have also gone over to the offensive east of Orel, though it is not known on what scale. In no case, however, has there been any great territorial change.

**Don Sector.**

35. In renewed attacks against the German positions at Voronezh the Russians initially met with some success, though whether they have been able
to hold the ground won is not clear. Strong Russian pressure, however, continues. They are also attacking some 50 miles south of Voronezh, where they are established in unknown strength on the western bank of the Don. The Germans have regained some little ground east of Yelansk, where the Russians had formed a bridgehead south of the Don, but Russian attempts to extend their footing continue.

Stalingrad Sector.

36. The one clear fact in a confused situation at Stalingrad is that the Russians continue to resist tenaciously. The Germans have penetrated to the centre of the city, where there is heavy street fighting, but the Russians retain their hold on the northern suburbs. Outside Stalingrad the Russians are launching sustained counter-attacks against the German flanks both from the north and, in a lesser degree, from the south. Russian reinforcements continue to arrive in the town, presumably by means of pontoon bridges across the Volga.

Caucasus Sector.

37. Eastwards of Mozdok, on the northern bank of the River Terek, the Germans have regained ground lost a week earlier. South of Mozdok the Germans have enlarged their bridgehead somewhat, but their progress continues to be slow. In the passes of the Western Caucasus range the Germans are at standstill, and in some cases the initiative has passed to the Russians, who have been counter-attacking with success. They still hold the heights round Novorossisk, and thus prevent access to the coastal road, although a German advance southwards from the railway Krasnodar-Krimskaya might endanger their position.

Summary.

38. The prolonged Russian resistance at Stalingrad, which shows no sign of abating, has now made any major German offensive against the main Russian armies in the Central sector extremely unlikely, but there are numerous indications that the Germans are preparing a full-scale attack on Leningrad. If Stalingrad falls, the Germans will doubtless attempt to establish their line along the lower Volga to Astrakhan and continue their efforts to obtain control of Caucasus and the Black Sea ports. After the middle of October, operations through the Caucasus passes should be impracticable. The Germans are, therefore, likely to be faced with another winter in Russia with a much extended line and the bulk of the Russian Army still in a position to harass them and to keep considerable enemy forces engaged.

Egypt and Libya.

39. Patrol activity has continued on both sides during the week. Enemy working parties have been encountered and dispersed. Enemy armoured cars carried out reconnaissance on the southern flank during the 16th. Our desert forces have carried out successful operations over 500 miles behind the enemy’s front. On the night of the 13th/14th Benghaz of Barce were raided, over 30 aircraft were damaged or destroyed on the ground, and several others have been shot down while attacking our troops. Heavy casualties were inflicted on enemy personnel and M.T. On the night of the 15th/16th Jalo-Oasis was occupied, and during this operation, which lasted several days, considerable casualties were caused to the enemy garrison. Our artillery destroyed dumps of ammunition and supplies. Our forces have now arrived back at their bases.

Madagascar.

40. On the 16th a request was received from the Governor-General regarding the possibility of discussing an armistice. This was agreed to, and Vichy French delegates arrived by air on the 17th at Majunga. They received our terms and refused them, returning to the capital the following day. Meanwhile, our advance on Tananarive had continued steadily, though slowly, owing to the large number of obstructions encountered on the road. A successful engagement was fought 5 miles south of Andriva on the 16th. By the afternoon of the 18th our leading elements had reached a point 90 miles north of Tananarive. Mopping-up operations in the north-west of the Island in the area east of Majunga continued. One of our patrols reached Port Berge during the 15th.
On the same day combined operations against Tamatave were carried out. After the local Governor had refused our ultimatum to surrender and fired on our envoys whom we sent ashore, British troops were landed following a brief bombardment from the escorting naval vessels. By midday the town was under our control and most of the French garrison had withdrawn by rail to Tananarive. Our forces followed up on the 19th, captured Brickaville and continued the advance on the capital.

On the 20th our advance from the north on Tananarive continued and Ankazobe was occupied. The village of Mahitsy, some 20 miles north of Tananarive, was captured on the 22nd after a sharp engagement, and our forces entered the capital at midday on the 23rd.

Operations are proceeding against the French forces retiring to the south of Tananarive.

Far East.

New Guinea.

41. Australian forces have carried out further limited withdrawals, and on the 15th were in contact with the Japanese some 25 miles north-east of Port Moresby. Activity is confined to patrolling, in which some casualties have been inflicted on the Japanese. It is estimated that Japanese forces south of the Owen Stanley Mountains consist of two regiments.

Solomon Islands.

42. During the 13th/14th a Japanese counter-attack on the U.S.A. positions on Guadalcanal Island was repulsed, and since that date land activity has been confined to patrolling and skirmishes. The U.S.A. forces in the South-East Solomons have received supplies and reinforcements.

According to U.S.A. estimates, the Japanese forces on Guadalcanal Island total 6,000 to 8,000. These comprise troops which fled into the interior after the initial landings, and also small parties which the Japanese have subsequently succeeded in landing on the island by night from light naval craft.

Intelligence.

Disposition of German Divisions.

43. There are now believed to be 179 German divisions on the Russian front, 34 in France and the Low Countries and 8 in Finland, including the Kirkenes area of Norway.

China.

44. Reports have been received of Japanese troop movements north of Kalgan on the main route leading across Outer Mongolia towards Lake Baikal in Siberia. The Japanese are said to have been building up reserves of petrol and water for a long time at Pangkiang (160 miles north-west of Kalgan). Other reports state that the Japanese have built dumps west of Kalgan along the border between Inner Mongolia and Suiyuan. This route is the most promising for a Japanese drive westwards to cut the north-west supply line from Russia to China, should the Japanese consider such a move necessary.

New Britain.

45. There are now over 35,000 Japanese troops in the Rabaul area, including tanks, cavalry, anti-aircraft and harbour defence artillery. Further reinforcements are reported to be en route.

General Review.

46. Bomber Command aircraft attacked Munich, Saarbrücken, Wismar and shipbuilding yards at Flensburg and Vegesack. Sea-mining in enemy waters was on a large scale. Successful attacks were made on enemy shipping in Home Waters and in the Mediterranean.

AIR SITUATION.

United Kingdom.

47. Fighter Command flew 745 defensive sorties by day (including 34 by U.S.A.A.C. aircraft) and 384 by night. Enemy activity against this country was again on a very small scale. Thirty-one enemy aircraft flew overland by day and 20 by night. Five were destroyed, two were probably destroyed and four were damaged.

Germany and Occupied Territory.

Day.

48. Fighter and Bomber Commands despatched 55 and 33 offensive sorties respectively, compared with 391 and 32 last week. Eighteen Bostons, operating in pairs, were despatched to attack power stations in Northern France and hits were scored on six of these targets, one of which was Mazingarbe, where the roof of a boiler or turbine house was blown off. Mosquitos operated against Berlin, the iron and steel works at Ijmuiden and targets in north-west Germany. There was heavy cloud over Berlin and no results could be seen, but at Ijmuiden it is believed that the coke ovens were hit. Offensive operations by Fighter and Army Co-operation Commands were restricted by bad weather and were, in the main, uneventful. Targets attacked included gun positions at Le Touquet and hangars at De Kooy and Lannion aerodromes.

From the above operations, six of our aircraft are missing.

Aircraft of the Photographic Reconnaissance Unit and of Army Co-operation Command flew a total of 41 photographic sorties.

Night.

49. Bomber Command operated against land targets on two nights only during the week, when 347 aircraft were despatched. The comparable figure last week was 1,493. A force of 80 heavy bombers operated against Munich and dropped 102 tons of incendiaries and H.E. (including 33 x 4,000 lbs.) in an attack which was completed in thirty minutes. Aided by good visibility and flares accurately placed by Pathfinders, many large fires were started which were seen to be burning strongly by one of the last aircraft to leave. On the same night, 118 aircraft were despatched to Saarbriicken but heavy ground haze made difficult the task of the Pathfinders, whose flares were more scattered than usual. About 153 tons of H.E. and incendiaries were dropped and good fires reported in the town were confirmed by the crews of aircraft returning from Munich.

Wismar, the Dornier factory to the north-west of Wismar and the shipbuilding yards at Flensburg and Vegesack were the targets for 135 heavy bombers. Over both Wismar and Vegesack heavy cloud with a base down to about 500 ft. made identification extremely difficult, but some fires were seen in the town of Wismar, and it is also probable that the Dornier factory was hit.

After experiencing extremely bad weather over the North Sea the aircraft detailed on the shipbuilding yards at Flensburg found a sudden improvement on the run down the Danish coast, and excellent visibility prevailed over the target, which, being situated on a promontory, was easily pinpointed in the moonlight. The majority of aircraft attacked from 1,500 feet, and bursts of bombs and one large explosion were seen in the shipyards. Fires started by incendiaries appeared to be taking hold as our aircraft left. On these four targets a total of about 190 tons of H.E. and incendiaries was dropped.

The 23 Fighter Command aircraft despatched on Intruder operations attacked about 16 trains and locomotives, but found negligible activity over enemy aerodromes.

From the week's operations 20 bombers and one Intruder aircraft are missing, and a further two bombers crashed in this country.

Coastal Operations.

50. Coastal Command despatched 438 sorties, of which 242 were engaged on anti-U-boat operations and 26 on convoy sorties. Bomber Command aircraft flew 38 sorties on patrols west of the Bay of Biscay. Fighter Command flew 611 shipping protection patrols.

Off the Norwegian coast, two vessels of about 5,500 tons and 2,000 tons respectively were hit with torpedoes, the former being left enveloped in smoke and the latter on fire.
Totals of 27 Hudsons and five Naval Swordfish made three night attacks on convoys off the Dutch coast. In one of these attacks 50 flame floats dropped around the convoy by one Hudson so illuminated the target that the remaining ten aircraft were able to carry out their bombing attack. One vessel of 6,000 tons and two of 4,000 tons were hit. In the other two operations, a Swordfish scored a probable hit with a torpedo on a large merchant vessel and bombing aircraft may have damaged others with near misses.

Ten Wellingtons of Coastal Command attacked the docks and shipping in the Bassin Nord at Bordeaux, but no definite results were seen.

Spitfires of Fighter Command operating off the Dutch coast sank a 500-ton vessel and set fire to a flak ship.

Beaufighters on patrol off Brest destroyed three enemy aircraft (including one F.W. Condor), and off Selsey Bill a Ju.88 was destroyed by U.S.A.A.C. Spitfires.

From the above operations five of our aircraft are missing.

Sea mining in enemy waters has been on a heavy scale. Bomber and Coastal Commands having despatched 165 and five sorties respectively. A total of 446 mines were laid for the loss of twelve aircraft in operations which extended as far east as Konigsberg.

**Mediterranean.**

**Egypt and Libya.**

51. In the week ending the 21st September, 1,162 sorties were flown by Allied aircraft compared with 1,498 in the previous week.

Although operations were hampered by sandstorms, our fighters maintained reconnaissance and offensive patrols over the battle area and provided protection for shipping off the Egyptian Coast. Fighter-bombers attacked M.T. in the Northern Sector and started an oil fire. At night, Hurricanes carried out intruder patrols against enemy landing grounds, M.T. and camps. Several vehicles were destroyed or damaged and many fires were started.

Shipping and harbour installations at Tobruk were heavily bombed on five nights by Halifaxes and Wellingtons. Large fires were started on the quays and jetties and near petrol installations, and a small ship was probably hit.

Benghazi Harbour was bombed by U.S.A.A.C. and R.A.F. Liberators. Two vessels of about 7,000 tons were hit. Photographs taken on the following day showed that one vessel was completely destroyed and the other seriously damaged. The harbour at Mersa Matruh was also bombed.

Heavy attacks were made on enemy landing grounds, especially on two near El Daba which were bombed by 21 Wellingtons and 17 Bostons. Successful attacks were also carried out on M.T. in the Bardia, Sollum and Fuka areas.

Six Me. 109s bombed a landing ground near Amiriya and two others machine-gunned a landing ground north-west of Cairo. Two aircraft bombed Edku (near Alexandria) causing some casualties.

**Malta.**

52. Enemy activity against Malta was again on a small scale. Several formations of fighters approached the Island but withdrew when they sighted our Spitfires. Four bombers made landfall but caused no damage.

**Sicily.**

53. Spitfires carried out several offensive reconnaissances of Southern Sicily by day. During one of these reconnaissances, two Spitfires destroyed two flying boats which were taking off.

At night, Beaufighters flew intruder patrols over the island. At Porto Empedole, E-boats were attacked and hit.

**Sea Communications.**

54. Beaufighters bombed and probably sank a 2,000-ton merchant vessel off the Tunisian coast.

A southbound convoy, consisting of three merchant vessels and two destroyers, was attacked by Wellingtons 60 miles north-east of Derna. Two merchant vessels were hit and one was low in the water when last seen.

Wellingtons from Malta attacked a convoy consisting of two merchant vessels and seven destroyers on a southerly course off the south-west coast of Greece.
Near misses were obtained on two destroyers. Later, the convoy was attacked by a Liberator and a Wellington from Egypt, but an effective smoke-screen hampered the attack. The Liberator scored two near misses on a destroyer.

A 6,000-ton tanker, escorted by three destroyers, on a south-easterly course was attacked off the south-west coast of Greece by Beauforts and Beaufighters. The destroyers were hit with cannon fire and one of the ships was torpedoed. The convoy was attacked later by Wellingtons, which obtained near misses on the tanker.

Beaufighters bombed and machine-gunned three schooners 24 miles east of Tripoli (L). One schooner was set on fire. Another Beaufighter scored several hits on a medium-sized ship off Licata in Sicily.

Russian Front.

55. The Russians claim that in the week ending the 19th September the Germans lost 310 aircraft against 205 of their own.

In the North, Russian bombers made several attacks on Luostari and Banak aerodromes, and on enemy positions south of Lake Ladoga.

In the Stalingrad sector, Russian bombers and fighters continuously attacked enemy troops and communications.

In the Caucasus, heavy attacks were made on Novorossisk, on enemy troops near Mozdok, on bridges over the Terek and on the aerodrome at Maikop.

Successful attacks were made on enemy shipping in the Black Sea ports. Several small naval vessels were sunk and some merchant vessels were damaged. In the Crimea, aerodromes and troop concentrations were bombed.

The main enemy effort was again directed against the Stalingrad sector, where important railway junctions and fuel dumps were bombed. Oil tankers on the Volga were also bombed.

In the Central and Northern sectors, strong bombing forces attacked Russian supply depots, aerodromes and railway communications. A cargo vessel was sunk on Lake Ladoga and two other vessels were damaged.

In the Caucasus, Russian supply routes and communications were attacked, and in the Black Sea a floating dock and a merchant vessel were bombèd and damaged.

Burma.

56. U.S.A.A.C. Mitchells, operating in pairs, made four successful attacks on enemy objectives. At Kalewa a steamer ran aground as the result of a machine-gun attack; in the Katha area an oil barge was hit and barracks and a railway station were damaged; barracks at Nankan (35 miles south-west of Katha) were hit, and damage was done to the aerodromes at Tingka and Myitkyina.

Supplies were dropped on five occasions to Chinese forces in North Burma.

New Guinea.

57. U.S.A.A.C. and R.A.A.F. fighters and medium bombers continued to harass the enemy in the Buna/Kokoda area. About 65 aircraft were engaged on these operations and, in addition to hits on fuel and stores dumps, particularly successful attacks were made on barges at Buna, where photographs confirm that, in one attack alone, 27 were set on fire and burnt out.

Night attacks by U.S.A.A.C. Fortresses were made on the aerodromes at Vunakanau, Lae and Salamaua, and on targets at Lakunai and Rabaul.

The only enemy activity reported is an attack on Rorana aerodrome (35 miles north-west of Port Moresby) by about 25 escorted heavy bombers. No damage was caused.

Solomon Islands.

58. Catalinas made three attacks on Buka and on an aerodrome in the vicinity.

Aleutian Islands.

59. On the 14th, U.S.A.A.C. fighters and bombers made a successful attack on Kiska. Two mine-sweepers were sunk, three large cargo ships and three submarines were damaged by bombs and machine-gun fire. Four Japanese fighters were shot down and a large seaplane was destroyed on the water.
HOME SECURITY SITUATION.

General.

60. There have been no large-scale raids, but bombs have been dropped on five days and three nights of the week. The attacks in daylight were confined to the South-east, South and South-west coasts and those during darkness to North-east coastal areas and East Anglia.

Damage.

61. The most serious damage was done at Dartmouth on the 18th, where the Royal Naval College and the Noss Works (shipyard) of Philip and Son, Ltd., were extensively damaged. There were forty casualties, nineteen of them fatal. Service property was damaged at Sandwich and Salcombe on the 19th. There was some interference with rail communications at King's Lynn on the night of the 17th/18th, and on the 19th/20th some damage was caused at Boldon colliery, near South Shields, where the station and utility services were affected. Elsewhere damage was confined to property and/or utility services at Bognor on the 17th, Hastings on the 21st, Rye on the 22nd and York on the 23rd/24th.

Casualties.

62. The estimated civilian casualties for the week ending 0600, the 23rd September, are 33 killed and 49 seriously injured.
APPENDICES I, II and III, will be published periodically.

APPENDIX IV.

Enemy Merchant Ship Losses as assessed to 31st August, 1942.

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Sunk, Captured or Constructive Loss</th>
<th>Seriously Damaged</th>
<th>Damaged</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>457</td>
<td>1,919,954</td>
<td>145</td>
<td>867,463</td>
</tr>
<tr>
<td>Italian</td>
<td>497</td>
<td>2,099,605</td>
<td>98</td>
<td>494,265</td>
</tr>
<tr>
<td>Other enemy ships and ships useful to enemy</td>
<td>169</td>
<td>291,654</td>
<td>19</td>
<td>47,259</td>
</tr>
<tr>
<td>Total</td>
<td>1,123</td>
<td>4,301,303</td>
<td>262</td>
<td>875,567</td>
</tr>
</tbody>
</table>

The table does not include losses inflicted on the enemy by our Russian Allies, which are estimated at about 956,000 gross tons sunk; nor does it include losses inflicted on Japanese shipping in the Far East and Pacific, which up to the 31st August are estimated to number 102 ships sunk, or about 600,000 gross tons. In addition, there is about 146,000 gross tons of Axis shipping which has been taken over by South American countries not at war with the Axis.

APPENDIX V.

Casualties to H.M. Auxiliary Vessels and to Naval Personnel.

September 17.—M/S Trawler Waterfly sunk by aircraft off Dungeness.

September 18.—M.L. 155 damaged by aircraft in Dartmouth.

The following casualties to naval personnel have been reported:—

Officers: 16 killed, 9 wounded, 29 missing.
Ratings: 106 killed, 27 wounded, 331 missing.

The above figures include 13 officers and 264 ratings from H.M.S. Sikh.
APPENDIX VI.

Provisional operational aircraft battle casualties for the period: dawn, Thursday, 17th September, 1942, to dawn, Thursday, 24th September, 1942.

### Metropolitan Area.

<table>
<thead>
<tr>
<th>British and Allied</th>
<th>In the Air</th>
<th>On the Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Coastal</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Army Co-operation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

**Enemy.**

<table>
<thead>
<tr>
<th>Bombers</th>
<th>6</th>
<th>2</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fighters</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

### Middle East (including Malta).

<table>
<thead>
<tr>
<th>British and Allied</th>
<th>In the Air</th>
<th>On the Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

3 pilots are safe.

**Enemy.**

<table>
<thead>
<tr>
<th>Bombers</th>
<th>8</th>
<th>8</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fighters</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

Amendment, week ending 17th September:—Delete 4 enemy bombers probably destroyed. Add 4 destroyed.

### Far East.

<table>
<thead>
<tr>
<th>British and Allied</th>
<th>In the Air</th>
<th>On the Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Enemy.**

<table>
<thead>
<tr>
<th>Bombers</th>
<th>1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fighters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes.—(a) No account is taken of enemy aircraft destroyed on the ground in any theatre.

(b) No account is taken of British Naval aircraft casualties.
APPENDIX VII.

Air Attacks on Enemy Territory in Europe.

Extracts from Recent Raid Assessment Reports.

The following reports have been received during the past week:

Germany.

Dusseldorf.

Photographic cover of the whole city and Neuss, obtained on the 11th and 12th September shows over 100 acres of devastation in the centre of the city, between the Rhine and the main railway line. Many public buildings, offices, shops and blocks of flats have been destroyed as well as numerous industrial premises and warehouses. Industrial damage, especially in the Oder Bilk and Unter Bilk districts is considerable, and there is also damage to communications.

The following are the main items of damage:

(a) Industrial.

At least 30 factories or industrial premises have been hit in Dusseldorf and Neuss. In the Deutsche Rohrenwerke (Steel Tubes) in Köhler Strasse nearly seven acres of the main buildings are completely destroyed. These works were damaged in a previous raid, and repairs had been in progress at the time of the last attack.

In the Schiess-Defries A.G. (magnetic mines, machine tools) about half an acre of sheds are gutted. In this works also repairs were proceeding to a previously damaged building.

Eight buildings of the Eschwarz Iron Foundry in Friedrichstadt are destroyed and three others severely damaged.

In Erkrather Strasse the works of Carl E. Braunwerke (insulating materials) were almost wholly destroyed.

In Neuss the Robert Kromucher Chemical Factory has had a direct hit, seriously damaging the main structure.

(b) Communications.

In the main railway station the main roof over the platform has been hit, making a hole of over 100 yards long. Half of the main office buildings is also wrecked and there is a large area of blast damage.

In Burgdorf Strasse and in Derendorf station there is damage to sheds and to the lines. In Derendorf marshalling yard rolling-stock has been damaged by fire and two lines of wagons affected.

In Neuss Town a direct hit on the junction of the Munich–Gladbach, Aachen and Cologne lines has caused an area of blast of 1,600 square yards. Five sheds and the line to the roundhouse have been destroyed.

Citie.

Amongst public buildings destroyed or damaged are the main tramway depot, the telegraph office, the State observatory and the District Savings Bank.

Photographs show the total area of destruction in recent attacks, not including scattered incidents of damage, to be approximately 380 acres.

Duisburg.

The following are some additional items of damage disclosed by photographs taken on the 10th September:

In the Fabrik für Eisenkonstr und Fahrrade (iron works and bicycles) a building approximately 250 by 190 feet has been completely gutted, and previously damaged buildings at the tram depot have sustained further damage.

Four or five buildings of a tobacco factory have been gutted, and a three-bay building to the north of this seriously damaged.
Three or four buildings of a small chemical works in Krefelder Strasse have been severely damaged by fire and one or two buildings of a starch factory have been destroyed. In addition, seventeen other industrial buildings have been destroyed or damaged.

It is reported that the transport crisis in Germany is growing worse, and that the wagon repair shops, in spite of working night and day, are unable to cope with the situation. In the Duisburg shops, for example, for every thirty wagons that can be sent out repaired, there are sixty-eight coming in in need of repair.

**Ruhr Area.**

During a daylight attack in July a factory at Hilder, near Düsseldorf, which makes parachutes received direct hits and the factory was completely burnt out.

On the night of the 5th/6th August a factory at Solingen-Ohligs making undercarriages for Ju. 88s and tail-wheels for F.W. 190s was completely destroyed by fire. This was stated to be the result of a stick of incendiaries, notwithstanding that the authorities said it was a result of sabotage. A number of foreign workers are known to be employed at this factory.

**Karlsruhe.**

An indication of the effect of the recent attack on Karlsruhe can be gained from news reports in which an appeal is made to the people to clear the streets of debris and make repairs of minor damage, particularly to repair provisionally roofs and windows themselves, so that the few available craftsmen can be used for the most urgent work.

An official notice informs the population where building material can be obtained—"on a small scale"—and continues:—

"It is natural that the great strain of the night of horrors did not pass without leaving its traces on everybody; it is understandable that some nerves did not quite stand the strain."

**Sea Mining.**

The *Koldinghus* (thought to be the Danish ship of 674 tons) has been sunk by mines in Aalborg Bay.

The German cargo ship *Hamburg* of 5,600 tons was recently in dock at Copenhagen where she was being repaired after hitting a magnetic mine.

**Occupied France.**

**Courtrai–Wevelghem Aerodrome.**

The pilot of a F.W.190 (shot down off Eastbourne on the 2nd September, 1942) was present at Courtrai–Wevelghem aerodrome when it was attacked by U.S.A.A.C. Fortresses at the end of August. He stated that the bombs were well aimed and material damage was substantial. Six or seven men were killed and a number wounded. The raid had a telling effect on the morale of the station.
SECRET.

W.P. (42) 430.

September 26, 1942.

TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET.

SUPPLIES FOR TURKEY.

NOTE BY THE SECRETARY.

The attached note of an interview between the Prime Minister and the Turkish Ambassador on the 24th September, 1942, together with a tabular statement of the equipment being supplied to Turkey, is circulated by direction of the Prime Minister for the information of members of the War Cabinet.

(Signed) E. E. BRIDGES, Secretary.

Great George Street, S.W. 1,
September 26, 1942.

I read out the list of the supplies to Turkey, agreed upon with the War Office, to the Turkish Ambassador this afternoon. On account of the cypher difficulties, though these are not great as the cable only is used, I did not give the list to the Ambassador to telegraph. I told him I wished Sir Hughe Knatchbull-Hugessen to have the honour of handing it to President Inonu, but that as M. Orbay had been instrumental in bringing this to my attention, I thought he would like himself to telegraph that a substantial packet of several hundred tanks and A.A. and A.T. guns would be sent forthwith. The only thing that would stop them would be a disaster on the Egyptian front, of which I told him, in my opinion, there was no danger.

The Ambassador expressed his thanks and his personal pleasure at being able to transmit the news. He also promised not to state any precise numbers in his telegram.
### List of the Main Items of Equipment to be Provided for Turkey Between Now and the End of 1942.

(Those items of equipment which are shown as to be provided from the Middle East will be so provided unless there is a military disaster in the Western Desert.)

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>Total to end of 1942 including already supplied</th>
<th>Already reached Turkey</th>
<th>In Transit or awaiting shipment</th>
<th>Further supplies now promised</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanks—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Stuart Light Tanks</td>
<td>410</td>
<td>...</td>
<td>40</td>
<td>40</td>
<td>Before the end of the year from the Middle East. In October, November and December from United States production in those months.</td>
</tr>
<tr>
<td>(b) Valentines or Matildas</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>200</td>
<td>To be shipped from the Middle East by the end of November.</td>
</tr>
<tr>
<td>A.T. Guns 37-mm.</td>
<td>746</td>
<td>...</td>
<td>510</td>
<td>138</td>
<td>From India and the Middle East as soon as they can be shipped. From United States September and October production.</td>
</tr>
<tr>
<td>3.7-in. A.A. Guns</td>
<td>214</td>
<td>142</td>
<td>72</td>
<td>...</td>
<td>By the end of the year from the Middle East.</td>
</tr>
<tr>
<td>Bofors A.A. Guns</td>
<td>25</td>
<td>...</td>
<td>...</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>A.A. Searchlights</td>
<td>111</td>
<td>84</td>
<td>27</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Field Guns</td>
<td>104</td>
<td>72</td>
<td>32</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Medium Guns</td>
<td>50</td>
<td>54</td>
<td>2</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Vickers' Guns</td>
<td>1,150</td>
<td>850</td>
<td>300</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Light Machine Guns</td>
<td>5,150</td>
<td>5,150</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Sub-machine Guns</td>
<td>7,500</td>
<td>...</td>
<td>7,500</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>A/Tk. Rifles</td>
<td>725</td>
<td>500</td>
<td>225</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Mortars 81-mm.</td>
<td>305</td>
<td>100</td>
<td>208</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>R.D.F. Light Warning Sets</td>
<td>25</td>
<td>...</td>
<td>...</td>
<td>25</td>
<td>To be shipped from the United Kingdom by the end of the year.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:**

- Before the end of the year from the Middle East.
- From India and the Middle East as soon as they can be shipped.
- By the end of the year from the Middle East.
WAR CABINET
FIRST REPORT OF THE PUBLIC ACCOUNTS COMMITTEE, 1942

Memorandum by the Chancellor of the Exchequer

1. It seems likely that it will be necessary to arrange an early debate on the first report of the Public Accounts Committee for 1942. This report covers the Committee's special investigation of certain contract cases which aroused much criticism in the House when the report of the Comptroller and Auditor General was published earlier this year. The matter was before the War Cabinet on 13th July (W.K.91(42), Item 5), when the Public Accounts Committee report was about to be published. The War Cabinet may now wish to be reminded of the main points in the report, to learn what action has been taken by the Departments concerned, and to consider what lines should be taken by Government speakers in the debate.

2. I attach a list of the cases, with short notes of the main findings of the Committee on each, and of the action taken by the Departments. Three supply Departments are concerned - the Admiralty, the Ministry of Supply and the Ministry of Aircraft Production. It seems probable that most of the criticism is likely to fasten on two cases, the British Thompson Houston Company (Ministry of Supply) and, particularly, the British Manufacture and Research Company (Ministry of Aircraft Production) of which Mr. Dennis Kendall, M.P., is Managing Director. Criticism may be directed both to the behaviour of the firms concerned, and also to the departmental handling of the contracts in question.

3. It will be for the Ministers concerned to deal with particular questions arising on the contracts for which they are responsible. I shall be ready of course to answer on any general questions of contract procedure and policy, if that should be necessary.

4. The Chief Whip is considering the questions of procedure involved, e.g. whether the debate should be on a specific motion or on the adjournment.

(Intd.) K.W.

Treasury Chambers,

26TH SEPTEMBER, 1942.
<table>
<thead>
<tr>
<th>Department</th>
<th>Firm</th>
<th>Committee's findings</th>
<th>Action taken by departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admiralty</td>
<td>Barr and Stroud</td>
<td>The firm should have been more willing to meet the requirements of the Admiralty. In divulging information as to their costs, who are obviously anxious to treat them with every consideration. The Admiralty must, however, be satisfied that they can defend before Parliament the financial arrangements with this firm as with others. It is to be hoped that on further consideration the firm will make the effort needed to furnish the additional information required by the Admiralty. If the firm does not do so, the Admiralty should use their compulsory powers.</td>
<td>The firm have furnished the information for which they were asked by the Admiralty, and this has received preliminary examination. In consequence the Admiralty are arranging for a meeting (to which the firm have agreed) between the Accountants of the Dept. of the Director of Navy Contracts and the firm's accountants, with intent to elicit certain explanations of the figures submitted by the firm.</td>
</tr>
<tr>
<td>Ministry of Supply</td>
<td>J.A. Prestwich and Co.</td>
<td>The Committee do not think it unreasonable that in this case prices should be related to those of other contractors. Instead of to a detailed investigation of the firm's own costs, provided that the comparative prices have been based upon ascertained costs.</td>
<td>The comparative prices used were in fact, based upon ascertained costs. The terms of further contracts are still under negotiation, but the price finally agreed will be based on ascertained costs of other makers, unless the firm can produce figures to justify its own quotation.</td>
</tr>
<tr>
<td>Ministry of Supply</td>
<td>British Thomson Houston Co.</td>
<td>The Committee consider that in the contracts in question the Ministry were not in a position to decide with certainty by comparison with other contractors whether the firm's prices were reasonable, and that it would for this reason have been better to investigate the contractor's costs in order to obtain adequate data on which to base these fixed-price contracts.</td>
<td></td>
</tr>
</tbody>
</table>

-1-
Department | Firm | Committee's findings | Action taken by departments
--- | --- | --- | ---
Ministry of Supply | British Thomson Houston Co., Ltd. | The company in negotiation gave the Ministry the impressions that they were not prepared to proceed until the contract price had been agreed. The Committee state that there was, in fact, no restriction of production by this firm, but they add that a contractor should recognize that in wartime their negotiating methods ought not to place a department in such a position that their negotiators fear that the country's needs may not be supplied unless they give way to the claims upon them. | The earlier contracts to which the Committee refers are fixed-price contracts and cannot be reopened. A further fixed-price contract placed in 1948 is very close to the lowest price obtained for those stores from any other manufacturer and is considered by the Ministry to be one which is not likely to yield more than a reasonable rate of profit. As regards the latest contract (August, 1942) this will not be at a fixed price. The contractor has agreed that it shall be a costed contract at a maximum price, with a fixed profit (within the maximum price) per instrument supplied.

Ministry of Supply | Solex Ltd. | The firm has no proper costing system, and while the Committee find this surprising they agree that there are difficulties in instituting a detailed costing system and see no objection to the alternative steps which the Ministry of Supply are taking to control the profits. | Negotiations on the terms on which supplies will be forthcoming during the year 1942 are still in progress, and a satisfactory conclusion is expected.

Ministry of Supply | Pilkington Bros. | The Committee are satisfied that this firm have at all times been willing to meet the requirements of the Ministry and have reduced prices when costs have fallen. They have no doubt that it will be possible to arrive at a reasonable settlement with the firm. This case attracted special criticism in the House, because of the magnitude of the profit for the year 1939-40 disclosed in the Comptroller and Accountant General's report. | The latest accounts are now available to the Department's investigators and investigations concerning the costs of supplies are proceeding.
In relation to one contract (which was entered into before the outbreak of war) the Company gave the impression to the Ministry that they would not deliver guns to the Air Min. until a price had been fixed. In fact, there was no restriction of production or failure to deliver; but the Committee feel no doubt that the officers of the Air Ministry in charge of the negotiations were influenced in concluding a price by the urgent desire to secure immediate deliveries.

A verbal understanding which the Ministry thought they had secured with the Company in negotiation was not incorporated in the formal contract terms. The Committee described this as a regrettable error which is excused by the conditions arising out of the evacuation of the Dept. from London. The Committee add that the Company's action in not implementing this understanding except as part of a general settlement of other questions is most regrettable.

The Committee find that throughout the discussions with this Company during 1939/40 and 41 the Ministry experienced difficulties in securing all the information that they considered necessary. The Committee:

All prices, whether fixed or provisional, for supplies of guns and shells during the years 1940 and 1941 are reopened. The new prices are settled on the basis of actual costs plus profit at the rate of 6½% on cost for 1940 and 8½% on cost for 1941. On this basis the total profits for 1940 and 1941 respectively will be £36,745, and £21,600 on a cost of sales of £861,000 and £1,474,000. For the two years together this is a profit of about £50,000 as contrasted with profits on the prices originally settled (most of which are provisional) of over £1,500,000, some of which, however, was subject to adjustment in any event. The net profit to the Company for the years 1938 to 1941 after taxation and expenditure of £11,000 not allowed in costs will now be £309,000. During this period the Company have produced 10,500 guns, plus 9½ million rounds of shell.

As part of the general settlement the Ministry will purchase from the Company at cost less depreciation certain capital assets previously provided by the Co. for the purpose of extending their capacity. Other ancillary matters are still under negotiation.
Committee's Findings. Action taken by Departments.

<table>
<thead>
<tr>
<th>Department</th>
<th>Firm</th>
<th>Findings</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Aircraft Manufacture</td>
<td></td>
<td>Firm.</td>
<td></td>
</tr>
<tr>
<td>Production and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry</td>
<td>Research Co. Ltd. (Cont.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| | Committee consider that the Ministry have been unduly reluctant to use their statutory powers for the purpose of obtaining full information. The Committee welcome the evidence regarding the highly satisfactory output of the Company, but state that the Company's persistent refusal to give full access to their accounts and records is indefensible. Finally, the Committee state that the investigation recently made for the first time into actual costs discloses that the prices hitherto demanded by and paid to the Company have been altogether excessive. As a result, large sums which greatly exceed any reasonable remuneration are in the hands of the Company. The Committee consider that the whole matter calls for an early adjustment between the Company and the Departments.

In the cases of the H.T.H. Co., and the British Manufacture and Research Co., the firms argued that the amount of profit did not greatly matter because the great bulk of it was swept away in Excess Profits Tax. The Committee have dealt with this question in a separate part of their Report and have accepted the general view put forward by the Treasury in evidence that the effect of taxation should not be brought into the reckoning in fixing contract prices, and that the policy of fixing fair and reasonable prices should be continued.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET.

MORALE IN GERMANY.

Memorandum by the Secretary of State for Foreign Affairs.

I CIRCULATE to my colleagues herewith a paper on morale in Germany which represents the agreed views of the various Departments concerned with this question, including the Service Departments.

A. E.

Foreign Office, September 26, 1942.

ANNEX.

MORALE IN GERMANY.

DURING the winter of 1941/1942 German civilian morale was profoundly shaken. The failure to break Soviet resistance and the entry of the United States into the war brought home for the first time to the German people that final victory was uncertain and that the war might be long. Hitler's assumption of the supreme command of the army on the 21st December, 1941, helped to stem a serious decline of confidence, and a progressive campaign of "blood and tears" propaganda throughout the winter succeeded in stiffening, though not materially raising, German morale.

Among the symptoms of shaken morale were apathy and scepticism about war news; an increase of rumours and belief in rumours; lack of response to a renewed anti-semitic drive; increased distrust of the value of money; the revival of the production and dissemination of subversive literature; increased appetite for foreign propaganda (both broadcasting and leaflets); and a religious revival, which indicated declining faith in national socialism. How powerful these factors were is shown by the attention given to them even in the Nazi home press and wireless.

In countering these symptoms, the German Government could rely on the innate patriotism and obedience of the German and his fear of the consequences of defeat, e.g., revenge by all the oppressed peoples, and, in particular, by the Russians, inflation, anarchy and unemployment. Exploitation of these factors by the Propaganda Ministry, coupled with an ever more ruthless use of the machinery of repression, has had a considerable effect in inducing widespread resignation to the idea of a long and hard war. The effect of the efforts of the Propaganda Ministry is accentuated by the absence of any belief in a tolerable future for the German people in the event of defeat.

In spite of the successes achieved in the East, in Libya and in the U-boat warfare, morale has risen only slightly this summer and remains spiritless. This
is due partly to a growing realisation of the very heavy cost of the war on the Eastern Front, partly to the serious deterioration in living conditions in recent months as shown in the great accentuation of already grave housing problems as a result of air raids, in fuel and transport difficulties, in the further tightening of police supervision, in more stringent measures of labour mobilisation, especially of women, and in attempts to speed up work still further; partly also, and more particularly in the areas affected, to the severity of air raids and the fear of worse to come. The adverse effect on morale of the drastic cuts in food rations last April has no doubt been partly offset by the recent announcement that meat and bread rations will be increased next month, but the fear regarding the future food situation still persists. While it is difficult at present to assess the general influence on morale of the greater weight of air raids, there is no doubt that they are increasing the physical and nervous strain on the population.

It would, however, be incorrect and dangerous to believe that the state of German civilian morale will at this stage appreciably affect the German war effort. There has been some loss of efficiency in industry, primarily as a result of administrative difficulties, over-strain and absenteeism; the peasants are beginning to show resistance to administrative measures; the foreign workers who are being introduced in increasing numbers are proving a disrupting element; the bureaucratic machine is being over-driven. But, although these indications of strain and war weariness are causing serious concern to the German Government, none of them should be read as indicating the emergence of a conscious and effective political opposition. Elements of opposition, no doubt, exist, but the power of the S.S. and the party is such that their chance of being able to influence the course of events is negligible.

Hitler is no doubt gambling on having achieved by the autumn such successes in the East that, though they may not necessarily be conclusive this year, they will make an ultimate Allied victory extremely difficult. German civilian morale, on the other hand, is tending more and more to be influenced by hopes of a compromise peace with Great Britain and the United States, though on terms which from our point of view would be indistinguishable from a major German victory. The success of the campaign in the East will be judged to a considerable extent in the light of the prospects of the realisation of such hopes. If they are disappointed, serious reactions may follow which will call for a further tightening of the terror machine. But, provided that the army's morale remains unimpaired, civilian morale will stand up to another war winter, and the worst that the German Government need fear from the home front is a rapidly diminishing return from its increased use of terrorism. Only if symptoms of deterioration begin to spread to the armed services or seriously to influence the estimate in the highest quarters of the likelihood of a German defeat can a development of those fissures in ruling circles be expected which must be the opening phase of a German collapse.

The morale of the German army and air force is still high and there are no signs of any deterioration as yet. German naval morale also remains high. There is no general dissatisfaction with service conditions in the navy, but there are incipient signs of anxiety about conditions at home. The fear of retribution and vengeance if Germany is defeated is strong among naval prisoners.
GERMAN ARMY CASUALTIES.

NOTE BY THE PRIME MINISTER.

I circulate, for the information of my colleagues, the following note by Lord Cherwell, which I sent for comment to the Chief of the Imperial General Staff, regarding casualties suffered by the German Army.

10 Downing Street, S.W. 1,
September 26, 1942.

GERMAN LOSSES.

AN agent who has had access to the German State Insurance Companies’ figures reports that the losses of the Wehrmacht between the 1st January, 1942, and the 1st July, 1942, are as follows:

I.—Killed (447,142)—

(a) Killed in action ... ... ... ... 218,193
(b) Died from wounds ... ... ... ... 80,977
(c) Died of illness ... ... ... ... 128,118
(d) Killed by accident ... ... ... ... 9,846
(e) Suicides ... ... ... ... 10,008

447,142
II.—Wounded and Sick (915,682)—

(a) Fit for service ... ... ... ... 285,355
(b) Unfit for service ... ... ... ... 471,120
(c) Sick with expectations of complete cure ... ... 39,890
(d) Sick remaining invalids after cure ... ... 49,347
(e) Wounded fit for service after treatment ... ... 34,910
(f) Wounded unfit for service after treatment ... ... 18,240
(g) Self-inflicted wounds ... ... ... ... 16,820

III.—General Losses (Killed and Invalided)—

Killed ... ... ... ... ... ... ... ... ... ... 447,142
Men unfit for service mentioned in II—

(b) ... ... ... ... ... ... ... ... ... 471,120
d) ... ... ... ... ... ... ... ... 49,347
(f) ... ... ... ... ... ... ... ... ... 18,240
g) ... ... ... ... ... ... ... ... ... 16,820

1,002,669

From the beginning of the war until the 1st July, 1942, the figures are not available in detail, but the total is given as 3,463,523.

This includes all members of the Wehrmacht but no civilians. So far as I can see the figures are reasonably consistent with our experience in the last war, though the proportion of wounded, permanently unfit, is higher. It is of interest that there were 10,000 suicides and nearly 17,000 self-inflicted wounds in the figures, which seems to me inconsistent with high morale.

September 20, 1942.

CHERWELL.

The above report is of interest.

We have always considered the figures from the German State Insurance Companies’ records to be genuine. As regards the four categories of killed, died of wounds, gross casualties and permanent casualties they agree very closely with our estimates for the same period; and in all categories we consider them generally reasonable.

2. The proportion of sick and wounded who are permanently unfit according to the Insurance Companies’ figures is 61 per cent. This is very high in comparison to the figure we have accepted in the past—i.e., 30 per cent., and it is possible that lightly wounded, who are treated in the forward area, have not been included in the Insurance Companies’ figures.
3. According to the Insurance Companies the number of suicides in this period works out at approximately 2.85 per annum per thousand. This compares with a rate of 0.27 for the previous two years and four months of war in earlier reports from the same source. These combine to produce an average figure for the Army during the whole war up to date of 0.73. The rate, amongst the male population of Germany in 1936, was 0.41.

4. We have no means of comparing the figures for self-inflicted wounds.

5. The high rate of suicides and self-inflicted wounds now shown is most interesting but in view of the known performance of the German Army against the enemy, we wonder whether fear of the Gestapo may not have been a major contributory factor.

Comparative totals.

<table>
<thead>
<tr>
<th></th>
<th>W.O. estimate</th>
<th>Insurance Co.'s figures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Jan., 1942, to 30th June, 1942.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Killed and died of wounds</td>
<td>339,000</td>
<td>299,170</td>
</tr>
<tr>
<td>Gross casualties from all causes</td>
<td>1,636,000</td>
<td>1,362,824*</td>
</tr>
<tr>
<td>Permanent casualties (killed, died and invalided)</td>
<td>1,012,000</td>
<td>1,002,669</td>
</tr>
<tr>
<td>1st Sept., 1939, to 30th June, 1942.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent casualties (killed, died and invalided)</td>
<td>3,850,000</td>
<td>3,463,523</td>
</tr>
</tbody>
</table>

* May exclude lightly wounded, treated in forward area.

September 25, 1942.

A. F. BROOKE, C.I.G.S.
WAR CABINET.

THE WORKING OF THE COMBINED BOARDS.

Memorandum by the Minister of Production.

I think the time has come to review the operation of the combined machinery which has been set up in Washington in the course of this year. In that part of the field with which I am concerned, namely, raw materials, production and the assignment of munitions, the progress made is far from encouraging. It may be that in our dealings with a country in which highly individualistic views are prevalent we have expected too much from organisations whose working depends upon co-operative give-and-take. Nevertheless, I think the time is ripe for a new impulse to be given to the machine.

2. As a result of the Prime Minister's visit to Washington in December and January last, four Combined Agencies were set up, viz., the Combined Chiefs of Staff; the Combined Shipping Adjustment Board; the Combined Munitions Assignment Board; and the Combined Raw Materials Board.

I am only directly concerned with the two latter. But I must point out that the smooth and effective working of the Combined Chiefs of Staff is vital to the whole machine, since it is the function of all the other Combined Agencies to help to bring to a successful conclusion the strategy which the Combined Chiefs of Staff lay down. I shall revert to this point later.

Munitions Assignments Boards.

3. The Munitions Assignments Boards made a good start in tackling the problem of dividing up, on a short-term basis, the combined output of finished munitions. The method of operation of the Board in Washington, however, can hardly be said to fulfill the spirit of the agreement by which it was set up, namely, that assignments should be in accordance with strategic needs. For example, the assignment of Army equipment produced in the United States is controlled almost entirely by the views of the United States War Department, whose primary concern is to build up a vast American Army. Assignments for the British Empire can only be secured by putting forward claims substantiated to the last detail, whereas the United States claim for the remainder is put forward on the general proposition that the material is all needed for the Army, without regard to holdings or operational requirements. Fortunately, the output in the United States of many of the essential types of Army equipment, such as tanks, has been so large that our interests have not suffered unduly.

4. The picture is very different, however, in the case of aircraft. It is not possible to make assignments of aircraft on a short-term basis, and consequently various agreements, covering six months or a year ahead, have been entered into between the British Air Staff and the United States Army Air Corps. The first of these, the so-called Arnold-Slessor Agreement, was made long before the United States came into the war. This was very quickly departed from by the Americans, who stated that they never recognised the Agreement as binding. This was followed by the Arnold-Portal Agreement, which was arranged during the Prime Minister's visit last January. This was broken by the Americans almost as soon as it was made. It was followed, in turn, by the Arnold-Portal-Towers Agreement, signed during the Prime Minister's visit to Washington in [24305]
June, and initialled by the President and the Prime Minister. This has already been broken by the Americans in various particulars, examples of which are in Annex I.

5. It is unquestionable that the assignment machinery is operated by the Americans in a unilateral manner. As they become more deeply involved in the war, the tendency is for their attitude to harden. Even in the case of items where production will be on an increasingly stupendous scale, we will be hard put to it to secure our share of the common pool.

Raw Materials Board.

6. The Combined Raw Materials Board has made a good start. Its two main tasks have been, first, to secure the reduction of less essential requirements in both the United States and the British Empire so as to ensure supplies for essential requirements; and, secondly, to allocate short supply raw materials between the various countries.

7. From the point of view of securing for British countries a fair and proper share of raw materials (including those where marginal supplies are under United States control) the Combined Raw Materials Board has hitherto worked smoothly and effectively—more so, indeed, than could reasonably be expected in view of the alarm which the United States authorities, and especially the United States Service Departments, have been showing for some time about the raw material position. A satisfactory technique for showing up clearly and unimpeachably the supply and requirement positions for each raw material as far as British countries are concerned has gradually been worked out and agreed between the British and American sections of the Combined Secretariat of the Combined Raw Materials Board in Washington, and this technique has stood us in good stead. The British have had hard figures and rigid control methods to oppose to the more speculative figures and much more ineffective controls at the disposal of the Americans.

8. Even so, the British countries are in for a difficult period in connection with the raw materials where marginal supplies are under American control. Much will depend on the success achieved by the Combined Production and Resources Board in their task of reducing the excessive demands of the United States Service Departments, which tend to create an artificial raw materials shortage (see paragraph 13 below).

Combined Production and Resources Board.

9. In June of this year I visited Washington with the objects set forth in my previous Report (W.P. (42) 268). The most important of these was to secure the rightful position of the British Production Programme in a combined Anglo-American Programme designed to fulfil the requirements of strategy. If this could be achieved, the production of raw materials and components vital to the British Production Programme would take place as part of an agreed plan, and no longer as a result of negotiations on each individual point, based on the statement of a British deficiency. Unilateral decisions to cut down supplies for us would no longer be made. To achieve this object I proposed the setting up of the Combined Production and Resources Board. It seemed, at the end of my visit, that there was general recognition in Washington that the object I had in view was worth attaining; and that the machinery which was then initiated would be in a position to ensure its realisation. The Directive issued by the President and the Prime Minister gave as the duty of the Combined Production and Resources Board the combining of the production programmes of the United States and the United Kingdom into a single integrated programme, adjusted to the strategic requirements of the war as indicated by the Combined Chiefs of Staff.

10. Mr. Nelson and I were convinced, from our knowledge of the possibilities of production both in the United States and in the United Kingdom, that unless the combined requirements first for 1942, and then for 1943, were set at a level realistically adjusted to the needs of the theatres of war, the Combined Chiefs of Staff would find, when they wished to put their plans into operation in these years, that the equipment they most wanted would not be available in sufficient quantity because of the waste of resources which would have taken place in an attempt to provide the maximum of everything. We accordingly asked the Combined Chiefs of Staff to prepare, and furnish to the
Board, a statement of munitions required to be produced by the 31st December, 1942, to meet the needs of the forces designed for the Spring of 1943. We ask for a similar statement for the requirements up to the end of 1943. This request was accepted by the Combined Chiefs of Staff, who issued a Directive to their Planning Staffs to produce the appropriate Orders of Battle on which requirements could be calculated.

11. By the time the data for the end of 1942 were produced it was already too late to affect materially the production during that year. The Combined Production and Resources Board accordingly pressed for the statement of the 1943 requirements. It was realised that it would be no easy task to work out the Combined Order of Battle for the various theatres of war in April 1944, but, nevertheless, it was felt that this task should be attempted so that requirements for production in 1943 would be related as nearly as possible to operational needs, and should not be simply worked out on the war establishment of the forces which the United Nations proposed to raise. The British part of the Order of Battle has been worked out, and transmitted to Washington. It has also been translated into terms of actual requirements of munitions of all kinds. We have now been informed, however, by the United States Chiefs of Staff, that they do not consider it possible to work out their part of the Order of Battle, and that they propose to calculate their requirements on the following basis:

(a) Total forces which can be transported and maintained in trans-oceanic theatres based on forecast of available shipping and escorts.
(b) Total United States forces required for defence of Western Hemisphere, in training, or for use as strategic reserves.

The latter gives a blank cheque to the United States War Department to set out the requirements of whatever Army they propose to raise in the United States.

12. The matter is complicated by the Presidential Directives which, on the one hand, lay down the size of the forces, and, on the other hand, have set industrial objectives for the various years in terms of the principal weapons—objectives which are quite unrelated to operational requirements. For example, it is believed that the President has authorised the raising of an Army of more than 61 million men, though it is obvious that only a small proportion of this number could be shipped abroad in measurable time. The President also set an objective of 75,000 tanks for 1943. In an effort to reach this objective, the Americans are proposing to manufacture in that year no less than 45,000 medium and heavy tanks and 31,000 light tanks. These, with our own production of 11,000 of all types, make a total of about 87,000 tanks, or sufficient to provide for some 200 Armoured Divisions with 100 per cent. reserves.

13. This illustration, together with others set out in Annex II, demonstrates that in 1943 there will be a tremendous waste of effort in the United States, much of which, if decisions could be taken now, could be diverted into productive channels, e.g., ships or aircraft. Another effect of these inflated figures is that a very large percentage of the American effort at the present moment is going into the construction of new industrial capacity, much of which could well be held over to a later date. The resultant demands on raw materials are creating artificial shortages, which react unfavourably on the vital parts of both the British and the American programmes.

14. While having met with little success in its main task of shaping a combined production programme to meet real strategic needs, the C.P.R.B. has devoted considerable time to adjusting individual items and to investigations into supply and demand of critical raw materials. In this field useful work has been done.

15. Our task remains the same as it has been all through the period since the United States came into the war, namely:

(a) To try to direct the vast energies of the American production machine into the right channels.
(b) To ensure that the forces in contact with the enemy are not deprived of their requirements in order to supply on too large a scale what may be called secondary needs. Since at present and for some time to come a high proportion of those forces are British, we must not allow their needs to take second place.

16. Much of our difficulty in trying to secure these objects springs from the peculiar organisation and the individualistic outlook of the Government and its
constituent parts in the United States. Mr. Nelson is well aware of the shortcomings of the present American system, and there are indications that, so far as lies in his power, he is preparing the ground for something better. First, he has appointed Mr. Charles Wilson, the Chairman of the General Electric Company, to be Chairman of a Committee, with representatives of the Maritime Commission and of the Service Supply Departments. This Committee will oversee the execution of the supply programmes. Secondly, he has made Mr. Ferdinand Eberstadt, the present head of the Army and Navy Munitions Board, entirely responsible for the provision of raw materials to meet requirements. Mr. Wilson and Mr. Eberstadt become vice-chairmen of the War Production Board.

17. Though these moves should prove helpful, the fact remains that the Americans have never been accustomed, in consideration of military or quasi-military matters, to link harmoniously the civil and the military interests. They have no War Cabinet and they have no Defence Committee at which requirements, both civil and military, can be scrutinised and programmes framed with due regard to the merits of the case. Nor have they any means by which the conflicting views of the several agencies can be harmonised and a common policy reached. The whole burden of curbing the extravagant demands of the War Department and of co-ordinating the action of the many agencies that have been created falls on one man—the President.

18. It is obviously impossible for us to alter the American system. Through our many contacts in the combined bodies we can exert a certain influence, but there is a point beyond which this influence is ineffective. If we see a situation, as I think we do now, in which great harm to the Allied cause will result unless remedial measures are taken, we have no course open to us but to approach the President and hope that he will bring the necessary pressure to bear.

19. It remains to consider what form the approach to the President should take. The choice before us seems to lie between the following two courses:

(a) We could reiterate to the President the importance and urgency of the preparation by the Combined Chiefs of Staff, and the agencies under their control, of a statement of requirements directly related to strategic needs, and urge him to order its preparation;

or (b) We could draw the President's attention to specific examples, such as the Tank and Ammunition production programmes, where there will be an inexcusable waste of resources in 1943, and leave it to the President to devise the remedy in the shape which he judges to be most suitable.

20. It so happens that the Combined Production and Resources Board has just prepared a progress Report at the request of the President. The main feature of this report is an exposition of the need for a statement of requirements directly related to strategic needs. I think it would be injudicious for the Prime Minister to put to the President an appeal couched in almost the same language. The Progress Report, however, provides a convenient peg on which to hang an approach from the Prime Minister to the President on the lines of the second alternative. This is the course of action which I recommend should be adopted, and at Annex III is a draft which I suggest might furnish the basis for the Prime Minister's telegram.

O. L.

Great George Street, S.W.1,
September 29, 1942.
ANNEX I.

Non-fulfiment of the Arnold–Towers–Portal Air Agreement, initialled by the President and the Prime Minister in Washington on June 22, 1942.

The main failure on the part of the United States to fulfil this agreement is in the light bomber class, of which approximately 50 per cent. only of the allocations promised from June to September 1942, inclusive, have been provided. The actual deficiencies are as follows:

- Hudson: 60
- Baltimore: 164
- Boston: 107
- Vengeance: 60
- Bermuda: 176

There has also been a deficiency in one type of fighter, namely:

- Mustang: 31

It is understood that these failures have been mainly caused by a lag in American production which has been passed on to us pro rata. It should be noted that, whereas deliveries under the Russian protocol are not affected by any failure in production, we have not been accorded such favourable treatment.

2. Under the agreement, the United States undertook to establish ready for operations in certain theatres of war specific numbers of air units. In the Middle East one pursuit group was to be established by the 1st September, 1942, and a further one by the 1st October, 1942. The latter has not been made available and is unlikely to be in operation until December or January and there seems at the moment to be no chance whatever of the full four fighter groups agreed upon being in the Middle East by the New Year.

ANNEX II.

Examples of United States Production Plans.

-30” Calibre Ball Ammunition.

The Americans have planned to produce 10,000 million rounds of this ammunition in 1943. This number is over and above the large quantity of tracer, A.P. and incendiary ammunition of the same calibre which they will produce.

2. The total expenditure of -303” ball S.A.A. in the Middle East since the beginning of the war to the present date is slightly over 200 million rounds. This includes losses in Greece and elsewhere and losses at sea en route. In the last war the total expenditure of the American Expeditionary Force in France was of the order of 1,000 million rounds of ball ammunition.

3. This enormous programme of ball ammunition springs largely from an inflated idea of expenditure rates which have been calculated by their War Department, apparently without any attention to the experience of three years of war. For example, a certain American task force of approximately nine divisions in all has been issued as initial equipment with over 400 million rounds of -30” calibre S.A.A., which is nearly 100 million rounds more than our entire holding in the Middle East.

4. In 1944 the Americans have put their requirements at no less than 20,000 million rounds of -30” calibre ball ammunition. Plans for other calibres are on a correspondingly stupendous scale.

Aircraft Bombs.

5. The United States production programme for 1943 of H.E. and A.P. aerial bombs totals 2,200,000 tons or an average of over 150,000 tons a month. This programme is seven times as large as our own. The maximum weight of bombs dropped by Bomber Command in any one month up to the present has been less than 7,000 tons. There will of course be a very great expansion
of the Anglo-American bomber effort all over the world, but the provision of bombs in 1943 assumes a rate of expansion which cannot possibly be attained in that year.

Merchants Vessels.

6. The President's objective for United States merchant shipbuilding for 1942 and 1943 is 24 million tons dead weight. If all shipbuilding facilities in the United States were fully developed, it is estimated that an output of 28 million tons would be possible. The allocation of steel at present being made is unlikely to enable even the lower figure to be attained. The completion of a shipyard was recently stopped, and there appears to be no incentive to exceed the President's objective at the expense of less vital output.

ANNEX III.

Proposed Draft Telegram from the Prime Minister to the President.

I HAVE been furnished with a copy of the Progress Report which the Combined Production and Resources Board have submitted to you in response to your letter of 19th August. I have followed with interest the work of the Board since its inception in June, and I fully appreciate the importance to the success of their task of integrating the production programmes of the two countries, of a statement of requirements directly related to strategic needs. I also realise the formidable difficulties which stand in the way of the preparation of such a statement for a date so far ahead as 1st April, 1944. The progress towards the ideal at which the Board is aiming may well be slow.

2. In the meanwhile, it seems to me that there are certain features of our combined programmes which, if they are allowed to stand unmodified, must lead to a misdirection in 1943 of resources of materials and industrial capacity which we can ill afford. I think I can best illustrate my meaning by taking as examples the combined production programmes of Tanks and of Ball Ammunition.

3. Our combined Tank Programme for 1943 allows for the production in the United States of some 31,000 Light Tanks and 45,000 Medium and Heavy Tanks. In the United Kingdom, the production will be 11,000 of all types. The total amounts to some 87,000 tanks, which I am advised would be sufficient to equip some 290 Armoured Divisions with 100 per cent. reserves. This appears to me to be a provision on a scale out of all proportion to anything that might be brought to bear on the enemy in 1943. It was, of course, necessary for us to fix high targets in the early days, so as to get production moving on a great scale. Have we not now reached the time when we could, with advantage, scrutinise our targets more closely? In our efforts to reach, too great a height, we may well exhaust an undue quantity of our resources.

4. A further effect of setting the targets of the main items of equipment too high is that everything else is then calculated in proportion. For example, the United States production in 1943 of Ball ammunition will be of the order of 20,000 million rounds of all calibres. That of the United Kingdom will be of the order of 2,000 million rounds. Observing that the entire expenditure of Ball ammunition by our army in the Middle East, from the beginning of the war to the present date, is little more than 200 million rounds, and remembering that the total expenditure of the American Expeditionary Force in the last war was of the order of 1,000 million rounds, it would appear that we are making provision on a scale which is altogether too lavish.

5. I am bringing these matters to your attention because of my anxiety that, if inflated demands are given full rein, we shall create for ourselves unnecessary difficulties in the provision of raw materials and industrial capacity, and shall be unnecessarily curtailing our power to expand the production of such vital requirements as escort vessels, ships, and aircraft, of which it is almost impossible to have too many.

6. I am ready to co-operate in any way you may think desirable in scrutinising our programmes, so as to rectify those anomalies which may exist, and so as to ensure that our combined resources will be used to the best advantage.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document

WAR CABINET.

SOVIET WARSHIPS AND MERCHANT SHIPS IN THE BLACK SEA.

Memorandum by the Secretary of State for Foreign Affairs and First Lord of the Admiralty.

THE question of the disposal of the Soviet tanker fleet and warships in the Black Sea was raised in W.P. (42) 355 of the 12th August. The Cabinet then approved the despatch of telegrams by the Foreign Office to His Majesty’s Ambassadors at Moscow and Angora (Nos. 144 to Moscow and 1280 and 1281 to Angora), which are reprinted in Annex I.

His Majesty’s Ambassador at Moscow reported on the 16th August in his telegram No. 86 (Annex II) that it had been decided, after consultation with the Prime Minister, that it was not an appropriate moment to raise the matter with the Soviet Government.

His Majesty’s Ambassador at Angora has since then set out his views on the Turkish aspect of the question, before and after consultation, with Admiral Kelly, in his telegrams Nos. 1521 of the 17th August and 1528 of the 18th August (Annex III).

In the light of these two telegrams I should judge that the Turkish Government’s attitude would probably be as follows:

(1) Soviet Black Sea tanker fleet.

The Turkish Government would probably allow Soviet tankers through the Straits into the Aegean, and might even be prepared to facilitate their passage. The Turkish Government would evidently expect the Soviet Government in return to discharge oil from the tankers at Istanbul. The Turkish Government would presumably be prepared to adopt the same attitude towards the remainder of the Soviet merchant fleet in the Black Sea.

(2) Soviet warships in the Black Sea.

The Turkish Government would probably be receptive to the idea of purchasing some of the Soviet warships in the Black Sea, but would wish to assure themselves in the first place of German acquiescence. His Majesty’s Ambassador at Angora does not think that a sale of Soviet warships on a limited scale would provoke a really serious German reaction. On the other hand, it seems hardly likely that the Germans, if asked, would acquiesce in such a transaction unless they felt fairly certain that they were not damaging their own interests and that they could make capital with the Turks out of their acquiescence. Not the less, the balance of advantage from our point of view would lie in promoting such a transaction, which would release us from our obligation to deliver to the Turks the two destroyers and two submarines which we are under contract to supply.

The dangers arising from the internment of Soviet warships in Turkish ports will depend largely on the number and fighting quality of the ships still left to be interned. The Soviet Black Sea fleet consists of one old battleship, four cruisers (two new), one new flotilla leader, six modern destroyers, four old
destroyers, nine small destroyers and twenty-four submarines. It can be assumed that the internment of anything like the whole of this fleet would certainly arouse German suspicion. Although no doubt the Germans would not, merely on account of the presence of such a fleet in Turkish ports, attack Turkey, unless it suited their general policy to do so, the fact that there is a possibility that the ships, by being interned in Turkish ports, might eventually become available for the use of the Allies if Turkey later came into the war on our side, would render the presence of the whole or the major part of this fleet in Turkish waters a potential source of friction between Germany and Turkey, which in its turn would be a constant source of anxiety and trouble to His Majesty's Government.

However, the Russians are likely to fight their ships to the bitter end, and it can therefore perhaps be assumed that only a depleted force, some of the surviving units being more or less seriously damaged, would be available for internment. The presence of such a depleted force in Turkish ports would obviously be much less likely to lead to difficulties with Germany. The Turkish Prime Minister appears to view with equanimity and even satisfaction the prospect of the fleet being interned in Turkish waters, and has said that if the Germans demanded that the fleet should be handed over to them Turkey would go to war. His Majesty's Ambassador at Angora has, however, warned us not to attach too much importance to these brave words.

Although the course least likely to lead to complications would obviously be that the Soviet warships (less any sold to the Turks) should be sunk in deep water, on balance we think that the advantage lies in the ships being interned in Turkish ports in spite of the risk of political complications, provided that, as may be anticipated, their number is not too large. In any case the Russians are perfectly capable of deciding themselves as to the future of their Black Sea fleet and it would be invidious for us to tender advice unsolicited. For instance, the Soviet Government might interpret advice to sink the ships as being given with the ulterior motive of destroying the Soviet Union's position as a naval Power.

It is not suggested that these matters should be raised officially with either the Turkish or Soviet Governments at the present moment. But the case for doing so may arise at short notice and if and when that moment arrives we would propose that we should:

(a) Assist the passage of the Soviet tanker fleet and possibly some other important units of mercantile marine from the Black Sea to the Aegean and provide such protection as may be possible until British waters are reached, as was done in the case of certain Soviet tankers and ice breakers earlier in the year (see W.P. (42) 355, paragraph 8), and endeavour to induce the Soviet Government to deliver oil to the Turkish Government by these tankers provided this will not accumulate Turkish stocks in dangerous areas.

(b) Sound the Soviet and the Turkish Governments on the question of a sale of some of the Soviet warships in the Black Sea to the Turkish Government on the lines adumbrated in paragraph 6 of Foreign Office telegram No. 144 to Moscow (Annex I).

(c) On the assumption that the Soviet fleet will have been reduced by enemy action and some of the surviving units more or less seriously damaged, leave the Soviet Government to make their own decision whether to sink the remainder of their warships in the Black Sea or have them interned in Turkish ports. If, however, we are consulted, we should advise the internment of a nucleus of the more valuable ships, offering to use our good offices with the Turks in whatever way required by the Soviet Government, and the sinking of the remainder. This would have the additional advantage of helping to cover up the transaction in (b).

(d) In the less probable eventuality of the great majority of the Soviet fleet being available after the fall of the Soviet Black Sea ports, we should draw the attention of the Soviet Government to the political complications which might arise from the presence of so large a fleet interned in Turkish waters and the consequent risk of the warships falling into German hands, and advise them to sink at least a proportion of the warships, offering our good offices with the Turkish Government as in (e) above in respect of the nucleus to be interned.

September 28, 1942.
ANNEX I.

(1)

Mr. Eden to Sir A. Clark Kerr (Moscow).

(No. 144. Most Secret.)

Foreign Office, August 13, 1942.

WE have been considering position of Russian Black Sea warships and merchant ships in the event of loss of Black Sea ports.

2. Tankers.—Important Russian tanker fleet would be of great value to United Nations, but, in view of present situation over the Second Front, it may be inadvisable to press Soviet authorities at this stage to pass their ships out into the Mediterranean. If circumstances arise where tankers are no longer of any use in Black Sea or you suppose that the Soviet Government will wish to pass any of these tankers into the Mediterranean for use in Northern waters, we shall be glad to make arrangements on similar lines to those of last autumn and to give them every assistance in our power. The same, of course, applies to other Russian merchant vessels in the Black Sea.

3. Operations of last year were facilitated by the discharge of oil at Istanbul (Constantinople) for the Turks. Promise of similar transfer of oil might have important effect on Turkish attitude, particularly in the case of oilers of doubtful status.

4. Turks have no right whatever to interfere with passage of merchant ships through the Straits, but Admiral Kelly has reported that they may open fire on tankers that approach the Bosphorus without first removing their defensive armament. This attitude is intelligible for Fleet oilers, but in the past Turks have always permitted genuine merchant ships to retain defensive equipment. Since retention of defensive armament is essential for passage through the Dardanelles, we would, if Russians desire, represent to Turks the right of merchant ships to retain it.

5. Warships have no legal right to pass through the Straits, and Admiral Kelly reports that they will not be allowed to proceed even as far as the Sea of Marmora for internment without first going to Eregli to be disarmed and to pick up Turkish naval escort. Attempt by surface warships to force passage of Straits would almost certainly be resisted by Turks. Hostilities between Turkey and Russia which would probably result from such an attempt would have incalculable consequences, greatly outweighing advantages of passing a few vessels through to safety. We therefore much hope Soviet authorities would not contemplate it. The course least likely to lead to subsequent complications would be that the Soviet warships should be sunk in deep water. The alternative would be that they should be interned in Turkish ports until Turkey abandons her present neutral position. This would have the attraction of saving the fleet for possible use at a later date on the side of the Allies. But there is a danger that meanwhile the presence of this fleet in Turkish ports might lead to dangerous complications between Turkey and Germany. There is also the possibility that in that case the Germans might use such pressure as to force Turkey to surrender the ships to Germany.

6. The following suggestion has, however, occurred to us: We are at present under obligations to deliver to Turkey towards the end of the year two Fleet destroyers and two submarines. It is conceivable that, if the Russians agreed to transfer to the Turks, either before or after internment, a sufficiently attractive number of new destroyers, submarines, or even a cruiser, the Turks might be ready to release us from our obligations. We in turn would transfer to the Russians for their Northern Fleet the two new destroyers and submarines at present destined for Turkey. The advantage of a sale before internment would be that the crews might be saved from internment and, if necessary, passed out into the Mediterranean in a Russian merchant ship to assist in manning the ships that we transfer to the Northern Fleet.

7. We realise that the Turks would be afraid of German reactions if they entered into such a bargain. But they might be tempted to do so if the offer of Russian ships were sufficiently generous and if they felt certain that the only part of the bargain that the Germans need know was the sale of Russian ships to.
Turkey, and not the transfer to the Russians of the ships which we are under contract to give to the Turks.

8. I shall be glad of your views as to whether it would be advisable or necessary to raise these matters with the Soviet Government either now or later.

(2) Mr. Eden to Sir H. Knatchbull-Hugessen (Angora).

(No. 1280. Secret.)
(Telegraphic.) Foreign Office, August 13, 1942.

Please repeat urgently to Sir A. Clark Kerr at Moscow any comments which you may wish to offer on my telegram No. 144 to Moscow. You should in particular give your views on the political consequences of the Russian fleet being interned in Turkish ports.

(3) Mr. Eden to Sir H. Knatchbull-Hugessen (Angora).

(No. 1281.)
(Telegraphic.) Foreign Office, August 13, 1942.

My telegram No. 144 to Moscow [of 13th August: Soviet Black Sea Fleet].

In connexion with the suggestion in paragraph 6, you should know of the following recent precedent. A damaged German submarine put into Cartagena some time ago and was allowed a period of three months for repairs. Just before this period elapsed early this month, Sir S. Hoare reminded the Spanish Government that His Majesty's Government expected the submarine and the crew to be interned at the end of the three months' period. The Spanish Government replied that the question of interning the submarine did not arise, as the Germans had sold it to them. We cannot find any adequate grounds to contest the legality of this sale. The case is, in many ways, parallel to that of the United States aircraft recently interned in Turkey.

ANNEX II.

Sir A. Clark Kerr to Mr. Eden.

(No. 86. Most Secret.)
(Telegraphic.) Moscow, August 16, 1942.

Your telegram No. 144.

I have discussed this with the Prime Minister. We agree that the present is not the appropriate moment to raise the question with Soviet Government.

2. Please pass to Angora.

ANNEX III.

Sir H. Knatchbull-Hugessen to Mr. Eden.

(No. 1521. Most Secret.)
(Telegraphic.) Angora, August 17, 1942.

Your telegram No. 144 to Moscow.

I propose to defer any comment regarding passage through the Straits of tankers or warships pending discussion with Admiral Kelly, whom I have asked to return from Istanbul (Constantinople) for this purpose.

2. My first reaction to the suggestion of internment in Turkish ports is that this would lead to serious embarrassments, as the ships would be constant temptation to Germany and, therefore, additional objective for German pressure on
Turkey. On the assumption that we wish at present to avoid complications between Turkey and Germany, we should not, I think, encourage the idea of internment. The fact that the Black Sea fleet would be available in Turkey for possible use at a later date on the side of the Allies is not, to my mind, so great an attraction as it may appear at first sight. It is clear that, unless attacked, Turkey has no intention of coming into the war, at least not until the last moment, when the issue is no longer in doubt, and at such a moment the value to us of the Russian Black Sea fleet would no longer be very great. In the meantime, it would be a constant source of anxiety.

3. I took the opportunity of an interview with the Prime Minister on the 15th August on another subject, to ask his views on the future of the Black Sea fleet. This led him to comment generally on deterioration of Turco-Russian relations. Since [group undecipherable] Russians had ceased to be friendly except for a short period during M. Potemkin's visit in the summer of 1939 and in view of the present Turco-Russian relations he did not expect the Russians to attempt to send the Black Sea fleet to Turkish ports. In fact he rather hoped that they would not as it might involve him in difficulties with Germany. On the other hand, it might be very useful in certain eventualities to possess the fleet. In reply to my comment that it would be impossible to pass the fleet into the Sea of Marmora (which he mentioned as possible place of internment) or, indeed, into any Turkish port without first disarming it, the Prime Minister intimated that disarmament might be done in a very sketchy manner, the Turkish personnel being put on board and the Russian crews interned not far away, so that they might be of use if required. I suggested that to have the Russian fleet in Turkish ports in such conditions would be a bait for the Germans, who might either bombard it or demand that it be handed over to them. The Prime Minister at once said that in that case Turkey would go to war. (I am inclined to think he was referring only to the second of my suggestions, i.e., a demand for handing over the fleet.)

4. Although the attitude of the Prime Minister thus seems satisfactory, I deprecate building too much on it. Firstly, is it in our interest that Turkey should become belligerent with consequent calls upon us, and danger of loss of Black Sea fleet into the bargain? Secondly, the situation may not be so simple and clear-cut as contemplated above. The Germans are perhaps less likely to force sudden issue than gradually to intensify pressure. And determined as the Turks may be now to resist pressure, this determination might be affected if the situation deteriorated, e.g., if further German successes in Russia and Egypt led to virtual encirclement.

5. I did not, of course, give any hint to the Prime Minister of the suggestion put forward in paragraph 6 of your telegram under reference. In view of his remark that it might be useful in certain eventualities for the Turks to possess the fleet, it is possible that he might be attracted by the idea of limited transfer suggested, and even that the idea of more extensive transfer might occur to him. In the event of—

(a) wholesale transfer, or
(b) limited transfer accompanied by the internment of the rest of the Russian Black Sea fleet in Turkish waters the situation vis-à-vis Germany would to my mind be more dangerous than that [group undecipherable] more internment of the whole fleet. I should, however, be inclined to doubt whether limited transfer suggested in your telegram would in itself provoke really serious German reaction (more particularly if Germany was unaware of our part in the transaction) unless Germany intends to attack Turkey, anyhow, and is looking for a pretext. But modalities of operation would need careful working out, and 1 would prefer to consider the whole matter further before expressing final opinion.

Sir H. Knatchbull-Hugessen to Mr. Eden.

Angora, August 18, 1942.

My telegram No. 1521.

I have now had discussion with Admiral Kelly, who states that, far from having reported that the Turks might open fire on tankers approaching the Bosphorus without having first removed defensive armament, he has no reason
to suppose that the Turks would do so. He considers the Turks would be prepared
to assist the passing of tankers into the Mediterranean. This view is supported
by conversation of the 17th August between Naval Attaché and Minister of
Communications on the subject of oil supplies to Turkey. Naval Attaché
suggested that Russia should be asked to send oil. Minister welcomed the idea,
and said twice during the conversation that if only Russia would help Turkey,
Turkey would reciprocate, and he volunteered that if, after delivering oil in
Istanbul (Constantinople), the Russian tankers wished to escape into the
Mediterranean Turkish pilots would be supplied to take them through Turkish
waters. Furthermore, existing regulations would be altered so as to allow them
to travel through territorial waters by night. While the matter was one for
direct discussion with the Russians, Minister hoped that I might assist by making
preliminary suggestions to the Ministry for Foreign Affairs. I have said
nothing on the point to Minister for Foreign Affairs, and do not propose to do
so without instructions. But I doubt whether Minister of Communications would
have spoken as he did unless the matter had already been considered by the
Turkish Cabinet, and you may think it worth while to pass on the idea to the
Soviet Government.

2. As regards disarmament of warships at Eregli before entering the Sea
of Marmora, please see Admiral Kelly's signal No. 1535 of the 6th April.

3. As regards [group undecipherable] suggested in paragraph 6 of your
telegram No. 144 to Moscow, conversations reported in Admiral Kelly's signal
1843 of 28th October, 1941, to the Admiralty and subsequent correspondence,
including his letter of 24th November, 1941, to the First Sea Lord, suggest that
Turks would not insist so long as the war lasts on the fulfilment of an obligation
to deliver two more fleet destroyers and two more submarines. But I see no
objection to sounding them about the proposed transfer on the assumptions—

(a) that Russian agreement to their part of the transaction has first been
obtained, and

(b) that our transfer to Russian northern fleet of destroyers and submarines
for Turkey would not take place until after safe arrival in Turkish
waters of corresponding ships from Russian Black Sea fleet.

4. It is possible that the Turkish Government might be reluctant to take
over ships from the Russian Black Sea fleet without having first assured them-
selves of German acquiescence [?group omitted: ?which] they could hardly
ask for until the ships had arrived in Turkish waters.

5. On general [group undecipherable: ?question] raised in your telegram
No. 1250 much would depend on number and fighting value of the ships from the
Black Sea fleet which may reach Turkey. Moreover, Germany will not attack
Turkey until and unless it suits her general policy to do so. But the presence of
the whole fleet in Turkish waters would certainly be added temptation and, as
stated in my telegram No. 1421, a source of anxiety.
WAR CABINET.

AIR SERVICES TO THE MIDDLE EAST.

Memorandum by the Secretary of State for Air.

At a meeting of the War Cabinet on the 25th August, I was invited to submit a scheme for providing the additional aircraft required to enable a firm allocation of 6,000 lbs. a week to be made from the end of this month for the carriage of mails for troops in the Middle East, and to explain what diversions from other air services would thereby be involved.

As I stated in my paper of the 25th July (W.P. (42) 315), I have been able to achieve the target figure of 14,000 lbs. per week which was set me by the ad hoc Committee on the Air Service to the Middle East (see their Report of the 29th June (W.P. (42) 275)), but only at the expense of overworking the existing B.O.A.C. fleet. This process cannot go on for ever, especially as many of the flying-boats are already several years old. Recently we have lost Clare, leaving only two "C" Class Boats on the African route. Moreover, the target figure has risen to 16,000 lbs. this month and will rise again to 18,000 lbs. in December and to 25,000 lbs. next March.

Accordingly, if I am to guarantee the fulfilment of the programme set me in June, the B.O.A.C. fleet must be reinforced, and I have decided to allocate for this purpose 6 Sunderland flying-boats and 14 Warwick landplanes. While it naturally goes against the grain to withhold aircraft from operational Commands, there is no alternative open to me in present circumstances. I should add that the loss to Coastal Command, as compared with the loss to Bomber Command, is less than it would be under a strict application of the 2:3 ratio proposed by the Prime Minister at the Cabinet Meeting on the 25th August.

The Sunderlands and Warwicks will not be ready for service in their new role before, at least, the New Year. Moreover, they are required, as explained above, to ensure the fulfilment of the existing programme. In these circumstances, other aircraft must be found for the new commitment approved by the War Cabinet on the 25th August.

I have reviewed the possibilities and have decided to increase the strength of No. 1425 Flight, Royal Air Force, which is responsible for the operation of the Liberator transport service from the United Kingdom to the Middle East via Gibraltar, by allotting to it two additional Liberator II's which were earmarked as backing for the two Liberator squadrons in India. These aircraft will be ready for service at the end of this month.

Three months ago, the aircraft establishment of 1425 Flight was three Liberators. With this equipment they maintained an average of one flight to the Middle East every twelve days carrying 3,750 lbs. per flight or a total of 9,375 lbs. per month. Two months ago two more Liberators were allocated to it but full advantage has not yet been derived from the increased fleet as one Liberator was immediately diverted for use in connexion with the Prime Minister's visit to Moscow and was unserviceable for some time after that in the Middle East, and another had an accident at Gibraltar, where it still is.
With seven Liberators, 1425 Flight will be able, if unserviceability and weather conditions are not abnormal, to do an average of one flight every third day to the Middle East, i.e., ten flights a month. As the average payload of the R.A.F. Liberators on this route has now been increased to 5,000 lbs. per flight, it is hoped that 1425 Flight will be able to carry 50,000 lbs. per month to Egypt.

The increased carrying capacity of 1425 Flight makes it possible for me to undertake that 6,000 lbs. of troop mail will be carried as from the end of this month all the way by air to the Middle East, but I cannot accept the obligation that it should all be taken by the direct route through the Mediterranean unless the War Cabinet rules that troop mail is in all circumstances to have absolute priority over, for instance, urgent tank and aircraft spares, specialist and high-ranking officers and other military traffic. The alternative, which is the course I recommend, is that the Priorities Board should be allowed to decide week by week in the light of changing circumstances what traffic should be sent by the direct route and what via West Africa. At present, all troop mails for the Middle East are taken by the B.O.A.C. service via West Africa.

Traffic sent by 1425 Flight reaches the Middle East a couple of days after departure from this country, and that sent by West Africa 7 to 10 days later.

Before the new commitment in respect of troop mails, the target figures laid down by the War Cabinet for the carriage of traffic all the way by air to the Middle East were as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1942</td>
<td>16,000 lbs. per week.</td>
</tr>
<tr>
<td>December 1942</td>
<td>25,000 lbs. per week.</td>
</tr>
<tr>
<td>March 1943</td>
<td>25,000 lbs. per week.</td>
</tr>
</tbody>
</table>

Of this, 1,000 lbs. was for troop mail. The revised figures will now be:

<table>
<thead>
<tr>
<th>Month</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1942</td>
<td>20,400 lbs. per week.</td>
</tr>
<tr>
<td>December 1942</td>
<td>29,400 lbs. per week.</td>
</tr>
<tr>
<td>March 1943</td>
<td>29,400 lbs. per week.</td>
</tr>
</tbody>
</table>

The First Lord has been consulted and is in agreement with these proposals.

September 29, 1942.
WAR CABINET.

A COMPARISON OF GERMAN AND BRITISH ECONOMIC MOBILISATION.

Memorandum by the Minister of Economic Warfare.

In organising war production Germany has met with problems very similar to our own, and not least in the field of labour. Labour shortage, indeed, appears to have become a bottleneck about one year earlier in Germany than in Great Britain, largely, no doubt, because the German programme of plant extension in the armaments industries was completed well before our own.

Labour Mobilisation.

2. A comparison of the distribution of the populations of Great Britain and Germany is a matter of difficulty owing to the lack of precisely comparable German statistics. Other complications are—

(a) The presence of numerous foreign workers in Germany.
(b) The inclusion in the category of "occupied" of the wives of peasant farmers. In order to make the German and British figures comparable, the estimated number of farmers' wives in Germany whose husbands are working at home is included in the unoccupied category.

The table below gives estimates of the numbers and the percentage distribution of Germans (men 14–64; women 14–59) in various occupations in mid-1939 and spring 1942, together with similar figures for Great Britain. The German figures cover native Germans only and exclude foreign civilian workers and prisoners of war, 0.5 million and 4.6 million of which are estimated to have been employed in Germany at the two dates, and of which 0.4 million and 2.6 million were engaged in agriculture. The German figure for Armed Forces, &c., includes net battle casualties estimated at approximately 2 million in the spring of 1942.

Distribution of Adult Population.

(Men 14–64: Women 14–59.)

<table>
<thead>
<tr>
<th></th>
<th>Mid-1939</th>
<th>Spring 1942</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Great Britain</td>
<td>Germany</td>
</tr>
<tr>
<td></td>
<td>Millions</td>
<td>Per Cent.</td>
</tr>
<tr>
<td>1. Armed Forces, &amp;c.</td>
<td>6.6</td>
<td>1.7</td>
</tr>
<tr>
<td>2. Munitions</td>
<td>3.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Total of 1 and 2</td>
<td>3.9</td>
<td>12.0</td>
</tr>
<tr>
<td>3. Other Essential Industries</td>
<td>5.9</td>
<td>18.4</td>
</tr>
<tr>
<td>4. Other Industries</td>
<td>10.0</td>
<td>31.3</td>
</tr>
<tr>
<td>5. All others</td>
<td>12.3</td>
<td>38.3</td>
</tr>
<tr>
<td>Total</td>
<td>39.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

NOTES.

2. Include Metal, Chemical, Engineering and Allied Trades.
5. "All others" include all those not gainfully occupied, domestic servants and students.
Available information does not permit of an analysis of the German figures by sexes, but even after allowance is made for farmers’ wives the proportion of adult women occupied in Germany in 1939 was considerably higher than in Great Britain. In the three years 1939–42 the additional numbers of adult women mobilised were only 300,000, but to these might be added the 1-2 million farmers’ wives whose husbands have been called up, and who are therefore assumed to have become occupied.

3. The comparison of the British and German percentage distributions in the spring of 1942 within the age groups considered brings out the following differences:

(a) The proportion engaged in “munitions” in Great Britain is substantially greater than in Germany for the following reasons:

(i) Work on capital construction in the armaments industries is still continuing in Great Britain but has largely ceased in Germany.
(ii) The British army is on the average more highly equipped.
(iii) The British naval and air forces which use highly specialised equipment are comparatively much larger.
(iv) “Munitions” industries in Great Britain probably provide for a greater proportion of civilian requirements (iron and steel, engineering, &c.).
(v) Armaments design in Germany tends to be simpler than in Great Britain.
(vi) Germany has fewer types of armaments than Great Britain, and changes them less frequently.

(b) The proportion engaged in “other essential industries” in Germany is considerably larger than in Great Britain owing to the large numbers engaged in agriculture.

(c) The proportion engaged in “other industries” is much smaller in Germany. It was smaller in 1939: since then Germany has reduced the number of persons so engaged by 50 per cent., while Great Britain has reduced them by only 30 per cent.

(d) The proportion not occupied is very similar in the two countries (making due allowance for farmers’ wives in Germany).

The contrast between the task of the labour forces in the two countries is seen if those in the armed forces and those engaged in agriculture are excluded. Germany has approximately 20⅔ million workers aided by 2 million foreigners to provide for all military and civil needs other than food; Great Britain has approximately 16⅔ million. Thus a German labour force only 37 per cent. greater than the British (and of which 10 per cent. are foreigners) supplies all the needs, except food, of armed forces more than 130 per cent. greater and a civilian population 75 per cent. greater than our own.

This takes no account of imports into either country; but there is little doubt that in commodities other than foodstuffs Great Britain receives from overseas substantially greater assistance (in terms of man hours) than does Germany from her allies and vessels and from European neutrals. Thus this factor, though it cannot be accurately assessed, does not help to explain the disparity in the foregoing figures, but, on the contrary, renders it greater.

Reductions in Civilian Supplies.

4. Already by mid-1941 Germany had accomplished a high degree of labour mobilisation for the forces, for munitions and for essential industries and services. Its speed must be largely attributed to the very drastic reductions which were made in the provision of consumers’ goods and services. Further special measures have been taken in 1942 (which will be described below), but the chief reductions in consumption were part of the general plan for war economic mobilisation. In clothing, household goods and furnishings, transport services, medical and dental services, besides all goods and services other than necessaries of life, the reduction in consumption in Germany compared with pre-war was, by the end of 1941, greater than it yet is in this country, although precise measurement is not possible.

The adverse effects of these reductions in civilian supplies have been reduced by a social policy designed to reconcile, so far as possible, the need to maintain
the stamina of productive workers with the need to maintain the morale of the population as a whole.

(a) Not only was rationing introduced on a wide scale early in the war, but differential rationing enabled special classes of the population to obtain better supplies than others. The clearest example of differential rationing is to be found in the provision of high food rations to heavy workers, and, on the other hand, of special rations to children and expectant mothers. The same basic principle extends to the provision of most other goods.

(b) Care was taken to provide ample financial assistance to those who were economically hit by the war—e.g., businesses forced to close down, dependants of men called up to the forces, &c. This comparative liberality in financial matters was made possible by the strict control of consumption and production which prevented inflationary tendencies. Its psychological effects were certainly most beneficial and there is ample evidence that the German population is appreciative of what is regarded as the most socially just method of distributing the burdens of war.

"Factory Leave."

5. An important aspect of German labour policy has been the acceptance of the principle that "factory leave"—i.e., the temporary release of men from the forces to industry—is both practicable and also desirable from the point of view of economising man-power. It has sometimes been stated that German labour strategy during this war has been to use men as soldiers in the summer and as munition workers in the winter to prepare for the campaigns of the following summer. Although such a crude description exaggerates the importance of factory leave, it is true that in the winter of 1940–41 especially, considerable numbers of men, particularly skilled men, were released for industrial work.

There is evidence that the Germans were not able to do this in the winter of 1941–42, partly because they were heavily engaged on the front, but also because it proved more satisfactory to repair damaged tanks, aircraft, &c., on the spot as far as possible rather than to send them back to the factories together with the necessary labour. The German High Command appears to have accepted the principle that army tradesmen should be freely drafted back to industrial jobs whenever their services in the army could be dispensed with.

Agricultural leave is also granted to some extent, but appears to be considerably less important than factory leave.

Recent Measures.

6. The foregoing measures, together with others, such as concentration of production, control of materials and labour, where British and German methods have been on similar lines, were part of Germany's original war mobilisation plans. At the beginning of 1942, however, further measures were introduced when it was realised that still greater economies in man-power would be necessary in the face of the prolonged Russian campaign and the need to compete with growing British and American war production. They cover a very wide field and, in effect, constitute a thorough-going reorganisation of the whole German war economy. The most important of them can be summarised as follows:

(a) Civilian supplies were further restricted, more, perhaps, by limiting the number of kinds of articles produced than by quantitative reduction.

(b) Production was further concentrated in the most efficient firms. Essential repairs in these firms were carried out, and these repairs were given high priority in labour and raw materials supply. At the same time, machines of closed-down firms were made available to those still in production.

(c) Steps were taken to compel firms to reveal to their competitors secret processes and methods of production wherever war production required this.

(d) Concessions were made to businesses in respect of excess profit taxes. At the same time, the pricing of public contracts on a cost-plus system was abandoned for a modified single-price system, which was of considerable advantage to the lowest cost producers.

(e) A number of simplifications were introduced in the tax system, in the allocation of raw materials and in the organisation of public and semi-public bodies.
Great stress was laid on the importance of "self-administration" in business and less on bureaucratic control.

Closer co-ordination was established between the Armed Forces, the Production Departments and the producers themselves.

Summary.

7. The mobilisation of the German war economy shows the following characteristics:

(a) The shift from less essential to more essential occupations has been much greater than in this country, though the proportion of unoccupied adults is no less.

(b) Adverse effects of drastic cuts in civilian consumption have been reduced by differential rationing and by liberal allowances to those hard hit by the war.

(c) Labour, particularly skilled labour, has been economised by the granting of "factory leave" which the High Command recognises to be both practicable and desirable.

(d) Concentration of production has been ruthlessly carried out in the interests of efficiency, although financial compensation has been liberal. At the same time efficient firms have received important E.P.T. concessions.

(e) Existing administrative procedure and taxation methods have been scrapped wherever a saving of personnel could thus be brought about.

Ministry of Economic Warfare, October 9, 1942.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET.

SECOND PROTOCOL—SUPPLIES TO RUSSIA.

Memorandum by the Secretary of State for Foreign Affairs.

THE Defence Committee, at their meeting on the 29th April,* gave general approval to the proposals for supplies to Russia after the 1st July, 1942, made by the Minister of Production in W.P. (42) 178, which had been remitted to them by the War Cabinet.

2. With the concurrence of the Prime Minister, a Combined Anglo-United States Offer for a Second Protocol covering the period the 1st July, 1942, to the 30th June, 1943, was communicated to M. Molotov by the President of the United States on the 29th May.

3. The reply of the Soviet Government to this offer was communicated simultaneously by the Ambassadors of the U.S.S.R. in Washington and in London on the 7th July.

4. This reply accepted the proposed Second Protocol with satisfaction, but \textit{inter alia} expressed the following hopes:

\begin{itemize}
\item[(a)] That the monthly delivery of aircraft from the United Kingdom in the first half of 1943 would, if not increased, at any rate not be reduced, and that the supply of aircraft from the United States would, after October 1942, be increased to the greatest possible limit.
\item[(b)] That the monthly delivery of aluminium on United Kingdom account should be continued after September 1942 until the end of the Protocol period; and that 10 tons of cobalt per month should be delivered.
\item[(c)] That the Combined Offer of nickel made at the rate of 600 short tons per month for the first six months (subject to review) including the nickel content of manufactured goods, but not finished munitions, should be revised so as to secure delivery at the rate of 400 tons per month, exclusive of the amounts required for the manufacture of finished products.
\end{itemize}

5. Negotiations have recently been in progress in Washington for the conclusion of an Agreement by which the Signatory Governments would formally adopt as a Second Protocol the Anglo-United States offer of the 29th May, and the Russian acceptance of the 7th July, including specific reference (at the request of the Soviet Government) to the points (a), (b) and (c) in paragraph 4 above.

\* D.O. (42) 13th Meeting, Minute 2.
6. The United States Government proposed a draft Article saying that they and we were "making every effort to comply with the hopes of the Soviet Government with respect to" these matters. I did not feel able to accept this, since it held out promises, especially in respect of aircraft, which we could not hope to fulfil. We have now secured their acceptance of a form of words which, so far as the United Kingdom is concerned, merely sets out the decisions so far reached in regard to these requests.

7. After consulting the Minister of Production, I have authorised Lord Halifax to proceed to the signature of an Agreement in the form attached to this paper (Appendix).

8. I am glad to be able to report the successful conclusion of these negotiations, with the details of which I need not trouble my colleagues, except to say that we had some difficulty in persuading the United States Government to accept the text of what is now Annex III and that Mr. Winant's helpful intervention has been of the greatest assistance in bringing them round to our view.

(Initialled) A. E.

Great George Street, S.W. 1,
October 1, 1942.

The Government of the United States of America and the Government of the United Kingdom desiring to continue their policy of full co-operation with the Government of the Union of Soviet Socialist Republics in the prosecution of the war against aggression and in such co-operation to provide the Soviet Union with the maximum assistance possible in the form of military supplies, raw materials, equipment, and food, hereby in conjunction with the Government of the Union of Soviet Socialist Republics declare—

Article I.—The Signatory Governments formally adopt as a Second Protocol the "Proposed Second Protocol between the Union of Soviet Socialist Republics and the United States and Great Britain covering the period of 1st July, 1942, to 30th June, 1943," as transmitted by the President of the United States with the concurrence of the Prime Minister of the United Kingdom to the Vice-President of the Council of People's Commissars and Commissar for Foreign Affairs of the Union of Soviet Socialist Republics on 29th May, 1942, a copy of which proposed Second Protocol is hereto appended and marked "Annex I" and accepted on behalf of the Soviet Government by note from the Ambassador of the Union of Soviet Socialist Republics to the Secretary of State of the United States dated 7th July, 1942, a copy of which is appended hereto and marked "Annex II," and which proposed Second Protocol the Signatory Governments have regarded as in effect since 1st July, 1942.

Article II.—The appropriate representatives of the three Signatory Governments will continue with the formulation of detailed procurement and supply programmes as contemplated in the proposed Second Protocol with a view to their early completion and will make from time to time such adjustments and clarifications as may become necessary.

Article III.—The Government of the United States and the Government of the United Kingdom have examined the requests of the Soviet Government with respect to supplies of aircraft, aluminium, cobalt and nickel beyond those provided in the proposed Second Protocol, as expressed in paragraphs (a), (b) and (c) of Annex II appended hereto. The decisions so far reached by the competent authorities in regard to these requests are embodied in Annex III to this Protocol.

ANNEX I.


1. The Governments of the United States and the United Kingdom have been giving the most serious consideration to the munitions of war which we can make available to the Soviet Government during the coming year. In addition to possible limitations due to the shortage of ships, the controlling factor by the Northern Route is the quantity of shipping that can be escorted to ports of discharge. The limiting factor by the Southern Route is inland transportation from Persian Gulf ports.

2. Our respective Governments will make available for despatch from the ports of the United States, United Kingdom and other countries during the period the 1st July, 1942, to the 30th June, 1943, approximately 3,300,000 short tons to the Northern ports and 1,100,000 short tons to the Persian Gulf ports. In the circumstances mentioned in paragraph 1, it is our opinion that this is the highest practicable export programme from all sources at which we can now aim. Within the limits imposed from time to time by the factors mentioned, we will supply the shipping necessary to lift that part of this programme for which U.S.S.R. ships cannot be made available.

3. The schedule of stores which the United States can make available has been drawn up in the light of the programme of requirements as submitted to the United States Government by the U.S.S.R. The schedule of stores offered by the
United Kingdom has been drawn up on the assumption that Russia desires to continue to receive supplies on the scale agreed at the Moscow Conference. The stores listed in these schedules amount to approximately 8,000,000 short tons.

4. It will be necessary for the Soviet Government to select from these schedules a programme of particular supplies and munitions of war for procurement and despatch which will come within the amounts mentioned in paragraph 2. This programme should include all cargoes to be transported after the 1st July, 1942, including Protocol and non-Protocol items either already on order or to be ordered.

5. It is to be understood this programme is subject to variations to meet unforeseen developments in the progress of the war. But you may be sure that every effort will be made to deliver the particular supplies which you designate.

6. The United States will be pleased to extend financial arrangements to cover its part of the proposed new Protocol and all adjustments thereof. The United Kingdom financial arrangements will continue as at present, i.e., cash-credit agreement of the 16th August, 1941, to cover civil supplies, and lend-lease agreement now under negotiation to cover warlike supplies, the terms of which have been agreed in principle.

7. We, of course, stand ready through appropriate officials to discuss with your representatives in Washington all detailed questions pertaining to the schedules listed below and any reasonable adjustments that may be desired.

8. Above all we want to assure you that we have a full understanding of the vital importance of your Front and the urgent necessities of moving supplies to it in the highest possible volume and in the shortest space of time.

9. With this in mind, we shall be glad to review the programme from time to time to see if increased quantities of munitions can be provided and delivered.

### Schedule of United States Stores.

The United States Government undertakes to make available to the Union of Soviet Socialist Republics the following schedule of stores aggregating some 7,000,000 short tons valued at three billion dollars, of which there are 1,110,000 tons of Military and Naval equipment, armament and ammunition valued at two billion dollars, 1,800,000 tons of materials, machinery and industrial equipment worth four hundred million dollars and 4,300,000 tons of food products worth six hundred million dollars.

The following schedule has been prepared on the basis that any balances which may be due from the existing Protocol after the 30th June, 1942, will be absorbed, as well as all articles contained in the new Protocol for which requisitions have been previously approved with delivery scheduled after the 30th June, 1942.

In the following schedule, the item numbers and major classifications correspond to those in the U.S.S.R. Program of Requirements, submitted the 2nd April, 1942. For certain items the amounts to be made available are indicated as combined offerings of the United States and the United Kingdom and appear as a combined figure in the schedules of both Governments.

#### Group I.—Armament and Military Equipment.

**Item 1.—Airplanes.**

Amount requested—4,200. Airplanes will be supplied through October 1942 at an average rate of 100 pursuits, 100 light bombers and 12 medium bombers per month. Commitments will be made for the balance of the year on the basis of developments incident to the progress of the war.

**Item 2.—Tanks with Armament.**

7,500 tanks with armament; first six months, 1,572 light and 1,428 medium tanks; second six months, 2,250 light and 2,250 medium tanks; all as nearly as possible in equal monthly instalments.

**Item 3.—Anti-aircraft Guns, 90 mm.**

204 90 mm anti-aircraft guns, complete with ammunition, made available at the following rate: 8 per month for first quarter; 16 per month for second
quarter; 20 per month for third quarter; 24 per month for fourth quarter. Auxil-
yary equipment will be provided in the same proportion as is made available to United States troops.

Items 4 and 6.—Anti-aircraft Guns, 37 mm., 45 mm., 12.7-20 mm.
3,360 substitute units, 37 mm., or twin 20 mm. on self-propelled mount without director; to be furnished at following successive quarterly rates: 300, 720, 1,020, 1,320.

Item 5.—Anti-tank Guns, 50-57 mm., complete with ammunition.
1,900 57 mm. at rate of 200 per month during period October through May, and 300 for June.

Items 7 and 8.—Machine Guns, complete with Ammunition, .38 calibre and Thompson Sub-machine Guns, .45 calibre.
240,000 at rate of 20,000 per month. No. .38 calibre in production.

Note.—Ammunition for all weapons will be supplied in the same proportion as for United States troops, and, if practicable, in an amount equal to the accuracy life of weapons.

Spare Parts.—An effort will be made to provide spare parts as follows:

- Spare engines: 20 per cent.
- Spare propellers: 20 per cent.
- Airplane spare parts: 20 per cent. of cost of plane.
- Engine spare parts: 15 per cent. of cost of engine.
- Propeller spare parts: 15 per cent. of cost of propeller.
- Tank parts: 1 year maintenance.
- Trucks: 10 per cent. of cost.
- Guns: 6 months' maintenance.

Spare-part production is lagging in the United States, and, if actual deliveries are below the rates stated above, they will be made in the same proportion as for United States troops.

Item 9.—Scout Cars.
6,000 scout cars at rate of 500 per month and 18,000 jeeps at rate of 1,500 per month.

Item 10.—Trucks.
120,000 trucks at rate of 10,000 per month.

Item 11.—Field Telephones.
144,000 field telephones at rate of 12,000 per month, of which one-half will be sound-powered.

Item 12.—Field Telephone Wire.
480,000 km. of field telephone wire at 40,000 km. per month.

Item 13.—Toluol and T.N.T.
24,000 tons of toluol at rate of 2,000 tons per month, and 24,000 tons of T.N.T. at rate of 2,000 tons per month.

Item 14.—Nitro-glycerin or Other Powder.
The type and amount to be made available are subject to further negotiation.

Item 15.—Stereoscopic Observation Instruments for Artillery.
Not available.

Item 16.—Military Field Glasses.
Not available.

Item 17.—Motor-cycles.
10,500 motor-cycles, at rate of 500 per month, July through September, and 1,000 per month thereafter.

Item 18.—Prime Movers for Artillery.
2,400 prime movers for artillery at rate of 200 per month, of which a part will have slow speed transmissions.

Item 19.—Toboggans (Motor Sleds).
2,000 toboggans, at rate of 200 per month, September through June.
Item 20.—Radio Sets of Various Types.
11,500 radio sets of various types. Specific types are to be negotiated and to be made available at the following rates:

100 in July.
1,100 in August and September.
2,350 in October.
2,475 in November.
1,225 in December.
525 each month from January to June, 1943.

Item 21.—Radio-Locators of Various Types.
None available at this time. Type under development.

Item 22.—Radio-Locators for Installation in Aircraft.
None available at this time. Type under development.

Item 23.—Radio Tubes.
2 million radio tubes to be furnished on schedule to be arranged.

Item 24.—Generators, Gas Driven.
10,000 gas-driven generators to be furnished on schedules to be arranged. To be supplied without tents.

Item 25.—Absolute Radio Altimeters.
No absolute radio altimeters available.

Item 26.—Radio Beacon, Blind Landing Equipment, and Homing Devices.
None available.

Item 27.—Radio Direction-Finders (Various Types).
150 sets of radio direction-finders at rate of 50 per month, November through January.

Item 28.—Measuring and Test Equipment.
$1 million worth of measuring and test equipment, on schedules to be arranged.

Item 29.—Radio Repair Trucks for Field Use.
No radio repair trucks available.

Item 30.—Dry Cells for Field Telephones.
1,500,000 dry cells for field telephones on schedules to be arranged.

Item 31.—Dry Cell Batteries for Use with Radio Equipment.
400,000 dry cell batteries for use with radio equipment, on schedules to be arranged.

Item 32.—Radio Components, Parts and Accessories.
$500,000 worth of radio component parts and accessories for maintenance and repairs to be furnished on schedules to be arranged.

Item 33.—Field Repair Shop, Light, for Tanks and Trucks.
No light field repair shop for tanks and trucks available.

Item 34.—Field Repair Shop for Brigade Tank Division.
90 units of field repair shops, each consisting of approximately 12 trucks, at rate of 10 units per month, October through June.

GROUP II.—VARIOUS MATERIALS, MACHINERY AND INDUSTRIAL EQUIPMENT.

Item 1.—Marine Cable.
1,200 km. in equal monthly instalments.

Item 2.—Submarine Cable.
600 K.m. in equal monthly instalments.

Item 3.—Aluminium Ingots.
24,000 long tons in equal monthly instalments.

Duraluminium.
6,000 long tons in equal monthly instalments.

Item 4.—Nickel.
Combined United Kingdom and United States at rate of 600 short tons per month for first six months; subject to review for second six months. This amount
includes nickel in all forms to be made available, including alloys with steel, nichrome wire, and other materials requiring nickel in the specifications, except finished munitions.

Item 5.—Molybdenum.
4,000 short tons in equal monthly instalments.

Item 6.—Copper Electrolytic, Copper Reserve.
Combined United Kingdom and United States. 120,000 long tons in equal monthly instalments. This includes copper in all forms, including refinery shapes, brass and wire mill products, copper base alloys and copper content of finished products other than ammunition.

Item 7.—Rolled Copper (Cartridge Brass, &c.).
102,000 short tons in equal monthly instalments, subject to copper limitation indicated in Item 6.

Item 8.—Magnesium Alloys.
None available.

Item 9.—Zinc, High Grade.
Combined United Kingdom and United States. 18,000 short tons in equal monthly instalments.

Item 10.—Bimetal.
12,000 short tons in equal monthly instalments, subject to copper limitation indicated in Item 6. Bimetal of types used for thermostats is unavailable.

Item 11.—Copper Goods and Tubes.
15,000 short tons in equal monthly instalments, subject to copper limitation indicated in Item 6 above.

Item 12.—Ferrosilicon.
Combined United States and United Kingdom, 12,000 long tons in equal monthly instalments.

Item 13.—Ferrochrome.
Combined United Kingdom and United States, 7,200 long tons in equal monthly instalments.

Item 14.—Armour Plate.
12,000 long tons in equal monthly instalments, provided types desired are available. Subject to nickel limitation indicated in Item 4.

Item 15.—Hard Alloys and Cutting Tools.
$9,000,000 worth to be furnished on schedules to be arranged. Subject to nickel limitation indicated in Item 4.

Note: Items 16–34, inclusive, as listed below, can be made available tentatively, but are all subject to specifications and sizes available in the United States and subject to nickel limitation indicated in Item 4.

Item 16.—Cold Drawn Steel Drill Rods.
120 long tons in equal monthly instalments.

Item 17.—High Speed Steel.
3,000 long tons in equal monthly instalments.

Item 18.—Tool Steel.
10,200 long tons in equal monthly instalments.

Item 19.—Cold Drawn Carbon and Alloy Steel Rods and Bars and Aircraft Steel.
129,600 long tons in equal monthly instalments.

Item 20.—Hot Rolled Steel (Carbon, Alloy and Aircraft).
96,000 long tons in equal monthly instalments.

Item 21.—Chrome—Manganese Silicon Steel Billets.
84,000 long tons in equal monthly instalments.

Item 22.—Cold Rolled Steel Sheet.
84,000 long tons in equal monthly instalments.

Item 22a.—Cold Rolled Steel Strip.
84,000 long tons in equal monthly instalments.

Item 23.—Stainless Steel.
3,000 long tons in equal monthly instalments.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Tinplate</td>
<td>60,000 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>25</td>
<td>Steel Wire</td>
<td>55,920 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>26</td>
<td>Steel Wire Rope</td>
<td>14,400 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>27</td>
<td>Steel Alloy Tubes</td>
<td>21,600 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>28</td>
<td>Stainless Steel Wire</td>
<td>960 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>29</td>
<td>Special Alloy Wire</td>
<td>240 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>30</td>
<td>Nickel Chrome Wire</td>
<td>450 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>31</td>
<td>Barbed Wire and Staples</td>
<td>50,400 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>32</td>
<td>Steel Tubes</td>
<td>252,000 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>33</td>
<td>Hot Rolled Steel Sheets and Plates under 3/4-inch thick and under 72 inches wide</td>
<td>96,000 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>34</td>
<td>Bolts, Nuts, &amp;c.</td>
<td>12,000 long tons in equal monthly instalments.</td>
</tr>
<tr>
<td>35</td>
<td>Other Metals and Steel Products</td>
<td>Types and schedules to be arranged.</td>
</tr>
<tr>
<td>36</td>
<td>Phenol</td>
<td>12,000 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>37</td>
<td>Petroleum Products</td>
<td>240,000 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>38</td>
<td>Ethylene Glycol</td>
<td>2,400 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>39</td>
<td>Sodium Bromide</td>
<td>1,800 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>40</td>
<td>Phosphorus</td>
<td>2,400 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>41</td>
<td>Dibutyl Phthalate</td>
<td>3,600 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>42</td>
<td>Dimethylaniline</td>
<td>3,600 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>43</td>
<td>Diphenylamine</td>
<td>1,800 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>44</td>
<td>Colloxylin</td>
<td>4,800 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>45</td>
<td>Methanol</td>
<td>4,800 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>46</td>
<td>Urotropine</td>
<td>4,600 short tons; 300 in July and August, and 400 per month thereafter.</td>
</tr>
<tr>
<td>47</td>
<td>Hexagen</td>
<td>None available.</td>
</tr>
<tr>
<td>48</td>
<td>Ammonia Chloride</td>
<td>4,800 short tons in equal monthly instalments.</td>
</tr>
<tr>
<td>49</td>
<td>Mercury (Metallic)</td>
<td>300 short tons in equal monthly instalments.</td>
</tr>
</tbody>
</table>
Item 50.—Potassium Nitrate.
3,600 short tons in equal monthly instalments.

Item 51.—Ammonium Cyanide.
3 short tons in equal monthly instalments.

Item 52.—Centralite.
600 short tons in equal monthly instalments.

Item 53.—Resarin (Resorcinol).
120 short tons in equal monthly instalments.

Item 54.—Barium Peroxide.
300 short tons in equal monthly instalments.

Item 55.—Strontium (S. Oxalate).
96 short tons in equal monthly instalments.

Item 56.—Rodalite (Rhodamine B).
6 short tons in equal monthly instalments.

Item 57.—Tellurium (T. Nitrate).
3 short tons in equal monthly instalments.

Item 58.—Cerium (C. Chloride).
18 short tons in equal monthly instalments.

Item 59.—Cresol.
1,200 short tons in equal monthly instalments.

Item 60.—Potassium Sulphate.
1,800 short tons in equal monthly instalments.

Item 61.—Anthracene.
None available.


Note:—Will be made available in quantities totalling an aggregate value of 150 million dollars, the amount and type of the specific items to be arranged at the earliest possible date, subject to limitations on copper and nickel.

Item 66.—Industrial Diamonds.
None available in the United States.

Item 67.—Abrasives.
$3,600,000 worth in equal monthly instalments.

Item 68.—Bearings.
Supply depends upon specific sizes.

Item 70.—Balls and Rollers.
25,000,000 in equal monthly instalments, provided sizes are spread generally through the range of American production.

Item 71.—Sole Leather.
No sole leather available except as included in finished shoes.

Item 72.—Army Boots.
2,400,000 pairs of army shoes at rate of 200,000 pairs per month.

Item 73.—Army Cloth.
18,000,000 yards of army cloth at monthly rate of 1,500,000 yards, in ratio of 60 per cent. for overcoating and 40 per cent. for suiting.

Item 74.—Electric Power Cables.
12,000 Km. in equal monthly instalments, subject to copper limitation indicated in Item 6.

Item 75.—Webbing.
36,000,000 yards of tubular-type webbing at 3,000,000 yards per month.
No other type available.

Item 76.—Tarpaulin.
No tarpaulin available.
Item 77.—Vistanex (Molecular wt. 60).
Supply not available until the Spring of 1943. The amount available will depend upon the development of the United States synthetic rubber programme.

Item 78.—Tires and Tubes.
Combined United States and United Kingdom 36,000 long tons of rubber in all forms, including tires and tubes in equal monthly instalments. In addition, 2,000 long tons per month from Ceylon as long as that source is open.

Item 79.—High Pressure Hose.

Item 80.—Sheet Fibre.

Item 81.—Shock Absorber Cord.
No commitments can be made until further specifications are received.

Item 82.—Metallic Cloth and Screen.
1,000,000 square metres in equal monthly instalments, subject to copper limitations as stated in Item 6.

Item 83.—Condenser Paper (Radio).
240 short tons in equal monthly instalments.

Item 84.—Miscellaneous Emergency Material.
Availability depends upon further specifications.

GROUP III.—EQUIPMENT AND MATERIAL FOR SPECIFIC INDUSTRIES.

A.—Equipment and Materials for Railroads.
The following items can be made available in equal monthly instalments as follows: rails and accessories, 216,000 tons; wheels, 12,000 sets; axles, 54,000 units. All other items requested for railroads include large amounts of critical materials and critically scarce tools, cranes and other heavy machinery, which are, for the most part, unavailable for delivery. Some of the items in this group may be found to be available upon receipt of specifications as to sizes and types.

B.—Equipment and Materials for Iron and Steel Industry.
It is impossible to meet this request. The requested equipment approximately duplicates that required for the expansion of the American steel industry which is now under way. To make available any substantial part of the materials requested would compel abandoning the United States steel expansion programme.

C.—Equipment for Petroleum Industry.
It is impossible to meet this request in full. Many of the items in this group are critical in the expansion of the 100 octane gasoline and synthetic rubber production in the United States. Certain items which will not interfere with the 100 octane and synthetic rubber programmes may be made available upon receipt of definite specifications. Some used refining equipment in good condition is available.

GROUP IV.—FOOD PRODUCTS.

Item 1.—Wheat and Flour.
2,400,000 tons available in equal monthly instalments.

Item 2.—Sugar.
840,000 tons available in equal monthly instalments.

Item 3.—Canned Meat Products.
120,000 tons available in equal monthly instalments.

Item 4.—Meat.
150,000 tons available in equal monthly instalments.

Item 5.—Lard.
144,000 tons available in equal monthly instalments.

Item 6.—Vegetable Oil.
120,000 tons available in equal monthly instalments.

Item 7.—Soap Stock.
60,000 tons available in equal monthly instalments.
GROUP V.—MEDICAL SUPPLIES.

Approximately $12 million worth of medical supplies, in approximately equal monthly instalments and substantially in accordance with request, but with the understanding that items and quantities thereof must be arranged with appropriate United States Agency.

In addition to the above listed items requested by the Government of the U.S.S.R., the Government of the United States undertakes to make available certain Diesel engines, gasoline engines, storage batteries for submarines, guns and ammunition to arm U.S.S.R. merchant vessels and minesweepers or patrol craft.

These items can be made available at the following rates:

**Diesel Engines**

506 Diesel engines, varying from 170 to 1,600 horse-power, in the following quantities: 122 of 170 h.p., 260 of 250 h.p., 48 of 600 h.p., 130 of 1,200 h.p., 6 of 1,600 h.p.

These Diesel engines can be made available at the following rates:

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>4</td>
<td>January 1943</td>
<td>46</td>
</tr>
<tr>
<td>July</td>
<td>16</td>
<td>February</td>
<td>46</td>
</tr>
<tr>
<td>August</td>
<td>20</td>
<td>March</td>
<td>51</td>
</tr>
<tr>
<td>September</td>
<td>24</td>
<td>April</td>
<td>51</td>
</tr>
<tr>
<td>October</td>
<td>44</td>
<td>May</td>
<td>56</td>
</tr>
<tr>
<td>November</td>
<td>46</td>
<td>June</td>
<td>56</td>
</tr>
<tr>
<td>December</td>
<td>46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gasoline Engines.**

2,170 gasoline engines from 50 to 1,200 h.p., in the following quantities: 1,600 of 50–120 h.p., 120 of 600 h.p., 550 of 1,200 h.p.

These gasoline engines can be made available at the following rates:

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>100</td>
<td>January 1943</td>
<td>215</td>
</tr>
<tr>
<td>August</td>
<td>150</td>
<td>February</td>
<td>215</td>
</tr>
<tr>
<td>September</td>
<td>150</td>
<td>March</td>
<td>215</td>
</tr>
<tr>
<td>October</td>
<td>150</td>
<td>April</td>
<td>220</td>
</tr>
<tr>
<td>November</td>
<td>150</td>
<td>May</td>
<td>220</td>
</tr>
<tr>
<td>December</td>
<td>165</td>
<td>June</td>
<td>220</td>
</tr>
</tbody>
</table>

**Storage Batteries for Submarines.**

12 storage batteries for submarines at the rate of one per month.

**Naval Armament and Ammunition.**

Sufficient guns and ammunition can be made available to arm U.S.S.R. merchant vessels with one 3-inch double-purpose gun and two machine guns, together with ammunition, as such ships become available for arming.

**Mine-Sweepers or Patrol Craft.**

10 Mine-sweepers or patrol craft can be delivered during April, May and June 1943.

The Government of the United States further undertakes to make available stationary and mobile power-generating equipment of types to be arranged. Some used power-generating equipment, in good condition, is available at the present time.

**Schedule of United Kingdom Stores.**

The United Kingdom offers to the Union of Soviet Socialist Republics the following schedule of stores from the period starting the 1st July, 1942, to the 30th June, 1943. For certain items the amounts to be made available are indicated as combined offerings of the United States and the United Kingdom, and appear as a combined figure in the schedules of both Governments.

A. Military Supplies.

1. Aircraft.—200 Fighters monthly for last six months of 1942. The United Kingdom Government cannot at present undertake to increase the present quota of 200 aircraft a month, but the existing quota rates will be continued.
to the end of the year. The United Kingdom Government cannot foresee the situation beyond the end of 1942, and its ability to continue or increase supplies of fighters will depend on the results of the intensified air fighting in the West of Europe during the present year.

2. Tanks.—250 monthly, until the 31st December, 1942. It is hoped that a combined offer of 1,000 monthly can be made by a Joint Commitment from the United States and United Kingdom for the first six months of 1943. Basis of allocation to be decided at a later date.

3. Anti-Tank Guns.—50—2-pdr. monthly with ammunition. 50—6-pdr. monthly with ammunition.

4. Anti-Tank Rifles.—300 monthly with ammunition.

5. Bren Carriers.—200 monthly with weapons.

B. Naval Supplies.

Certain Naval supplies have been promised since Protocol, and these promises will be fulfilled. Quantities falling within period after June 1942 until completed are—

6. Oerlikons.—50 monthly with ammunition.

7. 3-inch HA/LA or 12-pdr. Guns with ammunition.—10 monthly until requirements are met.

8. Submarine Storage Batteries.—20 to complete total of 32.

9. 150 mm. Complete Barrels.—8 plus one spare barrel per gun per month starting in August.

C. Raw Materials Supplies (Figures in long tons monthly, except where otherwise stated).

10. Aluminium.—2,000 tons monthly July, August, September. Subject to reconsideration end of September. United States offer of 24,000 tons in equal monthly instalments remains unchanged.

11. Tin.—750 tons monthly (adjustments dependent upon decisions arrived at by the Combined Raw Materials Board, less any amounts over 9,000 received by U.S.S.R. from China).

12. Nickel.—Combined United Kingdom and United States at rate of 600 short tons per month for first six months, subject to review for second six months. This amount includes nickel in all forms to be made available, including alloys with steel, nichrome wire and other materials requiring nickel in the specifications, except finished munitions.

13. Lead.—3,500 tons monthly dependent upon cancellation of unshipped amounts under the first Protocol and upon shipping conditions.

14. Copper.—Combined United Kingdom and United States, 120,000 tons in equal monthly instalments. This includes copper in all forms, including refinery shapes, brass and wire mill products, copper base alloys and copper content of finished products other than ammunition.

15. Zinc, High Grade.—Combined United Kingdom and United States, 18,000 short tons in equal monthly instalments.

16. Industrial Diamonds.—$150,000 monthly.

17. Ferrosilicon.—Combined United Kingdom and United States, 12,000 tons in equal monthly instalments.

18. Ferrochrome.—Combined United Kingdom and United States, 7,200 tons in equal monthly instalments.

19. Silver Steel.—50 tons per month.

20. Graphite.—100 tons per month, dependent upon local conditions in Ceylon.

21. Rubber.—Combined United Kingdom and United States, 36,000 tons of rubber in all forms, including tyres and tubes, in equal monthly instalments. In addition, 2,000 tons per month from Ceylon as long as that source is open.
22. Jute.—4,000 tons per month, dependent upon Indian conditions.
23. Shellac.—300 tons per month dependent upon Indian conditions.
24. Wool.—2,000 tons per month from New Zealand dependent upon shipping conditions.

D. Food.
The only quantities of food which it will be possible for the United Kingdom to make available to the U.S.S.R. will be food which it would be possible to use for filling capacity for bottom cargo and broken stowage in ships carrying tanks and aircraft.

ANNEX II.

Identical Note dated the 7th July, 1942, from the Ambassador of the U.S.S.R. in Washington to the Secretary of State of the United States and from the Ambassador of the U.S.S.R. in London to His Majesty's Principal Secretary of State for Foreign Affairs.

The Soviet Government accepts with satisfaction the Second Protocol between the Union of Soviet Socialist Republics, the United States of America and Great Britain for a period of from the 1st July, 1942, to the 30th June, 1943, proposed by the Governments of the United States of America and the United Kingdom.

The Soviet Government hereby expresses the following hopes:—

(a) The monthly delivery of aircraft from Great Britain after the end of the second half of 1942, i.e., in the first half-year of 1943, if not increased, will at any rate not be reduced, and from the United States of America will, after October 1942, be increased to the greatest possible limit.

(b) The Government of Great Britain will find the possibility to maintain the monthly delivery of aluminium fixed for July-September, 1942, until the end of the second period, as well as to secure the monthly delivery of cobalt of not less than 10 tons as was provided for by the Moscow Protocol.

(c) Taking into account the increased requirements of the United States of America and of Great Britain in nickel, as well as the acute need of the U.S.S.R. for this metal, this will be delivered in the course of the whole second period, at the rate of 400 tons per month above those quantities which will be required for the production of goods provided for delivery in the Second Protocol.

The Soviet Government is of the opinion that the proposal of the American and British Governments to limit the programme of deliveries to the U.S.S.R. to 4,400,000 short tons which will be secured by tonnage available for delivery in the northern ports of the U.S.S.R. and in the ports of the Persian Gulf, should be effected at the expense of wheat, flour, sugar and oil products.

The Soviet Government hopes that the Government of Great Britain will secure the delivery of various equipment ordered by the Soviet Trade Delegation in Great Britain up to the 1st July, 1942, and will find it possible to accept further orders for equipment to be delivered in the second period.

The Soviet Government notes the communication of the Government of the United States of America regarding the impossibility at present to fulfil the programme put forward by the U.S.S.R. concerning equipment of metallurgical and oil industries, as well as railways. It trusts, however, that the United States of America will find it possible to satisfy these Soviet requirements in the future.

The Soviet Government expresses its satisfaction at the statement of the American and British Governments that they would be glad from time to time to revise this programme with a view to examining the possibilities of increasing the quantities of military supplies which can be put at the disposal of and transported to the U.S.S.R.

The Soviet Government empowers the Soviet Purchasing Commission in Washington to finally work out those points of the Protocol which require further clarification and agreement.
ANNEX III.

(1) The Government of the United Kingdom will, before the termination of their present commitment, give further consideration to the question of continuing or increasing supplies of aircraft after the end of 1942. They can at present give no undertaking in the matter. The Government of the United States are earnestly examining the request of the Soviet Government and will reach a decision as promptly as possible in consultation with representatives of the U.S.S.R.

(2) The Government of the United Kingdom agree to continue the supply of aluminium at the approximate monthly rate of 2,000 tons until the end of 1942.

(3) The Government of the United States undertake to make available 10 tons of cobalt per month during the period covered by the Second Protocol.

(4) The Government of the United States and the Government of the United Kingdom agree to increase the amount of nickel to be provided to the U.S.S.R. in all forms except finished military stores to 700 tons per month for the fourth quarter of 1942.
SUMMARY OF OPERATIONS OF BOMBER COMMAND FOR FORTNIGHT ENDING 1200 HOURS, SUNDAY, SEPTEMBER 13, 1942.

Memorandum by Secretary of State for Air.

KARLSRUHE, Saarlautern and Bremen were attacked with good results; it is thought that more than half of Dusseldorf has been effectively devastated; great destruction was done to the Opel works at Russelsheim; Duisburg again suffered heavily. Considerable destruction from earlier raids at Kassel and Nuremberg has now been revealed. There is fresh evidence confirming the success of mining activities.

Operations.

2. Night—

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saarbrücken</td>
<td>1/2 Sep</td>
<td>232</td>
</tr>
<tr>
<td>Karlsruhe</td>
<td>2/3</td>
<td>200</td>
</tr>
<tr>
<td>Emden</td>
<td>3/4</td>
<td>11</td>
</tr>
<tr>
<td>Bremen</td>
<td>4/5</td>
<td>251</td>
</tr>
<tr>
<td>Duisburg</td>
<td>6/7</td>
<td>207</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>8/9</td>
<td>249</td>
</tr>
<tr>
<td>Düsseldorf</td>
<td>10/11</td>
<td>475</td>
</tr>
</tbody>
</table>

Day—

<table>
<thead>
<tr>
<th>Operation</th>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-submarine patrols</td>
<td>30 Aug</td>
<td>6</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>31</td>
<td>6</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>1 Sep</td>
<td>6</td>
</tr>
<tr>
<td>Ghent-Teneuzen Canal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(oil installation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essen</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Cologne</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Osnabrück</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Convoy escort</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Cologne</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Essen</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Münster</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Boulogne</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Ijmuiden</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Karlsruhe</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>
### Day (continued)

<table>
<thead>
<tr>
<th>City</th>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emden</td>
<td>7 September</td>
<td>1</td>
</tr>
<tr>
<td>Essen</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Cologne</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Le Havre</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Cherbourg</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Osnabrück</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Münster</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Anti-submarine patrols</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

### Mining

**Aircraft.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 August/1 September</td>
<td>5</td>
</tr>
<tr>
<td>2/3</td>
<td>3</td>
</tr>
<tr>
<td>4/5</td>
<td>3</td>
</tr>
<tr>
<td>6/7</td>
<td>9</td>
</tr>
<tr>
<td>7/8</td>
<td>43</td>
</tr>
<tr>
<td>9/10</td>
<td>34</td>
</tr>
</tbody>
</table>

A total of 246 mines was laid.

### Operational Achievements.

**Saarlautern (1st/2nd September).**

3. This town lies 11 miles North-West of Saarbrücken, and resembles it in several ways. It is the centre of the mining district, and its population of 32,000 largely consists of miners and those serving their needs.

On the night of 1st/2nd September 232 aircraft were directed to attack Saarbrücken. The first of the 19 Pathfinders marked Saarlautern in error, with the result that the whole force concentrated there.

Very extensive damage has been done by fire and H.E., to both industrial and residential property in the section of the town lying on the North bank of the river. The rest of the town on the South bank of the river has not yet been photographed by day, but the indications are that the area of destruction is probably greater.

**Karlsruhe (2nd/3rd September).**

4. This city is the administrative capital of Baden (population 190,000). It has a large inland port on its West side and important railway repair shops on its East side. The armament factory of “Deutsche Waffen” is its most important industrial concern.

5. A force of 200 aircraft attacked the city and port, achieving, with the guidance of the Pathfinders, an extremely dense concentration. Print No. 1 shows fires and smoke drifting over the city during the attack. Day photographs reveal 270 acres of destruction in the city and industrial districts, excluding damage in the docks. Print No. 2 shows blocks of municipal buildings gutted in the centre of the city, and Prints Nos. 3 and 4 some of the destruction in other districts.

6. In the industrial area one large building and at least five small buildings at the Michelin tyre works are gutted. Three-quarters of another large factory is gutted or destroyed by blast (Print No. 5); a 4,000-lb. bomb appears to have burst directly in its largest building. In the dock area a large warehouse 417 yards x 84 yards was still burning nine days after the attack (Print No. 6). Other warehouses and a power station at the Eastern end of the docks, covering an area of approximately 15 acres, have been completely destroyed.

7. A ground report states that there were as many as two hundred fires burning at once. The goods station was still on fire late on the following afternoon, and warehouses in the vicinity are said to be severely damaged. The Food Office, Regional Treasury, Police Headquarters and main Post Office were severely damaged. During the evening of the 3rd September railway traffic was stopped at the outskirts of the town.

Another report states that on the 4th and 5th September coal traffic through Karlishuhe had fallen by 30 per cent.
Bremen (4th/5th September).

8. A force of 215 aircraft carried out the most successful of the many raids on Bremen, and photographs suggest almost as much damage was done as in all previous raids put together. Fires were burning next morning in factories and warehouses in the dock area, and in many residential properties. Print No. 7 shows several blocks in the core of the city burning fiercely.

9. In the docks, the Weser Flugzeugbau aircraft factory, which makes the Ju. 87, has been seriously damaged, the machine shop almost destroyed and other buildings blasted. Two workshops of the Atlas shipyards which make U-boat hulls, warehouses on the Europa and Hohtenors Hafen and on the quay side near the Weser railway station, railway sheds at Neubau station and 220 yards of covered goods sidings at the goods station have been destroyed.

10. In the inner town devastation among residential and business property is considerable, and it is possible that nearly 1/5th of the inner town is now in ruins.

11. The Focke Wulf factory was the target for a small part of the force. Photographs secured so far are not satisfactory, but they reveal a direct hit on a hangar-type building adjacent to the boiler house.

Duisburg (6th/7th September).

12. This attack was carried out by 207 aircraft. Only a small part of the town has been covered by photographs, but the following, mostly south of the Central city area, can be seen:

(i) On the South-East side of the Aussen Hafen a large building, probably part of an engineering works, is gutted, and on the North-West side of the Hafen two bays of a five-bay building are seriously damaged.

(ii) In both the Deutsche Maschinenfabrik A.G. and the Vereinigte Stahlwerke two buildings have been damaged by high explosive. A chemical works and two other buildings in Nicolai Strasse are damaged.

13. Photographs, taken on the 10th September, show a large factory in Neuendorf almost entirely burnt out, and much damage to residential property.

14. The whole story of this attack cannot be told as yet.

15. A ground report states that during the attack on Duisburg on the 21st/22nd July, the large French tug Nantes was sunk.

Russelsheim (8th/9th September).

16. This industrial town (15,000 inhabitants) was attacked by 249 aircraft. The target was Frankfurt, 10 miles to the North-East, but the Pathfinders marked Russelsheim, which is also on the Main, and in moonless conditions may well have resembled Frankfurt.

17. The bulk of the attack fell on the Adam Opel factory, which was adapted for the production of components for A.F.V.s, and aircraft and is known to employ 17,000 workers (many of these are, of course, drawn from the surrounding districts).

18. Photographs so far secured show 10 workshops either gutted or seriously damaged, eight acres of workshops adjoining the railway completely gutted, smaller buildings, a timber stack and stores of material destroyed. Some of this damage is shown in Print No. 8.

Düsseldorf (10th/11th September).

19. Düsseldorf was very successfully attacked by 475 aircraft, including 174 drawn from training units. The Southern and larger half of the town appears as completely devastated as the most heavily hit areas in Cologne. The town was still burning the next day but final assessments are not yet available. Two prints, however, are attached—No. 9 showing the ruins of the Deutsche Rohrenwerke, which made steel tubes, and No. 10 showing destruction at the main railway station and burnt-out docks nearby.
Information regarding Previous Raids.

**Kassel (27th/28th August).**

20. A detailed assessment of the damage caused by the attack shows—
   (i) Hits on the Henschel locomotive works—one of the most important in the Reich.
   (ii) In the Sternberg Strasse six factories completely gutted.
   (iii) In the Frankfurt Strasse a large factory gutted.
   (iv) In the Wolfhanger Strasse a further factory damaged.

Residential property suffered considerably, a typical incident being shown on Print 11.

**Nuremberg (28th/29th August).**

21. Nuremberg is the largest industrial town in Northern Bavaria (population over 400,000). It is also an important centre of communications, where two main transport routes of major importance intersect. Industries consist mainly of engineering works, many solely engaged on the production of tanks, diesel engines, armoured cars and other military transport.

22. There are six main areas of damage. High explosive caused damage over 3½ acres and 1¼ acres of built-up area respectively. In the North and North-East part of the town there is much damage to industrial property. At the M.A.N. submarine diesel-engine works a shed 300' x 70' has been completely destroyed, another building 250' x 70' partially demolished, and other sheds damaged by fire. In the Siemens Schuckert Works a building 275' long has been completely destroyed. At the aerodrome a large hangar and two workshops have been damaged. There are also a number of items of damage to domestic property. One 4,000-lb. bomb demolished houses and sheds over an area of approximately 8,000 square yards in the North-East part of the town. There is a very heavily damaged area immediately South of the main railway station. The station building has been gutted, and there are a few incidents in the old town.

23. The German Press announced that the Mayor of Nuremberg had called a conference of all managers of firms connected with the building industry. The reopening of schools has been postponed.

24. Two photographs are attached showing damage to the Johann Mederer Metal Works and an adjoining factory (Print No. 12) and fire and blast damage to semi-industrial property (Print No. 13).

**Hamburg.**

25. Further damage from the July raids, now revealed, is centred chiefly in working-class districts of Barmbeck, and suburban districts of Wandsbeck and Horn. In Barmbeck a considerable number of blocks of flats, tenements and houses have been destroyed or damaged by high explosives or fire in addition to some warehouse property. In Wandsbeck factory buildings have been damaged (including a chemical works) and five blocks of barrack buildings destroyed or seriously damaged. In Horn further barrack buildings have been damaged and a row of army huts gutted.

**Mainz.**

26. Further reports, believed to be reliable, state:
   (i) 400 people were killed and many more injured. Of 40,000 evacuated, 30,000 (nearly one third of the population) were homeless.
   (ii) Seven days after the attack on the 12th/13th August the main station was still closed to all but military traffic. For three days after the raid, a tremendous flow of refugees continued to arrive at Frankfurt station.
   (iii) Two oil transport trains were burnt out, and 24 barges laden with coal sunk.

**Saarbrücken.**

27. It is reported that in the attack on the 29th/30th July 68 passenger coaches, and a considerable number of goods trucks in or adjoining the goods station, were destroyed or damaged.
28. A newspaper report of the 19th August stated that in order to repair the worst of the damage in Saarbrücken workers from many other districts had to be brought into the city, amongst them “innumerable” glaziers from Würzburg, Frankfurt, Stuttgart and many other towns.

29. German railway employees in Basle are reported to have informed their Swiss colleagues that the railway lines and sidings in Saarbrücken have been so effectively damaged in R.A.F. attacks that full resumption of traffic would not be possible for a considerable period.

Duisburg.

30. A reliable report states that the inland harbour installations were badly damaged, at least thirty barges being sunk, and as a result the traffic in German coal and Swedish pulp to the southward has dropped off considerably.

Stuttgart.

31. Further confirmation of damage to the Bosch Works has been received from a reliable informant, who states that 600 workers were unemployed for two weeks after the attack in the first week of May. Two textile works and a leather factory were severely damaged and had not recommenced production by the middle of July. It took a week to effect full repairs to railway lines in and around the town.

Rostock.

32. A reliable source states that as a result of the four attacks on Rostock between the 23rd and 26th April—

(i) About one-third of the Heinkel works were destroyed or suffered varying degrees of damage.
(ii) Over forty-five large bombers, completed or nearly so, were destroyed or damaged beyond repair.
(iii) For eighteen days after the attack there was no water, gas or electricity in the town.
(iv) Over 400 people were killed in a shelter, and total casualties killed and severely wounded amounted to about 6,000. Morale was very bad and the police had to intervene to prevent panic spreading.
(v) It was three weeks before the railway lines between Rostock and Warnemünde were fully repaired.

Lille area.

33. On the 19th and 20th July Boston aircraft attacked targets in the Lille area by day. Reports of damage state:—

(i) The installation of Desmarais Frères was very severely damaged.
(ii) The Kuhlmann chemical works in Lille were damaged, the zinc chloride and caustic soda workshops being hit. Two other factories were set on fire.
(iii) At Pont-a-Vendin serious damage was caused to the synthetic ammonia plant.
(iv) At Donai the Penna-Roya plant, and at Gosnaye the power station, were severely damaged.

Mining.

34. The following reports of mining successes have been received:—

(a) On the 23rd July the Danish steamer Ruth of 321 tons was mined and sank off the entrance to the Guldborgsund, near Gjedser.
(b) On the 12th August the Danish fishing vessel Gudrun was mined and sank 1 mile off Koldov Kass in the Little Belt.
(c) The Danish Lise of 1,247 tons was mined and sank off Heligoland.
(d) The French radio on the 28th August stated that the motor fishing boat Perseverance struck a mine off St. Nazaire.
(e) On the 11th July the Norwegian Troma of 5,029 tons was severely damaged by a mine, and docked at Rotterdam for repairs which are expected to take four months.
35. Absolutely reliable information has been received of the positions of the wrecks reported since the 1st June, 1942, in the Baltic and off the Frisian Islands. Eighteen appear in the former area and seventeen in the latter. All coincide with positions in which mines have been laid by Bomber Command, and the thirty-five wrecks may be assumed to be due to mines laid by the Command. Certain of these wrecks may link up with reports in past Summaries, but it is considered that others may be incidents of which no previous information has been received and are additional indications of the success achieved.

Effects of R.A.F. Raids.

36. The following message from Zurich, dated the 6th September, referring to a statement issued to the German press, is of interest:

Dr. Rosenberg, German Minister for Occupied Russian Territories, said yesterday: "Germany and her allies are entitled to a privileged position because they alone are making sacrifices. Many parts of Europe, even after defeat, have not suffered privations like those caused by the R.A.F. in German towns."

A. H. M. S.

September 30, 1942.
KARLSKRONA 2/3 SEPTEMBER, 1942.
The civic and commercial centre almost completely gutted by fire. Note the hollow buildings and the spotted shadows caused by sun shining through empty window.
KARLSKRONA 3/9 SEPTEMBER, 1942.
Areas of complete devastation caused by blast and fire. Area clearance by a 4,000 lb bomb.
KREUZE 2/3 SEPTEMBER, 1942.
The commercial and business part of the city almost completely gutted. Note the hollow buildings and the "spotted" shadows as in print 4. A. Large clearance by a 4,000lb bomb. B & C. Trees on both sides of the road burned by fire.
MADE FINE 2/3 SEPTEMBER, 1942.

Large factory was gutted by fire and blast. The
large factory on the left formerly made stoves and
now probably makes army equipment such as field kitchens.
FALMOUTH - 2/3 SEPTEMBER, 1942.

A large warehouse measuring 417 yards by 32 yards, still burning 9 days after the attack.

The height of this immense building is demonstrated by the width of its shadow compared with that of the adjacent buildings.
4/5 September, 1942.

HULLEN. Large fires in the centre of the old city still burning at 10.30 hours on the morning after the raid.
AUSBRENNEN - THE OPEL WORKS 8/9 SEPTEMBER, 1942.
Many workshops and sheds destroyed by fire and blast are shown within the dotted line.
DUSSELDOF. 10TH SEPTEMBER, 1942.
The Deutsche Rohren Werke making steel tubes, almost completely destroyed and much of the surrounding property gutted by fire.
DUSSELDORF 10/11 SEPTEMBER, 1942.
The main Railway Station severely damaged by a heavy bomb. Many blocks to the west of the Station almost completely gutted by fire.
27/26 August 1942.

KASSEL. Areas of destruction are within the dotted lines.

A. A stick of bombs has burst in the roadway shattering the front of a long row of large buildings.
28/29 August, 1942.

LUFTFELD:
A. An unidentified factory completely gutted.
B. The metal works of JOHANN MEDEUR completely destroyed.
C. Severe fire damage to roof of adjoining workshop.
1. The VICTORIA ENGINE A.C. - motor cycle works are gutted.
MINISTERIAL CRISIS IN SIND.

Memorandum by the Secretary of State for India.

A ministerial crisis, precipitated not by local politics but by a peculiar and significant action by the Prime Minister of Sind, is imminent.

Sind is one of the three provinces in which ministerial government has been continued without a breakdown since 1937, and one of the five provinces in which the normal constitutional machinery is now functioning. It is a backward province with only one flourishing city (Karachi). Its financial resources are slender and its politics peculiar to itself. For several months a considerable part of the province has been under martial law during the operations conducted by British forces against the Hurs, the followers of the air Pagaro, a fanatical Moslem chieftain who has terrorised the countryside.

The present Prime Minister, Khan Bahadur Allah Bakhsh, O.B.I., is a Moslem but not a member of the Muslim League. Neither is he a member of Congress. But his Ministry depends for its existence on the support of the Congress members in the Legislature. He is an adroit politician; hitherto he has behaved more or less satisfactorily and has given reasonable support to the war effort. Last week, however, he sent the Viceroy a letter, which he subsequently published in the local press, declaring his disappointment with the policy of Great Britain who evidently "had no desire to give up her imperialistic hold on India" and renouncing his O.B.E. and his title of Khan Bahadur (conferred by the Viceroy) which he "cannot but regard as tokens of British imperialism".

Although no final decision has yet been taken, the Viceroy feels that this deliberate and public affront to the Crown and the King's Representative in India cannot be passed by and that the Governor has really no choice but to dismiss the premier. Fortunately the Governor apprehends no difficulty in forming an alternative Ministry to carry on for the time being though he is doubtful whether it could successfully face the Legislature in the budget session early next year. Should it fail it would be necessary for the Governor to take the administration into his own hands under Section 93 of the Government of India Act, a course constitutionally retrograde but likely to be beneficial to the administration of the province.

I have no doubt that my colleagues will agree as to the undesirability of retaining in office a Prime Minister who has committed such an impropriety; and I have informed the Viceroy that he may count on my support if it proves necessary to dismiss Allah Bakhsh.

L.B.K.

ININDIA OFFICE.

30 September 1942.
MEMORANDUM BY THE SECRETARY OF STATE FOR WAR

1. As my colleagues are aware, the United States authorities are sending to this country the same proportion of coloured troops as obtains generally throughout the United States Army. There are now between 11,000 and 12,000 such troops over here, and their numbers are likely to be considerably increased. The Secretary of State for Foreign Affairs at the 119th (42) Meeting of the War Cabinet on 31st August, 1942, undertook, with the approval of the War Cabinet to press the U.S.A. authorities to reduce the numbers sent over, but I believe has met with little success. We are thus left to face the various problems to which their presence gives rise.

2. The policy of the United States military authorities in dealing with their coloured troops in this country is based on the modus vivendi which has been developed in the United States in the course of time as the result of the conditions obtaining in that country. Their policy, which is well understood among Americans (although there is a minority in the United States which advocates a departure from the traditional view) rests on the principle of an almost complete separation between white and coloured troops. Thus the latter are placed in separate formations: they live in separate camps and are provided with their own canteens, clubs, recreation rooms and entertainments. Separate hostels are being provided and it is the intention to send over to this country coloured A.T.S. units to do the work normally done by A.T.S. for white troops.

3. This policy which may perhaps be fairly described as the combination of equal rights and segregation practised in the Southern States is not generally known to the population of this country who with little experience of a colour problem at home are naturally inclined to make no distinction between the treatment of white and coloured troops and are apt to regard such distinctions as undemocratic.

4. The War Office is thus faced with two incompatible theories, the disregard of either of which may have serious consequences. On the one hand the average white American soldier does not understand the normal British attitude to the colour problem and his respect for this country may suffer if he sees British Troops and British Women's Services drawing no distinction between white and coloured. There have already been instances of American white troops walking out of canteens and public houses on seeing coloured American soldiers being served in such places. This difference of attitude may clearly give rise to friction and, in fact, has done so. Moreover, the coloured troops themselves probably expect to be treated in this country as in the United States, and a
markedly different treatment might well cause political difficulties in America at the end of the war. It must be added that from the point of view of the morale of our own troops, whether in this country or overseas, it is most undesirable that there should be any unnecessary association between American coloured troops and British women. These considerations suggest that the War Office attitude towards the American coloured troops should be based on the view of the American Army authorities.

5. On the other hand, there is evidence both in the public Press and from Members of Parliament that any difference of treatment between white and coloured troops may be regarded as racial discrimination which will give rise to bitter resentment. I have, for example, received a letter from Mr. Pritt on this subject and in the *Sunday Pictorial* of 6th September, there was an attack on the wife of the vicar of Worth, Weston-super-Mare, for having advised the women of that village as to their attitude towards coloured troops. This point of view has a considerable measure of official support. Thus the Secretary of State for the Colonies has told me that he is unhappy about the possible repercussions of the policy of the American Army authorities on West Indian opinion and that of our Colonial Empire generally; an article written several months ago by the Minister of Information and concerned only with the position of coloured British subjects in this country was published in the *Sunday Express* on the 20th September, and given the heading of "The Colour Bar Must Go": appearing at this time, it may have been read by some as referring also to the question of American Coloured Troops; and the Home Office in a circular sent out to Chief Constables regarding the attitude of the police towards American coloured troops emphasizes that "it is not the policy of His Majesty's Government that any discrimination as regards the treatment of coloured troops should be made by the British authorities".

6. The War Office finds itself on a razor's edge and its attitude has been to endeavour to maintain a nice balance between these two conflicting views. Relying for the avoidance of many difficulties on the administrative arrangements which the Americans themselves make for the segregation of the coloured troops from the white troops, it has taken no steps to discriminate against the former in those cases where the American administrative arrangements do not cover the case. For example, in railway canteens run by British authorities, no endeavour is made to exclude the coloured American soldier. At the same time, while admitting no official discrimination in the British Army arrangements for coloured troops, the War Office has held that it is desirable for British troops, especially British A.T.S., to understand the American background on this matter and so to regulate their conduct as not to give cause for offence either to the white or to the coloured troops. From the point of view of the relations between the two Armies, this is most important. Misunderstandings, or quarrels on this subject, may well have serious results and may even affect the efficiency of the Allied fighting machine. It is, therefore, in my view essential that within the limits that are necessarily imposed on us and subject to local conditions we should follow the general lead given by the U.S.A. authorities.

7. It is natural that in so delicate and controversial a matter the military authorities should have asked for guidance. The War Office view from the start has been that no written instructions should be issued. Nevertheless, early in August the Major-General in charge of Administration, Southern Command, in whose area a large proportion of the American troops in this country will eventually be stationed decided that in view of the difficulties which were already occurring it was essential to give some confidential guidance in writing to his District Commanders and the local Regional Commissioners. He accordingly issued a short paper (of which a copy is annexed) entitled "Notes on relations with Coloured Troops" to all District Commanders and to the Regional Commissioners of numbers 6 and 7 Regions. The paper was sent under cover of a personal letter, which stated that the notes had been prepared to provide material for officers, including A.T.S., when talking with their men and women on the subject, and emphasized that the notes must not be distributed in writing—except to selected officers for the above purposes. The notes were issued in close consultation with the local American Commanders,
and set out shortly the historical reasons for the American Army policy. The notes were generally welcomed as affording guidance to a uniform policy, and, whether due to their issue or not, relations between British and American troops have since improved considerably.

I think that it is desirable that some purely factual statement, such as is given in the beginning of the note, should be made available to the Army generally. That view was expressed at a meeting of the Bolero Combined Committee (London) on 12th August, 1942, and it was recommended that an article should be published by the Army Bureau of Current Affairs after consultation with the Foreign Office setting out the history and facts of the relations between the white and coloured communities in America and between white and coloured troops. I endorse that recommendation and I hope that an agreed article will appear in an early issue. But I do not propose that the article should be followed by instructions or written advice based on the facts presented. The problem is more than an Army problem and any authorized statement which in any degree took sides could not be limited to the Armed Forces in its application. So far as the Army is concerned, therefore, I contemplate no such statement. But it will be left to Army officers as occasions arise to interpret the facts orally to those serving under them. There is of course always the risk, in the absence of written instructions, of varying interpretations and of misrepresentation of what has been said. But the objection to written instructions is so great that the risk is the lesser evil.

To sum up, I would ask the endorsement of the War Cabinet of the policy I propose to follow in the Army:

(a) To make full use of the American administrative arrangements for the segregation of coloured troops, but where those fail to make no official discrimination against them.
(b) To give the Army through A.B.C.A. a knowledge of the facts and history of the colour question in the U.S.A. and the U.S.A. Army.
(c) To allow Army officers without the issue of overt or written instructions to interpret those facts to the personnel of the Army including the A.T.S. and so educate them to adopt towards the U.S.A. coloured troops the attitude of the U.S.A. Army Authorities.

P. J. G.

War Office,
3rd October, 1942.
NOTES ON RELATIONS WITH COLOURED TROOPS
(Not to be published)

1. Among the American troops in this country are a number of units whose personnel are coloured troops. Their Officers are white though there are some coloured officers. It is to be borne in mind that they contribute a valuable effort to the prosecution of the war by the provision of labour both skilled and unskilled.

Their presence in England presents a new problem to British men and women brought in contact with them. They are American citizens and have equal rights with the white citizens and there is no discrimination between the two but the racial problem is there and cannot be ignored.

It is necessary, therefore, for the British, both men and women, to realize the problem and to adjust their attitude so that it conforms to that of the white American citizen. This will prevent any tarnishing of our amicable relations with the U.S. Army through misunderstanding which knowledge and forethought can prevent.

2. The historical aspect must be understood in broad outline.

The U.S. comprises a vast area and the South is semi-tropical where labour is more fitted to the coloured man. Therefore, Africans were brought over in the eighteenth century as slaves. They took root and multiplied, working mostly on cotton plantations. In the American Civil War of 1861-64 one of the issues was the abolition of the slavery which was effected. The negro became a free man and though the bulk of them remained in the South they began to percolate into the North. This historical cause accounts for a difference in attitude between citizens in the North and South of the U.S.A.

3. The bulk of the coloured population remains in the S. and S.W. States of the Union. They live apart from the white men, leading their own lives in their own way. They have their own churches, schools and social gatherings. They have their own areas in towns and villages to live in. In cars and buses they have seats allocated and their own reservations in cinemas.

They are sympathetically treated by the white man and in their relationship with each other there is a bond of mutual esteem. The white man feels his moral duty to them as it were to a child.

In many ways the coloured man in the South is happier than his brother in the North.

But the racial problem demands that the white man or woman does not intimately associate with the coloured man.

4. In the North, the coloured man does not work in massed labour in the fields but more individually and his personal contact brings him a greater political consciousness. He tends to demand more equitable treatment and becomes more sensitive to racial distinction. His treatment in the North is freer and he is given greater latitude and is not segregated to the degree he is in the South. Nevertheless, his social life is not intimately connected with that of the white man who does not normally associate with him in social gatherings.

5. While there are many coloured men of high mentality and cultural distinction, the generality are of a simple mental outlook. They work hard when they have no money and when they have money prefer to do nothing until it is gone. In short they have not the white man's ability to think and act to a plan. Their spiritual outlook is well known and their songs give the clue to their nature. They respond to sympathetic treatment. They are natural psychologists in that they can size up a white man's character and can take advantage of a weakness. Too much freedom, too wide associations with white men tend to make them lose their heads and have on occasions led to civil strife. This occurred after the last war due to too free treatment and associations which they had experienced in France.

6. A summary then of the coloured man from the U.S.A. is that he is a race within a nation, living a life apart, possessing equal rights of citizenship and sympathetically treated, yet debarred from full social association by the fact of his birth.
7. From these facts the correct attitude of the British soldier or auxiliary can be gauged.

It is necessary to realize:

(a) the coloured problem with which America is faced.
(b) the necessity for us to conform to the American attitude.
(c) the mental outlook of the coloured man.
(d) the difference in attitude between North and South.

8. There are certain practical points which arise from the foregoing. These include the following:

(a) Be sympathetic in your mind towards the coloured man, basing your sympathy on a knowledge of his problem, of his good qualities and his weaker ones.
(b) White women should not associate with coloured men. It follows then, they should not walk out, dance, or drink with them. Do not think such action hard or unsociable. They do not expect your companionship and such relations would in the end only result in strife.
(c) Soldiers should not make intimate friends with them, taking them to cinemas or bars. Your wish to be friendly if it becomes too intimate may be an unkind act in the end.
   Try and find out from American troops how they treat them and avoid such action as would tend to antagonize the white American soldier.
(d) It is to be noted that in the U.S.A. there are a few political extremists who endeavour to make the colour question a means to stir up political trouble. If such are met with they should not be listened to.
(e) It is probable that enemy propaganda will make every effort to use the colour question to stir up bad feeling between people in this country and the coloured troops and between American white and coloured troops. Never pass on a story which would tend to create disaffection and do all you can to scotch such rumours when they come to your notice.

If you have any difficulties on this problem ask your officer for advice.
UNITED STATES COLOURED TROOPS IN THE UNITED KINGDOM.

Memorandum by the Secretary of State for the Colonies.

The presence of a large number of coloured American troops in the United Kingdom presents a difficult problem for the Colonial Office as well as the War Office. It seems to the Colonial Office to raise two aspects of the colour question which are intimately related to each other. The first is the position of British coloured persons whether in or out of uniform, and the second is the position of American coloured troops.

2. British coloured persons in the United Kingdom and in the Colonies are extremely sensitive to colour discrimination, and it is our effort to secure both in the Colonies and in this country equality of treatment for all races. We have brought over to this country numbers of technicians from the West Indies, of foresters from British Honduras, and there are also considerable numbers of coloured persons serving in the Army, and the Air Force, brought over to this country under special schemes and serving alongside white men. Some of these coloured persons in the Services have also been recruited in this country. We have done everything we can to encourage good relations, and in this we have had a large measure of success. There are also numbers of coloured Colonial civilians, students, seamen and residents.

3. As the American attitude towards coloured persons is very largely different from the attitude we adopt in this country towards our own coloured people, the Colonial Office feels that the American authorities should be made fully aware of this attitude, and also of the fact that there are numbers of our own coloured people in the United Kingdom, and that they should be asked to respect our attitude towards these people.

4. I consider that any lead given to the British people in this country, asking them to adopt the attitude of the American Army towards coloured people, whether Americans or others, is likely to cause serious resentment among our coloured people in this country and in the Colonies, and also to cause confusion (if not indeed a reaction gravely prejudicial to Anglo-American relations) in the minds of the public here, who have been asked repeatedly to accept British coloured Colonial persons on equal terms and to extend to them hospitality and friendliness. I refer particularly to the broadcast made by Mr. Macmillan, the Parliamentary Under-Secretary of State for the Colonies, on the 28th July, 1942, and to the recent article by Mr. Brendan Bracken in the Sunday Express, both of which express very clearly the attitude which we would like the British public to take towards our own coloured people.

5. I am in full agreement with the proposal made in the War Office memorandum that all ranks in the Services should be given a knowledge of the past history of the colour question in the United States and in the United States Army, but I consider that it is going much too far to attempt to ask the British Army or the A.T.S. to adopt the attitude of the American Army towards American coloured people. It should be impressed upon our Service personnel that this is an American and not a British problem. I suggest that it should then...
be left to them to decide on their own behaviour in the matter, and it should be a question of good manners and conduct on the part of our troops and the A.T.S. to avoid giving offence to the United States Army in their attitude to American coloured persons.

6. I cannot believe that thinking Americans would wish us to adopt their ideas and prejudices any more than they would ours. If the Americans propose to treat their coloured people in a certain way, we should to some extent conform by not interfering, but we should not take any positive action to imitate their administrative or other arrangements.

7. To summarise, the Colonial Office ask for agreement to the following points:—

(a) There should be no interference with American administrative arrangements for segregation within the United States Army, but, in the absence of such arrangements, the British Authorities should not attempt to provide special arrangements on lines of racial discrimination.

(b) The historical and social reasons for the American attitude should be fully and fairly explained to the British Services so as to encourage a proper understanding of the American problem.

(c) Similarly, the reasons which differentiate our problem from that of the Americans, and which have led to a different attitude towards the question on the part of our people, should be explained to the Americans, and the American Army should be asked to respect our attitude towards British coloured Colonial people in this country, and to avoid any interference with them that may lead to bad relations.

(d) British Service men and women and civilians should be left to draw their own conclusions as to their behaviour towards coloured Americans without official directions as to their conduct in this matter.

Colonial Office, October 2, 1942.
SECRET.

W.P. (42) 443
(Also C.O.S. (42) 419)

October 1, 1942

TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document

WAR CABINET

WEEKLY RÉSUMÉ
(No. 161)

of the
NAVAL, MILITARY AND AIR SITUATION
from 0700 September 24th, to
0700 October 1st,
1942

[Circulated with the approval of the Chiefs of Staff.]
NAVAL SITUATION.

General Review.

1. The total of U-boats operating in the Atlantic continues to increase. There has been a large number of attacks by ships and aircraft based in Home Waters.
Concentrated attacks by U-boats on three convoys in the North Atlantic have resulted in the loss of four ships. Shipping losses were relatively light.
Two of H.M. destroyers have been lost.
Our light forces have intercepted an enemy convoy off the Dutch coast.

Home Waters and North Atlantic.

2. H.M. Destroyer Veteran, one of the escorts of a homeward-bound convoy of river steamers, is presumed to have been sunk during U-boat attacks on the convoy early on the 26th in mid-Atlantic. Survivors from two ships of the convoy which had previously been sunk were on board Veteran.

3. An escorted convoy of six ships was attacked by our light forces off Terschelling on the night 30th/1st. One ship of 2,500 tons was torpedoed by M.T.B. 230 and blew up and the enemy escorts were heavily engaged. M.G.B. 18 was hit and had to be abandoned after being set on fire. The Commanding Officer of M.G.B. 88 was killed, but other casualties were light.

4. Naval aircraft, in conjunction with the R.A.F., have been engaged in minelaying operations, and attacks on shipping, off the French and Dutch coasts.

Mediterranean.

5. H.M. Submarine P. 35 sank a large ship 60 miles W.N.W. of Navarino (south-west coast of Greece) on the 27th. The Greek Submarine Nereus sank a ship of 1,500 tons and an 80-ton caique in the Aegean.

6. Naval aircraft operating with the R.A.F. torpedoed a destroyer off Cape Spartivento on the night 28th/29th.

During the week 7,987 tons of French merchant shipping westbound, and upwards of 5,000 tons eastbound, passed Gibraltar under escort.

East Indies.

8. The Vichy French S.S. Amiral Pierre (4,391 tons), after being sighted by aircraft of the South African Air Force, was intercepted by H.M. Destroyer Nizam on the 29th. As the result of an attempt at scuttling by her crew, the ship sank while in tow, early the following morning, east of Lourenco Marques. The captain, crew and eight passengers are being taken to Durban.

Pacific.

Solomons.

9. The U.S. Navy Department has announced the loss of the U.S. Destroyer Jervis and the auxiliary transport Little off the Solomons.

New Britain.

10. A force of cruisers, seaplane-tenders and destroyers, with 14 merchant ships, including two tankers, was seen by air reconnaissance off Rabaul on the 28th.

Timor.

11. H.M. Australian Destroyer Voyager ran aground on the south-east coast of Timor on the 23rd and, after being damaged by air attack, had to be destroyed by her crew. The ship's company have reached Australia. There were seven minor casualties.

Anti-Submarine Operations.

12. Apart from attacks carried out from the U.S.A., 13 attacks on U-boats have been made by surface craft and 25 by aircraft during the week. A convoy
threatened by a concentration of U-boats in mid-Atlantic had the assistance of an additional hunting group, available for the first time, which carried out two promising attacks.

Aircraft sighted seven U-boats and made six attacks in the vicinity of another homeward-bound convoy, south of Iceland (C), on a single day. At least two promising attacks were made by aircraft in the Bay of Biscay and one north of Iceland (C).

Of the total attacks, two were carried out west of Norway, seven in the Bay of Biscay, 17 south of Iceland (C) and in the North Atlantic, five in the Gulf of St. Lawrence, five in the West Atlantic and in the West Indies, and three in the South Atlantic. Among the aircraft attacks was one carried out by a Liberator at a distance of some 720 miles south-west of its base in Iceland (C).

**Enemy Intelligence.**

**German.**

13. There have been no important changes in the disposition of the German fleet.

**Italian.**

14. There has been a decrease in the amount of shipping arriving in North African ports, particularly Tripoli, during the week.

**Japanese.**

15. It is reported that ten Japanese seaplane-carriers are being used to ferry aircraft between Japanese Home Waters and the New Guinea and Solomons area.

**U-boats.**

16. Activity of the U-boats now in the Atlantic has been widespread and sporadic; but there have been no further reports of the six U-boats which are thought to be in the eastern South Atlantic.

In the Arabian Sea, at least four Japanese U-boats are operating between the Gulf of Aden and the Persian Gulf.

German U-boats at present in service are believed to total between 380 and 390, of which 180–190 are fully operational. It is estimated that by March 1943 the total number may have reached 500.

**Protection of Seaborne Trade.**

17. During the week ending the 27th–28th, 940 ships have been convoyed. Of these 166 were in ocean convoys and 774 in British coastal convoys. One anti-aircraft ship, 70 destroyers (including two United States destroyers) and 105 sloops, cutters and corvettes (including four United States cutters) were employed on escort duties.

During the week 167 ships, in three ocean convoys, arrived in the United Kingdom without loss.

18. Imports into the United Kingdom by ships in convoy during the week ending the 25th totalled 759,000 tons, compared with 911,000 tons during the previous seven days and an average of 707,000 tons for the past ten weeks. Of the week’s imports, 275,000 tons were mineral oil of various grades.

19. During the month of August imports other than mineral oil totalled 1,957,800 tons, of which 38,900 were from Eire. Imports under the Ministry of Food totalled 709,400 tons, under the Ministry of Supply 1,179,600 tons and under the Board of Trade 68,800 tons.

**Enemy Attack on Seaborne Trade.**

20. Seventeen ships are reported to have been attacked by U-boats during the week and, of these, eight are known to have been sunk. Three ships (river steamers from the Great Lakes) were sunk while in convoy in mid-Atlantic and one ship in an outward convoy to Iceland (C). In the West Atlantic, one ship was torpedoed off Newfoundland, two were sunk south-east of Trinidad and one sunk and a second torpedoed north of Para, Brazil. Two ships were torpedoed in the Freetown area, one was shelled off the north-east coast of Ceylon and three were attacked west of Bombay, off Cochin, and in the Gulf of Oman respectively.
Enemy aircraft sank a ship west of Cape Finisterre; and a small coastal tanker was attacked by a flying-boat off the east coast of Iceland (C). A ship was torpedoed by aircraft in the Red Sea but reached Port Sudan.

A total of 668 passengers and crew, including 392 service personnel, from the s.s. *Laconia*, torpedoed and sunk on the 12th, have been landed at Casablanca from the French Cruiser *Gloire*, which sailed from Dakar in response to a distress message intercepted by a Vichy French sloop.

**British Minelaying.**

21. Aircraft laid mines during the week in the Baltic, off the German North Sea coast, and in the Channel and Bay of Biscay.

**Enemy Minelaying, British Minesweeping.**

22. Minelaying by surface craft was suspected off the South-West Coast on one night of the week and aircraft may have laid mines off the Lizard.

Anti-sweeping devices have been met with in the course of the clearance of the Lyme Bay area, where seven mines have been destroyed during the week.

The mine totals now are: acoustic 1,318; magnetic 2,637; moored 1,681.

**Enemy Merchant Shipping.**

23. Seven German ships, totalling 14,392 tons, in Spanish ports have been bought by the Spanish Government. The change of flag has not been recognised by His Majesty's Government.

The Italian tankers *Albaro* (2,104 tons) and *Celeno* (3,741 tons) arrived at Istanbul on the 30th.

**Vichy French Intelligence.**

24. Reports have recently been received regarding present conditions of service in the Vichy Navy. It is considered that the Navy has been less affected by the defeat in 1940 than either of the other services, and, despite restrictions imposed by the Armistice terms, conditions since have not only been maintained, but, in many instances, improved.

**MILITARY SITUATION.**

**The Russo-German Campaign.**

(An outline map showing comparison of the German advance in Russia 1941–42 is included as an inset of this Résumé.)

**Northern Sector.**

25. The Russians have continued their local attacks south of Lake Ladoga, but latterly German counter-attacks have met with some success. Although there are continued indications that a German offensive against Leningrad has been contemplated, it is doubtful whether it can take place this year.

**Central Sector.**

26. The Russians have gained ground in their sustained attacks in the Rzhev area, and are now reported to hold half the town, though their losses appear to have been heavy.

**Don Sector.**

27. Despite strong Russian attacks, the German positions at Voronezh remain substantially intact.

**Stalingrad Sector.**

28. Repeated Russian attacks against the German northern flank, stretching from the Don to the Volga, have probably played a big part in so far preventing the capture of Stalingrad. Smaller Russian attacks have also been delivered against the German southern flank, some 40 miles south of Stalingrad. The northern part of the city is still in Russian hands, but the position elsewhere is obscure. The Germans are now probably well established in the city centre, and may hold a substantial part of the southern suburbs.
Caucasus Sector.

29. To the east of Mozdok the Germans have made no fresh progress, but south-westwards of that town they have advanced some distance up the eastern bank of the Upper Terek River. In the Caucasus mountains the Russians continue to counter-attack, with unknown results. Ground has been gained by the Germans towards Tuapse and, to a smaller extent, south-east of Novorossisk, but on the 26th the Russians were still holding the heights round the latter port.

Egypt.

30. Patrol activity has continued.

Madagascar.

31. East African troops, supported by South African armoured cars and British artillery, entered Tananarive, the capital of Madagascar, at mid-day on the 23rd September. Before our entry the last French garrisons to the west of the city, including that at the airport, surrendered unconditionally. The remainder of the French forces in this area withdrew southwards. On the 26th our forward troops captured Behenjy (approximately 20 miles south of Tananarive) after some slight resistance. They have now reached a point about 50 miles south of Tananarive. Road blocks, demolitions, and now rain are holding up the advance.

32. On the 29th a detachment of South African troops was landed at Tulear, on the south-west coast, and occupied the town and barracks without opposition. The civilian population is friendly and co-operating with our forces. Our patrols have since advanced some 55 miles along the road running north-east from the town.

33. On the east of the capital our forces have made contact with the troops advancing from Brickaville, and the whole of the main railway line from Tamatave to Tananarive is now in our hands.

Far East.

South-West Pacific.

34. From the 24th-28th September the position in New Guinea remained stable, with the Japanese forces held up some 30 miles north-east of Port Moresby. On the 29th Australian forces attacked, and the Japanese, numbering 8,000 in the forward area, withdrew some ten miles. The capture of quantities of equipment is claimed. Considerable reinforcements have reached the Australian forces, which now consist of three Australian Imperial Force Bdes. at the front, with two Australian Militia Force Bdes., one tks. sqn. and two U.S. Inf. Regts. (one of which was flown from Queensland) in the Port Moresby area. The forces in the Milne Bay area consist of one A.I.F. and one A.M.F. Inf. Bde.

35. Australian casualties during the operations at Milne Bay and against the Japanese landed at Buna total 2,070, including sick wastage. The Japanese casualties at Milne Bay are estimated at 700, and their losses in the Kokoda-Port Moresby fighting at 1,300.

36. The Japanese strength in the S.W. Pacific area is now estimated at the equivalent of four divisions, of which the equivalent of one division is composed of naval landing parties.

South Pacific.

37. The situation in the S.E. Solomons is relatively quiet. The strength of the Japanese on Guadalcanal Island is now estimated at 4,000.

38. The High Commissioner for the Western Pacific has reported enemy occupation of the remaining islands of the Gilbert Islands Group. A Japanese Commissioner is already reported to be functioning at Tarawa, the capital of the group.

Intelligence.

France and the Low Countries.

39. It is now known that 23 German Inf. Div., which arrived recently on the borders of France and Belgium, is in the area of Ypres. It was included in
the total of 34 divisions in France and the Low Countries mentioned in last week's *Résumé*. 320 Inf. Div. has been identified at Cherbourg. It was formerly in the Dunkirk area, where its place is believed to have been taken by another division, at present unidentified. There are indications that a further division has arrived in the Rotterdam area. If this is confirmed, it will bring the strength up to five divisions in the Low Countries and the total to 35 in France and the Low Countries.

**AIR SITUATION.**

**General Review.**

40. Our offensive against land targets in Germany was suspended throughout the week owing to persistent bad weather.

Tobruk Harbour was heavily bombed by night.

**United Kingdom.**

41. Fighter Command flew 958 defensive sorties by day (including 20 by U.S. aircraft) and 300 by night.

Harassing raids on a somewhat heavier scale were made in daylight on the South Coast and over East Anglia; a total of 58 enemy aircraft flew overland. An attack was made on Hastings by 20 Me. 109s, whilst about 15 more fighters were seen just off the coast acting as a withdrawal cover for the attacking force. Do. 217s operating singly made roof-top attacks on Colchester and Broadstairs. At night only 13 bombers were reported overland.

Four enemy aircraft were destroyed, two were probably destroyed and four others damaged.

**Germany and Occupied Territory.**

**Day.**

42. Fighter and Bomber Commands despatched 119 and ten offensive sorties respectively compared with 55 and 33 last week. In addition, 70 sorties were flown by U.S. fighters and 62 by U.S. bombers.

A determined low-level attack was made by four Mosquito bombers on the Gestapo Headquarters at Oslo. The raid was timed to disorganise a Norwegian Nazi Party rally and was carried out successfully; photographs show that the building was hit (see Appendix VII). One of the Mosquitos was shot down over the target.

Other projected operations were cancelled or, owing to deterioration in weather, were not completed. Casualties are set out in Appendix VI.

Aircraft of the Photographic Reconnaissance Unit and of Army Co-operation Command flew a total of 48 photographic sorties.

**Night.**

43. No offensive operations were possible against land targets.

44. The following are tables showing the operational activities of Fighter and Bomber Commands during the three years of war:

**Fighter Command.**

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Sorties</th>
<th>Offensive Sorties</th>
<th>Aircraft Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>R.A.F.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>By Fighters.</td>
</tr>
<tr>
<td>September 3, 1940-September 2, 1941</td>
<td>63,086</td>
<td>5,547</td>
<td>665</td>
</tr>
<tr>
<td>September 3, 1940-September 2, 1941</td>
<td>172,189</td>
<td>19,796</td>
<td>358</td>
</tr>
<tr>
<td>September 3, 1941-September 2, 1942</td>
<td>145,343</td>
<td>42,386</td>
<td>880</td>
</tr>
</tbody>
</table>
Bomber Command.

<table>
<thead>
<tr>
<th>Western Front</th>
<th>Bombing</th>
<th>Minelaying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aircraft Sorties</td>
<td>Bombs Dropped</td>
</tr>
<tr>
<td>September 3, 1939, to August 31, 1940</td>
<td>11,094</td>
<td>6,765 tons</td>
</tr>
<tr>
<td>September 1, 1940, to August 31, 1941</td>
<td>30,947</td>
<td>28,427 tons</td>
</tr>
<tr>
<td>September 1, 1941, to August 31, 1942</td>
<td>30,184</td>
<td>40,592 tons</td>
</tr>
</tbody>
</table>

Coastal Operations.

45. Coastal Command despatched 521 sorties, of which 223 were on anti-U-boat operations (three aircraft are missing) and 58 on convoy sorties. Bomber Command flew 40 sorties west of the Bay of Biscay. (Results of attacks on U-boats are summarised under "Naval Situation.") Fighter Command flew 608 shipping protection patrols and made 67 sorties against enemy shipping.

Hudsons and Swordfish attacked a convoy off Texel and hits were made on a ship of about 3,500 tons and on another of 10,000 tons. Hurricane bombers seriously damaged three ships; one of these (of 600 tons) was later seen aground near Calais. Spifires hit three armed trawlers off Flushing and left one of them in flames. Other operations against shipping resulted in near misses, while some attacks were carried out at night when results could not be assessed. Aircraft of Coastal Command destroyed three Ju. 88s.

Sea mining was again on a heavy scale. Bomber and Coastal Commands despatched 171 and 14 sorties respectively. Over 300 mines were laid in enemy waters. Five aircraft are missing.

Mediterranean.

Egypt and Libya.

46. In the week ending the 28th September, 1,208 sorties were flown by Allied aircraft compared with 1,162 in the previous week.

There was no marked activity over the battle area. Fighters maintained offensive patrols and escorted tactical reconnaissances. Fighter-bombers attacked M.T. and gun positions in the coastal and southern sectors, and in one raid three armoured cars were hit. A heavily escorted enemy formation of about 40 aircraft made an ineffective attack on our landing grounds at Amiriya and was intercepted by a patrol of ten Spifires. During these operations two of our fighters were lost and three Me. 109s were shot down, two others probably destroyed and two damaged.

Long-range fighters shot up enemy M.T. on the Siwa-Mersa Matruh track, and on the coastal road west of Mersa Matruh. At least 40 vehicles were destroyed or damaged, casualties were inflicted on enemy troops and four enemy aircraft were shot down.

At night heavy attacks were made on Tobruk and in one raid 65 mines were laid in the harbour and approaches. Bursts and fires were observed on the waterfront, on the jetties and near the oil installations. Near misses were made on ships in the harbour entrance and one ship was believed to have been set on fire. Attacks were carried out on enemy landing grounds near Sidi Haneish and El Dhaba where fires were caused in the dispersal areas. U.S. and R.A.F. Liberators participated in a raid on Benghazi and two hits were made on shipping. Five of our bombers are missing from these operations.

Eight enemy bombers attacked our landing ground at Kufra and destroyed five aircraft on the ground and a considerable amount of equipment; two aircraft were destroyed by A.A. guns. Attacks were also made on aerodromes near Cairo, but no serious damage was caused. One Boston was shot down; one enemy aircraft was destroyed and another forced-landed intact.

Malta.

47. In the week ending the 28th September 334 sorties were flown.

Enemy activity was confined to fighter sweeps, which in most instances avoided combat on the approach of our fighters. Three Me. 109s were destroyed.
one was probably destroyed and another was damaged; none of our Spitfires is missing.

Sea Communications.

48. Wellingtons attacked a southbound tanker of 10,000 tons north of Tobruk. One hit with a torpedo is believed to have been made and a broad streak of oil was observed in the wake of the vessel after the attack. A convoy N.E. of Cape Spartivento was bombed and a near miss was observed near the stern of one ship; the following day a vessel of 2,000 tons was seen beached in the vicinity. Naval aircraft attacked the same convoy and torpedoed a destroyer amidships.

Russian Front.

49. The Russians claim that in the week ending the 26th September the Germans lost 206 aircraft against 158 of their own. In the Far North and Leningrad areas there has been no marked Russian activity. Air support was given to Russian tank attacks in the Rzhev area. Two raids were carried out by the Russian Air Force on Kerch, where one tug and one lighter were destroyed and one tug and three landing craft were severely damaged. On the 24th Tamanskaya was raided six times by the Russians.

India—Burma—China.

50. Blenheims bombed railway installations at Mandalay; photographs confirm hits on rolling-stock at the station and goods yards. Barracks near Lake Indawgyi (65 miles E.S.E. of Myitkyina) were machine-gunned by Kittyhawks. Two attacks were made by U.S. aircraft on enemy transport and installations near the China—Burma frontier (South-West Yunnan). Buildings were hit on Tinka and Loiwing aerodromes and at Tengchung and Mangshih; 23 trucks, five cars and three tanks were destroyed. An enemy aircraft reconnoitred the Calcutta area on two days.

Pacific Zone.

51. Allied aircraft continued their attacks on Japanese positions in the Buna—Kokoda—Efogi area (New Guinea), partially destroying a bridge near Wairapa, and against enemy shipping at Rabaul, where a ship of about 13,000 tons was hit and another damaged. A 500-ton ship was seen to be gutted and abandoned off Woodlark Island (100 miles north of Louisiade Archipelago) after being bombed by a Hudson and machine-gunned by Beaufighters. U.S. aircraft attacked shipping off the Solomon Islands; a seaplane tender was damaged, a cruiser hit and left burning and a large ship was set on fire. Six enemy seaplanes were shot down. Three Japanese transports were hit near Shortland Island (Western Solomons).

Enemy aircraft made small, ineffective attacks in the Port Moresby and Darwin areas. On two days, during attacks on Allied positions at Guadalcanal, 27 enemy bombers and six fighters were shot down. U.S. aircraft suffered no casualties as a result of these combats.

Aleutian Islands.

52. The island of Kiska was twice attacked by Allied aircraft; a ship was hit and, later, was seen to be beached. Six enemy floatplanes were destroyed on the water and another shot down in the air.

HOME INTELLIGENCE SITUATION.

General.

53. There has been no heavy bombing. By night the only two raids, on both occasions against points in Cornwall, were at the beginning of the week. During daylight, on the first and on the last three days of the period scattered incidents were reported from the Eastern Counties of Lincolnshire, Suffolk and Essex and from the Southern Counties of Kent, Sussex, Wiltshire and Somerset.
Damage.

54. There has been no damage of national importance. The more outstanding incidents were at Hastings on the 24th, when 19 people were killed and 17 seriously injured, and at Petworth (Sussex) on the 29th, where a boys' school was completely wrecked; casualties are reported to be 23 killed, of whom 20 are children, and 30 seriously injured, of whom 24 are children. It is feared that 7 children are still missing and must be presumed dead.

Other incidents involving fatal casualties and damage to private property and/or utility services were reported from Seaford (the 24th), Penzance (the 25th/26th), Colchester and Broadstairs (the 28th), Somerton (Somerset), Shrewton (Salisbury Plain), Betteshanger Colliery, Northbourne (Kent) (the 29th), Ashford, Worthing, Lancing and Colchester (the 30th).

Casualties.

55. The estimated civilian casualties for the week ending 0600 hours the 30th September are 62 killed and 82 seriously injured.
**APPENDICES I, II and IV will be published periodically.**

**APPENDIX III.**

(1) Vessels on the British Register or on Time Charter to the United Kingdom.

<table>
<thead>
<tr>
<th>Month</th>
<th>Total</th>
<th>Allocated to the Fighting Services</th>
<th>Coasting Trade of the United Kingdom and Eire</th>
<th>Trading between Countries other than the United Kingdom and Eire</th>
<th>Repairing, Damaged or not in use</th>
<th>Importing Services of the United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>3,613</td>
<td>20,845,000</td>
<td>674</td>
<td>5,227,000</td>
<td>145</td>
<td>340,000</td>
</tr>
<tr>
<td>October</td>
<td>3,613</td>
<td>20,665,000</td>
<td>696</td>
<td>5,316,000</td>
<td>150</td>
<td>371,000</td>
</tr>
<tr>
<td>November</td>
<td>3,616</td>
<td>20,671,000</td>
<td>717</td>
<td>5,332,000</td>
<td>175</td>
<td>414,000</td>
</tr>
<tr>
<td>December</td>
<td>3,641</td>
<td>20,823,000</td>
<td>746</td>
<td>5,677,000</td>
<td>171</td>
<td>419,000</td>
</tr>
<tr>
<td>1942-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>3,615</td>
<td>20,782,000</td>
<td>818</td>
<td>5,985,000</td>
<td>176</td>
<td>419,000</td>
</tr>
<tr>
<td>February</td>
<td>3,599</td>
<td>20,622,000</td>
<td>830</td>
<td>6,095,000</td>
<td>167</td>
<td>400,000</td>
</tr>
<tr>
<td>March</td>
<td>3,528</td>
<td>20,330,000</td>
<td>824</td>
<td>6,095,000</td>
<td>148</td>
<td>351,000</td>
</tr>
<tr>
<td>April</td>
<td>3,473</td>
<td>19,961,000</td>
<td>761</td>
<td>5,728,000</td>
<td>142</td>
<td>347,000</td>
</tr>
<tr>
<td>May</td>
<td>3,453</td>
<td>19,792,000</td>
<td>741</td>
<td>5,662,000</td>
<td>142</td>
<td>346,000</td>
</tr>
<tr>
<td>June</td>
<td>3,403</td>
<td>19,661,000</td>
<td>747</td>
<td>5,627,000</td>
<td>157</td>
<td>434,000</td>
</tr>
<tr>
<td>July</td>
<td>3,417</td>
<td>19,818,000</td>
<td>737</td>
<td>5,657,000</td>
<td>157</td>
<td>364,000</td>
</tr>
<tr>
<td>August</td>
<td>3,399</td>
<td>19,460,000</td>
<td>830</td>
<td>6,184,000</td>
<td>181</td>
<td>315,000</td>
</tr>
</tbody>
</table>

**Note.—** The above table is an aggregation of the material in the employment tables of non-tankers and tankers in Statistical Digests E and F respectively. In combining the figures for non-tankers with those for tankers, certain slight differences have had to be brought into a common form. The figures for non-tankers relate to the last day of the month while those for tankers relate to the 15th of the month from January 1942.

(1) (a) Tankers on Admiralty service include vessels importing oil fuel to the United Kingdom; in August 1942 these comprised 35 tankers of 272,000 gross tons.

(1) (b) Non-tankers allocated to fighting services which are under repair are excluded from this column. All tankers on Admiralty service are, however, included.

(1) (c) A substantial part (in recent months nearly one-half) of the tonnage in these columns brings commercial cargoes to the United Kingdom on completion of the outward voyage (see note (3)).

(2) These columns give vessels out of employment (apart from tankers on Admiralty Service), being mainly those immobilised by damage or repair. They do not, therefore, include vessels under repair while loading or unloading cargo.

(3) These columns include vessels (apart from tankers on Admiralty Service) which are bringing imports to the United Kingdom but which were allocated on the outward voyages to Fighting Services or which had previously been trading between countries other than United Kingdom and Eire.
APPENDIX V.

Casualties to H.M. Auxiliary Vessels and to Naval Personnel.

September 27.—M.L. 526 damaged in air attack S.S.E. of the Eddystone. Three ratings wounded.

September 30/October 1.—M.G.B. 18 sunk in action off Terschelling.

The following casualties to naval personnel have been reported:

- Officers: 35 killed, 1 wounded, 6 missing.
- Ratings: 149 killed, 15 wounded, 350 missing.

These figures include casualties in the Tobruk operation and officers and men missing in H.M.S. Talisman.
APPENDIX VI.

Provisional operational aircraft battle casualties for the period: dawn, Thursday, 24th September, 1942, to dawn, Thursday, 1st October, 1942.

### Metropolitan Area.

<table>
<thead>
<tr>
<th></th>
<th>British and Allied</th>
<th>Enemy</th>
<th>Middle East (including Malta)</th>
<th>British and Allied</th>
<th>Enemy</th>
<th>Far East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>8</td>
</tr>
<tr>
<td>Fighters</td>
<td>...</td>
<td>...</td>
<td>13</td>
<td>...</td>
<td>...</td>
<td>1</td>
</tr>
<tr>
<td>Coastal</td>
<td>...</td>
<td>...</td>
<td>3</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Army Co-operation</td>
<td>...</td>
<td></td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Total</td>
<td>...</td>
<td>...</td>
<td>24</td>
<td>...</td>
<td>...</td>
<td>9</td>
</tr>
</tbody>
</table>

### Notes.

- (a) No account is taken of enemy aircraft destroyed on the ground in any theatre.
- (b) No account is taken of British Naval aircraft casualties.

(In addition to above 1 enemy fighter was destroyed in the Aleutians—Western Air Command.)
APPENDIX VII.

Air Attacks on Enemy Territory in Europe.

Extracts from Recent Raid Assessment Reports.

The following reports have been received during the week:—

Germany.

Munich.

It is reported that the casualties caused were heavy and that damage was particularly severe in the Schwanthaler Strasse near the main station. The Rosenberg Temple (thought to be the headquarters of the National Socialist Cultural Fraternity) was destroyed. It is learnt from press reports that the Volksheater near the main station has been closed temporarily and that the tickets for the star performance of "Schonhals" will be refunded.

Ruhr Area.

The following reports have been received:—

(a) As a result of the recent raids on the district the coal production for the Ruhr, Saar and Aachen districts, has dropped from 440,000 tons per day to 360,000 tons per day. At the Rhein Preussen mines the output fell from 12,000 to 9,000 tons per day due almost entirely to damage to the workers' dwellings in the neighbourhood.

(b) Because of damage caused to blast furnaces the Germans have now given instructions that blast furnaces at two places in France which had been partially idle must resume operations to their full capacity, the necessary materials being supplied.

(c) At the time the bomb hit the main station at Dusseldorf an express had just arrived and 50 passengers, including some leading industrialists, were killed.

Cologne.

The following reports refer to damage resulting from the 1,000 bomber attack:—

(a) The depot at Bremen has received no spare parts for diesel engines from Humboldt Deutz since the "1,000" attack. The greatest shortage is stated to be induction distributor pumps.

(b) During the same attack an army depot containing spare engines for lorries was hit and over 1,000 destroyed or seriously damaged.

(c) The "Bureaux de Normalisation et d'Uniformisation de l'Industrie de Guerre de la Region Nord-Ouest de l'Allemagne" was completely destroyed. It is estimated that the destruction of these offices and all their plans and statistics will set this organisation back at least three months.

Saargemund.

During the attack on the 1st-2nd September, two converted pottery works, one making shells, and the other parachutes, were both hit and seriously damaged, the parachute factory being burnt out. About 60 families, living next to this factory lost their houses and belongings. Some barracks in the neighbourhood were also heavily damaged.

Saarbrücken.

An important result of recent attacks in this area has been that many shafts used for ventilation purposes in the coal-mining industry have fallen in or been damaged, and repair will take some time. This has caused on occasion a complete suspension of all work in mines served by these shafts.
Wiesbaden.

During recent attacks in this area a factory making sausage skins and food packings for the German Army was completely destroyed by fire. The loss is stated to be a serious one.

Occupied Norway.

Oslo.

Photographs taken on the 28th September show that damage is confined to roofs and buildings in the Kron Prinsens Gate, in which the Gestapo Headquarters is situated. The roof of the headquarters is seen to have been damaged. Ground sources tell of the uplift and encouragement that the attack has given to all loyal Norwegians, and it was the main topic of conversation in Stockholm the following day.

General.

A Nuremberg paper of the 5th September contained an announcement by the Mayor, as the official in charge of emergency measures, that, in order to overcome the situation arising from the British raid, the Sunday holiday will be abolished for all building and transport workers until further notice. The Food and Economy Offices will be open at certain additional hours in order to receive applications from air-raid victims. Householders in Berlin have been greatly depressed by a recent announcement that all but two or three of their rooms are liable to be requisitioned to provide accommodation for homeless persons from bombed areas. A flat in the Königsring, Dusseldorf, had all its windows blown out during a recent R.A.F. attack by a bomb which dropped over 900 yards away.

Sea Mining.

On the 17th August the German transport Wuri (believed to be of 7,000 tons) was mined and sank off Limfjord in the Kattegat. She carried 500 G.A.F. mechanics, 1,000 other men and equipment. Four hundred casualties were landed at Aalborg, and it is known that at least 100 men have been lost. On the 20th September sixteen German southbound vessels were detained at Marstrand, north of Gothenburg, on account of British mining of the Sound. According to a Swedish broadcast of the 25th September, the Finnish Navigator (5,656 tons) was mined a few miles off Trelleborg on the 18th and badly damaged in the engine-room. The ship has been beached. The Dutch Vledperen II, of 133 tons, was mined and abandoned on the 25th September, 4 miles off the Falsterbo Canal in South Denmark. On the 22nd September a schooner was sunk and a small Danish steamer damaged by mines off Helsingör.
MOST SECRET
O.R. 5742
SOUTH WEST U.S.S.R.
SCALE: 1,000,000 OR 94 MILES TO 1 INCH

1941
Start Line 28-6-41
End of 1st Month 1941
- 20th
- 5th
(Limit of Advance)

1942
Start Line 28-6-42
End of 3rd Month 1942
1. I am exceedingly sorry to bother my colleagues with a subsidiary point which has arisen in connection with the decision of the War Cabinet on the 28th September (W.M. (42) 130th Conclusions, Minute 14) that the admission to this country of refugees from Unoccupied France should be limited (a) to children who had a parent or parents already in this country, subject (b) to the Home Secretary having discretion also to admit orphan children who had a near relative in this country.

2. The cases in which a child is in Unoccupied France and a parent is in this country are exceptional. It is right to accord exceptional treatment to these children, but the number will be very small, perhaps not more than 20.

3. No representations have as yet been made to the Home Office about orphan children with near relatives in this country. Most orphan children are believed to be in institutions and their position will not be affected by the deportation policy of the Vichy Government.

4. The children whose position is most pitiful are those who become in effect orphans as the result of the deportation of their parents. The fate of their parents will often be uncertain and as a result of the Cabinet decision it will be necessary to refuse to admit such children unless evidence is forthcoming that both of the parents have perished.

5. Nothing ought to be done which is liable to encourage the Vichy Government to think that their deportation policy will be made easier by the readiness of the United Kingdom to admit the children if the parents are deported. But the admission of such children only as have close relatives in this country is unlikely to have any such effect. The parents of many of them have already been deported. The number who will be eligible for admission is quite small, and there is no reason to think that a decision to admit to the United Kingdom individual cases of children who have a close relative here will influence the Vichy Government to deport parents whom they would not otherwise deport.

6. Strong sympathy will be excited in many quarters in this country for this small group of children who are left in the position of de facto orphans in France and have near relatives in the United Kingdom ready and anxious to look after them. The Refugee Organisations recognise that there must be a limitation on the numbers admitted, and I do not think there would be any substantial difficulty in making a clear line of demarcation by defining close relative as meaning a grandparent, an uncle or aunt, a brother or a sister.

7. I shall be grateful, therefore, if the War Cabinet will be so good as slightly to amend the previous decision so as to authorise the Home Secretary to admit to this country refugee children from Unoccupied France if there is already in this country either
2.
a parent or a near relative - near relative being defined as suggested above.

In accordance with the previous Cabinet decision this policy would be applied to children of Allied Nationals, whether they are or are not Jewish.

H.M.

HOME OFFICE.
2nd October 1942.
WAR CABINET.

TREATMENT OF WAR CRIMINALS.

Memorandum by the Secretary of State for Foreign Affairs.

AT a conference of the Allied Governments in London, held last January at St. James's Palace, at which I was present as an observer on behalf of His Majesty's Government, a resolution was adopted calling for the punishment of war crimes through the channels of organised justice. Since that time, the Allied Governments in London have renewed their pressure on His Majesty's Government to make clear their own policy towards this question. They have represented in particular that such a statement would prove encouraging to their own peoples in the occupied countries of Europe. Those responsible for our own propaganda have supported this view.

2. A preliminary study of the whole question and its legal implications was accordingly undertaken in the Foreign Office, and the results circulated to the War Cabinet (see W.P. (42) 264). On the basis of this paper, the War Cabinet decided to set up a Ministerial Committee under the Lord Chancellor's chairmanship to investigate the matter.

3. This Committee's investigations followed two main lines:

(1) They prepared a statement of the preliminary views of His Majesty's Government regarding general principles which should govern the punishment of war criminals. This was communicated to the Allied Governments in London and to the French National Committee at a meeting in the Foreign Office on the 6th August. It was also communicated to the United States, Soviet and Chinese Governments and to the Dominions Governments.

(2) The committee, on the basis of a paper produced by Mr. Hopkins to give effect to a suggestion of the Prime Minister's, produced two papers setting forth the scope and functions of an international fact-finding commission, which it was proposed should be established to investigate evidence of atrocities, particularly organised atrocities, submitted by the Governments of the United Nations, and to report back to those Governments the results of its investigations. It was proposed that membership of this committee should be confined to nationals of the United Nations. At the committee's request, these papers were communicated by the United States Ambassador to President Roosevelt with a request for his views.

4. Meanwhile, pressure has increased upon His Majesty's Government to make a statement. In particular, Lord Maugham has expressed the wish to introduce a motion on the subject into the House of Lords. This motion has been postponed for a month in order to give the United States Government time to formulate their views on the fact-finding commission proposals, but is now to go forward on the 7th October, and it is not felt possible to ask Lord Maugham to agree to further delay.

11866 [24441]
5. It is accordingly proposed that in reply to this motion the Lord Chancellor shall make a statement on behalf of His Majesty's Government. This statement will cover two main points. It will declare that His Majesty's Government think it desirable to set up a United Nations fact-finding commission on the lines indicated above. It will also state that, in response to a request by the Allied Governments in London, His Majesty's Government are in favour of including in any eventual armistice terms provision for the immediate capture and surrender of wanted criminals, rather than allow such measures to wait until the conclusion of peace treaties. This point was in fact one of those included in the document setting forth the preliminary views of His Majesty's Government, which was communicated to the Allied Governments, and the latter had requested that His Majesty's Government should forthwith declare their adoption of it.

6. The United States Government have throughout been kept fully informed of His Majesty's Government's intentions and the hope has been expressed that they will be able to let us have their views on the detailed arrangements proposed for the fact-finding commission before the proposed statement is made. They have already informed us of their concurrence in the proposed statement on the subject of dealing with the question of war criminals in the armistice; and the original proposal for a commission came from the United States Government.

7. The Soviet and Chinese Governments and the Allied Governments in London, the French National Committee, the Dominions Governments and the Governments of India and Burma have also been informed of His Majesty's Government's intended statement and invited to associate themselves with the policy proposed. It is hoped that replies may be received from at least some of these Governments in time for a reference to their attitude to be included in the statement.

8. The Governments concerned have been informed that His Majesty's Government regard this statement as a further step forward towards the formulation of a common policy on the subject of war criminals, and intend to enter into further consultation with those Governments regarding the detailed application of the measures proposed.

A. E.

*Foreign Office,*
*October 5, 1942.*
WAR CABINET.

INDIA.

INDIAN STATES: REQUEST BY CHAMBER OF PRINCES FOR STATEMENT OF POLICY BY HIS MAJESTY'S GOVERNMENT.

NOTE BY THE SECRETARY.

WITH reference to W.M. (42) 129th Conclusions, Minute 1, the following documents are annexed:—

(A) Minute from the Secretary of State for India to the Prime Minister covering:—

(a) Draft of proposed assurance to the Chancellor of the Chamber of Princes.
(b) Draft telegram from the Secretary of State for India to the Crown Representative.

(B) Alternative draft of proposed assurance to the Chancellor of the Chamber of Princes, circulated by direction of the Prime Minister.

(Signed) E. E. BRIDGES,
Secretary of the War Cabinet.

Great George Street, S.W. 1,
October 5, 1942.

(A)

Minute from the Secretary of State for India to the Prime Minister.

PRIME MINISTER,

In accordance with War Cabinet Conclusions 129 (42) of the 24th September, I send you (a) a draft of the assurance which the War Cabinet desired should be conveyed to the Chancellor of the Chamber of Princes in reply to his letter of the 1st June (Annexure B in W.P. (42) 391). The assurance would be conveyed by the Crown Representative and embodied in a letter, with the full text of which it is not necessary for me to trouble you.

As the draft differs so substantially from the form of reply which the Crown Representative recommended, I feel it very desirable that he should be given an opportunity to comment on its terms before it issues. I would therefore propose, if you think the draft generally suitable, to communicate it to the Crown Representative under a telegram, of which I also enclose a draft (b).

L. S. AMERY.

India Office, S.W. 1, October 1, 1942.
(a) Draft of Proposed Assurance to the Chancellor of the Chamber of Princes.

(1) The general nature of the policy envisaged by His Majesty’s Government and the particular action contemplated to bring it into effect were set forth in the draft Declaration which Sir Stafford Cripps discussed with a number of Princes and Ministers of States. That policy implies no intention to depart from the continued observance by the Crown of its obligations by Treaty or otherwise towards the States in so far as they elect to remain outside such new Constitution for India as may be devised by agreement.

(2) His Majesty’s Government see no present reason to redefine or amplify their conception of those obligations, nor should a recent statement by the Lord Privy Seal in the House of Commons, regarding the desirability of encouraging and expediting the development in all Indian States of suitable representative institutions, be taken as in any way inconsistent with them.

(3) The fact that no explicit provision was contained in the draft Declaration for the formation of any Union of non-adhering States or groups of States is not to be taken as constituting any discrimination to the disadvantage of the States as compared with the Provinces of British India. His Majesty’s Government recognise a direct responsibility for the form of government enjoyed in the Provinces of British India, while they have no such direct responsibility within the territories of the Rulers of the Indian States. Hence, His Majesty’s Government saw no reason at that juncture to enter into a discussion of the detailed issues involved in such a development.

(b) Draft telegram from Secretary of State to Crown Representative.

Your telegram of the 25th August, 2591P. Draft reply to Jam Sahib has been discussed by War Cabinet whose view is that since the terms of any reply made are likely to become known (vide end of paragraph 5 of your telegram) it would be better that the reply should be given "publicly." They consider that the objections to making the reply public would not apply to a short, simple statement which in their view should follow the lines of the draft contained in my immediately succeeding telegram.

2. The draft is in the form of a letter from your Political Adviser to the Chancellor which could be communicated by one or other to the press. It does not refer specifically to the Jam Sahib’s letter (which was marked “Secret”) but generally to representations made by the Princes. The Prime Minister asks me to say that he would welcome any criticisms that you may have to offer on the wording before he finally approves the draft.

3. I think it would be helpful to the Prime Minister to have your views also on the following points which occur to me in this connection:—

   (i) Would you apprehend any unfavourable reactions from British Indian parties if such a statement were published, seeing that none of them has received a similar clarification or explanation of the draft declaration subsequent to the Cripps Mission?

   (ii) You and I are, I think, in general agreement that nothing should be done to cause the Princes to relax their efforts to set their houses in order and prepare in this way for whatever the future may hold. Do you think a published statement on the above lines would encourage them in any way to sit back and rely on His Majesty’s Government’s support rather than on their own efforts?

   (iii) We cannot afford to be pushed into a discussion as to how we intend to carry out our treaty obligations. Is there more risk of embarrassing pressure of this kind arising from a short published statement on the lines indicated than from the procedure proposed in your telegram?

   (iv) Would you consider it advisable in so far as the proposed statement does not cover all the points raised by the Jam Sahib to supplement it by a confidential letter dealing with the remaining points on the lines discussed between us?

4. It is clearly important that the answer to the Chancellor’s letter should not be delayed much longer and I hope you will be able to let me have your views urgently on the above points and any other considerations that you would wish to put to me.
5. In view of the representation received from Hyderabad regarding Commons statement by Cripps (Chhatari's letter of the 15th August) it seems desirable that a letter should be sent to Chhatari in similar terms (with the necessary verbal alterations) to that sent to the Jam Sahib.

(B)

Alternative Draft of Proposed Assurance to the Chancellor of the Chamber of Princes, circulated by direction of the Prime Minister.

(1) His Majesty's Government most firmly adhere to their obligations by Treaty or otherwise towards the States. They see no reason to re-define their conception of those obligations: nor, should a recent statement by the Lord Privy Seal in the House of Commons, regarding the desirability of encouraging and expediting the development in all Indian States of suitable representative institutions, be taken as in any way inconsistent with them.

(2) The fact that no explicit provision was contained in the draft Declaration for the formation of any Union of non-adhering States or groups of States is not to be taken as constituting any discrimination to the disadvantage of the States as compared with the Provinces of British India. The draft Declaration contained a provision on this matter in regard to non-acceding Provinces, but not in regard to non-adhering States, because the responsibility which His Majesty's Government have exercised for many years for the Government of the Provinces of British India finds no parallel within the territories of the Rulers of Indian States.
WAR CABINET.

INDIA.

INDIAN STERLING BALANCES.

Memorandum by the Secretary of State for India.

I circulate for consideration the Viceroy's reply regarding the reservation suggested by the War Cabinet on the subject of Indian Sterling Balances, the text of which is in personal telegrams to the Viceroy, No. 16781 and 16782, dated the 24th September (already circulated). The objections and dangers stressed by the Viceroy, and his own earnest appeal to the War Cabinet not to raise this matter unnecessarily, will, I trust, be regarded as conclusive against pursuing the matter at the present critical juncture.

L. S. A.

India Office, October 5, 1942.

Telegram from Viceroy to Secretary of State for India dated October 2, 1942.

399-S.C. Your personal No. 16781, dated 24th September, 1942: Sterling Balances.

2. It is impossible to predict with certainty precise effect on Council of communicating to them of contents of your personal No. 16782. Sub-paragraphs (1) and (2) of your 16781 would, of course, be communicated to them simultaneously with main declaration, and this should obviate any danger of individual resignations. They would, however, at once recognise declaration for what it is, namely, a formal reservation by His Majesty's Government in regard to future treatment of debt which Britain is incurring to India under present settlement. Majority opinion would almost certainly be that such reservation could not be accepted, and that a vigorously argued protest or challenge should be lodged on India's behalf. My difficulty in securing acceptance of Raisman's proposals for undertaking additional burdens within the framework of the existing settlement, of course, be very greatly intensified. A counter-claim would most probably be put forward for a revision of the settlement in India's favour, for fixing of a definite monetary limit to India's defence liabilities, and for His Majesty's Government to defray unconditionally all excess expenditure.

3. Most serious aspect of the matter lies, however, in the consequences which would flow from open or surreptitious publication of the fact that reservation had been lodged by His Majesty's Government. It is possible, but not I think likely, that Council might ask for publication. Even if they do not, however, I regret to say that it is quite impossible to ensure that no knowledge of the fact that a reservation had been made would reach the public. We have, therefore, undoubtedly to reckon with the effects of the inevitable disclosure of this fact. In what follows I am stating not merely my own and Raisman's views but also those of Taylor, Governor of Reserve Bank of India, who has been consulted.

4. There is already much uneasiness in Indian financial and commercial circles regarding the size and rate of sterling accumulations, and in various
quarters suggestion had been put forward that a demand should be made for payment at least in part in gold or dollars, or that India should receive a guarantee against post-war depreciation of sterling. In the meantime, it is claimed that sterling balances should be used for the acquisition of private British investments in India as well as for repatriation of all public or quasi-public debt. This attitude has already been taken up by certain members of the Board of Reserve Bank. Hitherto, Taylor has succeeded in preventing passing of embarrassing resolution by emphasising importance and value of sterling for post-war re-equipment and industrial expansion of India. Raisman has taken similar line in Legislature. When once, however, knowledge of His Majesty's Government's reservation begins to percolate, it will be impossible any longer to maintain this reassuring front, nor could Raisman and Taylor, with their private knowledge of position, be expected to do so. Matters would undoubtedly come to a head both in Legislature and in Board of Reserve Bank, the Hindu majority of which has strong Congress affinities. It is difficult to foresee the exact form in which the Board would set out to create trouble, but at least we should be faced with a widespread and insistent demand for payment in other forms. Since His Majesty's Government would, I presume, not be prepared to incur a monetary debt to America in order to gratify India's demand for dollars or gold, the Board would probably refuse to acquiesce in continued expansion of rupee currency against sterling assets, but resign in protest. This in turn would have its repercussions on position of Members of Council, particularly those whose contacts are with Hindu commercial community. These would probably find it increasingly difficult to remain in office. The fact even that His Majesty's Government had (?) purported to deal with (?) Governor-General on an equal footing in this matter would be travestied as a cunning device to disguise the inescapable fact that His Majesty's Government in final reckoning still retains its advantage in dealing with Government of India. In that case we should find that on this issue alone we had precipitated a further political crisis of most formidable proportions, and a most serious aggravation of our existing difficulties.

5. My considered conclusion is that I must warn the Cabinet with all the emphasis at my command against communicating this reservation to Council. It can, in my opinion, do no good, and, on the other hand, it is difficult to exaggerate the gravity of consequences it may have on political situation and on industrial and commercial aspects of India's war effort. Such démarche would be fraught with great perils at any time during the war, and at present critical juncture it may well prove disastrous. I would urge with all earnestness that question dealing with adjustment of post-war obligations of Britain to India be left to be (corrupt group), if it seems necessary or desirable, with post-war (?Government of India), in the light of conditions then existing.

6. I must add finally that, as I have already indicated in paragraph 10 of my private and personal telegram 2828-S dated 20th September, I personally could not possibly take note of a reservation of this character which could not be communicated to Council.
SECRET

W.P. (L2) 14/8.
6th October, 1942.

WAR CABINET

EXTRATERRITORIALITY IN CHINA.

Memorandum by the Secretary of State for Foreign Affairs.

I circulate to my colleagues herewith the text of a letter which I have received from the American Ambassador, enclosing a copy of instructions to the Ambassador from the State Department in Washington, together with the draft of a treaty between the United States Government and China relating to extraterritorial jurisdiction.

(Intd.) A.E.

FOREIGN OFFICE,
6th October, 1942.
October 5, 1942.

Dear Mr. Eden,

With regard to the instructions which I received from Washington concerning the proposed treaty with the Republic of China relating to extraterritorial jurisdiction and which I talked to you about yesterday afternoon by telephone, I enclose a copy of these instructions as well as the draft text of this treaty. In accordance with the suggestion contained in the instructions of the Department of State that an oral communication be made to the respective Chinese Ambassadors in London and in Washington on Friday, October 9th, I am enclosing the text of the draft treaty for the information of the British Government and for such comment as it may desire to offer thereon. I would like to discuss this matter with you at your convenience.

Sincerely,

(Signed) JOHN G. WINANT.
Strictly Confidential.

SUBSTANCE OF TELEGRAM FROM THE DEPARTMENT OF STATE DATED OCTOBER 3, 1942.

(1) With the installing of a new Chinese Ambassador here we anticipate that we may find the Chinese Government approaching the American Government at almost any time regarding the desire of the Chinese Government to terminate in China the system of extraterritorial jurisdiction. One of the important reasons why, as we have previously stated, we have felt it advisable to take some affirmative action with reference to the question of relinquishing in China extraterritorial rights at this time has been to show an initiative on the part of the United States and Great Britain and to keep the initiative in our hands.

(2) We believe, with the foregoing considerations in mind, it would be advisable for the American Government to inform in strict confidence the Chinese Ambassador here and for the British Government to inform in strict confidence the Chinese Ambassador in London for their report to the Chinese Government in strict confidence similarly, that the American Government and the British Government for a good many weeks have been giving intensive consideration to the question of making approaches to the Chinese Government directed toward the relinquishment in China of consular jurisdiction and that the study of the American and British Governments has proceeded now to a point where the American and British Governments respectively expect to present to the Chinese Government within the relatively near future for its consideration draft treaties, the conclusion of which would accomplish the described end.

(3) At the earliest possible moment please inform Mr. Eden of the foregoing and tell him that I suggest that the American Government and the British Government inform orally in the sense indicated the respective Chinese Ambassadors in Washington and in London on Friday, October 9th, the communication of the American Government to be in the forenoon and the communication of the British Government to be in the afternoon with a view to taking account of difference in time.

(4) Also please inform Mr. Eden that the text of a brief draft treaty of the nature we have in mind, prepared after study of the comments of the British Foreign Office, the comments of Ambassador Gauss, and the comments which Ambassador Gauss has informed us the British Ambassador at Chungking has forwarded to the British Government, is being telegraphed separately. When received please communicate the text to Mr. Eden for the information of the British Government and for such comment as it may desire to offer.
TREATY WITH REGARD TO RELATIONS BETWEEN THE UNITED STATES OF AMERICA AND CHINA.

The United States of America and the Republic of China desirous of defining more clearly the general relations between the two countries have resolved to conclude a treaty for that purpose and have appointed as their plenipotentiaries:

The President of the United States of America, and the President of the National Government of the Republic of China,

Who having communicated to each other their full powers found to be in due form have agreed upon the following articles:

Article One.

All those provisions of treaties or agreements in force between the United States of America and the Republic of China which authorise the Government of the United States of America or its representatives to exercise jurisdiction over nationals of the United States of America in the territory of the Republic of China are abrogated. Nationals of the United States of America in such territory shall be subject to the jurisdiction of the Government of the Republic of China in accordance with the principles of international law and practice.

Article Two.

The Government of the United States of America considers that the final Protocol concluded at Peking on September 7, 1901, between the Chinese Government and other Governments, including the Government of the United States of America, should be terminated and agrees that the rights accorded to the Government of the United States of America under that Protocol and under agreements supplementary thereto shall cease.
NATIONAL INTEGRATION

The object of national integration is the establishment of a central authority over the various ethnic groups of the country. This will involve the integration of these groups into a single national consciousness. The integration process will be guided by the principles of multinationalism and federalism.

The integration will be achieved through the following steps:

1. Creation of a national identity: The government will work towards creating a unified national identity that encompasses all ethnic groups.

2. Implementation of a national language: A national language will be established to facilitate communication across different ethnic groups.

3. Promotion of cultural diversity: The government will promote cultural diversity and encourage the preservation of individual cultures.

4. Development of a national economy: A national economy will be developed to ensure economic stability and prosperity for all.

5. Strengthening of national institutions: The government will strengthen national institutions to ensure a stable and democratic society.

In conclusion, national integration is crucial for the development and progress of the country. It will require a long-term commitment and effort from all stakeholders to achieve a unified and prosperous nation.
The Government of the United States of America will co-operate with the Government of the Republic of China for the reaching of any necessary agreements with the other Governments concerned for the transfer to the Government of the Republic of China of the administration and control of the diplomatic quarter at Peiping, including the control of the official assets and the official obligations of the diplomatic quarter and the Government of the Republic of China will accept such transfer and will make provision for the assumption of such obligations and for the recognition and protection of all legitimate rights in such quarter.

The Government of the Republic of China hereby accords to the Government of the United States of America a continued right to use for official purposes the land which has been allocated to the Government of the United States of America in the diplomatic quarter in Peiping, on parts of which are located buildings belonging to the Government of the United States of America.

Article Three.

The Government of the United States of America considers that the International Settlements at Shanghai and Amoy should revert to the administration and control of the Government of the Republic of China and agrees that the rights accorded to the Government of the United States of America in relation to those Settlements shall cease.

The Government of the United States of America will co-operate with the Government of the Republic of China for the reaching of any necessary agreements with the other Governments concerned for the transfer to the Government of the Republic of China of the administration and control of the International Settlements at Shanghai and Amoy, including the control of the official assets and the official obligations of those settlements and the Government of the Republic of China will accept such transfer and will make provision for the assumption of such obligations and for the recognition and protection of all legitimate rights in those Settlements.

Article Four.

In order to obviate any questions as to existing rights in respect of and titles to real property in territory of the Republic of China possessed by nationals (including corporations or associations), or by the Government of the United States of America, particularly questions which might otherwise arise from the abrogation of the provisions of treaties or agreements as stipulated in Article 1, it is agreed that such existing rights shall be indefeasible and shall not be questioned upon any ground except upon proof, established through due process of law, of fraud in the acquisition of such rights.
It is also agreed that if it should be the desire of the Government of the Republic of China to replace by new deeds of ownership, leases in perpetuity or other documentary evidence relating to real property held by nationals or by the Government of the United States of America, the replacement shall be made by the Chinese authorities gratuitously and the new deeds of ownership shall fully protect such leaseholders and their legal heirs and assigns without diminution of their prior rights and interests including the right of alienation.

It is further agreed that nationals or the Government of the United States of America shall not be required or asked by the Chinese authorities to make any payments as land transfer fees for or with relation to any period prior to the effective date of this treaty.

Article Five.

The Government of the United States of America having long accorded rights to nationals of the Republic of China within the territory of the United States of America to travel reside and carry on trade throughout the whole extent of that territory the Government of the Republic of China agrees to accord similar rights to nationals of the United States of America within the territory of the Republic of China.

Article Six.

The Government of the United States of America and the Government of the Republic of China mutually agree that the Consular officers of each country duly provided with exequaturs shall be permitted to reside in those ports places and cities of the other country which are or may be open to consular officers of any foreign country. The consular officers of each country shall have the right to interview to communicate with and to advise their countrymen within their consular districts; they shall be informed immediately whenever any of their countrymen are arrested or detained in their consular districts by authorities of the other country and upon notification to the appropriate authorities they shall be accorded the rights privileges and immunities enjoyed by consular officers under modern international usage.

It is likewise agreed that the nationals of each country in the territory of the other country shall have the right at all times to communicate with the consular officers of their country.
Article 7.

The Government of the United States of America and the Government of the Republic of China mutually agree that they will enter into negotiations for the conclusion of a comprehensive modern treaty of friendship, commerce, and consular rights upon the request of either government or in any case within six months after the cessation of the hostilities in the war against the common enemies in which they are now engaged. The treaty to be thus negotiated will be based upon the principles of international law and practice as reflecting in modern international procedures and in the modern treaties which the Government of the United States of America and the Government of the Republic of China respectively have in recent years concluded with other governments.

Pending the conclusion of a comprehensive treaty of the character referred to in the preceding paragraph if any questions affecting the rights in territory of the Republic of China of nationals (including corporations or associations) or of the Government, of the United States of America should arise as a consequence of the relinquishment of extraterritorial rights and if these questions are not covered by the present treaty or by the provisions of existing treaties, conventions, or agreements between the Government of the United States of America and the Government of the Republic of China not inconsistent with this treaty such questions shall be discussed by representatives of the two Governments and shall be decided in accordance with generally accepted principles of international law and with modern international practice.

Article Eight.

The present treaty shall come into force on the day of the exchange of ratifications.

The present treaty shall be ratified and the ratifications shall be exchanged at Washington as soon as possible.

Signed at Washington this _______ day of 1942.
The War Cabinet, at their Meeting on 28th September, 1942, referred to a telegram from the Commander-in-Chief, India, concerning a proposal by General Chiang-Kai-Shek that some 8,000 Chinese troops should be flown into India, if the necessary transport was available, to be trained and equipped there.

The War Cabinet expressed the view that, on political grounds, this proposal was likely to be disadvantageous and should be discouraged, unless it would be in our interests on military grounds.

2. The proposal has been considered by all Departments concerned. From the military point of view we agree with General Wavell that there would be no objection to the proposal, but we see no great advantage in it.

3. It appears that, from the political point of view, there are considerable disadvantages but that these are likely to be outweighed by the effect that a flat rejection would probably have on our relations with China and the United States. It seems, therefore, that it is on political grounds that the question should be decided.

4. It has been suggested that our response to General Chiang-Kai-Shek's offer should be a warm acceptance but that we should, at the same time, point out all the practical difficulties of executing the project and hope that, as a result of these difficulties, the project will die a natural death.

5. We attach a draft telegram which has been prepared on these lines and with which we fully agree, and we propose, subject to the approval of the War Cabinet, to send it to the Commander-in-Chief, India, with copies to the Joint Staff Mission in Washington and H.M. Ambassador in Chungking.

(Signed) A.F. BROOKE
DUDLEY POUND
C. PORTAL

Great George Street, S.W.1.,
7TH OCTOBER, 1942.

W.P.(42) 130th conclusions, Minute 1.
Annex I
Annex II.
ANNEX I

Copy of a telegram No. 23796/C dated 27th September from C.-in-C., India, to C.I.G.S.

General Sibert, Stilwell's representative at Delhi, informed me yesterday that Generalissimo disappointed at number of Chinese troops who had reached India from Burma proposed to send additional 8000 or more by air to be equipped from American Lease-Lend stores in India and to be trained at Ramgarh with remainder.

Two. I said there would be no difficulty about accommodation up to limit of Ramgarh camp but that I could supply no equipment or transport.

Three. Do not know how far proposal likely to materialise as air transport unlikely to be available. From military point of view I have no objection so long as I do not have to provide equipment or transport and well trained Chinese force might be possible asset in reoccupation of Burma.

Four. Do not know if there are any political implications behind request. Force would presumably be token of Chinese intention to continue struggle alongside India but might be embarrassment in some respects. Presume Ambassador will inform Foreign Office and Government of India if proposal likely to be carried out. Have informed Viceroy of request.

T.O.O. 1000 GMT.

C.6 (Tels).
From: War Office.
To: Commander-in-Chief, India.
Repeated to Joint Staff Mission, Washington, and H.M. Minister, Chungking.

From C.I.G.S. to General Wavell.

Your No. 23796/C of 27th September. We understand that on purely military aspect you see no particular advantage in acceptance of proposal. There are some political disadvantages but these are outweighed by consideration that flat rejection of the proposal by us would be likely to have an unfortunate effect on our relations not only with China, but also the United States. It would be misrepresented as a further refusal of Chinese military assistance and the resulting propaganda put out by the Chinese in the United States might have serious consequences.

2. Our response to the offer should therefore be ostensibly a warm acceptance. But we should at the same time point out all the practical difficulties of executing a project which may be very great and may not have been fully considered. These difficulties are mainly for the United States authorities and if on examination of them they decide to persuade Chiang-Kai-Shek to withdraw suggestion that would be best solution.

3. With this object you should, if you agree, inform Sibert that we welcome the suggestion as a contribution to the solidarity of the United Nations and are prepared to accept proposal in principle, although we cannot ourselves provide transport or equipment for the additional Chinese troops. For reasons of space at Ramgarh it would also be necessary to limit the total number to 20,000. We foresee, however,
certain practical difficulties and before the proposal is approved and put into effect we should like Stilwell's views on the following points:

(a) From information available here of capacity of existing air transport at disposal of Americans move of Chinese would cover considerable period even using available aircraft fullest capacity.

(b) We are not aware how Americans could augment numbers of transport aircraft in view of their accepted commitment under Arnold-Portal agreement to build up air transport groups in United Kingdom, Middle East/India.

(c) Would not transport of Chinese troops to India hold up deliveries of Chinese exports e.g. wolfram, tin and silk to their destinations? In this connection diversion of shipping capacity to meet these commitments from elsewhere at expense of deliveries of war materials to United Kingdom, Middle East and India would be unacceptable to British Government.

(d) Presume Americans have considered implications of intensive large scale air transport movement ex-China on small stocks of aviation spirit available in China. We cannot see how expenditure could be balanced by import of cased petrol to China by air.

(e) If Americans undertake to equip and maintain these Chinese with all needs we presume this would be done without diversion shipping capacity and supplies war material at present allotted to British theatres of war.

4. You should add that we assume Stilwell with refer the above points to Washington with a view their consideration by the Combined Chiefs of Staff.

5. For your own information we are assuming that comparatively few Chinese troops will be sufficiently equipped and trained to take part in any operations against Japanese in campaigning season 1942-43. Question of operational control of Chinese will presumably be settled to your satisfaction with Stilwell when the time comes.
WAR CABINET.

FRENCH MORALE.

Memorandum by Secretary of State for Foreign Affairs.

My colleagues may be interested to see the annexed report on French morale. It represents the agreed views of the various Departments concerned, including the Service Departments.

A. E.

Foreign Office, October 7, 1942.

ANNEX.

FRENCH MORALE.

With certain exceptions noted below, opinion throughout France is anti-Axis. It is not so uniformly pro-British. Pro-British feeling throughout France suffered severely under the shock of defeat. Constant anti-British propaganda has also had its effect. Pro-American feeling has not been subjected to these influences. The result is that, superficially at least, the Americans are more popular than the British. But it is to both jointly that the majority of Frenchmen look for liberation, and an outstanding military success, particularly if achieved in the German-occupied territory of France, would win general support for both nations. Morale throughout France is, of course, extremely sensitive to the military fortunes of the United Nations.

Until Laval's return to power in April there was a marked difference between the two zones of France, morale in occupied being much higher than in unoccupied France; the inhabitants of both zones were anti-German, but in the occupied zone they were actively so, in the unoccupied zone they were apathetic. Recent reports indicate an up-swing in morale in the unoccupied zone, and it may no longer be true to say that it is lower in one zone than the other. There remains, however, a difference of quality: the morale of the occupied zone is more uniform and less subject to fluctuations. The special qualities of morale in the two zones are dealt with separately below.

A.—Occupied Zone.

Anti-German Feeling.

Anti-German feeling is high and almost universal. It finds expression in acts of violence carried out with disregard of personal risk. These acts, however, express, in the main, personal revolt against oppression and against the prevalent feeling of helplessness: they do not appear to be part of any centralised plan of campaign. There is, indeed, little evidence of widespread organisation except within the Communist party (see Section D below).
A small number of collaborationists is to be found in the occupied zone among (i) industrial employers who have long had association with German industry or who hope to continue to receive benefits from German industrial preponderance in the New Europe; (ii) financiers and middlemen who are profiting by their relations with the Germans; (iii) self-seeking politicians; and (iv) convinced admirers of the Nazi system who hope to lead Nazi France.

The population of the Occupied Zone have on the whole reacted well to British air and other attacks as long as these have been directed successfully against targets of importance to the enemy. The local reaction to certain attacks which have caused disproportionate civilian losses has been unfavourable.

B.—Unoccupied Zone.

Until Laval's return to power and more particularly before his public statement that he hoped for a German victory, the main characteristic of the unoccupied zone was apathy. The population were anti-German but passive, their chief concerns being food and employment. This applied particularly to the middle class. A marked change has taken place under Laval. Laval's pro-German declaration of the 22nd June, the campaign to supply workers to Germany, the deportation of Jews, the new compulsory labour decree and increasing evidence of Gestapo activities in the unoccupied zone have caused a considerable wave of resentment and labour in industrial areas has displayed active resistance and restlessness, especially on the 14th July last. Peasant proprietors in most districts are better fed and less discontented than other classes. As a class they are anti-Communist and have probably been influenced by the fear of a complete Russian victory.

C.—Armed Forces.

Army.

Reports suggest that the armistice army still retains hopes of revenge. At the outset of the Vichy régime it confined itself to blind obedience to Marshal Pétain, but it is now reported that it will rally to the appeal of a non-political General with a nation-wide reputation, even if the appeal were not backed by Pétain. It would not follow General de Gaulle. It has a low opinion of the military capacity of Great Britain, cannot be considered pro-British and has a tendency to xenophobia. It is certainly anti-German and would be unlikely as a whole to fight against a powerful invading army of the United Nations in Metropolitan France. In the Colonies, however, it is probable that the army would offer at least a token resistance against any superior invading force.

Navy.

The navy is, in the main, anti-British, but also anti-German, and still more anti-Italian. The reaction of independent units cannot be forecast. The results of the favourable treatment the French navy received after the armistice and of its undefeated record in the war against Germany have combined to maintain its morale during a long period of comparative inactivity.

Air Force.

The morale of flying personnel, though it has been to some extent impaired by prolonged inactivity, remains favourable to the Allies, and there is every reason to believe that the majority of crews would welcome the opportunity to resume active operations. Anti-British feeling is largely confined to senior officers, while anti-German sentiments are general.

D.—Political Influences.

I.—Anti-German Movements.

(a) Communists.—The Communist party was the only one of the old political organisations to survive the collapse of France. Its structure and discipline are firmer than those of any other group. Its organisation of centres of resistance is generally reported to be thorough and its membership relatively large. It is said to be prepared to co-operate with any genuine elements of resistance, but no concrete evidence of this is available, perhaps because the Communist leaders fear to be betrayed if they confide in British or Gaullist agents.
On the other hand, fear of Communism is an important feature in the attitude of certain sections of the population. Outside the Communist party there are many (clergy, peasants, *bourgeois*, &c.) who, though they would welcome liberation from any hand, fear the political effects of a complete Russian victory. This fear has recently declined somewhat owing to the belief that there is no longer any great likelihood of a total Russian victory unaccompanied by Anglo-Saxon action in the west.

(b) Socialist Party.—It is reported that serious efforts are being made to form a consolidated group out of various elements of the former Socialist parties.

(c) France Combattante.—A majority of Frenchmen support General de Gaulle as a symbol of resistance. In the first instance, however, the French would probably look for a focus for their spirit of resistance within France and those who turn to de Gaulle do so *faute de mieux*, other personalities, such as Pétain and Weygand, having lost much of their prestige. Although the active following of de Gaulle is small, if we were to abandon it, this would undoubtedly have a depressing effect on French morale.

II.—Pro-Vichy and Pro-German Parties.

The chief of these parties are the League of Ex-Service Men, nominally under Pétain but actually controlled by Laval, the Parti Populaire Français, under M. Doriot, and the Rassemblement National Populaire, under M. Déat. A movement is on foot to unite the last two Frenchmen under Laval. As these parties are not repressed like the resistance groups they are capable of exercising an influence disproportionate to the amount of active support they receive from public opinion.

E.—Other Elements.

I.—The Church.

The Catholic hierarchy supported Marshal Pétain after the collapse, pinning their faith in his programme of a national revival based on religion and the family. Since the evident failure of this programme they seem to be growing more conscious of the danger to the Church of totalitarianism. Some Catholic bishops have recently protested against Laval's anti-Jew measures; and in this they were perhaps inspired by the fear that, as in Germany, the anti-Jewish campaign would be followed by an anti-Catholic campaign. The country clergy, especially the younger members, will certainly follow this lead.

II.—Youth.

It is natural that the youth of France should be less apathetic than their elders. The Chantiers de Jeunesse established by Pétain provide physical training on military lines for 100,000 youths a year, and are the most important influence at work on young Frenchmen. The Chantiers are organised by military officers from the École des Cadres, and it is reported that their morale is high and strongly anti-German.
WAR CABINET.

RELATIONS WITH CANADA.

Memorandum by the Secretary of State for Dominion Affairs.

I should like to bring to the notice of my colleagues an aspect of our relations with Canada which impressed itself forcibly upon me during my recent visit to Ottawa. While Mr. Mackenzie King and his colleagues gave me a most friendly welcome, and my personal relations with them could not be more cordial, I could not fail to detect in Ministerial and official circles an undercurrent of uneasiness, indeed resentment, at what is regarded there as a lack of recognition of the part that Canada is playing in the war. The Canadian Government are proud of Canada's war effort, as they have every reason to be: in munitions production, in the supply of essential raw materials and foodstuffs, in the management of the air training scheme, in the provision and equipment of naval, military and air forces, in shipbuilding and ship repairs, and, finally, in the billion dollar gift— in all these directions Canada has strained every nerve to contribute to her utmost, and her total contribution has been immense. Moreover, she has financed the whole of her war effort from her own resources, and to do so has transformed her social economy and imposed on her people taxation of certainly the same order of severity as that in force in this country. The Canadian Government do not want praise for what they have done, though it is certainly fitting that we should acknowledge not so much in words as in our general attitude towards Canada the great part which she is playing. What is disturbing Canadian Ministers and causing a damping effect in Ottawa is a growing realisation that, now that the British Commonwealth no longer stands alone in the struggle, it is the Great Powers associated with us who come uppermost in our minds with the result that in the stress and strain of events we are apt, in effect, to deny to Canada that full and equal partnership with us to which by her contribution she feels herself entitled. The Canadian Government feel, in short, that they are being gradually elbowed aside in the cause of Anglo-American and Anglo-Soviet co-operation.

I am sure my colleagues will agree with me that it is most important that we should do all we can to allay any apprehensions of this character. If uneasiness on this score were to spread from Canadian official circles to the Canadian public, the results would certainly be serious and far-reaching. We shall need the utmost assistance which Canada can give us not only in materials and man-power, but also financially; given a sense of full partnership with us, we can count on the Canadians as on our own people, and they will, I am sure, be ready to face any and every sacrifice in the common cause. But once let them feel that they are regarded here as playing only a minor role, the sharp edge of their enthusiasm will be blunted and their willingness to give of their utmost impaired by a barrier of mistrust.

Fortunately, there is time to check this dangerous undercurrent before it becomes strong; all that is needed is that each of us in our respective spheres should keep our relations with Canada prominently in mind and should seek by prior consultation to associate the Canadian Government with us in all decisions affecting Canadian interests. Only thus can we give full effect to the conception of equal partnership, and I am sure that I can count on my colleagues to co-operate with me in working to this end.

C. R. A.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET

WEEKLY RÉSUMÉ

(No. 162)

of the

NAVAL, MILITARY AND AIR SITUATION

from 0700 October 1st, to

0700 October 8th,

1942

[Circulated with the approval of the Chiefs of Staff.]
COMBINED OPERATIONS.

1. A small force sailed from Portland on the evening of the 3rd in a M.T.B. with the object of carrying out a raid on Sark. A landing was made without incident by a party of five. Five Germans, sleeping in separate rooms, in the annex of an hotel, were surprised and taken prisoner, and a number of papers collected.

The prisoners were assembled, and, owing to the probability that they would attempt to escape in the darkness when passing through a wood on the return to the shore, their hands were temporarily bound in front of them. Four of the prisoners began shouting and, in endeavouring to escape, were shot.

The landing party, having suffered no casualties, re-embarked and returned to Portland Harbour with the remaining prisoner.

NAVAL SITUATION.

General Review.

2. Our light forces have been active in the Channel and off the Dutch coast. E-boats have attacked shipping off our south and east coasts.

U-boat activity has extended to the Capetown area.

Shipping losses reported have been relatively light, but full details of casualties in the Capetown area are not yet available.

Home Waters.

3. On the night of the 1st/2nd, during an unsuccessful attack by E-boats on a coastal convoy off Start Point, an escort trawler was sunk and two M.L.’s were damaged. On the following night, in foggy weather, our light forces off the Dutch coast claimed hits on four enemy trawlers. One M.G.B. was lost. On the night of the 3rd/4th, a large and heavily escorted enemy ship was intercepted north of the Texel and many hits were claimed on the escorts. On the night of the 5th/6th, another large ship, heavily escorted, was engaged off Flushing and one E-boat was destroyed. One M.T.B. and one M.G.B. were lost.

A northbound coastal convoy escorted by two destroyers was attacked by 12 E-boats, off Cromer, early on the morning of the 7th. Three ships in the convoy, a rescue tug and a M.L. were torpedoed.

Mediterranean.

4. On the 18th September, H.M. Submarine *Taku* sank a southbound ship off Tobruk.

On the 1st, three M.T.B.s. from Cyprus fired torpedoes into Rhodes harbour which caused five explosions.

During the week 30,562 tons of French merchant shipping westbound and 36,947 tons eastbound have passed Gibraltar under escort.

Black Sea.

5. It is reported that two Russian destroyers bombarded the port of Yalta on the night of the 3rd. A Russian submarine sank a 2,000-ton ship in convoy off the Roumanian coast on the 25th September.

On the nights of the 19th/20th and the 20th/21st September Russian landing parties from light craft carried out an operation 20 miles west of Novorossisk. A large number of enemy troops was surrounded and casualties were inflicted. A patrol boat and a quantity of stores were destroyed.

Pacific.

6. A United States submarine, operating in Far Eastern waters, has reported sinking one seaplane tender and four cargo ships; two cargo ships were probably sunk and one tanker damaged.

7. It is reported that 115 enemy ships have been successfully attacked by United States submarines to date, of which 74 were sunk, 19 probably sunk and 22 damaged.

Aircraft are reported to have damaged one enemy heavy cruiser and a destroyer; four other cruisers may have been damaged. A U-boat was sunk in the Aleutian Islands. Details are given in the Air situation.
Anti-Submarine Operations.

9. Apart from attacks carried out from the United States, five attacks on U-boats have been carried out by surface craft and 21 by aircraft. Six attacks on one day were made by aircraft from Iceland (C) on U-boats which were shadowing a homeward bound convoy from Canada.

At least two promising aircraft attacks were carried out in the Bay of Biscay.

H.M. Corvette Crocus rammed a U-boat off Freetown and one of our aircraft damaged an Italian U-boat in this area.

A Japanese U-boat was probably damaged by aircraft in the New Guinea area. Promising attacks by United States aircraft were carried out off Dutch Guiana and Trinidad.

10. In Home Waters during the last three months Allied aircraft have reported 238 U-boat sightings, from which 160 attacks have developed.

Enemy Intelligence.

German.

11. There is no change in the disposition of German main units.

Italian.

12. Air reconnaissance of northern Adriatic ports carried out on the 2nd showed the new battleship Impero, at Venice, still incomplete. At Trieste the battleship Cavour, sunk in the naval air attack on Taranto in 1940, was seen with her main armament complete except for one turret, but her secondary armament incomplete. The cruiser Cadorna was at Pola.

13. The flow of shipping from Italy to Libya has still further decreased due to our air and submarine attacks. Very few ships are known to have reached Libyan ports during the past week.

Japanese.

14. Most of the Japanese naval forces are in the Caroline Islands, but three or four heavy cruisers and three light cruisers with 16 destroyers are operating in the Bougainville area. It is believed that the Japanese have denuded the Netherlands East Indies and Malayan areas of everything larger than destroyers, in order to effect this concentration in the S.W. Pacific.

U-Boats.

15. Over 100 U-boats are now operating in the Atlantic, with concentrations on the convoy routes outside the effective range of aircraft based on Ireland (R) and Canada.

There has been considerable activity east of Trinidad and in the latter part of the week a number of U-boats have been reported off Capetown. Japanese U-boats have been operating in the Gulf of Oman, in the Bay of Bengal and off the coast of Oregon.

Protection of Seaborne Trade.

16. During the week ending 4th/5th, 961 ships have been convoyed. Of these 248 were in ocean convoys and 713 in British coastal convoys. Three anti-aircraft ships, one armed merchant cruiser, 59 destroyers (including one United States destroyer) and 105 sloops, cutters and corvettes (including four United States cutters) were employed on escort duties.

During the week, 159 ships in five ocean convoys arrived in Home Waters. Four ships, two of which were stragglers, were sunk.

17. Imports into the United Kingdom by ships in convoy during the week ending the 3rd totalled 570,260 tons, compared with 759,000 tons during the previous seven days and an average of 692,700 tons for the past ten weeks. Of the week's imports, 209,297 tons were mineral oil of various grades.

Enemy Attack on Seaborne Trade.

18. Twenty ships are reported to have been attacked by U-boats during the week, and of these nine are known to have sunk. One ship in homeward-bound convoy and one straggler from an outward-bound convoy were torpedoed in the N.W. Approaches.

[24457]
Seven ships were attacked to the east of Trinidad, one south-west of Freetown, six off Cape Town, two in the Bay of Bengal and two off the Pacific seaboard of the United States.

Three ships in coastal convoy were torpedoed by E-boats off Cromer, and one ship was mined and sunk off the Humber.

19. The provisional figure of shipping losses in September (details of which will be included next week) is just over 462,000 tons. Apart from the losses by air attack in the convoy to Russia, almost all the remainder have been caused by U-boat attacks in the Atlantic.

20. Approximately 17,000 officers and men of the British Mercantile Marine and 600 seamen in British fishing boats have been killed by enemy action up to the 31st August, 1942. From the 27th September, 1941, to the 31st July, 1942, United States merchant marine casualties are reported as 410 killed and 1,891 missing.

British Minelaying.

21. During the week light craft laid mines off the Dutch and Flemish coasts and in the Dover Straits. One of our submarines laid mines off Tobruk. Aircraft minelaying took place, on a small scale, off the German North Sea coast and in the Channel.

Enemy Minelaying, British Minesweeping.

22. There has been no enemy minelaying by aircraft during the week. On one night E-boats were suspected of minelaying between Start Point and the Eddystone. In the Lyme Bay area a total of 82 mines have been destroyed and 21 others have been accounted for. Six mines were swept off Malta on the 22nd September. The mine totals to date are: acoustic 1,324; magnetic 2,645; moored 1,711.

Enemy Merchant Shipping.

23. Since the middle of August, 13 enemy ships are reported to have been mined in Danish waters, seven of which are known to have sunk.

The enemy blockade runner, probably the German s.s. Belgrano (6,095 tons), which was attacked by aircraft in the Bay of Biscay and put into Ferrol on the 3rd, was expected to complete her repairs by the 9th.

It is reported from Massawa that the German s.s Liebenfels (6,318 tons) was taken in prize on the 30th September.

MILITARY SITUATION.

The Russo-German Campaign.

Northern Sector.

24. The Russian attacks south of Lake Ladoga have increased in intensity, but have been met by German counter-attacks, which appear to have had some appreciable success. There is probably some truth in the German claim to have surrounded a Russian force in this area, but there is no confirmation that it amounts to seven divisions as the Germans state.

Central Sector.

25. Heavy fighting has continued in the Rzhev area, where the Russians have made further attacks.

Don Sector.

26. The Russians have continued their attempts to reduce the German bridgehead at Voronezh and have also tried to force fresh crossings of the Don in the area south of Svoboda. They do not appear to have had any great success.

Stalingrad Sector.

27. The German northern flank has been subjected to further heavy Russian attacks, but, in general, has held firm. Attacks have also continued on the German southern flank, but do not appear to have made any progress.
In the city of Stalingrad itself Russian resistance is as fierce as ever, but the Germans are very slowly gaining ground in the centre and north and are substantially in control in the south.

Caucasus Sector.

28. The Germans are still held on the northern bank of the River Terek, but south-west of Mozdok they have made a further slight advance. They are still some 25 miles from Tuapse and are meeting very strong Russian resistance. North-east of Novorossisk the Russians have improved their positions by repeated counter-attacks.

Black Sea.

29. While the Russian fleet has been active against Crimean and occupied Black Sea ports, the Germans have been bombing the Russian Black Sea ports, and the harbour of Tuapse is reported to be largely destroyed.

Summary.

30. In no sector have the Germans made any rapid progress, and at Stalingrad in particular their advance is extremely slow. The approach of winter strictly limits the possibilities open to them in the near future, even if Stalingrad should fall immediately, of which there is no sign. Unless an attack were made soon, any fresh German offensive, apart perhaps from an advance to Astrakhan, would probably be limited to the Caucasus sector.

Egypt.

31. On the 30th September we carried out an infantry brigade attack against the north-eastern face of the enemy salient at the southern end of our line. Our objectives were limited to the eastern rim of the Deir el Munassib depression. This runs roughly east and west for about eight miles and our intention was to secure the northern and southern rims for three miles from the eastern end.

This attack had generous artillery support and the northern rim was captured. Our western advance along the southern rim, however, was delayed by mines and field works and although our troops reached their objectives they were unable to dislodge the enemy from his positions on the southern rim. We now hold three miles of the northern rim and a mile and a half of the southern rim at the eastern end of the depression.

Since then the enemy has carried out a raid on our forward positions on the northern edge of the Deir el Munassib and he is also reported to have occupied some company localities along the southern rim.

Apart from these operations there has been only normal patrol activity.

Madagascar.

32. By the 1st October the leading elements of our forces from Tananarive had reached a point about 50 miles south of the capital. Their progress was slowed by numerous obstructions which the retiring Vichy French forces had placed on the road. On the evening of the 2nd our forces reached Antsirabe (80 miles south of Tananarive). They had thus covered 460 miles in 23 days in their advance from Majunga. They have been joined by forces which captured Tamatave and have since moved up by road and rail.

Far East.

South-West Pacific.

33. In New Guinea the Australian counter-attack has reached the Kagimyola area, overlooking Kokoda, without encountering the main body of the enemy, who on the 29th September withdrew through the gap in the Owen Stanley range. Another small force of Australians is moving through the Owen Stanley mountains to the north-west of Kokoda.

A small Allied force of all arms landed at Collingwood Bay (north-west of Milne Bay) on the 5th October, and is believed to have achieved complete surprise.

South Pacific.

34. The garrison at Fiji has been reinforced by one U.S. Infantry Regiment and now totals one complete U.S. Infantry Division.
Central Pacific.

35. The Hawaiian garrison has been reinforced by one U.S. Infantry Division, bringing the total strength to four infantry divisions and one infantry regiment.

North Pacific.

36.—(a) Alaska.—U.S. War Department has announced that the Canadian-Alaska military highway will be ready for use by the 1st December, 1942. The road begins at the railhead at Dawson Creek (British Columbia) and runs via White Horse (Yukon) to Fairbanks (Alaska).

37.—(b) Aleutians.—Attu and Agattu Islands (western extremity of the Aleutians) have been evacuated by the Japanese.

U.S. forces are reported to have occupied islands, including Adak Island, in the Andreanof Group (500 miles west of Dutch Harbour).

Intelligence.

France and the Low Countries.

38. There are strong indications that a new German armoured division is being formed in Brittany, probably by conversion of 17th Infantry Division. A new division, known at present as the Division Schacky, is being formed in the area Nevers-Chalon-sur-Saone, increasing the number of German divisions to 31 in France and 5 in the Low Countries. It is not yet clear whether Division Schacky is an infantry or a training division.

AIR SITUATION.

General.

39. Bomber Command aircraft made heavy attacks on Krefeld, Aachen and Osnabrück.

Our operations in Egypt and in the Mediterranean were hampered by bad weather.

In the Pacific Zone, successful attacks have been made on enemy shipping and a large number of enemy aircraft were destroyed in combat.

United Kingdom.

40. Fighter Command flew 662 sorties by day (including eight by U.S. aircraft) and 121 by night.

Enemy activity against this country was on a very small scale. Only 12 enemy aircraft flew overland by day and one by night.

Germany and Occupied Territory.

Day.

41. Fighter and Bomber Commands despatched 310 and 17 offensive sorties respectively compared with 119 and ten last week. In addition, 97 U.S. Fighter sorties and 73 U.S. Bomber sorties were flown which compares with 79 and 62 last week.

The only major operation of the week took place on the 2nd, when 43 Fortresses were despatched to attack the Potez airframe factory at Meaulte. In conjunction with this attack, 12 U.S. Bostons bombed the docks at Havre and other Fortresses attacked the Longuenesse aerodrome at St. Omer and carried out a diversionary sweep over Cayeux. Many bursts were seen on the target at Meaulte, and on dispersal points and the aerodrome at Longuenesse (see Appendix VII). Considerable enemy fighter opposition was encountered and the Fortresses, without loss to themselves, destroyed one fighter, probably destroyed 24 and damaged 13. Escort and support to these operations were supplied by 34 Squadrons of fighters (including eight U.S. Squadrons) and these destroyed six enemy fighters, probably destroyed five and damaged three for the loss of six aircraft from which one pilot was saved.

Five Mosquitos attacked the Ougree steel and armament works (near Liége), numerous bursts and fires being observed on the target. Other attacks, mostly by single Mosquitos, were made on the Sluiskil chemical works, where the sulphate store and power station were hit; the Diesel engine works at Hengelo, where a
large eight-storied building was damaged; the power station at Hengelo, which
was hit and for a short period was enveloped in red flames; and on Siegen,
Bremen, Munster and Saarbrucken.

Aircraft of the Photographic Reconnaissance Unit and of Army Co-operation
Command flew 74 sorties.

Night.

42. Bomber Command operated on four nights of the week, a total of
812 sorties being despatched against land targets. Last week there were no night
operations. Heavy attacks were made on Krefeld, Aachen and Osnabruck; a
smaller force operated against Wismar, Flensburg and Lubeck. Except at
Osnabruck, difficult weather conditions were experienced.

At Krefeld, about 309 tons of H.E. and incendiaries were dropped, but
darkness and thick ground haze made identification difficult. Numerous fires
were seen in the town but no accurate estimate of results could be made.

Aachen was attacked by 180 aircraft, which dropped 447 tons of H.E. and
incendiaries. Severe electrical storms and icing conditions were encountered soon
after the take-off and, although better conditions prevailed over the target, ground
haze again made accurate pinpointing extremely difficult and most crews bombed
by the Pathfinders’ flares, which themselves were scattered. Good concentrations
of fires were seen in the centre of the town as well as others spread over a wide
area.

At Wismar and Lubeck, similar conditions prevailed although at the latter
some crews were able to identify the River Trave and the U-boat slipways at
Herrenwijk.

At Flensburg, however, the sky was cloudless and visibility good and the
majority of aircraft attacked from below 1,600 feet. Many fires were seen
burning in the U-boat building yards. Flak defences were found to be
considerably stronger than in the previous attack, and 12 of the 27 aircraft
despatched on this target failed to return.

A successful raid was carried out on Osnabruck, where about 90 per cent.of
the 237 aircraft despatched attacked the target. Approximately 463 tons of
H.E. and incendiaries were dropped. Well placed flares from the Pathfinders
gave considerable assistance to the crews which followed, and concentrated fires
were seen.

In the above operations, 698 tons of H.E. (including 238 x 4,000 lbs.) and
880 tons of incendiaries were dropped. Thirty-eight of our bombers are missing
and a further eight crashed in this country.

No Intruder operations were carried out.

Coastal Operations.

43. Coastal Command despatched 412 sorties of which 205 were on
anti-U-boat operations and 24 on convoy escort. Bomber Command aircraft
flew 24 sorties west of the Bay of Biscay. Fighter Command flew 395 sorties
(of which 12 were by United States aircraft) on shipping protection patrols
and a further 79 offensive sorties against shipping.

Three Sunderlands attacked an outward-bound enemy blockade-runner off
Cap Finisterre and although no direct hits are claimed, the vessel is now
reported to be in Ferrol.

A night attack on a convoy off Terschelling was made by seven Hudsons
which attacked four vessels with unobserved results.

Our fighters operating off the Dutch, Belgian and French coasts damaged
three minesweepers (one of which ran aground), two small coasters and a
1,500-ton tanker.

Mediterranean.

Egypt and Libya.

44. Bad weather hampered our air operations during the greater part of
the week. Allied aircraft flew 1,078 sorties compared with 1,205 in the
previous week.

Our fighters maintained reconnaissance and offensive patrols over the battle
area and provided protection for shipping off Port Said and in the Gulf of
Suez. On the 1st, our fighters intercepted a heavily escorted dive-bomber
formation forcing the enemy to jettison his bombs on his own troops. Six Ju. 87s
were destroyed and one Ju. 87 and one Me. 109 were probably destroyed without loss to our own aircraft.

Fighter-bombers continued their attacks on enemy mechanical transport. On the 6th, a total of 12 Hurricanes and 53 Kittyhawks made six attacks on mechanical transport in the battle area causing considerable damage. In one attack alone over 25 vehicles were set on fire. Attacks were also carried out on Bomba seaplane base where one aircraft was destroyed and 14 were seriously damaged, on El Daba landing ground, on trains on the coastal railway and on working parties. Eight Baltimores escorted by fighters made a successful daylight attack on petrol dumps at El Daba.

Benghazi Harbour was attacked at dusk by six United States Liberators. Several hits were scored on the Central Mole. Another Liberator bombed Bardia.

A night attack on Tobruk was carried out by six Halifaxes and 34 Wellingtons. Near misses were obtained on a ship and many bursts were observed on the water front and near a power station. Three other Wellingtons bombed aerodromes near El Daba and El Gubbi. Seventeen Bostons bombed dispersed aircraft on landing grounds at Sidi Haneish.

Enemy activity, although still slight, was on an increased scale. Several attacks were made by dive-bombers and fighter-bombers on our troops, mechanical transport and artillery positions in the central and southern sectors. Three Me. 109s dive-bombed Alexandria harbour ineffectively.

Malta.

45. In the week ending the 5th October our aircraft flew 282 sorties.

Enemy activity consisted mainly of fighter sweeps, most of which, on sighting our fighters, withdrew without crossing the coast. No bombs were dropped on Malta.

Greece and Crete.

46. Eight U.S. Liberators bombed Navarino Harbour, where a ship was hit. Wellingtons bombed Maleme aerodrome and destroyed three aircraft on the ground.

Sea Communications.

47. A southbound convoy, consisting of a 3,000-ton tanker, a 6,000-ton ship and three destroyers, was attacked off the Libyan coast by eight Liberators and later by three Wellingtons. The tanker was torpedoed and set on fire.

A 7,000-ton ship, escorted by three destroyers on a south-easterly course, was torpedoed by Wellingtons west of Corfu. A reconnaissance made on the following day revealed that the ships had entered Corfu harbour.

Four Liberators attacked a ship and two destroyers off the coast of Crete. Near misses were obtained on the three vessels.

A Maryland machine-gunned two schooners north of Tobruk, and Beaufighters attacked laden tank-landing craft off Sidi Barrani.

Russian Front.

48. The Russians claim that in the week ending the 1st October the Germans lost 257 aircraft against 137 of their own.

In the Far North, Russian bombers sank two transport vessels in an unspecified area.

In the Baltic an enemy harbour was successfully bombed and an aerodrome attacked; two Ju. 88s were destroyed on the ground and three other aircraft in the air.

Enemy troops and communications in the Stalingrad and Voronesh areas were continuously attacked by Russian bombers.

Aircraft of the Black Sea Fleet heavily bombed enemy formations in the Caucasus and sank several German barges, trawlers and supply ships in the Black Sea.

The estimated number of enemy aircraft engaged on the Russian Front continues to be about 2,400, the main scale of effort being maintained in the Stalingrad and Caucasus sectors. Activity increased in the Terek River and Tnapse areas.

There was an increase in enemy activity on the Leningrad front where, it is estimated, about 500 German aircraft are engaged.

In the North, several bombing attacks were made on Archangel.
Burma.

49. A total of 31 Blenheims operated, of which 13 attacked the oil-producing centre of Yenangyuang; bursts were observed among buildings and barracks. Other Blenheims attacked the barracks at Meiktila, the Shewbo cantonment, the village of Rathedaung (20 miles north of Akyab) and Akyab harbour. One enemy bomber was destroyed by a Mohawk on escort duty.

U.S. Mitchells attacked barracks at Myitkyina, bridges near Mogaung and Tingka (15 miles north of Loiwing), rolling-stock and railway tracks near Katha and Mogaung, objectives at Lashio and Loiwing (50 miles north of Lashio), and other targets near the Yunnan/Burma frontier.

China.

50. U.S. fighters bombed, machine-gunned and heavily damaged Washawng and two adjacent villages.

Pacific Zone.

New Guinea.

51. United States aircraft (Fortresses, Mitchells, Bostons and Airacobras) have continued to bomb and machine-gun enemy objectives in the Buna–Kokoda–Efogi areas. The bridge at Wairopi (16 miles east of Kokoda) has again been hit and is now reported to be demolished.

Barges and other objectives in the Buna area were attacked by Allied aircraft on four occasions. An A.A. post and at least six barges were destroyed and a supply dump was blown up.

Medium bombers attacked a small enemy convoy off Buna and destroyed three of the enemy fighters which intercepted.

R.A.A.F. Beaufighters attacked buildings at Salamoa, and machine-gunned enemy positions on Goodenough Island.

New Britain.

52. United States Fortresses attacked shipping in Rabaul harbour. Two transports of 15,000 and 7,000 tons were hit and set on fire. It is probable that a cruiser and another ship were also hit.

Two attacks were made by Allied heavy bombers on aerodromes in the Rabaul area. Runways, dispersal areas and an ammunition dump were hit. In combat, four enemy fighters were destroyed and a further four were probably destroyed for the loss of one Allied bomber.

Solomon Islands.

53. Ten United States heavy bombers attacked a light cruiser near Bougainville Island. One bomber was shot down by A.A. fire and seven more were damaged by enemy fighters, of which eight were destroyed.

Ten Beauforts, of which one is missing, made torpedo attacks on shipping in the Buin–Faisi area. Three light cruisers and two cargo vessels are believed to have been hit.

A heavy enemy cruiser off Guadalcanal was attacked and damaged by Allied aircraft. Small enemy supply craft in the same area and enemy installations at Rakata Bay, where a munitions dump was set on fire, were also attacked. Two intercepting seaplanes were destroyed.

Between the 27th September and the 5th October, Catalinas made five attacks on the aerodrome at Buin and one of these is believed to have caused extensive damage, including the destruction of W/T installations. Buka aerodrome was bombed on three occasions; hits were made on dispersal bays and at least one aircraft on the ground was destroyed.

United States dive bombers and torpedo aircraft hit and damaged one of four destroyers south of the New Georgia group.

Between the 27th September and the 4th October, enemy bombers with strong fighter escort made six attacks on Allied positions on Guadalcanal Island. Fifty-one of these raiders were destroyed by Allied fighters.

Netherlands East Indies.

54. Hudsons attacked oil storage cisterns at Boela (Serang Island).
Alutians.

55. Between the 27th September and the 5th October, United States heavy bombers with fighter escort made six attacks on shipping and the camp area at Kiska. One transport and a U-boat were sunk and hits were also made on seaplane hangars and the camp. Enemy seaplanes intercepted on five occasions and 17 were destroyed for the loss of one United States fighter.

HOME SECURITY SITUATION.

General.

56. There has been no bombing by night. Minor bombing incidents occurred in daylight at Ventnor (2nd) and in the Rye area (7th). At Dover some houses were demolished by shell-fire (5th).

Casualties.

57. The estimated civilian casualties for the week ending 0600 the 7th October are 15 killed and 10 seriously injured.
APPENDICES I, II and III will be published periodically.

APPENDIX IV.

Enemy Merchant Ship Losses as assessed to 31st August, 1942.

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Sunk, Captured or Constructive Loss.</th>
<th>Seriously Damaged.</th>
<th>Damaged.</th>
<th>Total.</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>460</td>
<td>1,927,954</td>
<td>145</td>
<td>867,463</td>
</tr>
<tr>
<td>Italian</td>
<td>503</td>
<td>2,116,441</td>
<td>101</td>
<td>481,165</td>
</tr>
<tr>
<td>Other</td>
<td>173</td>
<td>296,858</td>
<td>20</td>
<td>38,819</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,136</td>
<td>4,341,253</td>
<td>266</td>
</tr>
</tbody>
</table>

The table does not include losses inflicted on the enemy by our Russian Allies, which are estimated at about 1,008,000 gross tons sunk; nor does it include losses inflicted on Japanese shipping in the Far East and Pacific which up to the 15th September are estimated to number 110 ships sunk or about 975,000 gross tons.

In addition there is about 146,000 gross tons of Axis shipping which has been taken over by South American countries not at war with the Axis.

APPENDIX V.

Casualties to H.M. Auxiliary Vessels and to Naval Personnel.

October 2.—Trawler Lord Stonehaven sunk by E-boats off the Eddystone.

October 3.—M.G.B. 78 presumed lost in action off Dutch coast.

October 6.—M.G.B. 76 sunk in action off Dutch coast.

October 6.—M.T.B. 29 lost in action in Straits of Dover.

October 6.—M.G.B. 75 damaged in action off Dutch coast.

October 7.—M.L. 339 and Rescue Tug Caroline Moller sunk by E-boats off Cromer. Fourteen survivors from M.L. 339. One officer and 2 ratings killed and 14 rescued from Rescue Tug.

The following casualties to naval personnel have been reported:—

Officers : 2 killed, 4 missing.
Ratings : 26 killed, 37 missing, 4 wounded.

Casualties to personnel in H.M. ships from the 3rd September, 1939, to the 2nd September, 1942:—

Officers : 2,468 killed, 477 missing, 705 wounded, 416 prisoners of war.
Ratings : 23,481 killed, 4,506 missing, 2,911 wounded, 3,418 prisoners of war.
APPENDIX VI.

Provisional operational aircraft battle casualties for the period: dawn, Thursday, 1st October, 1942, to dawn, Thursday, 8th October, 1942.

**Metropolitan Area.**

<table>
<thead>
<tr>
<th>British and Allied.</th>
<th>In the Air.</th>
<th>On the Ground.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>43*</td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Coastal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army Co-operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>Nil</td>
</tr>
</tbody>
</table>

*Includes 1 U.S.A.A.F. aircraft.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>16</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>30</td>
<td>15</td>
</tr>
</tbody>
</table>

**Middle East (including Malta).**

<table>
<thead>
<tr>
<th>British and Allied.</th>
<th>In the Air.</th>
<th>On the Ground.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>14†</td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>Nil</td>
</tr>
</tbody>
</table>

4 crews and 2 pilots are safe. †Includes 2 U.S.A.A.F. aircraft.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

**Far East.**

<table>
<thead>
<tr>
<th>British and Allied.</th>
<th>In the Air.</th>
<th>On the Ground.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>Nil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fighters</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes.—** (a) No account is taken of enemy aircraft destroyed on the ground in any theatre.
(b) No account is taken of British Naval aircraft casualties.
APPENDIX VII.

Air Attacks on Enemy Territory in Europe.

Extracts from Recent Raid Assessment Reports.

The following reports have been received during the week:—

Germany.

Munich.

Photographs taken on the 1st October, though of excellent quality, are of small scale. Nevertheless, it can be seen that as a result of the attack on the 19th/20th September damage is spread mainly over the centre and southern half of the town. The chief points of damage are the complete destruction of the engineering works of G. Baumann in Golber Str., due to a 4,000-lb. bomb, the explosion of two dry type gasholders in Truderinger Str. on the East Bank of the river, and the partial destruction of what is probably a tram depot in Aussere Wiener Str. In addition there is considerable damage to residential and commercial property, including an area of 5½ acres of devastation in the Haidhausen district.

It is also reported that as a result of the above attack, the Kustermann ammunition works have been partially destroyed and the Opel depot severely damaged.

Bremen.

Photographs taken on the 1st October are of poor quality and cover only part of the city and the suburbs. An immediate interpretation shows that as a result of the attack on the 13th/14th September several areas, including one of 35 acres, have been devastated in Sudervorstadt. In Hastedt there is damage to what is believed to be part of the Lloyd Dynamo Works and to the Carl Borgward Works, manufacturers of armoured fighting vehicles and motor transport. In Neuenland, the Focke Wulf Works has again been damaged and there is severe damage by fire to industrial buildings in Neuenlander Strasse, Vulcan Strasse and to a factory to the east of the Wallheimer Works.

Duisburg.

The last attack has had serious results upon communications, especially by water. It appears there was almost a complete stoppage for a time and that the number of barges actually sunk was about 90. These sunken barges made the harbour unserviceable.

Two thousand workers of the Demag Company, makers of equipment for heavy industry, are unemployed as a result of the stoppage of work caused by heavy air-raid damage to this works.

Kassel.

It is reported that the damage caused to the Henschel locomotive works will cause a production loss of 30 locomotives.

Danzig.

It is reported that in the attack on the 27th/28th August—

(i) An alcohol distillery at Neufahrwasser was burnt out;

(ii) Bombs fell on a station near Der Holm and a ship loaded for departure at a quay nearby was sunk; and

(iii) Considerable damage was caused to some barracks in the neighbourhood.

Occupied France.

Abbeville/Drucat.

It is reported that the attack on the aerodrome by United States Fortresses at the time of the Dieppe operation came as a complete surprise to the aerodrome personnel, only three minutes elapsing between the first warning and the arrival of the bombers. This was insufficient time to get all the aircraft on the ground into shelters and at least 15 were either destroyed or damaged beyond repair.
St. Omer/Longuenesse.

Photographs taken during and subsequent to the attack on the 2nd October by six United States Fortresses show, among other things, serious damage to four or five hangars and a total of at least 30 craters on the landing ground and dispersal area, at least five of which are on the only runway.

General.

In the belief that the R.A.F. will never bomb Alsace, the German authorities have in the last fortnight been deporting people from all parts of Alsace to make room for air raid victims from Germany.

The attack on Karlsruhe had a considerable effect on the population of Freiburg, large numbers of whom spent the following night in the Black Forest, thinking that their town would be bombed. Both in Stuttgart and Freiburg people have been prohibited from taking baths owing to fear of water shortage in the event of an air raid.

It was announced in the Munich press of the 22nd September that in order to place all Party, State, Municipal and Wehrmacht authorities at the disposal of the victims of the R.A.F. attack, Gauleiter Paul Giesler has ordained that the proposed Party Day in Munich and all its meetings should be cancelled.

Sea Mining.

It is reported that from about the 26th September, all ships carrying iron ore between Bilbao and Bayonne were stopped owing to the danger from our mines.
WAR CABINET.

EXCHANGE OF TECHNICAL INFORMATION WITH THE SOVIET GOVERNMENT.

Memorandum by the Secretary of State for Foreign Affairs.

MY colleagues will find in the Annex to this paper the text of a note to the Soviet Government which, with the Soviet Government's reply, signifying acceptance of our proposal, constitutes an agreement providing for the interchange of technical information regarding war-like inventions between His Majesty's Government in the United Kingdom and the Soviet Government. Sir A. Clark Kerr has informed me that the notes were exchanged by M. Molotov and himself on the 29th September.

2. Agreement in principle to conclude such an arrangement was reached during the Prime Minister's visit to Moscow in August.

3. It is important that the three Service Departments and also all other Government Departments concerned should bear in mind that His Majesty's Government are bound by this undertaking, so that the communication to the Soviet Government of all technical information of real importance is not overlooked. Similarly, it is important that all Government Departments concerned should be aware of the terms of this undertaking in order that requests may be addressed to the Soviet Government for the communication by them of any technical information likely to be of value to us.

4. I should, therefore, be grateful if my colleagues would take the necessary steps to ensure that their Departments are made fully aware of the terms of the Agreement in question.

5. The United States Government have been kept informed through Mr. Harriman, and the Dominions Governments should no doubt also be informed of the conclusion of the Agreement. But in view of the importance which the Soviet Government attach to secrecy in matters of this kind, I would propose that it should not be communicated to the other Allied Governments, and should be treated as secret.

A. E.

Foreign Office, October 8, 1942.
NOTE ADDRESSED TO M. MOLOTOV BY HIS MAJESTY'S AMBASSADOR AT MOSCOW.

I have the honour to inform your Excellency that His Majesty's Government, in the United Kingdom, being desirous of coming to an agreement with the Government of the Union of Soviet Socialist Republics regarding the exchange of information relating to warlike weapons, are prepared to conclude an agreement in the following terms:

"The Government of the Union of Soviet Socialist Republics and the Government of the United Kingdom will furnish to each other on request all information, including any necessary specifications, plans, &c., relating to weapons, devices or processes which at present are, or in future may be, employed by them for the prosecution of the war against the common enemy. They will also furnish such information spontaneously as regards new weapons, devices or processes which they may employ and which they consider would be of interest to the other Government.

"If either Government considers that in the common interest there would be disadvantage in giving such information in a particular case, they shall be entitled to withhold the information in question, but in that event they will indicate the reasons which led them to take this view."

If the Government of the Union of Soviet Socialist Republics are prepared to accept these proposals, this note and a reply from your Excellency notifying their acceptance will constitute an agreement between the two Governments.
The fourth winter of the war falls on a public not flagging or out of heart but for the time being much more preoccupied with the unavoidable difficulties of every day life than with the larger issues of the progress of the war or of world politics. A year ago there were many to believe that the end of the war was not far off and that we should not have to spend another winter in the shelters; now the expectation of a speedy end to the war seems to have faded altogether and people have settled down to a steady plugging away at the jobs that immediately concern them.

2. Much of this might change overnight with an intensification of our share in military operations. In the meantime hopes are uncertain while practical problems are real. Indeed, post-war conditions seem to be more a cause of anxiety as to what they may bring to the individual in the shape of unemployment and distress than of hope for the blessings that they may bring to the nation at large. Criticism of the management of the production side of the war which was so vigorous and widespread earlier this year has mainly died away; so has criticism of the Government itself. The House of Commons, on the other hand, has not enjoyed the same immunity, the Lord Privy Seal's comment on members' attendance in the House having been received with vigorous and sustained approval.

3. The war news that has dominated men's minds throughout the period is the battle of Stalingrad. Every week of successful defence confirms the popularity of the Russians and there is much uneasiness and unhappiness at the spectacle of our apparent inaction. For this reason a piece of news such as the passing of the recent convoy to Russia is received with real pleasure.

4. But uneasiness and unhappiness do not now feed any clamour for a Second Front. When one compares the public feeling on this subject in September 1942 with the feeling a year ago, it is remarkable how great the change has been. As a political issue it has ceased to count. There is much greater awareness of the tremendous gravity of such an undertaking; and the public seems satisfied to accept that "prodding", whether of military or political leaders, is neither wise nor necessary.

5. No single factor has contributed more powerfully to bring this about than the news of the Dieppe raid. It has all along been widely believed that the raid was intended to be "the Second Front", or that it would have turned into one if operations had gone more favourably. The first impact of the news was highly stimulating, and it is reported that in many factories it lent an appreciable impetus to production. Gradually, however, it came to be realised that serious difficulties had been encountered and heavy losses suffered; and the public, seeing for the first time as it were the opening phases of a landing enacted, appear to have drawn a grim moral from what they saw.

6. The review comes back in the end to the fact that the public are regarding the coming winter with foreboding as a period dominated not by hunger but by cold, darkness and irksome transport difficulties. The prospect of air raids grows more formidable. It is on these practical things that their attention will mainly be concentrated.
7. The public are taking fuel economy to heart and are making serious efforts to meet the Government's appeal, but they find it so hard to understand why this country should be short of coal that their efforts are accompanied by resentment against what they describe as Government mismanagement in having allowed the present situation to come about. They do not look forward to rationing with apprehension, for not only has their experience of commodity rationing been favourable hitherto, but they have also derived real satisfaction from the thought that whatever supplies are available are being shared out on an equitable basis unaffected by the influence of privilege or money. Finally, the readiness of response from the lower income groups is affected by the feeling that they have never been able to afford to do otherwise than economise in fuel and that the range in which saving ought to be sought is amongst the higher income groups occupying the larger houses.

B.B.

9th October, 1942.
WAR CABINET.

UNITED STATES COLOURED TROOPS IN THE UNITED KINGDOM.

Memorandum by the Lord Chancellor.

THE War Office Memorandum (W.P. (42) 441) and the Memorandum by the Secretary of State for the Colonies (W.P. (42) 442) put forward differing views as to the proper handling of this difficult subject by the British Authorities, and I should like to submit some considerations which support the view taken by the Colonial Office. My own reflections and experience lead me strongly to affirm the view of the Secretary of State for the Colonies that any lead given to the British people in this country, asking them to adopt the attitude of the American Army towards coloured people, whether American or others, is likely to cause serious resentment among coloured people who are British subjects, and also to cause confusion—and even protest and resentment—in the minds of the public here who have been asked repeatedly to accept British coloured Colonial persons on equal terms and to extend to them hospitality and friendliness. I would ask attention to the following points:—

1. The British attitude to coloured people is in fact widely different from the American attitude. There are historic and social reasons which may explain this, but the fact is undeniable. Anyone acquainted with the Southern States knows to what lengths the attitude adopted by the Whites against the Blacks sometimes goes. I feel sure that British opinion would never accept, for example, provisions requiring coloured people to travel only in "Jim Crow" cars, to sit on separate seats in the parks, to abstain from entering cinemas to which white people resort, and so forth. We cannot ask people to adopt the American attitude on the colour question without asking them to set aside the British tradition.

2. No colour bar is observed in the Service Clubs run by the voluntary organisations which are officially recognised by the War Office; for example, St. Stephen's Club, Westminster, is being used as a Toe H Services Club. Soldiers wearing a British uniform—whether white or coloured—resort to the Club. I am told that a number of American coloured troops have already used it. Would it be consistent with British principles and traditions for the British Authorities to say that such a place must not be entered by American coloured troops? I should think it would be equally difficult to persuade Salvation Army canteens or services like the Y.M.C.A. or the Church Army to adopt such a discrimination. It is, I understand, the policy of the British Service Clubs to admit coloured troops, and I submit that the British Government ought not to seek to get that policy in any way changed.

3. As to licensed premises, I do not think that the holder of a publican's licence would have any right to refuse to admit and serve coloured men. He gets his monopoly by a grant from the Magistrates because his house is "public," i.e., ready to serve anybody who is not drunk and who behaves himself.
4. The British Empire is, on the whole, a coloured Empire, and it is hardly necessary to emphasise what the reactions might be in the Empire if we took a wrong course on this subject.

5. I appreciate that the War Office proposal does not necessarily go to these lengths, but I question whether it is possible to go as far as the War Office proposes and stop there. Surely the Colonial Office Paper is right in saying "I consider that it is going much too far to attempt to ask the British Army or the A.T.S. to adopt the attitude of the American Army towards American coloured people. It should be impressed upon our Service personnel that this is an American and not a British problem."

6. My own conviction is that if a mistake is made by yielding to American sentiments and issuing orders which involve the British Government in the practice of segregation, we are likely to raise a much greater storm than may be realised in some quarters. There is a profound British conviction underneath the surface in most of us that if a coloured man behaves himself he is entitled to the same treatment as a white man.

7. I submit, therefore, that instead of urging our own people to adopt American practices in this matter, we should explain to the American Army Authorities that we, too, have traditional methods in connexion with coloured people and that we can take no action which would be a departure from them. The problem, which is undoubtedly a difficult one, is a problem for the American Military Authorities, who, if they wish, can put places out of bounds, &c.

8. As for the allegation that there are some white women in this country who feel that American coloured troops are particularly attractive and who run after them, that is a difficulty which will not be cured by keeping American coloured troops out of canteens or clubs at all. The great mass of white women certainly have no such feelings, and I believe that the great mass of American coloured men are perfectly well conducted. In any case, barring American coloured troops from canteens, clubs, &c., will not reduce the risk of association with white women in the least—rather the opposite.

S.

House of Lords, October 9, 1942.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document

WAR CABINET.

UNITED STATES COLOURED TROOPS IN THE UNITED KINGDOM.

Memorandum by the Home Secretary.

As pointed out in the memorandum by the Secretary of State for War (W.P. (42) 441), the Home Office has issued to Chief Constables in England and Wales a circular letter advising them as to the attitude which they should adopt towards American coloured troops in this country, and a similar circular has been issued by the Secretary of State for Scotland to the Scottish police.

The Home Office circular, of which a copy is appended to this memorandum, was issued after consultation with the Foreign Office, the Ministry of Information and the Chairman of the Bolero Committee. General Eisenhower was shown in advance a copy of the draft circular, and he expressed "complete accord with the instructions" which the Home Office proposed to issue. In his letter to the Home Office General Eisenhower said: "This policy of non-discrimination is exactly the policy which has always been followed by the United States Army. Subordinate United States Army Commanders in the European Theater of Operations are being informed of the proposed action of the Home Office. With reference to the question of placing certain places out of bounds, we do not make any restrictions of that kind on the basis of colour. The policy followed by the United States Army Authorities is that places put out of bounds for United States soldiers are out of bounds to all United States Army personnel."

So far as the attitude to be adopted by the police is concerned it will be seen that they have been advised not themselves to exercise any discrimination against United States coloured troops in this country, and not to encourage such discrimination by licensees of cinemas, public houses, restaurants or other places of public entertainment.

2. Reports received by the Home Office from Chief Officers of Police show that on the whole the American coloured troops in this country have behaved well, and that, apart from isolated incidents, there have been no difficulties created by the association of American coloured troops with the civil population. On the other hand, some of the Regional Commissioners have expressed considerable apprehension as to the difficulties likely to be created in their Regions by the presence of American coloured troops, and their association with the civil population, and particularly with British women. Some Regional Commissioners have informed me that, in their experience, some British women appear to find a peculiar fascination in associating with men of colour, and that this association is resented by American white soldiers and is likely to give rise to difficult social problems in their Regions. They have also urged that the morale of British troops is likely to be upset by rumours that their wives and daughters are being debauched by American coloured troops.
3. The question for the Cabinet, as I see it, is whether any advice should be given by the Government as to the attitude which should be adopted towards American coloured soldiers and, if so, to whom that advice should be given and in what terms. The War Office proposal is that Service personnel should be informed of the facts and history of the colour question in the United States of America and the United States Army, and should be educated by private lectures from their officers to adopt towards American coloured troops what is supposed to be the attitude of the United States Army Authorities. If, however, it were decided that such advice should be given to Service personnel, would the matter end there? If, for example, in any area Civil Defence workers were found to be fraternising unduly with coloured troops, would it not be the duty of the Minister of Home Security to give some advice to these persons? Would it not ultimately be necessary to give some information to the police as to the policy of the Government? Service personnel would inevitably inform the police and licensees of public houses, for example, of the nature of the advice which they had received, however confidentially, and the advice given to Service personnel would soon percolate throughout the rest of the community, possibly in an exaggerated and distorted form. It appears that any advice which goes beyond the mere imparting to Service personnel of information as to the colour problem in the United States is bound to give rise to this type of difficulty, and the mere imparting of such information may itself give rise to a demand for advice as to the correct behaviour to be used towards American coloured troops, having regard to the varying attitudes adopted towards the colour problem in different parts of the United States.

4. The proposal that British Service personnel should adopt towards the United States coloured troops the attitude of the United States Army Authorities seems to assume that the Americans do in fact wish to maintain in this country a policy of segregation similar to that followed in the United States or in some parts of the United States. General Eisenhower’s letter, however, states categorically that it is not part of the policy of the United States Army to place out of bounds to coloured troops places which are not also out of bounds to other members of the United States forces; and in this country where separate canteens, public houses, cinemas or places of entertainment are not available for coloured people it is difficult to see how effect could be given to a policy of segregation. Moreover, there would be a large body of opinion in this country which would strongly resent a policy under which British citizens were advised to treat coloured persons in the same way as the United States Army Authorities are supposed to treat them.

It appears from General Eisenhower’s letter that there is some reason for thinking that the American Army Headquarters take a broader and more tolerant view of the question than local American Army Commanders. Is the explanation that the official American policy has not yet been fully understood by subordinate Commanders of the American Forces in this country? Moreover, the American troops have not yet been in this country sufficiently long to enable them to appreciate the British attitude towards the delicate question of colour prejudice, while the British people themselves have not had sufficient experience on a large scale of the colour problem to enable them to appreciate the American point of view.

5. I am fully conscious that a difficult social problem might be created if there were a substantial number of cases of sex relations between white women and coloured troops and the procreation of half-caste children: but I am doubtful whether the policy suggested by the War Office would have any effect in checking this danger. The educative methods suggested in the War Office memorandum are unlikely to have any influence on the class of women who are attracted by coloured men.

Although there is among Regional Commissioners some concern about this danger, I have no information to suggest that it is serious at the present time; but I propose that a careful watch should be kept on this aspect of the problem.

6. There is also no doubt a risk that respectable English girls may not realise that if they show to coloured men from the United States the same friendliness as they commonly show to our own Service men the coloured man from America is likely to misunderstand their intentions and their character; and the creation of such misunderstanding is unfair to him and may be dangerous to the girls. I can therefore see a case for giving some warning to the members of the A.T.S. and the other women’s Services on this subject.
As regards, however, educating the personnel of the Army "to adopt towards the United States coloured troops the attitude of the United States Army Authorities," I am doubtful whether any such practical advantages would ensue from such a course as to outweigh the disadvantages which are likely to arise when the men and women concerned attempt to follow in practice the instructions which have been given to them, and from the controversy which will arise when, as must almost inevitably happen, there is some public disclosure, possibly in a distorted form, of the nature of those instructions.

H. M.

Home Office, October 10, 1942.

APPENDIX.

(Confidential.)

American Coloured Troops.

Home Office, Whitehall, S.W. 1,

September 4, 1942.

Sir,

1. I AM directed by the Secretary of State to say that, as you are no doubt aware, the American troops who are now coming to this country in increasing numbers include a certain proportion of coloured troops.

2. From reports which the Secretary of State has received from various parts of the country it appears that there is ground for thinking that difficulties may be caused by the presence among the civil population of coloured troops, and by their association both with other troops and with British women.

3. It is not the policy of His Majesty's Government that any discrimination as regards the treatment of coloured troops should be made by the British authorities. The Secretary of State, therefore, would be glad if you would be good enough to take steps to ensure that the police do not make any approach to the proprietors of public houses, restaurants, cinemas or other places of entertainment with a view to discriminating against coloured troops.

4. If the American Service authorities decide to put certain places out of bounds for their coloured troops, such prohibition can be effected only by means of an Order issued by the appropriate American Army and Naval authorities. The police should not make themselves in any way responsible for the enforcement of such orders.

I am,

Sir,

Your obedient servant,

F. A. NEWSAM.

The Chief Constable.
Note by the Secretary of the War Cabinet

With reference to W.M. (42) 137th Conclusions, copies of the following documents are circulated herewith, by direction of the Deputy Prime Minister:-

(1) Telegram No. 408 from Dominions Office to the Dominions.

(2) Telegrams Nos. 207 and 208 to Canada.

(3) Telegrams Nos. 214 and 215 from Canada.

(4) Draft of proposed public statement.

(Signed) E.E. BRIDGES.
Secretary of the War Cabinet.

Great George Street, S.W. 1.

10th October, 1942
OUTWARD TELEGRAM

CRYPTER (TYPEX)  S.D.

FROM: D.O.
TO: CANADA (GOVT.)
AUSTRALIA  "
NEW ZEALAND  "
SOUTH AFRICA  "

(Sent 5.00 a.m., 10th Oct., 1942.)

IMMEDIATE

D. No. 408 SECRET

My telegram D. No. 405 of 8th October.

1. In view of latest developments, War Cabinet have again reviewed the position. Following is statement of facts with our comment.

2. On 2nd September the German High Command announced:

"The English Order captured near Dieppe states in Appendix L paragraph 4, Figure E (2):

'Wherever it is possible, the hands of prisoners will be bound, so that they cannot destroy their papers'.

This extract from the English Operational Order was published among other things in the official statement of the German High Command of the 30th August 1942. The English Government has not defined its attitude to this.

The German High Command have therefore ordered that all the British Officers and soldiers taken prisoner near Dieppe will be placed in fetters as from 14.00 on the 3rd September. The reason for this treatment has been made known to the prisoners. This measure will only be cancelled when the British Government withdraws in an official pronouncement the instruction decreed in the abovementioned order about the fettering of German prisoners of war."

3. The War Office issued the following statement on 2nd September:

"A German communique has stated that orders were given by the British in the Dieppe operations that prisoners' hands should be tied to prevent them destroying their papers. Investigations are being made as to whether in fact any such order was issued. It is categorically denied that any German prisoner had his hands tied. Any such order, if it was issued, will be cancelled."

The German High Command issued on 3rd September a statement repeating the War Office statement and saying:

"On the strength of this Declaration, the High Command of the German Armed Forces has lifted the reprisal measures against British prisoners of war announced on September/
September 2nd. The text of this British Declaration will be made known to the British prisoners of war as well.

4. On enquiries being made it was found that the Order referred to in the German statement of 2nd September had been issued. In the view of the War Office this might be held to imply that irrespective of the circumstances the hands of prisoners of war should be tied. This might be regarded as contrary to the Geneva Convention which, though it lays down nothing about tying the hands of prisoners of war prescribes humane treatment.

5. On the 7th October German Government issued a further announcement as follows:

"After the abortive landing attempts at Dieppe, a captured British Order demanding that German prisoners be fettered, forced the High Command of the Armed Forces to announce suitable counter-measures for the protection of German soldiers' honour. Thereupon the British War Office declared on the 2nd September:

'It is emphatically denied that any German prisoner has had his hands fettered. Any such order, if it should have been issued, will be revoked.'

In the meantime, both declarations of the British War Office have been proved to be either frivolous unverified assertions or conscious lies.

For the examination in court of a German Lance Sergeant, a Corporal and five Privates as well as of five men of the organisation Todt, who temporarily fell into British captivity at Dieppe and who were later freed, makes it clear that they had all been fettered from ten minutes to one hour and a half. Either their hands had been tied on their backs, or their wrists, in some instances even their individual fingers had been tied together over their chests.

This was not all: a similar dastardly incident took place on the Channel Islands of Sark on the 4th October. In the early hours of the morning, 16 British raided a German labour squad of one N.C.O. and four men. These, dressed only in their shirts, were tied up with a thin but very strong round plaited rope, prevented from putting on any further clothes and marched to the beach. When the German soldiers resisted this unheard of treatment, the N.C.O. and one man were killed by shots and by thrusts with bayonet, and another soldier was wounded. These facts are confirmed by the evidence of a Sapper, who managed to escape in the affray. The investigation has evinced that the fettering had been prepared systematically.

The German High Command of the Armed Forces has thus in its hands irrefutable proof of the two British War Office statements of 2nd September having been made untruthfully.

The High Command of the Armed Forces therefore finds itself compelled to direct as follows:

As from 12 o'clock noon of the 8th October, all British officers and soldiers captured at Dieppe will be laid in irons. This measure shall remain in force until such time as the British War Office will give evidence that in future it will make truthful statements of the fettering of German prisoners of war or that it has assumed authority to make sure its orders are enforced with the troops.
In future, all terror and sabotage units of the British and their henchmen who behave not like soldiers but like bandits will be treated as such by the German troops and wherever they appear, they will be finished off in ruthless struggle."

6. The War Office issued the following statement on the same day:

"Enquiries were instituted after the Dieppe raid. All German prisoners-of-war brought back to the United Kingdom were interrogated and unanimously declared they had not had their hands tied and had been given humane treatment. This statement can be proved by the German Protecting power.

Any of the prisoners can be seen by the representatives of the German Protecting power to confirm this.

The evidence the enemy have adduced rests on their unsubstantiated assertions.

There is full evidence of the humane treatment of prisoners of war by British troops and if the German Government carry out the threats mentioned in their communiqué, the British Government will have to consider their future action.

The raid on Sark was carried out by a party of ten officers and men. Seven of the party went into an occupied house and captured five Germans. The hands of the Germans were tied in order that arms might be linked with the captives. No written Orders had been issued. The prisoners had to be taken past a German occupied barracks to the boats and the precautions were therefore necessary. In spite of the precautions, four of the five German prisoners of war broke away shouting and had to be shot to prevent their raising the alarm."

7. On the next day, 8th October, His Majesty’s Government issued a further statement as follows:

"His Majesty’s Government repeat the declaration that they do not and will not countenance any Orders for the tying of the hands of Prisoners of War taken in the field.

The action of the German Government in taking reprisals against the British Prisoners of War in their hands is expressly forbidden by Article 2 of the Geneva Convention.

Nevertheless, should the German Government persist in their intentions, His Majesty’s Government will be compelled, in order to protect their own Prisoners of War, to take similar measures upon an equal number of enemy Prisoners of War in their hands."

8. The German High Command thereafter announced that they had put the Dieppe prisoners in chains as from noon on 8th October.

9. The War Office thereupon issued the following statement:

"The German Government, having put into operation the illegal action threatened in their communiqué, the War Office announces that unless the German Government release the prisoners captured at Dieppe from their chains, an equal number of German prisoners of war will be manacled and chained as from 12 noon, Saturday, 10th October."

10. The German High Command issued the following on 9th October:

"Since
"Since the announcement by the German High Command on October 7th in which reprisal measures against the fettering of German prisoners at Dieppe and on the Island of Sark were unknown, the British Government have only made excuses, referred to statements of German prisoners who were not manacled and declared that they do not and will not countenance the binding of war prisoners in the field.

Since the British Government has not referred to the fact that notwithstanding the former and the present hypocritical statements of the British War Office German prisoners were fettered in a crude way, on October 8th at noon, 207 British Officers and 1,269 N.C.O.s, and men who were taken prisoner at Dieppe were in fetters after they had been informed of the reasons.

Chaplains, medical personnel, wounded and sick were not manacled.

In the evening of October 8th the British War Office announced that an equal number of German prisoners will be manacled and in irons from October 10th onwards.

If this should be done the German High Command will put on fetters three times the number of British prisoners of war from noon on October 10th onwards."

11. His Majesty's Government think that there is risk of some misunderstanding as to what is or is not allowed in this matter.

12. The Geneva Convention lays down the treatment to be accorded to prisoners of war. Clearly however wholly different conditions apply to prisoners in safe custody as contrasted with the action of taking prisoners in the course of battle. In the latter case the tying of a prisoner's hands may be the only way of preventing him from escaping while being taken into custody; it may indeed be the only alternative to taking his life.

13. The German Government have now deliberately manacled prisoners of war in their custody and far removed from the battle. They have done this as a reprisal. But reprisals are specifically forbidden by the Geneva Convention.

14. His Majesty's Government think it desirable that an early public statement should be issued based on the above and we hope to let you have the text of this as soon as possible.

15. In the War Cabinet's view there is reason to think that the German action was prompted by fear of our Commando raids and aimed at making them less effective. His Majesty's Government therefore propose that if the German Government put into effect their threat to manacle three times the number of British prisoners of war, they, for their part, should increase correspondingly the number of German prisoners to be manacled. His Majesty's Government trust that this action, which has been forced upon us, will receive the approval and co-operation of the Dominion Government.

We should be grateful for earliest possible reply.
OUTWARD TELEGRAM

CYPHER (TYPEX)

FROM: D.O.

TO: CANADA (GOVT.)

(Sent 5.0 a.m., 10th Oct., 1942.)

No. 207 SECRET

My telegram D. No. 406 of today. Last paragraph.

Action proposed by us would involve Canadian Government in the first instance putting manacles on 5,000 German prisoners of war in all (inclusive of those due to be manacled at noon on 10th October). We trust that Canadian Government would agree to take this action on our notifying them that Germans have fulfilled threat.
OUTWARD TELEGRAM

FROM: D.O.
TO: CANADA (GOVT.)

(Sent 5.0 a.m., 10th Oct., 1942.)

No. 208 SECRET

My telegram No. 207, of 10th October.

Following from Prime Minister for Prime Minister. Begins.

Earnestly hope that you will stand by us in this anxious business in which we both have much at stake. Assure it will be of short duration. Ends.
INWARD TELEGRAM

CYPHER(TYPEX)

FROM: CANADA (GOV'T.)

TO: D.O.

D. 9th Oct., 1942; 7.41 p.m.
R. 10th " " 8.00 a.m.

MOST IMMEDIATE

No. 214 MOST SECRET.

Your telegrams Nos. 202 9th October and 204 9th October.

We are prepared to take desired action and to handcuff from noon Saturday 1,100 German prisoners in Canada. By my immediately following telegram for text of notification to Germany sent through Swiss representative. We think it undesirable that any figures indicating number of German prisoners handcuffed in Canada and in United Kingdom respectively should be made public, only the total being given.

2. This decision has been reached with reluctance. We feel that we have been committed without proper consultation to a course of doubtful wisdom. Not only are nearly all the Dieppe prisoners Canadians, but the task of applying reprisals to German prisoners falls mainly on Canada. We fear a futile contest may follow in an attempt to match with the Germans an eye for an eye. In such a contest in the application of harshness to prisoners the Germans are certain to win.

3. We consider that it would have been preferable to leave to the Germans a face-saving escape before reprisals were applied on our side. An offer might have been made of complete investigation by the protecting power accompanied by a threat of reprisals if such an investigation showed the German charges to be unfounded and if the Commonwealth prisoners were not promptly freed from their chains.

4. To avoid, however, a open difference with the United Kingdom Government, who had already announced the measures to be taken although their execution required Canadian co-operation, we have decided with regret to take the action requested and are so informing the press.

5. We understand that there was included in the operation plans for Dieppe a sentence authorising the tying of prisoners hands to prevent destruction of documents. We believe that especially since the Germans have this order, a straightforward statement of the facts should now assist in ending this unhappy contest in reprisals.

6. Can you offer any explanation of why German reprisals have been imposed at this particular time? What connection exists between them and the incidents occurring during the Commando raid on Sark?
In order that the true facts of the controversy about tying the hands of prisoners of war may be clearly before the public, the following statement is issued by His Majesty's Government.

In the Dieppe raid, an order was issued, without authority, to the effect that "wherever possible the hands of prisoners of war will be bound, so that they cannot destroy their papers". On the complaint of the German Government, the War Office at once, before there had been time to make enquiry, issued a statement that, if any such order had been issued, it would be countermanded, because they considered that such an order might be held to imply that, irrespective of the circumstances, the hands of prisoners of war should be bound.

On inquiries being made, no evidence was found that any of the prisoners brought back from Dieppe had had their hands tied. But the existence of the order came to light, and it was countermanded.

The raid on Sark was carried out by a party of ten officers and men. Seven of the party captured five Germans. The hands of the Germans were tied in order that arms might be linked with the captors. No orders, written or otherwise, had been issued. But the prisoners had to be taken past a German-occupied barracks on the way to the boats, and precautions were therefore necessary. In spite of the precautions, four of the five German prisoners of war broke away, shouting, and had to be shot to prevent them raising the alarm.

The Geneva Convention contains no statement about tying the hands of prisoners, but prescribes humane treatment. The question at issue is, therefore, what constitutes humane treatment.

Clearly this differs according to circumstances. There is a wide difference between what is appropriate to a prisoner in safe custody and to prisoners in the course of battle. It will be observed that the actions complained of by the German Government relate to action in the course of battle.

The German Government have, however, themselves taken action to tie the hands of prisoners of war in their custody and far removed from the battle field as an act of reprisal. Acts of reprisal against prisoners of war are specifically forbidden by the Geneva Convention.
TO BE KEPT UNDER LOCK & KEY.

It is requested that special care may be taken to ensure the secrecy of this document.

SECRET

W.P.(42) 458.

10TH OCTOBER, 1942.

WAR CABINET

PRISONERS OF WAR

Note by the Secretary of State for Dominion Affairs

I circulate herewith for the consideration of my colleagues a letter which I received to-day from the High Commissioner for Canada about the treatment of Prisoners of War.

(Intl'd.) C.R.A.

Dominions Office, S.W.1.
Office of the High Commissioner for Canada,
Canada House,
London, S.W.1.
10th October, 1942.

My dear Secretary of State,

I should like to refer to telegram No. 214 addressed to you from my Government, containing their reply to the request made to them by the Government of the United Kingdom, that German prisoners of war in Canada should be shackled in reprisal for the fettering of prisoners of war by the German Government.

As you will have noted, the decision of the Canadian Government to comply with this request has been reached with reluctance, especially as it is felt that a policy of mutual reprisals will result in a futile attempt to match with the Germans an eye for an eye, and that any contest in applying hardships against prisoners of war the Germans are certain to win.

As indicated in my Government's telegram they consider it would have been preferable to leave the Germans a face-saving escape before reprisals were applied on our side, by an offer to accept complete investigation by the Protecting Power.

This course of action still remains open to us, and the Canadian Government consider an approach might be made through the Protecting Power along the following lines. It should be intimated to the Germans that as their action in placing fetters on Canadian and British prisoners of war is in clear violation of Article 8 of the Geneva Convention, and as this measure of reprisal was taken without any prior independent investigation of the facts, which could have been arranged through the Protecting Power, His Majesty's Government had no alternative but to place an equivalent number of German prisoners in handcuffs in like manner. At the same time the German Government might be invited to submit its charges regarding the tying of hands to the investigation of the Protecting Power, and in the meantime to suspend the shackling of prisoners of war on a reciprocal basis pending a report on the part of the Protecting Power.

As an alternative to the above proposal it has occurred to me that there might be advantages in an unofficial intimation being made to the Protecting Power that if they were prepared to initiate an offer of mediation between the two parties we for our part would be prepared to accept them as referees.

I should add that this is a personal suggestion which would have to be referred to my Government for their views.

It is felt by the Canadian Government that unless some action along these lines is taken, there is evident danger that the whole situation will develop into competitive reprisals with no limit in sight, and I have received instructions from my Government to express the hope that an issue will be found out of the present situation by adopting a course of action along the above lines.

Yours sincerely,

(Signed) VINCENT MASSEY.

The Right Hon. C.R. Attlee, M.P.
As the Minister charged by the War Cabinet with the responsibility for co-ordinating civilian hospitality to the American troops in this country I have been brought into constant touch with the problem of defining what attitude we should wish the people of this country to adopt towards the American coloured troops. It may be of some assistance to the War Cabinet, in view of the divergencies of opinion that seem to have arisen, if I indicate briefly the line of advice that I have throughout offered on this subject. The substance of it is contained in a letter which I wrote to the Secretary of State for War on the 16th September last, and I will quote the relevant passages here:

"It seems to me that the first thing to realise is that the Americans have exported to us a local problem which is not of our own making and that there is no conceivable prospect of its being solved on this side in any way that is completely satisfactory. Therefore, I deprecate general discussions of it, which tend more to diagnosis than cure.

I am sure that the American policy of segregation is the best practical contribution to the avoidance of trouble. Let us second it in every way. But it is not always achieved, nor is it always capable of being achieved. In such circumstances, our public is conscious of a divided allegiance: their sense of sympathy and protectiveness towards the black troops conflicts with their wish to respect the feelings of the white troops among us. I cannot feel that we ought by any process, visible or invisible, to try to lead our own people to adopt as their own the American social attitude to the American negro: nor should we succeed, but I think that we ought most certainly to do what we can to make those who will be brought into contact with both white and black Americans aware of the problem, of the attitude of both sides, of the social background in which they have grown up; and to encourage them to use all their tact to avoid offending or insulting the white American in their relations with the black.

I think that the Service Departments can fairly tackle this subject among their own personnel owing to the peculiar relations between officers and men, especially in the Women's Services. Even here I feel that written documents should be avoided as well as the didactic approach.

I do not think that the mass of the civilian population ought to be approached at all with any propaganda on the subject. A wrong step would be disastrous, and there is not sufficient prospect of any real success, however wise one's attitude. Incidentally, the essential agents of national hospitality are the Voluntary Societies, with whom we are working closely. Their fundamental principles are involved in the doctrine of no racial discrimination".

B.B.

12th October, 1942.
UNITED STATES COLOURED TROOPS IN THE UNITED KINGDOM.

Note by the Secretary.

The attached suggested revision of the Notes on Relations with Coloured Troops (Annexe to the Memorandum by the Secretary of State for War, W.P. (42) 441), was drawn up by the Lord Privy Seal and embodies his main comments on the Draft prepared by the Secretary of State for War.

The main points of difference in the Revised Draft are:

(a) It omits the recommendation that our men and women should adopt the American attitude, but recommends that they should recognise the problem and take account of the attitude of the White American citizen.

(b) It omits the analysis of the negro character set out in paragraph 5 of the original draft.

(c) Certain changes are made in the practical suggestions at the end of the note.

The revised draft Notes, which have been shown to the Secretaries of State for War and for the Colonies, are circulated for consideration in connection with the other papers on this subject.

(Signed) E.E. BRIDGES.

Great George Street, S.W.1.
1. Among the American troops in this country are a number of units whose personnel are coloured troops. Their Officers are white though there are some coloured Officers. It is to be borne in mind that they contribute a valuable effort to the prosecution of the war by the provision of labour both skilled and unskilled.

Their presence in England presents a new problem to British men and women brought in contact with them. They are American citizens and have equal rights with the white citizens and there is no legal discrimination between the two but the racial problem is there and cannot be ignored.

It is necessary, therefore, for the British, both men and women, to recognise the problem and to take account of the attitude of the white American citizen. This will prevent any tarnishing of our amicable relations with the U.S. Army through misunderstanding which knowledge and forethought can prevent.

2. British soldiers and auxiliaries should try to understand the reasons for the American attitude to the relationships of white and coloured people, and to appreciate why it is different from the attitude of most people in this country to the isolated coloured people with whom they normally come in contact.

They should recognise that difficult problems do arise when people of different races live together — especially when their numbers do not differ greatly, and they are learning to live on terms of equal citizenship. Thus they should also be aware of the differences of attitude among Americans themselves, according to whether they come from the Southern States of the Union, where the coloured population is about one-fourth of the total, or from the North where coloured people are a very small minority.

3. The historical aspect must be understood in broad outline.

The U.S. comprises a vast area and the South is semi-tropical where labour is more fitted to the coloured man. Therefore, Africans were brought over in the eighteenth century as slaves. They took root and multiplied, working mostly on cotton plantations. In the American Civil War of 1861-64 one of the issues was the abolition of the slavery which was effected. The negro became a free man and though the bulk of them remained in the South they began to percolate into the North. The coloured population of the United States is now about 12 millions, of whom 9 millions live in the Southern States and 3 millions in the North.

4. In the South coloured people live apart from the white men, leading their own lives in their own way. They have their own churches, schools and social gatherings. They have their own areas in towns and villages to live in. In cars and buses they have seats allocated and their own reservations in cinemas.
The white population of the South still tend to regard coloured people as children for whom they have a moral responsibility. Like children coloured people commonly inspire affection and admiration; but they are not considered 'equal' to white men and women any more than children are considered equal to adults, although an increasing number of them are now playing an active and influential part in the public life of communities in which they live.

It is a matter of deep conviction in the South that the white man or woman should not intimately associate with the coloured man.

5. In the North, the coloured man does not work in massed labour in the fields but more individually and his personal contact brings him a greater political consciousness. He tends to demand more equal treatment and becomes more sensitive to racial distinction. His treatment in the North is freer and he is given greater latitude and is not segregated to the degree he is in the South. Nevertheless, his social life is not intimately connected with that of the white man who does not normally associate with him in social gatherings.

6. The Americans are making a great experiment in working out a democratic way of life in a mixed community, with races of very different characteristics and traditions. In doing so they have to take account of the legacy of the past and fears of the future. It is a difficult task and it is not for us to embarrass them, even if we have different views on how race relationships should be treated in our own country and in the Empire.

7. There is no reason why British soldiers and auxiliaries should adopt the American attitude but they should respect it and avoid making it a subject for argument and dispute. They must endeavour to understand the American point of view and they must always be on their guard against giving offence.

8. There are certain practical points which arise from the foregoing. These include the following:

(a) Be friendly and sympathetic towards coloured American troops — but avoid intimate relationships.

(b) If you find yourselves in the company of white and coloured American troops (as for example if white American troops come into a canteen or bar where you are in the company of coloured Americans) make it your business to avoid unpleasantness. It is much the best, however, to avoid such situations.

(c) It is undesirable that a white woman should go about alone in the company of a coloured American. This is bound to lead to controversy and ill-feeling. This does not mean that friendly hospitality in the home or in social gatherings need be ruled out.

(d) Avoid arguments over the colour question but if it happens to come up in discussions with American troops listen patiently to what the Americans have to say and, without necessarily agreeing with them, try and prevent it from becoming an occasion for ill-feeling or open dispute. You can always admit that if you happened to live in Alabama you would probably think the way they do. Every man is entitled to his opinion.
(e) Be on your guard against ill-disposed people who are out to use the colour question as a means of stirring up trouble between the Americans and ourselves.

(f) It is probable that enemy propaganda will make every effort to use the colour question to stir up bad feeling between people in this country and the coloured troops and between American white and coloured troops. Never pass on a story which would tend to create disaffection and do all you can to scotch such rumours when they come to your notice.

If you have any difficulties on this problem ask your Officer for advice.
WAR CABINET.

INDIA.

REPORT OF THE AMERICAN TECHNICAL MISSION TO INDIA.

Memorandum by the Secretary of State for India.

The American Technical Mission, whose report is appended, was sent to India on the initiative of the Government of the United States, who had enquired whether the Government of India would agree to the despatch to India of a Technical Mission which could examine and report on the possibilities of American assistance in the development of the industrial resources of India as a supply base for the armed forces of the United Nations in the Middle and Far East. The Government of India expressed their readiness to receive the Mission and invited it to be their guests during its stay in India. His Majesty's Government in the United Kingdom also expressed their appreciation of the American initiative and their confidence that it would lead to valuable results in supplementing what had already been done, e.g., by the Chatfield and Roger Missions. The Mission, which was headed by Dr. Henry F. Grady, was composed of the Chairman, three members and an executive officer. It arrived in India on the 17th April and remained there for five weeks.

2. Before leaving India the Mission presented to the Government of India a preliminary report, in which it set forth some of its basic recommendations, while during its stay in India it telegraphed to Washington a number of specific requests for essential machines, materials and personnel. In its final report the Mission submits its recommendations in full, together with the factual data on which they are based.

3. In addition to its numerous recommendations for the development of particular industrial resources, the Mission made one or two general recommendations which were somewhat outside its scope. It expressed the opinion that a much larger army than now exists could be recruited in India. As to this the Commander-in-Chief advised the Government of India, who accepted his advice, that the question is not one of equipment only. The pace of recruitment and adequate training facilities are equally important, and the Commander-in-Chief could not at present recommend acceleration of recruitment. The Mission put forward as sound and feasible a suggestion for the establishment of a "war cabinet" of three or five members of the Governor-General's Council with complete control of war production in all its phases. This suggestion has already been met by the establishment of the War Resources Committee with the Defence, Supply, Commerce, Finance and Communications Members as members, and the Viceroy as President. General T. J. Hutton, late Chief of the General Staff in India and G.O.C. in Burma, has been appointed Secretary. This Committee, which sits several times a week, takes broad policy decisions and prescribes time limits for action. One of its tasks is to deal with the industrial and economic recommendations of the Mission.

[24473]
4. The Mission's final report seems to be a competent and objective piece of work, but of no particular originality or constructive quality. It reproduces clearly and concisely material provided to it by the Indian Supply Department, and it discusses and evaluates various ideas which were brought to its notice in the course of its tour. A good deal has happened in regard to some of the projects since the Mission left India, and the report fails to take account of this progress, e.g., the pipe-line north-eastwards from Bombay, the most important section of which is already in hand. Most of the Mission's numerous recommendations and suggestions, bearing on the development of India's industrial resources, are sufficiently well related to the war effort and, if given effect, they would be of value from that point of view on the assumption that measures for the expansion of production in India, which will take some time to mature, are strategically desirable. But there are various limiting factors in India, such as—

(a) Transport and Communications.
(b) Plant.
(c) Power.
(d) Raw Materials.
(e) Skilled Personnel.

These are likely to restrict seriously the number of fresh projects which can profitably be put in hand. The Indian authorities themselves, though desiring to undertake as much as is within their capacity, are well aware of this consideration and seem anxious not to be over-burdened with new projects. There are considerations on the American side, too, which operate against the likelihood of American resources being prodigally expended upon projects of doubtful utility. It is probable, therefore, that, irrespective of the attitude of His Majesty's Government, the scale of the suggestions and recommendations of the American Mission will in the course of further examination by the Indian and American authorities be reduced to a comparatively small number.

5. We have ourselves made substantial efforts to develop war production in India by providing as much plant and skilled personnel as could be made available from the United Kingdom for that purpose, and our general attitude can only be that of welcoming well-considered efforts on the part of America to do the same. The case for encouraging the production of war supplies in India is all the stronger to-day than it was two years ago because we have virtually reached the limits of our man-power in the United Kingdom, and have, or soon shall have, a balance of productive capacity over our man-power, and, therefore, need to harness our own redundant productive capacity to such man-power resources as are still available elsewhere, e.g., in India. Any steps taken to this end must have some effect upon the post-war economic situation, though the measure of this can easily be exaggerated. We have not allowed ourselves to be influenced by this consideration in proceeding with the expansion of war production in India and we should be falsifying our own position if we were allowed to weigh any more in relation to American assistance than to that which we have ourselves provided. It is worth noting, incidentally, that the work of the American Mission does not seem likely to tend towards the cultivation of closer relations between Indian and American industrial interests. In fact, the Mission and the leading industrialists in India impressed each other unfavourably, and on the American side there is evidence of this in the report itself and still more in the opinions expressed confidentially by Dr. Grady upon his return to the United States.

6. By reason of the measures now being carried to completion in India with resources provided by us we have a big stake in India's existing production and could not be expected to support new undertakings which might prejudice the completion and operation of projects upon which we are ourselves counting. Further, we have a special interest in the carrying out of those proposals of the Mission which contribute towards the strengthening of the basic deficiencies of India and so strengthen the foundations for the production in which we are already interested, and for any further projects which may, with American assistance, be laid upon them. These are—

(1) Improvement in Transport and Communications.
(3) Labour Training.
(4) Steel Expansion.
7. We might, therefore, emphasise the necessity for giving prior consideration to, and concentrating upon, proposals designed to remedy these deficiencies; but we should not do so in such a way as to rule out without due consideration any other specific projects that America and India may agree in wishing and feeling able to proceed with.

8. We shall no doubt shortly receive through the joint organs of consultation upon strategic and supply affairs references from the American authorities for our views. There are elements in America which are inclined to obstruct any further proceeding with the recommendations of the Mission. It seems to me important that they should not do so with any encouragement from us. We need not pronounce upon specific projects until they are referred to us through the C.P.R.B., or otherwise after the elimination for one practical reason or another of those which the Governments of the United States and India do not propose to pursue. But we can, and should, I submit, indicate our general attitude for the guidance of our representatives in America in their discussions with their American counterparts.

9. I recommend, therefore, that the following points should be regarded as setting out our attitude at this stage:

1. The policy of His Majesty’s Government has always been that, within the practical limits of the situation, every assistance should be given to the expansion of India’s war industries.

2. The speed at which India’s war industries can be developed depends upon certain basic factors and, in particular, the supply of skilled labour.

3. Any further expansion of Indian war production will largely depend upon the assistance America can give in providing skilled supervision, and we should be particularly interested to learn what they have in mind under this heading.

4. Action should be concentrated upon crucial factors, e.g., power facilities, transport and other communications, labour training, steel production, the improvement of which will serve as a basis both for production already designed and for any new measures that are contemplated.

5. Care should be taken not to overload the Indian expansion programme to the prejudice of projects already in hand upon the execution of which we are counting, and in any new project to be undertaken the resultant saving of shipping is a factor of special importance.

6. While these are our general views, we reserve our opinion upon such specific projects as India and America may, after jointly considering the report of the Mission, propose to proceed with.

L. S. A.

India Office, October 9, 1942.
SECRET

REPORT
of the
AMERICAN TECHNICAL MISSION
to
INDIA

AUGUST
1942
SECRET

A SURVEY OF INDIA'S INDUSTRIAL PRODUCTION FOR WAR PURPOSES

Report of the
AMERICAN TECHNICAL MISSION TO INDIA

Submitted to the
GOVERNMENT OF INDIA
and to the
GOVERNMENT OF THE UNITED STATES

August 1942
AMERICAN TECHNICAL MISSION TO INDIA

Henry F. Grady, Chairman
H. E. Beyster
Dirk Dekker
A. W. Herrington

Frank A. Waring, Executive Officer
ACKNOWLEDGMENT

The members of the American Technical Mission wish to express their sincere appreciation for the cordial hospitality extended to them by the Government of India during their recent visit. They feel a pleasant sense of obligation for the many courtesies shown them by officials of that Government. They particularly wish to acknowledge their indebtedness to Mr. E. M. Jenkins, Secretary of the Department of Supply, whose cooperation and assistance were most valuable, and to Lieutenant-Colonel D. G. P. M. Shewen who, as Staff Officer of the Mission, did much to make a rigorous program less difficult and arduous.

The members of the Mission wish also to express their appreciation of the cooperation accorded them by the Government of the United States. They are especially grateful for the assistance received from officers of the Department of State, both at home and abroad, and from officials of the Board of Economic Warfare and of the Lend-Lease Administration.

For much of the factual data contained in this report, the Mission acknowledges its indebtedness to officials of the Department of Supply who prepared a comprehensive series of memoranda covering the principal phases of industrial activity in India, and to officials of the Board of Economic Warfare who, prior to the departure of the Mission, submitted a most helpful report on the economy of India.
Early in 1942 the Government of India invited the Government of the United States to send a group of American experts to India. The purpose of the Mission was to advise the Government of that country on ways and means of stimulating the production in India of essential war materials and to determine how the United States might assist most effectively in this effort. The Government of the United States gladly accepted the invitation. The Department of State, in cooperation with the Board of Economic Warfare, selected the members of the American Technical Mission to India, and issued directives concerning the scope of the Mission's activities. Those appointed were Henry F. Grady, Chairman, H. E. Beyster, Dirk Dekker, A. W. Herrington, and Frank A. Waring, Executive Officer.

The Mission left the United States in April 1942 and returned in June, after making a comprehensive survey of the industrial resources of India and of the possible expansion of production essential to the prosecution of the war. The Mission is now submitting its report, together with its several recommendations. To these recommendations the Government of the United States will give the prompt attention and the thoughtful consideration which the subject so richly merits.

Henry A. Wallace
Vice President of the United States, and
Chairman of the Board of Economic Warfare

Cordell Hull
Secretary of State
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The strategic importance of India</td>
<td>2</td>
</tr>
<tr>
<td>Organization of Government and industry</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Group Supply Council</td>
<td>7</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>8</td>
</tr>
<tr>
<td>Railways</td>
<td>8</td>
</tr>
<tr>
<td>Ports</td>
<td>9</td>
</tr>
<tr>
<td>Roads, airways, and waterways</td>
<td>14</td>
</tr>
<tr>
<td>Petroleum</td>
<td>18</td>
</tr>
<tr>
<td>Exploration for petroleum</td>
<td>21</td>
</tr>
<tr>
<td>Industrial alcohol</td>
<td>21</td>
</tr>
<tr>
<td>Drum containers</td>
<td>21</td>
</tr>
<tr>
<td>Electric power</td>
<td>22</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>24</td>
</tr>
<tr>
<td>Iron ore</td>
<td>24</td>
</tr>
<tr>
<td>Coal and coke</td>
<td>25</td>
</tr>
<tr>
<td>Iron and steel industry</td>
<td>26</td>
</tr>
<tr>
<td>Munitions</td>
<td>30</td>
</tr>
<tr>
<td>Armored vehicles</td>
<td>35</td>
</tr>
<tr>
<td>Airplanes</td>
<td>37</td>
</tr>
<tr>
<td>Shipbuilding and ship repairs</td>
<td>38</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>38</td>
</tr>
<tr>
<td>Ship repair</td>
<td>39</td>
</tr>
<tr>
<td>Industrial production</td>
<td>41</td>
</tr>
<tr>
<td>Machine tools</td>
<td>41</td>
</tr>
<tr>
<td>Small tools</td>
<td>43</td>
</tr>
<tr>
<td>Other steel manufactures</td>
<td>43</td>
</tr>
<tr>
<td>Assembly of motor vehicles</td>
<td>44</td>
</tr>
<tr>
<td>Cement</td>
<td>44</td>
</tr>
<tr>
<td>Radios</td>
<td>45</td>
</tr>
<tr>
<td>Nonferrous metals</td>
<td>46</td>
</tr>
<tr>
<td>Bauxite and aluminum</td>
<td>46</td>
</tr>
<tr>
<td>Chromite</td>
<td>48</td>
</tr>
<tr>
<td>Copper</td>
<td>49</td>
</tr>
<tr>
<td>Lead and zinc</td>
<td>49</td>
</tr>
<tr>
<td>Manganese ore</td>
<td>50</td>
</tr>
<tr>
<td>Tin</td>
<td>50</td>
</tr>
<tr>
<td>Titanium</td>
<td>51</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Other strategic products</td>
<td>52</td>
</tr>
<tr>
<td>Mica</td>
<td>52</td>
</tr>
<tr>
<td>Rubber</td>
<td>53</td>
</tr>
<tr>
<td>Shellac</td>
<td>55</td>
</tr>
<tr>
<td>Chemicals and drugs</td>
<td>56</td>
</tr>
<tr>
<td>Chemicals</td>
<td>56</td>
</tr>
<tr>
<td>Drugs</td>
<td>58</td>
</tr>
<tr>
<td>Textiles</td>
<td>60</td>
</tr>
<tr>
<td>Jute and jute manufactures</td>
<td>60</td>
</tr>
<tr>
<td>Cotton and cotton manufactures</td>
<td>61</td>
</tr>
<tr>
<td>Wool and wool manufactures</td>
<td>62</td>
</tr>
<tr>
<td>Silk and silk manufactures</td>
<td>63</td>
</tr>
<tr>
<td>Hides, skins, and leather</td>
<td>64</td>
</tr>
<tr>
<td>Timber and lumber</td>
<td>65</td>
</tr>
<tr>
<td>Foodstuffs</td>
<td>68</td>
</tr>
<tr>
<td>Experts and technicians from the United States</td>
<td>69</td>
</tr>
<tr>
<td>Labor</td>
<td>71</td>
</tr>
<tr>
<td>Conclusion</td>
<td>73</td>
</tr>
<tr>
<td>Appendix</td>
<td>75</td>
</tr>
</tbody>
</table>
The Government of India extended an invitation to the Government of the United States to send to India a group of experts to investigate the industrial resources of that country and to recommend ways and means by which the Government of the United States could assist in augmenting India's war production. The Government of the United States accepted the invitation, and the Secretary of State appointed, as members of the American Technical Mission to India, Dr. Henry F. Grady (Chairman), Mr. Harry E. Bayster, Mr. Dirk Dekker, and Mr. Arthur W. Herrington. Dr. Frank A. Waring was named Executive Officer of the Mission. Because of its terms of reference, the work of the Mission was directly related to the common war effort of the United Nations and was in no way connected with the post-war industrial and commercial problems of India.

The Mission left New York on April 3, 1942, and arrived in New Delhi on April 17. It remained in India 5 weeks, leaving Karachi on May 22 and arriving in Washington on June 2. During its stay in India the Mission conferred with officials of interested Departments of the Government of India and of some of the Provinces and States, and with industrial leaders, business men, and chambers of commerce in New Delhi, Calcutta, and Bombay. It visited Government munition factories, railway workshops, shipbuilding and ship-repair shops, and the principal industrial plants engaged in the production of war materials in the Calcutta area. It spent 2 days in inspecting the plants of the Tata Iron and Steel Company and its allied concerns producing steel castings, tin plate, and wire and cable at or near Jamshedpur. It visited the principal industrial plants of Bombay, including those for automobile assembly and the manufacture of tires, and it spent a day in inspecting the port area of that city. The Mission also visited the port area at Karachi and conferred with officials concerning conditions there and at the port of Cochin.

The Mission at all times received the most cordial cooperation from officials of the Government of India, especially those in the Supply Department with whom the members were in daily contact. Mr. Jenkins, Secretary of the Supply Department, was particularly helpful. The members of the Mission were given every opportunity to confer with all types of industrialists, regardless of their political beliefs and affiliations, and to visit any and all industrial plants in which they evidenced an interest.

The members believe that the Mission, by its advice, has been able to suggest much that will be helpful to the Government and industrialists of India and that additional assistance will flow from the fulfillment of its recommendations concerning the supply of materials and personnel to further India's effort to increase its production of munitions and other essential goods. Some of the Mission's recommendations were designed to expedite the orders for equipment placed prior to the Mission's arrival in India. Other orders were placed by the Government.
of India and endorsed by the Mission after conferences with officials of the Government. In all instances the Mission's endorsement was given only after a careful investigation of the facts pertinent to each case.

The American Technical Mission to India is submitting herewith its report to the Government of India and to the Government of the United States. Before its departure from India the Mission presented to the Government of that country a preliminary report in which it set forth some of its basic recommendations. And, immediately upon its return to the United States, the Mission presented a preliminary report to its own Government. In this final report, the Mission submits in full its recommendations, together with the pertinent factual data that impelled their formulation.

This report is offered in a spirit of constructive suggestion. The Mission is in no sense critical of the efforts which have thus far been made by the Government and the industrialists of India in the development of war production. Much has already been done despite grave handicaps in equipment, materials, and personnel. But today an even greater effort is required. With the enemy at their very gates, the Mission is confident that the Government and people of India will respond to the challenge as did the Government and people of Great Britain after Dunkirk and the Government and people of the United States after Pearl Harbor.

The Strategic Importance of India

The Mission believes that India is of great strategic importance to the cause of the United Nations. In its opinion this is because India can be utilized as a base for an offensive against the Japanese in Burma, because India and Burma are essential links in the efforts of the United Nations to supply China with war materials, and, finally, because India possesses great natural resources which must not only be kept from the enemy, but must also be fully developed for the benefit of the United Nations. The importance of rapidly developing India's potentialsities for war production has been greatly accentuated by recent military developments in southeastern Asia. At present there appear to be three principal war fronts of the United Nations in their struggle against the aggressors. These are the Soviet Union front, the India-Burma-China front, and the Australian front. The military strength of that front with which India is associated will be largely determined by the extent to which that country, limited only by capacity and practicability, can become an important arsenal producing munitions essential to the prosecution of the war. There is, therefore, not only the problem of producing military equipment to protect India from invasion, but also that of supplying quickly and effectively certain war equipment essential to aggressive action in Burma and China. Current difficulties of transportation may be lessened by an improvement of the military situation, but the time factor will continue to be important. The production of military supplies close to a military front is obviously vital.

It is the opinion of the Mission that a much larger army than now exists can be recruited in India. The capacity of that country to mobilize such an army is a vital consideration in any plan to expand its production of war materials. Indeed, if India can aid the United Nations by supplying equipment and by creating an even more formidable army of its own, it will be of material assistance in bringing about an early and successful termination of the war.
At the time of the Mission's visit, the Government of India and its industries of India, with few exceptions, were not organized on a war basis. There was no single governmental official or group of officials with the responsibility of directing and coordinating the entire industrial war effort. Competitive bidding was still required in obtaining supplies of many articles. The Mission found horseshoes, steel tips for army boots, and railroad switch gear being produced in a ship-repair plant at Bombay, while more than 100 ships waited in the harbor for major and minor repairs. A large number of the industrial plants in India were, in fact, mere jobbing shops producing a variety of articles with a resulting loss in efficiency of production; yet there was no central authority to bring about the transfer of machinery and the concentration in production that would be certain to result in increased output. The railroads, despite increasingly serious congestion, were accepting goods for shipment with little regard for their importance or ultimate use. There was a shortage in electric power, but no serious attempt was being made to curtail consumption for non-essential purposes. An adequate system of priorities had not been developed and, in consequence, essential construction was frequently delayed by the lack of requisite materials. Prices were increasing, but no machinery had been established for their control.

The industrialists in India were, with few exceptions, still concerned primarily with profits and apparently did not realize the threat which the war had created not only to profits, but to capital as well. Valuable time was lost in debating whether government or industry should pay for plant extensions and, if government was to pay, the terms on which the property might be acquired when the war was ended. Numerous industrialists were demanding substantial war risk insurance and a guarantee of profits. Protracted negotiations were necessary before some industries would accept government contracts that were less remunerative than production for civilian demand. A number of Indian industrialists were not in sympathy with the Government of India and stubbornly resisted its efforts to take over plants for war production or to requisition and remove machinery urgently required elsewhere. They appeared to be more concerned with possible conditions in the post-war period than with the assistance they might be able to render in the present emergency.

In its preliminary report to the Government of India, the Mission made the following observations concerning the organization of the Government of India and of the industries of India for the increased production of materials essential to the war:

"Political and industrial economy in times of war is very different from that in times of peace. In a democracy there must be a considerable element of laissez faire and the profit incentive in the production and distribution of goods is generally recognized. Initiative and enterprise do not thrive under regimentation and yet, under the emergency of war, there must be unification, coordination, the restriction of initiative, the subordination of the profit incentive, and the complete concentration of the nation through its government on the defeat of the enemy. Democracies are characteristically slow in converting their national organization from a peacetime to a wartime basis. Totalitarian countries which are always mobilized for national objectives have little difficulty in quickly striking
with the full force of their national resources. Some leaders in our country were talking as late as a year ago of 'business as usual' and of the ability of the country to do the war job and to continue its normal peacetime activities. Finally, however, we learned that this could not be done and public opinion in government, business, agriculture, and labor is now united on the single objective of defending the country and its allies against the aggressors. To accomplish this task it has been necessary greatly to change our government organization. Mr. Donald Nelson has had delegated to him by the President many of the President's broad war powers. He is in effect the czar of war production. It took the United States many months to evolve the War Production Board and its organization under Mr. Nelson. Development along similar lines was necessary in Great Britain, Canada, Australia, and in others of the United Nations.

The Government of India has made definite progress during the last year in stimulating India's war effort. Indeed, some believe that it has attained its maximum production under a voluntary system actuated by the profit motive, but there is still much to be done before the complete mobilization of India's resources shall have been attained. The United States, Great Britain, and other democratic countries have had a twofold problem, first, that of augmenting the production of certain peacetime commodities needed for war, and secondly, of converting peacetime industries to war production. India has had that same problem. These two phases of reorganizing and coordinating long-established institutions can hardly be done without strong centralized power vested in government and exercised by it.

In India most of the shops now producing war goods are engineering concerns which historically have been jobbing shops. They have produced a large variety of articles based on the orders received. As the Government of India has issued orders for the production of munitions and other war goods, these shops, including the railroad shops, have taken the orders on a 'jobbing' basis. To maximize production it will be necessary to have a basic change in production technique. It will be necessary to concentrate machinery and plant on one or two rather than many articles. A few plants in India have developed the mass production technique to a high degree of efficiency, notably the Tata plant producing iron and steel, but many more must be induced or compelled to do so.

To convert a large number of miscellaneous engineering shops to something approximating the system of 'assembly-line' production common to advanced industrial countries is a difficult undertaking, but it is essential that this be done if India's maximum potentialities for war production are to be realized. It will be necessary not only to obtain new equipment but also to move equipment from one shop to another and thus develop a program of concentrated, rather than scattered, effort. In many instances such a reorganization should also include the rearrangement of machinery within existing plants to achieve maximum efficiency.
With the more general establishment of plants engaged in war production, the armed forces and the Government of India will have, on a wider scale than heretofore, the problem and responsibility of planning orders sufficiently far in advance to secure and maintain efficiency of operations. It is the opinion of the Mission that beneficial results could be obtained by the immediate and general application of such a policy. In addition, a more rigid control of raw materials and the priority allocation of them will have to be instituted. Price fixing will be required so as to remove unreasonable profits from war production and avoid the disaster of inflation. It is not the intention of the Mission, however, to recommend any particular form of governmental organisation to accomplish these purposes. The Mission wishes merely to state the problem and let the Government and leaders of India determine how it can best be solved.

The organization of war production in the United States is practically independent of established government agencies. This arrangement has much to commend it, and many who have talked with the Mission have stated that something comparable to our system, or to that of Great Britain which is similar, should be adopted in India. Others have suggested that the Supply Department, which under present conditions has been primarily responsible for war production, should have divorced from it the problems of production and that a new Department of Production under the direction of a member of the Council should be formed. It was urged that, if established, such a department might be strengthened by bringing into it, as heads of departments, executives from industry and that to this organization might be added production advisers from the United States. Still another suggestion is that the Department of Supply might be converted into a Department of Production and Supply with two clearly defined divisions, the functions of which would be segregated in accordance with the new title. A fourth suggestion, which appeals to the Mission as being sound and feasible, provides for the establishment of a war cabinet of three or five members of the Council with an appropriate Secretariat, which would have complete control of war production in all its phases. With membership based on responsibility for production, transportation and communication, finance, and defense, such a cabinet might direct the war effort more effectively than could be done under any of the suggestions outlined above.

The members of the Mission have been gratified to learn that the Government of India has accepted its suggestion regarding governmental organization for war production and has established the War Resources Committee of Council which, the Mission understands, is charged with the duty of coordinating and directing India's industrial war effort. His Excellency The Viceroy is President of the Committee which consists of the Defense Member, the Supply Member (Vice President), the Commerce Member, the Finance Member, and the Communications Member. The Mission believes that this action, together with the appointment of a permanent Secretary, represents a substantial advance in India's program for the intensification of its industrial production.
The expansion of industrial production in India is to be based at least in part on Lend-Lease material from the United States, and upon the advice of technicians from this country whose services have been requested by the Government of India and whose appointment has been recommended by the Mission. Because of the interest of the United States in the industrial development of India, the Mission believes that the Government of the United States should appoint an Economic Adviser as a member of the staff of the American Mission in New Delhi. The duties of such an appointee would be to direct and coordinate, from the standpoint of this country, its various economic activities in India. In addition to representing the Department of State in economic matters, he would act for the Board of Economic Warfare and the Lend-Lease Administration, and would maintain close contact with representatives in India of the United States Army, the Reconstruction Finance Corporation, and the United States Maritime Commission so that he might be apprised of and might cooperate with their economic activities. In order that this special representative might work most effectively with appropriate officials of the Government of India, the Mission wishes to suggest that he be fully informed of the activities of the War Resources Committee of Council, and of the various Departments concerned. In this way the Mission believes that the efforts of the two Governments might be most fully and effectively coordinated.

Recommendations:

1. The Mission recommends that the necessary authority and responsibility for the industrial program affecting the production of war materials be centralized in an appropriate individual or group within the Government of India.

2. The Mission recommends that the Government of India make every effort to mobilize the industrial resources of that country in order that maximum production of essential war materials can be obtained. To assist in achieving this objective, it suggests that:

   a. Wherever appropriate and possible, existing engineering shops that are in reality jobbing shops should be converted into mass-production factories;

   b. The Government of India and the military command should make every effort to plan as far as possible in advance its orders of supplies, and the military command should be requested to reexamine its present supply program in the light of current military developments;

   c. The Government of India should exercise more rigid control over raw materials and should adopt a system of priority allocation for their distribution; and

   d. To prevent the possible disaster of inflation, the Government of India should take steps to introduce adequate measures of price control.

1/ In order to facilitate the study of the Mission's report, the pertinent recommendations are set forth at the end of each section.
Recommendations—Continued.

3. The Mission recommends to the Government of the United States that it appoint an Economic Adviser on the staff of the American Mission in New Delhi who would supervise the economic activities of the United States in India and assist in coordinating the programs of the two Governments. It suggests to the Government of India that this special representative be kept fully informed of the activities of the War Resources Committee of Council and of the various Departments concerned.

Eastern Group Supply Council

The Eastern Group Supply Council was established in the fall of 1940 to coordinate war production and supply in Great Britain, India, Australia, New Zealand, and South Africa. It has accomplished notable results. With current developments in the military situation, however, only India and South Africa have remained able to make active contributions to the Council, and South Africa has not been a large producer of war materials. The clearance through the Council of purchases from the Government of India on behalf of overseas commands, therefore, would seem no longer to serve a useful purpose. Accordingly, the Mission ventures to suggest that orders from overseas placed on India should be handled directly by the Supply Department of the Government of India without prior clearance through the Eastern Group Supply Council. This is not to be interpreted as a recommendation for the discontinuance of the Council. It can continue to serve a useful purpose by assembling and coordinating information on production and supply in the various countries making up the Group and by disseminating such information to the proper authorities in those countries.

Recommendations.

1. The Mission recommends that orders from overseas placed on India should be handled directly by the Supply Department of India without prior clearance through the Eastern Group Supply Council.

2. It further recommends that the Council be continued as an agency for assembling and coordinating information on production and supply for dissemination to the proper authorities in those countries having representation in the Council.
The railway, port, and communication facilities in India have been adversely affected by military developments in recent months. Attacks by the Japanese on shipping in the Bay of Bengal have temporarily immobilised the ports on the east coast of India. This has imposed a greatly increased burden not only on ports of the west coast, notably Bombay, Karachi, and Cochin, but also on inland transportation facilities, especially the railways.

Railways are by far the most important means of transportation in India. Indeed, it is estimated that they carry more than 92 percent of all land-borne traffic. Current estimates of the ton-miles borne by railways and roads are as follows:

<table>
<thead>
<tr>
<th></th>
<th>(In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railways</td>
<td>28,000</td>
</tr>
<tr>
<td>Roads</td>
<td>450</td>
</tr>
</tbody>
</table>

Government ownership of, and interest in, the railways has doubtless operated to retard the development of other types of transportation. Traffic on the rivers of India might be increased somewhat, but the principal rivers, with few exceptions, are not so located as to relieve the railways of much of their present burden. A substantial program of road construction would, when completed, assist in solving the present problem of transportation in India and should certainly be undertaken promptly. Such a program, however, would not provide immediate relief because of the time required to implement it. Moreover, increased use of roads would stimulate the consumption of rubber and gasoline, of which there is already a shortage. A pipe line across at least a part of India has been suggested to relieve the railways of the recently imposed burden of transporting petroleum from west-coast ports to the Calcutta area. Inasmuch as the total capacity of tank cars in India is inadequate to cope with this single problem, it would appear that the proposal should receive serious consideration, despite the time that would be consumed in its execution. But, even with the development of these various alternate means of transportation, the railways will remain the chief instrument for the movement of goods across India. Their maintenance and improvement, therefore, are matters of special concern.

Railways.

There are 48 railway systems in India. Of these, 13 are class I roads, each having earnings in excess of $1,500,000 a year; together they control most of the equipment and trackage in the country. At the outbreak of the war the Government of India owned about 75 percent and managed about 40 percent of the total route mileage of the Indian railways. At present the entire railway system is operated under Government control, which is exercised by a Railway Board in the Department of Communications.

On March 31, 1941, the total route mileage of the Indian railway system was 41,156, more than nine-tenths of which consisted of single lines. The track mileage of Indian railways was about 56,000, of which 11,000 were sidings. Broad-gage lines (5 ft. 6 in.) accounted for 21,154 miles, meter-gage lines (3 ft. 3-3/8 in.) for 15,899 miles, and
narrow-gage (2 ft. 6 in. and 2 ft. 0 in.) for 4,103 miles. Broad-gage lines connect all of the important ports of India, except Chittagong, with most, if not all, of the principal industrial centers. Meter-gage lines, which were first introduced many years ago principally for the sake of economy, constitute an important supplementary system and operate chiefly in northeastern India, in Rajputana, and in the extreme south. The narrow-gage lines operate largely as feeders to the broad-gage systems.

The tractive power of the average locomotive in India is slightly more than one-half of that in the United States. The capacity of the class I broad- and meter-gage freight cars, which constitute most of the total stock, was 3,619,094 tons, and the capacity of each car is about 22 tons. On March 31, 1941, the latest date for which detailed statistics are available, the motive power and the rolling stock of the railways in India consisted of the following numbers and types of vehicles:

<table>
<thead>
<tr>
<th></th>
<th>Broad-gage</th>
<th>Meter-gage</th>
<th>Narrow-gage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotives¹/</td>
<td>5,290</td>
<td>2,638</td>
<td>558</td>
</tr>
<tr>
<td>Passenger cars²/</td>
<td>13,815</td>
<td>9,841</td>
<td>2,065</td>
</tr>
<tr>
<td>Freight cars²/</td>
<td>152,402</td>
<td>59,600</td>
<td>7,232</td>
</tr>
</tbody>
</table>

Since March 31, 1941, the railways of India have lost appreciable numbers of freight cars and locomotives that were sent to assist in the campaign in the Middle East. These include 230 meter-gage locomotives, 6 narrow-gage locomotives, more than 9,000 meter-gage cars of various types, 50 narrow-gage cars, and 2,100 broad-gage cars which were, or are, being converted to standard-gage prior to shipping.

Despite the loss in motive power and rolling stock, the railways of India, in the fiscal year 1941-42, handled an appreciably larger volume of traffic than in the immediately preceding years. In the fiscal year 1940-41 the railways carried 575,723,000 passengers, an increase over the previous year of 8.7 percent; the passenger miles amounted to 19,933 million which was 7.6 percent greater than in the previous year. Statistics of the net ton-miles moved over the railways in the last four fiscal years, beginning with 1938-39, are shown in table 1.

<table>
<thead>
<tr>
<th>Year ending March 31</th>
<th>Broad-gage 1,000 net ton-miles</th>
<th>Meter-gage 1,000 net ton-miles</th>
<th>Narrow-gage 1,000 net ton-miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938-39</td>
<td>18,283,959</td>
<td>-</td>
<td>3,023,616</td>
</tr>
<tr>
<td>1939-40</td>
<td>19,352,820</td>
<td>+5.85</td>
<td>3,226,810</td>
</tr>
<tr>
<td>1940-41</td>
<td>21,041,216</td>
<td>+15.08</td>
<td>3,367,697</td>
</tr>
<tr>
<td>1941-42*</td>
<td>23,321,033</td>
<td>+27.55</td>
<td>3,650,325</td>
</tr>
</tbody>
</table>

*Estimated on the basis of operations for 9 months.

Source: Government of India, Department of Communications, Railway Board.

¹/ On March 31, 1939, broad-gage locomotives numbered 5,300, and narrow-gage, 2,602.
²/ On March 31, 1939, broad-gage freight cars numbered 149,131, and meter-gage, 59,090.
It is obvious that such an increase in traffic could be handled only by an improved utilization of the locomotives and rolling stock of the Indian railways. This improvement is reflected in the statistics given in table 2.

Table 2: - Indian railways: Net ton-miles moved per locomotive day and per wagon day, 1938-39 to 1940-41

<table>
<thead>
<tr>
<th>Year ending March 31</th>
<th>Broad-gage</th>
<th>Meter-gage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net ton-miles per locomotive day on line</td>
<td></td>
</tr>
<tr>
<td>1938-39</td>
<td>15,144</td>
<td>7,019</td>
</tr>
<tr>
<td>1939-40</td>
<td>15,776</td>
<td>7,487</td>
</tr>
<tr>
<td>1940-41</td>
<td>17,154</td>
<td>7,637</td>
</tr>
<tr>
<td></td>
<td>Net ton-miles per wagon day</td>
<td></td>
</tr>
<tr>
<td>1938-39</td>
<td>351</td>
<td>147</td>
</tr>
<tr>
<td>1939-40</td>
<td>367</td>
<td>158</td>
</tr>
<tr>
<td>1940-41</td>
<td>392</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>Engine-miles per day per engine on line</td>
<td></td>
</tr>
<tr>
<td>1938-39</td>
<td>79</td>
<td>76</td>
</tr>
<tr>
<td>1939-40</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td>1940-41</td>
<td>83</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Wagon-miles per wagon day</td>
<td></td>
</tr>
<tr>
<td>1938-39</td>
<td>40.2</td>
<td>30.9</td>
</tr>
<tr>
<td>1939-40</td>
<td>41.3</td>
<td>32.9</td>
</tr>
<tr>
<td>1940-41</td>
<td>42.9</td>
<td>33.1</td>
</tr>
</tbody>
</table>

Source: Railway Board, Department of Communications, Government of India.

Despite the advance thus far made in the utilization of motive power and rolling stock, the Mission is of the opinion that further improvement can be effected, and indeed must be, if the railways of India are to perform the task of transportation essential to the prosecution of the war. The railways are now seriously overburdened, and evidences of an actual break-down are becoming increasingly apparent. Finished goods at steel mills and other plants are accumulating for want of transportation, and inventories of essential raw materials are declining below the danger point because incoming shipments are not keeping pace with requirements. This condition is due to a number of factors, among the most important of which are the following:

1. The closing of the east-coast ports by enemy action in the Bay of Bengal. - Of the seven principal ports of India, four (Madras, Vizagapatam, Calcutta, and Chittagong) are located on the east coast. These four ports, which in 1941 handled approximately 11,000,000 tons, or about one-half of the total ocean-borne traffic of India, were at the time of the Mission’s visit almost totally inactive because of the presence of the Japanese in the Bay of Bengal. All essential exports from these ports, formerly carried directly by sea, had to be transported across India by rail before they could be loaded on ocean-going vessels. This placed a tremendous additional burden on the railroads, particularly in the Calcutta area, which alone customarily accounted for about 9,000,000 tons of ocean-borne traffic. Among the principal
products now requiring rail transportation are coal, jute and jute products, pig iron, manganese, and tea. These commodities, together with a few other strategic ones such as linseed, mica, and shellac, aggregate nearly 4,000,000 tons annually; their movement from Calcutta to Bombay would necessitate the daily allocation of about 700 railway cars. Imported products also present a serious problem. Approximately 1,650 tank cars are required to provide the quantity of petroleum products necessary for the Calcutta district, and the stock of tank cars in all India is only 1,500. In addition, there is the problem of providing railway transportation for the various foodstuffs formerly imported into Calcutta. Inasmuch as the Calcutta district accounts for about two-thirds of the industrial activity of India, the maintenance of a flow of essential traffic to and from that area assumes a special importance.

2. The increased traffic arising out of the greater industrial production caused by the war. - As in most countries involved in the war, industrial activity in India has been stimulated and general employment and purchasing power have been increased. This has been reflected in a greater movement of passengers and traffic over the railroads. Moreover, the enlarged demand upon the railroads has operated to prevent the accumulation at plant sites of inventories of essential raw materials, such as coal and iron ore, during seasons of off-peak traffic.

3. The greatly increased movement of troops and military supplies.

4. The loss of rolling stock and locomotives sent to assist in the campaign in the Middle East.

Ordinarily 1,500 freight cars are built each year in the railway workshops of India, but the railways are now 1 year in arrears on this program, in part because of their inability to obtain essential equipment from the United Kingdom. The Tata Iron and Steel Company, however, has recently installed a wheel and axle plant which should relieve a part of this difficulty.

Broad-gage locomotives are not built in India, the essential facilities for such construction not being available there. Orders placed in the United Kingdom have been long delayed; at present, delivery is awaited on 66 locomotives and the number would have been much greater had not additional orders been prohibited. Broad-gage locomotives are urgently required. When the war began (1939), 574 engines were awaiting renewal, based on a life of 35 years; by 1945, 1,495 broad-gage locomotives, or 29 percent of the total stock as of March 31, 1941, will be in need of replacement after allowing for the 66 on order.

The construction in India of 10 to 15 meter-gage locomotives per annum has been carried on for some time. This program, however, is inadequate to meet requirements. At the outbreak of the war 366 meter-gage locomotives were due for replacement after 35 years of service, and by 1945 this number will have increased to 829, or 35 percent of the total stock as of March 31, 1941.

Despite the loss of four railroad workshops to the Government for the production of munitions, officials of the Government of India state that the repair of rolling stock and locomotives has been adequately maintained. The unusual demand for equipment, however, has kept the
rolling stock and locomotives in use when they would ordinarily be re­
turned to the shops for repair. Efforts have been made to reduce to a
minimum the number of locomotives and cars under repair. The goal for
locomotives, for example, is no more than 12 percent of the total. The
average time required for the periodic overhaul of locomotives in the
main workshops was, in March 1942, 37 days for broad-gage locomotives
and 35 days for meter-gage; the corresponding pre-war figures were 40
days and 32 days, respectively. The average time required for the over­
haul of freight cars in March 1942 was 6.7 days for broad-gage cars and
8.9 days for meter-gage cars; the corresponding figures for the months
immediately preceding the outbreak of war were 7.4 and 8.9 days, respect­
ively.1 A statement of the rolling stock on Indian railways out of
service for repair is given in table 3.

Table 3. - Rolling stock of Indian railways out of service
for repair, pre-war and current

<table>
<thead>
<tr>
<th>Period</th>
<th>Broad-gage</th>
<th>Meter-gage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>of total</td>
<td>of total</td>
</tr>
<tr>
<td>Locomotives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept.-Nov. 1938</td>
<td>979</td>
<td>18.5</td>
</tr>
<tr>
<td>Sept.-Nov. 1941</td>
<td>833</td>
<td>15.7</td>
</tr>
<tr>
<td>Dec. 1938, Jan.-Feb. 1939</td>
<td>965</td>
<td>18.0</td>
</tr>
<tr>
<td>Dec. 1941, Jan.-Feb. 1942</td>
<td>850</td>
<td>16.0</td>
</tr>
<tr>
<td>March-May 1939</td>
<td>969</td>
<td>18.3</td>
</tr>
<tr>
<td>March-May 1941</td>
<td>898</td>
<td>17.0</td>
</tr>
<tr>
<td>June-Aug. 1939</td>
<td>994</td>
<td>18.8</td>
</tr>
<tr>
<td>June-Aug. 1941</td>
<td>903</td>
<td>17.1</td>
</tr>
<tr>
<td>Freight cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept.-Nov. 1938</td>
<td>8,297</td>
<td>5.4</td>
</tr>
<tr>
<td>Sept.-Nov. 1941</td>
<td>6,831</td>
<td>4.3</td>
</tr>
<tr>
<td>Dec. 1938, Jan.-Feb. 1939</td>
<td>7,128</td>
<td>4.6</td>
</tr>
<tr>
<td>Dec. 1941, Jan.-Feb. 1942</td>
<td>5,840</td>
<td>3.7</td>
</tr>
<tr>
<td>March-May 1939</td>
<td>8,249</td>
<td>5.3</td>
</tr>
<tr>
<td>March-May 1941</td>
<td>6,612</td>
<td>3.5</td>
</tr>
<tr>
<td>June-Aug. 1939</td>
<td>8,638</td>
<td>5.6</td>
</tr>
<tr>
<td>June-Aug. 1941</td>
<td>6,934</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: Government of India, Department of Communications,
Railway Board.

1/ In all cases the average number of days in shops includes Sundays
and holidays.
Prior to the outbreak of the war India ranked about tenth among the trading nations of the world. Its position was probably higher in 1941-42. The total foreign commerce in India has aggregated approximately 22,000,000 tons, which were divided about equally between imports and exports. Although India has an extensive coast line with many ports, only a few are considered suitable for use throughout the year. Seven ports account for more than 75 percent of India's total foreign trade. These ports are Karachi, Bombay, Cochin, Madras, Visagapatam, Calcutta, and Chittagong, of which only the west-coast ports (Karachi, Bombay, and Cochin) have natural harbors.

The closing of the east-coast ports by enemy action in the Bay of Bengal has thrown a tremendous burden on the west-coast ports which must now handle all of the ocean-borne traffic entering and leaving India, whereas prior to 1942 they had accounted for less than one-half of the total. The congestion of shipping at Karachi, Bombay, and Cochin has become acute, and there is confusion in moving cargoes to and from the docks. The congestion at Karachi and Cochin, though pronounced, is less serious than at Bombay, now the principal port of India. On May 20, 1942, there were more than 200 ships waiting in the harbor of Bombay to discharge cargo or to obtain needed repairs, and the average turn-around of ships was reported to approximate 6 weeks. In view of the current shortage of shipping and its importance to the United Nations, the Mission deems it vital that harbor facilities in the west-coast ports of India for unloading and repair be improved as rapidly as possible.

Port facilities at Karachi and Cochin are inadequate to handle the sharp increase in the traffic which occurred in the first 6 months of 1942. Port officials discussed with the Mission the additional equipment urgently required to permit them to cope with the increased tonnages, and the Mission agreed to support orders for such equipment when they had been cleared through the Supply Department, and placed on the Land-Lease Administration by the Indian Purchasing Mission.

The port of Bombay is administered by the Bombay Port Trust, a separate public body created by and operated under the control of the Communications Department of the Government of India. The Port Trust operates as a commercial organization as well as a public service body in managing the various facilities of the port. These include three wet docks with 4.42 miles of quays and a total water area of 104.52 acres. In addition, the Trust controls deep-water tidal berths at three places, two drydocks, 121.8 miles of railway, and 8.12 miles of wharves and bunders used by coastal sailing vessels. The total port area comprises 1,880 acres. The facilities of the port were used in the fiscal year 1941 to handle a monthly average of 419,420 tons of cargo in the entire port area. Of this amount, 245,000 tons, or slightly more than one-half, were loaded or discharged at the docks. The remainder represented cargoes taken from or to ships anchored in the outer harbor or tied at the bunders. The three wet docks together have berths for approximately 45 vessels. The Alexandra Dock, the newest and largest of the three, can berth 17 vessels drawing 32 feet and not exceeding in length 475 feet. The Victoria Dock can handle 14 ships with a draft of 24 feet and not exceeding 430 feet in length. Prince's Dock, the oldest of the three, has seven cargo berths and seven repair berths; it can handle ships which draw 20 feet and which do not exceed 400 feet in length. There are deep-water tidal berths at
Ballard Pier and along the Alexandra Dock harbor wall. The berth at the Ballard Pier is 800 feet long and 30 feet deep, and that at the Alexandra Dock harbor wall, 1,692 feet long and 25 feet deep. There is also a berth at Pir Pau which is 570 feet long and 29 feet deep, and which is used principally for tankers.

In addition to its docking facilities, the Bombay Port Trust operates two drydocks, one of which is 1,000 feet long, 100 feet wide, with a 22-foot sill, and a normal depth of water over the sill of 33 feet; the other is 525 feet long, 65½ feet wide, and has 22 feet of water over the 14-foot sill. There are also two private docks in Bombay, one 495 feet long and 66 feet wide, and the other 400 feet long and 65½ feet wide. The Royal Indian Navy operates three drydocks, the maximum lengths of which are 640 feet, 380 feet, and 256 feet, respectively. There are also two private companies engaged in shipbuilding and ship repairing in Bombay. At the time of the Mission's visit (May 1942), no ship-repair work was being done by the workshops of the Port Trust.

The equipment for the loading, unloading, and repair of ships at Bombay, while adequate under ordinary circumstances, has proved totally inadequate to cope with the recent tremendous increase in traffic. Prompt and drastic steps must be taken if the materials essential to the United Nations are to be moved in and out of India. The Mission, therefore, has made a number of recommendations designed to facilitate the handling of cargo and the repair of ships at Bombay.

Roads, airways, and waterways.

Roads. - On March 31, 1939, there were 319,000 miles of roads in India. Of these, 99,000 miles were classified as unsuitable for motor vehicles, 122,000 miles as fair-weather roads, and 98,000 miles as all-weather roads. Of the last-named group, 66,000 miles were water-bound macadam and 32,000 miles were asphalt. Most of the macadam roads are in the Provinces of Madras, Bombay, and the United Provinces. The asphalt roads are chiefly in the Indian States of Mysore, Hyderabad, and Travancore. Bengal, Bihar, the Punjab, and the United Provinces have the greatest mileage of fair-weather roads.

The four principal highways in India are the trunk roads which extend from Calcutta to the Khyber, from Calcutta to Madras, from Madras to Bombay, and from Bombay to Delhi. These through-roads parallel the railways as do other main roads in the country. They are far less important, however, than the railways in the movement of commodities and people. In general, it may be said that India's roads are inadequate for the peacetime requirements of the country; they are altogether inadequate for wartime requirements.

The total number of motor vehicles registered in India on January 1942 was 123,400, of which 77,000 were passenger cars, 26,200 were busses, 18,800 were trucks, and 1,400 were diesel units. Additional motor vehicles are, of course, being operated by the armed forces in India, but no data are available concerning their number. The Army, however, has requisitioned 3,700 new vehicles imported for civilian use and 1,800 used vehicles in the 2 years ending June 1942. In addition, a number of trucks have been hired by the Army for the training of drivers, and many more are being used in the construction of roads, airports, army camps, and supply depots. To maintain the present capacity of busses and trucks, already insufficient, at least 10,000 vehicles
would have to be imported. The importation of replacement parts is also essential to the maintenance of this traffic. It is possible, of course, that commercial transportation by motor vehicles will be further curtailed by shortages of gasoline and tires.

Airways. - Air transportation has not been greatly developed in India. Only two companies operate regular service between important centers of population. Tata Sons, Ltd., the more important of the two companies, maintains services over the three following routes: (1) Karachi, Bhuj, Ahmedabad, Bombay, Hyderabad, Madras, Trichinopoly, and Colombo; (2) Bombay, Indore, Bhopal, Gwalior, and Delhi; and (3) Bombay, Goa, Cannanore, Trivandrum, and Trichinopoly. The total mileage of these routes is 3,791. The other company, the Indian National Airways, operates between Karachi and Calcutta via Jacobabad, Multan, Lahore, Delhi, Cawnpore, and Allahabad. The services maintained by these two companies are almost exclusively for passengers and mail; very little freight is transported by air. Although there are a large number of airports in India, many of them are small, with inadequate runways. In fact, few airports in India have runways sufficiently long and reinforced to permit their use by United States "flying fortress" and other heavy aircraft.

Waterways. - Inland waterways are of importance in the Provinces of Bengal, Bihar, Assam, and in parts of Madras. Although no data are immediately available concerning the volume of traffic, steamers and small river boats operate on the river systems of these areas, carrying sugar, grains, and molasses from the Ganges Basin, tea and jute from East Bengal, and tea from Brahmaputra and Surma valleys in Assam to urban centers. With the exception of a few companies operating steamers on rivers in the Provinces of Bengal and Assam, transportation on inland waterways is unorganized, and individual boat owners predominate.

Communications. - The postal and telegraph services of India are controlled by the Director-General of Posts and Telegraphs whose office is attached to the Department of Communications. The telegraph facilities of India have been extended considerably in recent years and facilities are now available in all of the larger cities. On March 3, 1938, there were 102,068 miles of line, including cable, and 618,605 miles of wire in India; 257 departmental telegraph offices and 4,053 other telegraph offices were operated by the post office. On the same date there were 463 telephone exchanges in India and about 80,000 telephones. Since 1927 India has been connected by wireless with the United Kingdom and that service has since been expanded to meet the wireless requirements of aircraft and shipping. In 1933 radio-telephone service between India and the United Kingdom was inaugurated, and this service which was at first restricted to Bombay has now been expanded to include all of the important cities in India. Despite the extension of these various services the Mission found that war demands had placed a severe burden upon them. As a result, it is frequently impossible to transmit messages quickly by either phone or telegraph. Indeed, it was not unusual for mailed confirmations of telegraphic orders to arrive before the orders themselves.
Recommendations.

1. Because of the seriousness of the problem of rail transportation in India, the Mission believes that efforts should be made to secure additional broad-gage locomotives and to increase the production in India of meter-gage locomotives and of freight cars and other essential rolling stock.

2. The Mission has urged the most efficient possible use of available equipment, including a quicker "turnaround" for cars and the possible utilization of third-class passenger cars for freight.

3. It suggests that serious consideration should be given to the installation of a pipe line from Bombay to Calcutta or to some central point, such as Allahabad, for the transportation of petroleum products, and that provision should be made for the manufacture of the pipe in India.

4. It approved a 50-percent curtailment in passenger traffic and suggested the possibility of a further reduction.

5. And it recommended that three top-ranking railway executives from the United States be sent to India to assist in obtaining maximum efficiency in operations.

6. The Mission recommended a substantial increase in the utilization of bunders (rock-walled jetties) for the loading and unloading of ships in the outer harbor. For this purpose it recommended the construction in India of a large number of barges and tugs, and agreed to endorse orders by the Government of India placed on the Lend-Lease Administration for the motors that would be required for the tugs. It approved the construction of temporary storage sheds and of spur tracks on the bunders in order to facilitate the loading and unloading of the barges or lighters. And it agreed to use its influence to secure from the United States an adequate number of mobile cranes for this work.

7. To secure the maximum utilization of existing equipment at the regular docks, the Mission strongly advocates continuous operation in three 8-hour shifts. It recommends that the penalties charged for work at night and on Sundays and holidays be abolished. In their stead, it suggests the
imposition of progressive penalties if export cargoes are not available on the docks so that loading operations may be commenced as soon as the unloading of the ship is completed.

8. The Mission does not approve the practice of sending negotiable bills of lading by ships following the actual cargo which such bills cover, and suggests that, inasmuch as this practice has often caused considerable delay in clearing cargoes, the negotiable bills of lading should accompany the cargoes to which they pertain, or be despatched via air mail.

9. The Mission was disturbed to find that ships were leaving the harbor of Bombay with inadequate fuel and water supplies because the facilities there could not provide promptly the necessary quantities. It recommends, therefore, that these facilities be expanded as rapidly as possible.

10. The Mission was informed of, and indeed saw for itself, the congestion of cargoes on the docks of Bombay. It urges that every effort be made to clear promptly these cargoes by rail; should this prove impossible, it suggests that cargoes be removed by motor truck to temporary storage.

11. Because of the congestion at the port of Bombay, the Mission recommends that full consideration be given to the utilization of other west-coast ports. It is ready to support orders for essential equipment at the ports of Karachi and Cochin when approved by the Department of Supply. It wishes also to call the attention of the Government of India to the Kathiawar ports, the facilities of which, it understands, are not now being fully employed.

12. The Mission recommends that an expert be sent from the United States to advise the Government of India on the improvement of harbor facilities in the west-coast ports in order that the congestion there may be relieved.

13. Although the construction of additional all-weather roads in India may not be of immediate assistance in solving the acute problem of commercial transportation, the Mission believes that such roads would be of great military importance and value. It recommends, therefore, that a program of road building should be undertaken without delay, and is ready to assist in obtaining for the Government of India the requisite equipment.

14. The Mission recommends the expansion and adequate equipment of airports in India, particularly those strategically located for both offensive and defensive operations.

15. The Mission recommends that efforts be made to stimulate the transportation of materials by inland waterways. It particularly urges the use of waterways, where practicable, to relieve the railroads in the movement of bulk freight, such as coal, to and from Calcutta.
16. The Mission recommends that the Government of India undertake a survey of its telephone and telegraph systems in order to ascertain what steps need be taken to improve these services.

Petroleum

Most of the petroleum resources of India are located in the Attock field in the Punjab and the Digboi field in Assam which produce, annually, 30,000,000 gallons and 66,000,000 gallons, respectively. This production is small in relation to India's needs, constituting about 15 percent of ordinary requirements, excluding the demand from China and that arising out of the increased activity of the air and other military forces in India. Most of the petroleum requirements of India have, in the past, been supplied by Burma, the Netherlands Indies, and Iran, although substantial quantities of lubricating oil were imported from the United States. The loss of Burma and the Netherlands Indies has placed India in the difficult position of having to import large quantities of petroleum products principally from the United States. A substantial part of its needs, however, can be obtained from the Persian Gulf ports of Bahrein and Abadan. Imports which must be greatly increased are now controlled by the Petroleum Department in London, but the Government of India assumes that future supplies will be forthcoming from either the Persian Gulf or the United States.

There are two refineries in India. One is located at Digboi, Assam, and has a daily capacity of 6,500 barrels; it is operated by the Burmah Oil Company which is affiliated with the Anglo-Iranian Oil Company. The other refinery is situated at Rawalpindi, Punjab; it has a daily capacity of 4,000 barrels, and is operated by the Attock Oil Company. These two refineries have a daily cracking capacity of 2,100 barrels each and are equipped to produce 70-octane to 80-octane gasoline.

Estimates of probable future consumption of petroleum products in India were given in a memorandum submitted to the Mission by the Government of India. A part of this memorandum is reproduced below.

"Estimated consumption, where possible, with brief comments is given here for the different main products. Figures are collated in table 4."

"A. Kerosene. Almost entirely used as an illuminant. No rationing measures at present in force, but bulk rationing can be introduced at very short notice."

<table>
<thead>
<tr>
<th>Type</th>
<th>Tons a Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>550,000</td>
</tr>
<tr>
<td>Red</td>
<td>280,000</td>
</tr>
</tbody>
</table>

"B. Motor Spirit. Civil consumption rationed and now cut by about 45% of prerationing figure. At present rates consumption is roughly 180,000 tons a year of which 24,000 tons only would be used in private cars."

"Military consumption is at present at the rate of 68,000 tons a year but how this figure will alter must depend on operational needs of which we have no figures at the moment."
C. Aviation Spirit. There is no indigenous source of 100 O.H. base (from which alone 100 O.H. spirit can be made) and our requirements must come either from Abadan or the U.S.A. 87 O.N. and 90 O.H. spirits blended from indigenous bases require T.E.L. and 90 O.N. 100 O.H. base as well. We may be able to use a certain proportion of indigenous benzol for blending 90 O.H. spirit in part replacement of 100 O.H. base; this is being investigated.

A separate statement of possible aviation spirit requirements is submitted in table 5.

D. Fuel oils. (i) Furnace oil. Consumption may be divided between:

Industrial — roughly 350,000 tons a year largely by Bombay Textiles Industry.

Bunkers —— figure impossible to estimate accurately but may go as high as 400,000 or 500,000 tons in 1942.

No rationing in force, but all deliveries controlled.

(ii) Diesel oils. Consumption may be divided between:

Industrial — 300,000 tons a year.

Bunkers —— impossible to estimate but may increase to 100,000 tons a year.

(iii) Gas oil. Consumption small at about 20,000 tons a year.

E. Jute batching oil. Consumption depends basically on working hours of East India Jute Mills, but normal consumption, on whatever working hours basis, is susceptible to a cut of 50% in extreme emergency and is already cut by 25%. Consumption between 60,000 and 100,000 tons a year.

F. Lubricants. With the loss of Burma practically all requirements must now come from the U.S.A. Military consumption is now estimated for 1942 at 54,000 tons including Iraq maintenance. Civil consumption is roughly 90,000 tons a year. Castor oil now largely used for railway axle lubrication and use of vegetable oil blends for industrial purposes on large scale likely in near future. Stocks under indirect government control.
Table 4. Petroleum products: Estimated annual consumption in India

(In long tons)

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerosene:</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>550,000</td>
</tr>
<tr>
<td>Red</td>
<td>280,000</td>
</tr>
<tr>
<td>Motor gasoline:</td>
<td></td>
</tr>
<tr>
<td>Civil</td>
<td>180,000</td>
</tr>
<tr>
<td>Military</td>
<td>68,000</td>
</tr>
<tr>
<td>Fuel oils:</td>
<td></td>
</tr>
<tr>
<td>Furnace: Bunkers</td>
<td>300,000/500,000</td>
</tr>
<tr>
<td>Industrial</td>
<td>350,000</td>
</tr>
<tr>
<td>Diesel: Bunkers</td>
<td>100,000</td>
</tr>
<tr>
<td>Industrial</td>
<td>300,000</td>
</tr>
<tr>
<td>Gas oil</td>
<td>20,000</td>
</tr>
<tr>
<td>Jute batching oil</td>
<td>80,000</td>
</tr>
<tr>
<td>Lubricants:</td>
<td></td>
</tr>
<tr>
<td>Civil</td>
<td>90,000</td>
</tr>
<tr>
<td>Military</td>
<td>54,000</td>
</tr>
</tbody>
</table>

1/ Excluding aviation gasoline and lubricants for which see table 3.
Source: Department of Supply, Government of India.

Table 5. Aviation gasoline and lubricants: Estimates of India's possible maximum requirements by the end of 1942

(In imperial gallons per month)

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 O.N.</td>
<td>Other</td>
<td>Total</td>
</tr>
<tr>
<td>R.A.F.</td>
<td>2,875,000</td>
<td>925,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>U.S. transport</td>
<td>225,000</td>
<td>900,000</td>
<td>1,125,000</td>
</tr>
<tr>
<td>U.S. Ferry, etc.</td>
<td>1,090,000</td>
<td>-</td>
<td>1,090,000</td>
</tr>
<tr>
<td>R.I.N.</td>
<td>-</td>
<td>125,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Total</td>
<td>4,190,000</td>
<td>1,950,000</td>
<td>6,140,000</td>
</tr>
</tbody>
</table>

PLUS
U.S. Army Air Corps: Not yet known.
China: Up to 1,000,000 - grades not known.

<table>
<thead>
<tr>
<th></th>
<th>Lubricants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 viscosity</td>
</tr>
<tr>
<td>R.A.F.</td>
<td>127,000</td>
</tr>
<tr>
<td>U.S. transport</td>
<td>-</td>
</tr>
<tr>
<td>U.S. Ferry, etc.</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>127,000</td>
</tr>
</tbody>
</table>

1/ Estimates prepared in General Headquarters.
Source: Department of Supply, Government of India.
Exploration for petroleum.

A moratorium on all prospecting in India was imposed at the instance of the United Kingdom in September 1940. Since then, various sources of supply for petroleum have been lost to the United Nations, and it now appears desirable to develop further the fields in India. Should prospecting be resumed, however, the Government of India has stated that assistance would be required from the United States, or elsewhere, in the provision of technical personnel, prospecting equipment, and ultimately of equipment for refineries.

Industrial alcohol.

Industrial alcohol can be produced in India from molasses, now a waste byproduct of the sugar industry. Two plants for the manufacture of industrial alcohol, having an annual capacity of 750,000 gallons each, are already on order in the United States, and the Government of India wishes to place orders for 10 additional plants of comparable capacities. In view of the greatly increased demand in India for petroleum products, including motor fuel, it would seem desirable to stimulate the production of industrial alcohol and thus conserve petroleum, refining capacity, and shipping space.

Drum containers.

A further problem pertaining to petroleum products in India is that of containers necessary for the transportation and storage of such products. The production of 5-gallon tin containers is adequate to meet Indian requirements. The Government of India, however, has estimated that additional drum-making equipment capable of producing 80,000 drums a month will be required to meet the increased demands of the armed forces of India, the United States, and China.

Recommendations.

1. The Mission assumes that arrangements have been made through the Petroleum Department in London to secure for India its requirements of petroleum and petroleum products. Should the Government of India fail to receive adequate supplies to meet military and essential civilian demands, the Mission agrees to lend its assistance.

2. To insure the receipt in India of adequate supplies of aviation gasoline (100-octane) and for other strategic reasons, the Mission has recommended that a refinery be established at Bahrain to augment the quantities now being made available at Abadan.

3. The Mission recommends that the exploration of potential petroleum fields in India be resumed, and is ready to assist the Government of India in obtaining needed supplies and personnel.
Recommendations—Continued.

4. The Mission recommends that the material and equipment required for the construction of 12 plants for the production of industrial alcohol be made available to the Government of India under provisions of the Lend-Lease Act.

5. The Mission recommends that the necessary equipment for the manufacture of 80,000 drums a month be made available to the Government of India under the provisions of the Lend-Lease Act.

Electric Power

India's electric power is produced almost entirely to meet industrial demands. The proportion of the total load consumed in buildings and private homes is quite small. Much of India's electrical generating capacity is owned by private utilities, Provincial and State Governments, and municipalities, although a number of industrial concerns own and operate plants producing electrical energy for their consumption alone. The investment in all these plants amounts to about $300,000,000 and their annual capacity to about 2,700 million kilowatts.

The distribution of electrical generating plants in India is uneven, being concentrated in the principal industrial centers and in the port cities. The productive capacities of these plants in kilowatts are indicated below by principal districts.

<table>
<thead>
<tr>
<th>Province or State</th>
<th>Capacity (kilowatts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bengal</td>
<td>2/366,000</td>
</tr>
<tr>
<td>Bombay</td>
<td>2/310,000</td>
</tr>
<tr>
<td>United Provinces</td>
<td>2/140,000</td>
</tr>
<tr>
<td>Madras</td>
<td>2/129,000</td>
</tr>
<tr>
<td>Bihar</td>
<td>2/111,000</td>
</tr>
<tr>
<td>Punjab</td>
<td>97,000</td>
</tr>
<tr>
<td>Mysore State</td>
<td>61,000</td>
</tr>
<tr>
<td>Delhi</td>
<td>31,000</td>
</tr>
</tbody>
</table>

The Provinces of Bengal and Bombay, in which are located the largest ports and industrial centers of the country, are by far the leading producers of electric power. Because of their location and previous industrial development, these two Provinces have also been the centers of most of the expansion of war industries. As a result the

1/ The capacities of self-contained factories are not included, except as noted.
2/ Of this amount 289,000 kilowatts are in the Calcutta area and 26,000 are at the Steel Corporation of Bengal.
3/ Principally the port area and city of Bombay, including railways.
4/ Of this amount 43,000 kilowatts are in the city of Madras.
5/ Of this amount 64,000 kilowatts are in Cawnpore.
6/ Of this amount 80,000 kilowatts are produced by the Tata Iron and Steel Company, Ltd.
shortage of generating plants is more acute in these two Provinces than elsewhere. Except for Cawnpore and the Presidency of Madras, however, there is very little reserve power in any of the Provinces or States of India. Power, therefore, must be a prime consideration in any program involving either the movement of existing industries or the establishment of new industries.

To prevent the consumption of electrical equipment and wire for nonessential purposes, and to conserve surplus generating capacity, governmental control has been established over all generating and distributing systems in India. This control is exercised by a new agency known as the Central Electric Power Control Board, of which the Electrical Commissioner is a member. Shortly after its creation the Board issued orders to all utilities in India, prohibiting any new service connections that are not essential for war needs.

The Government of India anticipates the installation of a number of extensions to plant capacities in electrical utilities by the middle of 1943. From orders already placed for generators it is expected that 12, with capacities aggregating 40,750 kilowatts, will reach India before the end of 1942 and will be in operation a few months thereafter. Most of this equipment, however, is designed to meet overloaded conditions in the various utilities by which it was ordered. A project to expand the Tata Hydroelectric System in the Bombay area will provide about 16,000 kilowatts of firm peak capacity and about 130,000,000 kilowatts annually, but most of this power will be required to meet the increased demands of existing consumers, including the railways. There is also a project designed to increase the production of electrical energy at Jog Falls, in Mysore, by 48,000 kilowatts. This additional capacity will be fully utilized by the new plants that are now being installed there for the production of war materials. It is essential, therefore, that this project be completed promptly.

Recommendations.

1. The Mission recommends that the projects for the expansion of the production of electrical energy in Bombay and Mysore be completed as rapidly as possible and that every effort be made to expedite the delivery of other electrical generating equipment now on order.

2. The Mission recommends that, whenever the demand of war industries for electrical power exceeds the supply, the Central Electric Power Control Board should curtail the services extended to nonessential consumers or to consumers which are not in a position to utilize the total load customarily made available to them. The jute mills, for example, are operating at very much less than capacity. In the Calcutta area a substantial saving of power could be effected by concentrating production in those jute mills necessary to supply current demands and by closing the others.
Recommendations—Continued.

3. The Mission is of the opinion that, for a long-term program, attention should be given to the development of hydroelectric power. But, inasmuch as the completion of most projects of this nature would require several years, the Mission does not believe that they should be considered as a part of any program to increase the production of war materials in India. In fact, the Mission recommends that the launching of any substantial hydroelectric projects be delayed until the war is ended. Meanwhile, to provide the power necessary for the expansion of Indian industry, the Mission suggests the installation of steam or diesel plants for the generation of electrical energy.

Iron and Steel

Steel is basic to industrial production of almost every kind. The steel industry, therefore, is a key industry and the production of steel is often regarded as an index of a country’s general industrial production. India is fortunate in having an efficiently operated steel industry and in having within its own borders all of the raw materials essential to the manufacture of steel. Its deposits of iron ore are high-grade and very large. Its deposits of coal are adequate to support for many years a much bigger steel industry than the present one, and its deposits of manganese ore much more than adequate for that purpose.1

Iron ore.

India is the second largest producer of iron ore in the British Empire, being exceeded only by the United Kingdom. About 3,000,000 tons of iron ore are mined annually in India. Mining operations are centered chiefly in the Singhbhum district of Bihar, and in nearby States; small quantities are also mined in Mysore State. Almost all of the iron ore mined in India is sent to iron works within the country for smelting, but in past years substantial quantities were exported to Japan. Exports from India are now chiefly in the form of pig iron and amount to about 500,000 tons annually, all of which are shipped to the United Kingdom.

The reserves of iron ore in India are probably the largest in the world and are superior in quality to those of any other country. In the Singhbhum district alone, the reserves of iron ore with an iron content in excess of 60 percent are estimated at not less than 3,000 million tons and may amount to as much as 20,000 million tons. In Bastar State the reserves are estimated at 724,000,000 tons of high-quality ore. There are also important deposits in neighboring districts of the Central Provinces, one of which in the Rajahana Hills is estimated to contain 2,500,000 tons of ore with a 67 1/2-percent iron content.

1/ See section on Nonferrous metals, Manganese ore.
The quantity of iron ore mined in India in recent years is shown in Table 6, together with the quantity of pig iron produced therefrom and the quantity of steel produced from the pig iron devoted to that purpose.

Table 6. - Production of iron ore, pig iron, and steel, in India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Iron ore</th>
<th>Pig iron used in steel production</th>
<th>Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>2,871</td>
<td>1,621</td>
<td>802</td>
</tr>
<tr>
<td>1938</td>
<td>2,744</td>
<td>1,540</td>
<td>852</td>
</tr>
<tr>
<td>1939</td>
<td>3,166</td>
<td>1,757</td>
<td>893</td>
</tr>
<tr>
<td>1940</td>
<td>3,103</td>
<td>1,994</td>
<td>1,094</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

The coal resources in Bengal and Bihar have been estimated at 60 billion tons, of which 20 billion are considered workable, and reserves in the Central Provinces and Berar have been estimated at 17 billion tons, of which 5,150 million are considered workable. In addition, there are coal resources ranging from 60 million to 80 million tons in the Langrin plateau of Assam, and 70 million tons in Nongstoin. Reserves of coal suitable for the manufacture of metallurgical coke have been estimated at 500 million tons, of which approximately one-half will be lost in the process of mining under existing methods; these reserves are being consumed at the annual rate of about 15 million tons, and are being used largely for purposes other than the manufacture of coke. Should the reserves of coal suitable for coke be devoted exclusively to that purpose, they would last for many years, even though the production of iron and steel should be greatly increased. The coking coal of India, although satisfactory for smelting purposes, is not of the best quality, having a substantial ash residue.

The total production of coal in India has ranged from 25 million tons in 1937 to 29 million tons in 1940. Exports of coal from India in recent years have amounted to about 2 million tons. Table 7 shows the annual production of coal in India, together with the amounts used for the manufacture of coke and the quantity of coke produced therefrom.

Table 7. - Production of coal and coke in India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Coal</th>
<th>Coke used for coke making</th>
<th>Coke</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>25,036</td>
<td>2,638</td>
<td>1,867</td>
</tr>
<tr>
<td>1938</td>
<td>28,343</td>
<td>2,398</td>
<td>1,711</td>
</tr>
<tr>
<td>1939</td>
<td>27,769</td>
<td>2,694</td>
<td>1,917</td>
</tr>
<tr>
<td>1940</td>
<td>29,382</td>
<td>2,985</td>
<td>2,109</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.
Iron and steel industry.

Production. - The annual production of pig iron in India rose from 1,750,000 tons in 1939 to 2,000,000 tons in 1942. Modifications in existing furnaces may further increase production to 2,100,000 in 1943. Of this amount, it was planned that about 500,000 tons would be exported to the United Kingdom, 100,000 tons would be used in the iron foundries of India, and the remainder would be consumed in the production of steel. Prior to the war, the total annual output of finished steel in India was 750,000 tons. Since then, plant capacity and annual production have been increased; in 1942 production was at the annual rate of 1,200,000 tons. And this may be increased to 1,500,000 tons by projects for the expansion of plant capacities now under consideration.

Producing companies. - The Tata Iron and Steel Company, located at Jamshedpur about 150 miles west of Calcutta, accounts for approximately 75 percent of the total production of steel in India. It is reported to be the largest single steel plant in the British Empire. The plant is equipped with modern machinery which is efficiently operated. The Steel Corporation of Bengal has the second largest plant in India and accounts for about 17 percent of that country's production. It, too, is equipped with modern and efficient machinery. The Government Metal and Steel Factory at Isapore is the third largest steel plant in the country, but produces only high-quality steels for armaments. The fourth largest steel plant is the Mysore Iron and Steel Works which annually produce about 25,000 tons of light structural shapes and bars. In addition to these four concerns, a number of small mills operate partially or wholly on scrap and produce light shapes and bars chiefly for the bazaar trade. There are 13 electric furnaces in the country; most of these have a capacity of four-fifths ton, but one has a capacity of 10 tons, and two, of 2 tons each.

The Tata Iron and Steel Company, which manufactures a wide variety of steel products, has five well-equipped blast furnaces which, in 1941, produced 1,237,000 tons of pig iron and 29,000 tons of ferromanganese. Of the pig iron produced in that year, 1,015,000 tons were used in the molten state at the foundry and the steel-melting shops. The remaining 222,000 tons were made into pigs which were either sold or consumed at the works. The production of ferromanganese in 1941 exceeded plant requirements which are about 12,000 tons a year. The 40-inch blooming mill has a capacity of 1,000,000 tons a year, provided it is not required to roll alloy steel ingots; the maximum tonnage produced by this mill was 953,599 in 1941. In addition, the company has a continuous sheet bar and billet mill with a maximum production of 577,289 tons, a semicontinuous Morgan mill with a maximum production of 172,344 tons, a plate mill with an annual capacity of 82,000 tons, and sheet mills with an annual capacity of 160,000 tons of black sheets, averaging 24-gage. The sheet mills contain hot mills, finishing mills, an annealing section, and a galvanizing section which has an annual capacity of 125,000 tons of galvanized sheets of 24-gage. On November 29, 1941, the Tata company began the manufacture of railway wheels, tires, and axles which are produced from its own acid open-hearth steel. The company is also operating a benzol and toluol plant on behalf of the Government of India. It has installed two electric furnaces capable of producing about 1,500 tons of high-quality steel a month, and is operating an ingot mold foundry to increase the output of castings. In addition, the company has extensive repair shops, machine-tool shops, laboratories, and a technical training school. The company is producing a large number of special steels, including bullet-proof armor plate, for use in the manufacture of munitions in India.
The Steel Corporation of Bengal also has a modern and efficiently equipped plant which includes steel furnaces with an annual capacity of 250,000 tons of ingots, and a new Sachs blooming mill with an annual capacity of 600,000 to 700,000 tons. Its finishing mills are capable of handling the quantity of steel which could be rolled in the blooming mill. The equipment at the Government Metal and Steel Factory at Ishapore and at the Mysore Iron and Steel Works is being modernized and the capacities of these plants are being expanded.

Expansion of production. - Various projects for the expansion of equipment essential to the production of steel are now being considered by the Government of India and the steel companies concerned. These extensions, for some of which the equipment has already been ordered, include the following:

<table>
<thead>
<tr>
<th>Firm</th>
<th>Type</th>
<th>Annual capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perrin plant:</td>
<td></td>
</tr>
<tr>
<td>Tata Iron &amp; Steel</td>
<td>Acid steel</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Basic steel</td>
<td>150,000</td>
</tr>
<tr>
<td>Steel Corporation of</td>
<td>90-ton open hearth</td>
<td>75,000</td>
</tr>
<tr>
<td>Bengal</td>
<td>Three 25-ton furnaces:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special steels</td>
<td>25,000</td>
</tr>
<tr>
<td>Ishapore (Government)</td>
<td>25-ton furnace:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic steel</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>10-ton open hearth</td>
<td>10,000</td>
</tr>
<tr>
<td>Campore</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 330,000

Source: Department of Supply, Government of India.

Production at the Tata Iron and Steel Company is limited by the capacity of its blooming mill which is taking the company's entire annual output of 1,000,000 tons. This, however, is inadequate to keep the secondary mills operating at capacity. The company is proposing to install a new Perrin-process plant which will increase its annual output of ingots by 200,000 tons; production will then exceed the blooming capacity by at least 100,000 tons. The company proposes, therefore, to install a billeting mill that will relieve the blooming mill and provide adequate steel to keep the production of secondary mills at a maximum. In addition to these projects for plant expansion, the Tata company is planning, with the aid of the Government of India, to erect three other plants: A plant for the manufacture of special alloy steels, with a capacity of 50 tons a month, a plant with a 15-ton furnace for the manufacture of ferro-alloys, such as ferromolybdenum and ferrotungsten, and additional equipment to enable the mill manufacturing steel plates to operate, on a three-shift basis, at the rate of 10,000 to 12,000 tons a month.
The Steel Corporation of Bengal has a new Sacks blooming mill with an annual capacity of 600,000 to 700,000 tons of ingots. At the time of the Mission's visit this mill was being fed by steel furnaces with an annual maximum production of 250,000 tons of ingots. A project is being considered by the Government of India and the Corporation to increase the capacity of the melting shop in order that an additional 400,000 tons of ingots can be made available to maintain the operation of the blooming mill at capacity. To secure these additional ingots without the erection of blast furnaces, it would be necessary for the Corporation to obtain a substantial amount of pig iron customarily exported to the United Kingdom. The Indian Iron and Steel Company has adequate capacity to feed the new melting furnaces, provided it is released from its contract to supply the United Kingdom with 32,000 tons of pig iron a month. The Mission understands that this release has been obtained and that negotiations between officials of the Government of India and the Steel Corporation of Bengal are now in progress for the expansion of the melting shop.

Other projects for the expansion of the production of steel in India include the installation of three 25-ton furnaces for the manufacture of special steels in the Government Metal and Steel Factory at Isnapore, and the erection of a 25-ton furnace for the production of basic steel by the Mysore Iron and Steel Works. In addition, there is a 10-ton open-hearth furnace at Cawnpore which, at the time of the Mission's visit, had not been placed in operation.

Projects to increase the production of iron and steel in India must also include a consideration of transportation facilities and of the availability of adequate supplies of water and power. The railroads of India are already greatly overburdened by increased traffic arising out of the war and the temporary closing of the port of Calcutta, and by the loss of rolling stock and locomotives sent to the Middle East. Any substantial increase in the production of iron and steel will place an even greater burden on the railroads which cannot cope with existing traffic. If an increase in the operations of steel mills is contemplated, adequate provisions must be made to move the necessary iron ore and coal to the mills and to move the finished products to their ultimate destinations. With foresight the necessary quantities of water can probably be obtained, but planning is essential because of the seasonal character of the rains. Finally, in any substantial program for the expansion of the industry, provision must be made for the increase of existing facilities for the production of power because the principal steel companies are already taking the capacities of their generating plants.

Government control. - Despite the considerable increase in the production of steel in India, the present supply is inadequate to meet all of the military and essential civilian requirements of the country. Before the war India imported annually about 300,000 tons of steel; since the outbreak of the war, these imports have been greatly reduced, amounting in 1941 to only 100,000 tons. The Government of India believes that India's minimum import requirements for 1942 are 250,000 tons, and that 600,000 tons could be used for war purposes if that amount could be made available.

Since August 1941, the distribution of the whole of India's production of steel has been rigidly controlled by a combined licensing and quota system. The use of tin and of spelter for galvanizing either corrugated or plain sheets is controlled by the Director-General,
Munitions Production, as are all ferro-alloys. The steel control has complete authority over the transfer of all available supplies, both imported and domestic. Exports are prohibited except for essential war purposes, and a strict export licensing system is enforced. All applications for import licenses for steel must be approved by the steel import controller. Importers are required to provide full information concerning the specific use for which the material is intended. In this way the Government of India is able to insure that steel is utilized only in the satisfaction of military and essential civilian requirements.

**Recommendations.**

1. The Mission endorsed the projects for the expansion of plant capacity by the Tata Iron and Steel Company, Ltd. These projects were also approved by the Government of India, and the Mission agreed to use its influence to secure priorities in the United States adequate to provide for the delivery of the necessary equipment and materials.

2. The Mission approved the projected expansion of production by the Steel Corporation of Bengal and urged that it be undertaken promptly. It agreed to use its influence to secure priorities adequate to insure the delivery of equipment and materials which might be ordered in the United States. In view of the acute problem of transportation created by the closing of the port of Calcutta, the Mission expressed the opinion that the pig iron formerly exported under contract to the United Kingdom could be more usefully employed by expanding the production of steel in the plant of the Steel Corporation of Bengal. The Mission was gratified to learn that, prior to its departure from India, this arrangement had been made with the Government of the United Kingdom.

3. Inasmuch as all of the steel to be obtained from the planned expansion of productive facilities has already been allocated to war or essential civilian uses, the Mission expressed the view that any considerable increase in industrial production would require a further expansion of the productive capacity of the steel companies. The Mission therefore urged that serious consideration be given to the early acquisition of additional equipment and materials for the manufacture of steel.

4. Most of the essential raw materials for the manufacture of tool steel are available in India. A very large part of its requirements, however, must be imported. The Mission recommends, therefore, that a plant for the manufacture of tool steel be erected in India.
5. The attention of the Mission was called to the quality of steel produced by the electric furnaces in India. These furnaces are not now producing the high-quality steels of which they are capable. The Mission recommended that this situation be rectified as promptly as possible and, in accordance with the request of the Government of India, agreed to attempt to secure the services of two qualified experts from the United States to assist in this project.

6. In any program for the expansion of the production of steel in India, the Mission recommends that special attention be given to the problems of providing adequate supplies of water and power and of securing the requisite equipment for transporting the raw materials and the finished products.

Munitions

Before the war India had six ordnance factories devoted to the production of munitions. These were the Metal and Steel Factory at Ishapore, the Gun and Shell Factory at Cosibipore, the Rifle Factory at Ishapore, the Gun Carriage Factory at Jubbulpore, the Cordite Factory at Aruvankadu, and the Ammunition Factory at Kirkee. When the war began India was engaged in implementing a plan, recommended by a committee under the chairmanship of Lord Chatfield, which provided for the expansion and modernisation of these ordnance factories and the establishment of a seventh plant for the production of high explosives. Most of the recommendations of that committee were put into operation by the end of 1941. In the fall of 1940, a Mission from the British Ministry of Supply, under the chairmanship of Sir Alexander Roger, visited India to determine how the industrial production of that country could best be expanded. The Roger Mission recommended a large number of projects for the manufacture of munitions, chief among which were the establishment of factories for the production of (1) Bren guns, (2) shells and mortar bombs, (3) fuses, (4) cartridge cases, (5) ammunition, and (6) scientific instruments. Most of these projects, as well as others recommended by that Mission, have been approved by the Government of India, and work on a number of them has been undertaken.

In addition to the expansion of existing munitions factories and the establishment of new ones, the Government of India has found it necessary to take over four railway workshops which are now being utilized in the production of war materials. One of these workshops was converted into an ordnance factory, a second one is producing munitions and armored vehicles, and the other two are being utilized principally for the production of armored vehicles. A number of other railway workshops are partially engaged in the production of war materials for the Government, and this production is being supplemented by the manufacture of war materials in the workshops of more than 200 private concerns.

1/ See section on Armored Vehicles immediately following.
The ordnance factories actually controlled and operated by the Government of India and the factories which that Government expects to erect in the near future are listed below. The list also shows the products that are being manufactured or that it is proposed to manufacture in such factories.

Ordinance Factories in India, in Operation and Projected

Plants in operation.

1. **Metal and Steel Factory (Ishapore).**
   Steel for guns, rifles, and shells; nonferrous metals for ammunition and fuses; steel bars and rods; shell forgings; stampings for fuses; and cartridge cases.

2. **Gun and Shell Factory (Gossipore).**
   Guns of various calibers; howitzers up to 6", and their components; miscellaneous stores and gas masks; repairing of 6" guns and machining of shells, fuses, and primers.

3. **Rifle Factory (Ishapore).**
   Rifles, muskets and their components, and sword bayonets; manufacturing and repairing V.B. guns; repairing Vicker's machine guns.

4. **Ammunition Factory (Kirkee).**
   Ammunition for small arms and pistols; pyrotechnics; filling shells, fuses, and primers.

5. **Gun Carriage Factory (Jubbulpore).**
   Artillery carriages and trailers; oil cookers; V.M.G. mountings; chests; boxes; axe and pick halves; numerous other articles.

6. **Harness and Saddlery Factory (Gawnpore).**
   Harness, saddlery, and leather articles of various types. The leather used in the factory is tanned there.

7. **Cordite Factory (Aravankadu).**
   Cordite, cordite charges, cannon cartridges, and gun cotton; activated charcoal for gas masks.

8. **High Explosives Factory (Kirkee).**
   Trinitrotoluene; ammonium nitrate; mercury fulminate; lead azide and lead stypnate.

9. **Ordinance Factory (Dohad).**
   Gun carriage components; oil cookers; and other miscellaneous ordnance stores. This plant was once a workshop of the E.B. and C.I. Railway.
Plants in operation—Continued.

10. **Gun Carriage Factory (Kanchrapara).**

Components of gun carriages, shell cases, armored cars; components for machine tools; gages including screw gages; numerous other articles.

This plant was once a workshop of the Assam and Bengal Railway and was taken over by the Government in the last half of 1940.

11. **Mathematical Instrument Office (Calcutta).**

Optical stores required by the Army.

This plant was taken over from the Surveyor-General.

Projected plants.

1. **Case Factory (Ambernath).**

Components for ammunition for small arms, cartridge cases, and nonferrous materials.

2. **Fuse Factory (Lucknow).**

Fuses and primers.

3. **Ordnance Factory (Khamaria, Jubbulpore).**

Ammunition for small arms; filling gun ammunition, mortar bombs, and grenades.

4. **New Instrument Factory.**

Optical and fire-control stores for the Army.

5. **Aircraft Instruments Repair and Maintenance Factory (Calcutta).**

Repairing and maintenance of aircraft instruments of all types.

6. **Light Bren Gun Factory (Hyderabad).**

Bren guns and the maintenance of components. When completed, the plant is to be operated for the Government by a Czech company.

7. **New Factory (Megaon, Central Provinces).**

Heavy bombs and nonferrous materials.

8. **New Factory (Cawnpore).**

Barrels for 6-lb. guns; liners for 3.7" guns; shell forgings and shells, and mortar bombs.
Projected plants—Continued.


The factory building was erected with the intention of transferring to it the machinery and equipment from the rifle factory at Ishapore. The American Technical Mission suggested, however, that new equipment for the manufacture of rifles be installed in the plant at Cawnpore in order to increase the number of rifles now being produced in India.

Any large program for the expansion of the production of munitions in India must take into consideration a number of inherent difficulties. There is an acute shortage of power in most manufacturing areas in India. The Mission believes that this difficulty might be overcome in certain localities by a more judicious system of distribution, but is quite aware that in many districts it would be necessary to install additional generating equipment if productive capacity is to be materially expanded. A second difficulty is that practically all of the machine-tool and processing equipment and many of the basic raw materials, such as special alloy steels, would have to be imported, and there is an acute shortage of most of these materials. Should there be any substantial expansion, additional technical staff would have to be secured to operate the new plants, and most of the technicians would have to come from countries other than India. With these limitations in mind, the Mission urged that every effort be made to secure the maximum utilization of existing equipment, but did suggest the installation of equipment for a new rifle factory in the vacant building at Cawnpore and the erection of a new factory for the manufacture of shells not exceeding 6" in size.

The Mission understands from officials of the Government of India that that country will be largely self-supporting in the execution of its present program for the production of munitions. Its chief import requirements for the maintenance of the program are listed below. The Mission is informed that arrangements have been made with the Government of the United Kingdom to obtain all of these requirements.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuses for 25-lb. guns</td>
<td>47,000</td>
</tr>
<tr>
<td>Fuses for antiaircraft ammunition</td>
<td>14,000</td>
</tr>
<tr>
<td>T.N.T.</td>
<td>150</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>200</td>
</tr>
<tr>
<td>Tetryl</td>
<td>45</td>
</tr>
<tr>
<td>Cordite for cannon</td>
<td>250</td>
</tr>
<tr>
<td>Nitrocellulose powder</td>
<td>55</td>
</tr>
<tr>
<td>Carbazite</td>
<td>4</td>
</tr>
<tr>
<td>Mineral jelly</td>
<td>11</td>
</tr>
<tr>
<td>Dimethylaniline</td>
<td>18</td>
</tr>
</tbody>
</table>

The program of the Government of India for the production of munitions and the actual production record as of March 1942 are shown in Table 8. To reach the objectives set by the Government, it is obvious that the production of many of the items listed in the table must be substantially increased.

1/ See section on Electric Power.
Table 8. - Munitions: Production as of March 1942, and objectives for 1943

(All figures are on a monthly basis.)

<table>
<thead>
<tr>
<th>Type of Munition</th>
<th>Approximate Production March 1942</th>
<th>Objective 1943</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>Small arms ammunition</td>
<td>17,500,000</td>
<td>43,700,000</td>
</tr>
<tr>
<td>Gun ammunition filling</td>
<td>100,000</td>
<td>382,040</td>
</tr>
<tr>
<td>Rifles, new and repaired</td>
<td>10,500</td>
<td>10,000</td>
</tr>
<tr>
<td>Bayonets</td>
<td>10,500</td>
<td>1/23,000</td>
</tr>
<tr>
<td>V.B. guns</td>
<td>150</td>
<td>400</td>
</tr>
<tr>
<td>Bren tripods</td>
<td>150</td>
<td>450</td>
</tr>
<tr>
<td>Howitzers, 3.7&quot; and 4.5&quot;</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Tubes and barrels (3.7&quot;, 4.5&quot;, 6&quot;)</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>Carriages (3.7&quot; and 4.5&quot;)</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Guns, 6-lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spare barrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carriages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empty shot and shell, for guns of various calibers</td>
<td>2/120,000</td>
<td>2/358,840</td>
</tr>
<tr>
<td>Cartridge cases for guns of various calibers</td>
<td>100,000</td>
<td>365,840</td>
</tr>
<tr>
<td>Fuses</td>
<td>4/95,000</td>
<td>5/255,610</td>
</tr>
<tr>
<td>Primers</td>
<td>87,500</td>
<td>365,840</td>
</tr>
<tr>
<td>Cordite, pressed</td>
<td>110</td>
<td>260</td>
</tr>
<tr>
<td>Rifle</td>
<td>80</td>
<td>75.22</td>
</tr>
<tr>
<td>Cannon</td>
<td>30</td>
<td>184.78</td>
</tr>
<tr>
<td>Grenades, filled</td>
<td>15,000</td>
<td>79,000</td>
</tr>
<tr>
<td>Mines, filled A.T.5</td>
<td>25,000</td>
<td>110,000</td>
</tr>
<tr>
<td>Mortar bombs, filled</td>
<td>5,000</td>
<td>119,000</td>
</tr>
<tr>
<td>Air bombs, filled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 &quot;</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>250 &quot;</td>
<td></td>
<td>5,500</td>
</tr>
<tr>
<td>500 &quot;</td>
<td></td>
<td>2,960</td>
</tr>
</tbody>
</table>

1/ Objective for ordnance factories, 10,000; remainder from private concerns.
2/ Production of ordnance factories, 40,000; remainder from private concerns.
3/ Objective for ordnance factories, 110,000; remainder from private concerns.
4/ Production of ordnance factories, 50,000; remainder from private concerns.
5/ Objective for ordnance factories, 200,000; remainder from private concerns.
6/ Components supplied by private concerns.
7/ Some components supplied by private concerns.

Source: Department of Supply, Government of India.
Recommendations.

1. The Mission is of the opinion that the present program for the manufacture of rifles is inadequate to meet the Army's requirements for expansion and replacements. It therefore recommends that a new rifle factory, at least equivalent in capacity to the present one at Ishapore, be established at Canmpore. This location appears to be desirable because a factory building and adequate power are available there.

2. The Mission recommends the establishment of a plant for the production of shells not to exceed 6" in size. It is the opinion of the Mission that a considerable saving in transportation could be effected if the capacity of this plant were adequate to care for anticipated needs in the Middle East and China, as well as in India.

3. The Mission urges the most efficient utilization of existing equipment. It believes that increased production can be obtained by improving the arrangement of machinery in the various plants and by concentrating in specific plants the manufacture of certain types of munitions. At the request of the Government of India, the Mission agreed to attempt to secure the services of a number of production engineers from the United States who would advise the Government of India on these problems.

4. The Mission recommends that every possible effort be made to achieve promptly the objectives established by the Government of India for the production of the various types of munitions.

5. The Mission further recommends that, in those instances in which the production of munitions may be retarded by a shortage of power, a rigorous system of priorities be invoked to curtail its nonessential uses.

Armored Vehicles

Shortly after the outbreak of war a Tank Development Board was established to design an armored carrier that could be constructed in India. Previously no armored fighting vehicles had been produced there; now it is necessary to import only the chassis on which the armored bodies are mounted. The first vehicle to be designed and put into production was the Mark I Wheeled Carrier based on a standard V-8 Ford chassis, fitted with a special front axle unit, radiator, and gasoline tank. The body was armored with 6 mm. plate produced in India.

Later it was discovered that the Mark I Carrier was restricted in usefulness to general reconnaissance work. It was therefore decided to produce an improved type of carrier. As a result the Mark II Carrier was developed, with a rear engine Ford chassis having a 101-inch wheel base and 4-wheel drive. These chassis are imported from Canada. The armor on the Mark II body ranges from 14 mm. to 4 mm. in thickness, depending upon the vulnerability of the points to be protected.
The armored vehicles now being produced in India may be divided into three classes. The armored carrier is a wheeled vehicle on a Ford chassis with an open-type body, the body weight of the armor being about 2½ tons.\(^1\) Armored cars are similar in type except that they have a somewhat heavier body, which is closed, with a revolving turret mounted on the top. The armored general-purpose vehicle is also a wheeled vehicle on a Ford chassis, the body being rectangular and covered with about 2½ tons of armor.\(^2\) These last-named machines are used for the movement of troops and supplies, especially on border patrol.

The projected maximum production of armored vehicles in India is 600 a month, to be composed as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armored cars and carriers</td>
<td>500</td>
</tr>
<tr>
<td>Armored general-purpose vehicles</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

It is anticipated that the production of 600 armored vehicles a month will be realized in July or August 1942. Three plants are now engaged in the manufacture of these vehicles and each one is scheduled to produce 200 a month. These plants, which were formerly railway workshops, are located at Singhbhum, Tatanagar, and Kanchrapara.

Production of armored vehicles in India cannot be increased without the installation of a new assembly plant and the procurement of additional armor plate by importation, or by the expansion of the plate-rolling capacity of the steel mills. The present program requires the delivery of 1,700 tons of armor plate each month, but even that amount cannot be obtained without importing substantial quantities. With existing equipment, India's capacity to produce armor plate is 750 tons a month. This might be increased to 1,000 tons a month, but only by reducing the production of other plate which is urgently required for defense purposes, such as ship repairs and the construction of a 50,000-ton drydock. Because of this situation, the Mission recommended by cable that the United States furnish to India 1,000 tons of armor plate a month. This amount, requested by the Government of India, appears necessary to maintain India's present program for the production of armored vehicles.

**Recommendations.**

1. The Mission recommends that every effort be made to reach and maintain the scheduled production of 600 armored vehicles a month. It believes that this schedule can be maintained more easily after improvements are made in plant organization and assembly methods.

2. In order to permit the execution of the present program, the Mission has recommended to the Government of the United States that it provide through the Lend-Lease Administration 1,000 tons of armor plate a month for export to India.

\(^1\) As reported to the Mission by officials of the Government of India.
Airplanes

In the latter part of 1940 the Government of India decided to lend its support to the Hindustan Aircraft Company, Ltd., of Bangalore, Mysore State, for the construction of an aircraft factory. The Government of India now owns a two-thirds interest in the company and the remainder is owned by the State of Mysore. For the period of the war the Government has complete administrative and financial control of the factory. This company, which has the only aircraft factory in India, employs 29 American supervisors and 3,400 locally trained Indian mechanics. It has a metal-working and component assembly plant, a foundry machine shop, and an assembly and erection hangar, the total floor space of which aggregates 230,000 square feet. A new hangar for maintenance with floor space of 25,000 square feet is under construction. Its airport has two surface runways, one 3,800 feet and the other 5,000 feet in length. It also has mooring and beaching facilities for seaplanes, and a maximum run of 9,300 feet.

The Hindustan Aircraft Company has been manufacturing wooden and metal air-frame components. With these, and with engines, instruments, and other parts imported from the United States and the United Kingdom, the company has been producing finished planes. At present the company has under contract the manufacture of 30 Harlow trainers, 24 Vultee bombers, 48 Hawk fighters, and 10 training gliders. By April 1, 1942, three trainers, one fighter, and one glider had been delivered. The company has also undertaken the manufacture of 600 52-gallon drop-tanks for Hawk and Mohawk fighters. In addition, it is servicing, overhauling, and repairing a substantial number of planes for the armed services of the United Nations.

The Mission understands that officials of the company are anxious to continue the assembly of planes at the factory in order that the labor force may be maintained intact. The Mission finds itself in sympathy with this view but wishes to point out that, as air activity in India is increased, there will be a marked demand for facilities to repair aircraft. The Mission is of the opinion that steps should be taken to adjust plant machinery so that the company would be properly equipped for this important task. Provision should be made for the overhaul of engines, the manufacture of certain spare parts (especially those that are bulky, light, and frail), and the maintenance of supplies of other spare parts. The Mission believes that it is impossible to overemphasize the importance of so equipping the company that it may be able quickly to repair the airplanes which have been and are being sent to India by the United Kingdom and the United States.

In March 1942, the repair of airplanes was undertaken on a modest scale by the ordnance factory at Kanjuram, near Calcutta. The repair work, however, has been severely handicapped by the absence of equipment and of propellers and other spare parts.

1/ The technical operations are under the control of Mr. W. D. Pawley, President of the Inter-Continental Corporation of New York. Since 1934 Mr. Pawley has also organized, financed, and managed the Central Aviation Manufacturing Co. in China. He also operates two aircraft factories in the United States.
Recommendations.

1. The Mission recommends that emphasis be placed on the repair and maintenance of planes in India rather than upon their manufacture.

2. It recommends that every effort be made to obtain the equipment necessary to expedite the repair of planes at both Bangalore and Kanchrapara, and that adequate supplies of spare parts be maintained at these repair centers.

3. Because of the importance of this work the Mission is ready to use its influence to obtain for the Government of India the equipment and materials that will be necessary to carry out these recommendations.

Shipbuilding and Ship Repair

Shipbuilding.

The Royal Indian Navy has been increased considerably since the outbreak of the war. James Fighting Ships, in 1940, lists five escort vessels, one patrol vessel, one trawler, and one surveyor; the book states that, in addition, a number of merchant vessels have been taken over for service in the Navy. The Mission understands that the construction program for the Indian Navy includes the following: 37 trawlers, 5 corvettes, 8 wooden mine sweepers, 6 Fairmiles (fast antisubmarine motorboats), 12 light-draught motor launches, 72 feet in length, 2 floating docks, 88 Z craft, 46 skids, 2 mine-sweeping tugs, a seagoing water-boat, and a number of small motor launches.

In 1941 the annual capacity of India's shipyards was 50,000 gross tons. However, these shipyards, however, cannot build large vessels; special equipment, including boilers and engines, must be imported. They do produce a variety of small craft; in October 1941 they were fully engaged in the production of about 200 vessels of various sizes. Recently, the construction of a shipyard was undertaken at Vizagapatam which will have a maximum capacity of 8,000 tons when the plant and equipment, on order from the United Kingdom, are delivered. Except for this yard and those at Calcutta and Bombay, the shipyards of India, because of size and equipment, are confined chiefly to the construction of wooden vessels.

Of the ships now being produced in India, the corvettes, with a length of 180 feet, and the Bangore, with a length of 171 feet, 6 inches, are the largest. The latter has a displacement of 689 tons and a speed of 16 knots. Other classes include the Basset Trawlers which have a length of 150 feet and a speed of 12 knots, Fairmiles, 72-foot motor launches, motor mine sweepers, tugs, life boats, skids, and tank-landing craft. The principal types and numbers of ships under construction in India in March 1942, and the locations in which they are being constructed, are shown in table 9.

1/ Source: U. S. Maritime Commission.
Table 9. - Naval craft: Type and number under construction in India, April 1942

<table>
<thead>
<tr>
<th>Type of vessel</th>
<th>Calcutta</th>
<th>Bombay</th>
<th>Cochin</th>
<th>Karachi</th>
<th>Vizagapatam</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corvette, 180 ft.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangora, 171 ft. 6 in.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bassett Trawlers,</td>
<td>150 ft.</td>
<td>25</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pairiplies, 110 ft.</td>
<td>1/18</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72-ft. motor launches</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105-ft. motor mine</td>
<td></td>
<td></td>
<td>8</td>
<td>2/4</td>
<td>2/2</td>
<td></td>
</tr>
</tbody>
</table>

1/ Including the completion of two vessels from Rangoon.
2/ Vessels from Rangoon that are being completed in India.

Source: Department of Supply, Government of India.

Ship repair.

The importance of India in maintaining in serviceable condition the war and merchant fleets of the United Nations has been greatly increased by the loss of ports in the Malay Peninsula, the Netherlands Indies, and Burma. Moreover, this repair work, which would customarily be distributed among the ports now in possession of the enemy, has been augmented by enemy action, and is now concentrated in the west-coast ports of India because of the operations of the Japanese fleet in the Bay of Bengal. Among the west-coast ports only Bombay has appreciable facilities for the repair of ships. In consequence, temporary repairs, sufficient to enable damaged ships to proceed to ports outside of India, are all that is possible in many instances. Even this task is a severe strain upon the available facilities. The only naval dockyard in India is that of the Royal Indian Navy at Bombay. The facilities at this dockyard are limited, and, should the necessity for repairs and the maintenance of naval vessels of the United Nations be increased, it is likely that such work would encroach on the limited facilities available for merchant ships. The Mission believes it to be of the utmost urgency that existing repair facilities of the west-coast ports should be utilized to the maximum and that such facilities should be expanded as rapidly as possible.

A summary of the repair facilities of the principal ports of India is given below:

1. Calcutta. - The port of Calcutta is probably the best equipped in India for the repair of ships, although it is short of berthing accommodations for such work. It has one large tandem drydock and three smaller drydocks. There are three major firms engaged in the repairing of vessels.

1/ For a previous reference to this subject, see section entitled "Ports."
2/ These three companies are the Garden Reach, the Shalimar, and the Hooghly Dock Co.
2. Vizagapatam. - This port has a small natural harbor. Facilities for ship repairing are inadequate but a new shipbuilding yard is now under construction there. Assuming the delivery of the requisite plant and materials from the United Kingdom, it could be made suitable for the repair of ships within a few months. The Port Trust is now able to undertake minor repairs and the docking of small craft.

3. Madras. - The harbor at Madras is artificial and facilities will permit only above-water and limited major repairs. It has no drydock but does have a small-craft slipway. Repairs are customarily undertaken by either the Port Trust or a private concern, and these are sometimes assisted by smaller concerns and a railway workshop.

4. Karachi. - Repair facilities in the natural harbor of Karachi could be expanded to relieve congestion at Bombay. This port, however, has one small drydock which is capable of handling only harbor craft. Three major firms are engaged in the business of ship repairing.

5. Bombay. - Bombay has a large natural harbor. There is, however, an acute shortage of berthing for ship repair. The port has one large tandem drydock and three smaller docks. It also has a slipway for small vessels. The repairing of vessels is chiefly in the hands of three private concerns and the Royal Indian Navy Dockyard.

6. Cochin. - The natural harbor of Cochin has limited facilities for repairing ships. There is only one small drydock for harbor craft, and additional berths for repairs are urgently required. Moreover, the port is deficient in facilities for the watering and fueling of ships. The repair work is carried on chiefly by the Port Trust and a private concern, both of which are handicapped by the lack of adequate equipment.

Recommendations.

1. The Mission recommends that existing facilities for the repair of ships at west-coast ports should be fully utilized.

2. To achieve this objective, it recommends the continuous operation of these facilities in three 8-hour shifts and the discontinuance of shipbuilding and all other construction that might interfere with the work of repair.

3. The Mission recommends the expansion of facilities for the repair of ships in west-coast ports by the transfer of light, movable equipment from east-coast ports and by the importation of equipment from the United Kingdom and the United States. In this connection the Mission has given its endorsement to a list of equipment required by the port of Bombay and stands ready to endorse similar orders for other west-coast ports, including Karachi and Cochin.

1/ The private company is known as Binny & Co.
2/ These firms are Herman & Mohatta, Ltd., the Karachi Engineering Works and Foundry, and the Dock Engineering and Welding Works.
3/ These private concerns are Mazagon Dock Co., Alcock & Ashdown, and the Indian Steam Navigation Co.
4/ The private concern is Brunton & Co.
Recommendations—Continued.

4. Wherever possible, it urges the utilization of additional repair berths and the location of buoys for mooring ships close to repair shops so that work might be diverted from the docks to the stream.

5. The Mission is fully aware of the importance of ship construction to the Royal Indian Navy and to the cause of the United Nations. It recommends, therefore, the continuance at east-coast ports of the program of ship construction, provided that adequate materials can be made available without retarding other more essential projects.

Industrial Production

The Mission, in its visits to industrial plants throughout India, had an opportunity to observe operations in privately owned factories and those owned by the Government. Based on its observations, the Mission believes that it will be possible to attain a substantial increase in the production of many articles essential to the prosecution of the war by an improvement in plant and industrial organization. In a number of plants productive efforts were less effective than they might otherwise be because many different articles were being produced simultaneously. This practice, which is apparently quite general in India, prevents the application of mass-production methods and retards production by making it difficult, if not impossible, to segregate into their simplest components the tasks to be performed. Frequently production was further retarded by the inefficient placement of machinery and by the excessive handling of articles arising out of such placement. Provision for adequate light and air and the installation of cement floors in some plants would operate to increase the speed and accuracy of production, and to protect valuable machinery.

The Mission observed that, in some cases, identical articles were being produced on a small scale in several different plants. In such instances the advantages of mass production were lost and production was smaller and more costly than it should have been. In other cases, the Mission observed that, because of the lack of essential machinery, it was necessary to move goods to a second plant for partial processing and later to return such goods to the original plant for finishing. Obviously a relocation of machinery would reduce the time of manufacture and the cost of handling. If it were possible to concentrate production in a few rather than in many plants, and if the machinery essential to any single productive process could be located within the plant primarily devoted to such production, the existing industrial equipment in India could be utilized more efficiently and effectively than at present.

Machine tools.

Another factor affecting India's production of war materials is the acute shortage of machine tools. Before the war India's capacity for the manufacture of such tools was very small, being limited to simple lathes and drilling and shaping machines. A more efficient utilization of existing facilities, particularly in the railway workshops, has enabled India in recent months to increase the volume and types of machine
tools produced there. The range of production has been extended to include presses, cold saws, thread millers, tool grinders, slotters, planes, furnaces, blowers, blasting equipment, and rolling mills. Despite this expansion in production, the machine-tool industry in India is not large and is unable to meet minimum requirements. Domestic production, therefore, must be supplemented by imports from the United Kingdom and the United States.

All requests from India for machine tools are routed through the Machine Tool Control in London. This Control attempts to meet India's requests from its own resources or by diverting to India some of the Lend-Lease allotments to the United Kingdom. Requests that cannot be filled in this way are handled by the Indian Purchasing Mission in Washington which places direct requisitions upon the Lend-Lease Administration. The dependence of India upon the United States for machine tools is indicated by the increase in the number of such tools being requisitioned by the Indian Purchasing Mission. Several recent requisitions have received the endorsement of the Mission.

The records of the Machine Tool Control for recent months show that, for the expansion of the war effort, India's current minimum requirements are approximately 9,000 machine tools per annum, of which about 4,000 are required by the Government and 5,000 by other war and essential industries. The Government of India proposes to meet these requirements as follows:

<table>
<thead>
<tr>
<th>Tools to be manufactured in India</th>
<th>1942</th>
<th>1943</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools to be requisitioned and reconditioned in India</td>
<td>3,360</td>
<td>4,600</td>
</tr>
<tr>
<td>Tools to be imported</td>
<td>2,310</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,600</td>
<td></td>
</tr>
</tbody>
</table>

These estimates, however, do not include 3,171 machine tools already on order for sanctioned projects for the production of munitions, 453 machine tools for the manufacture of small tools, forged tools, and engineering stores, and 111 machine tools for the expansion of production in existing plants. Moreover, they do not include any allowance for ordinary replacements of machine tools which, based on an expected life of 20 years, would amount to about 4,000 tools a year. Imports of required machine tools into India should amount to about 3,330 in 1942 and to 4,400 in 1943; in addition, there would be the 3,735 machine tools on order for specific projects and the 4,000 machine tools that are required for ordinary replacements. With the completion of the program of industrial expansion, it may be assumed that India will be able to provide the machine tools necessary for ordinary replacements and that only the more intricate type of tools will have to be imported. But, in order that the program of expansion may be completed, it is essential that India's requirements for machine tools (as indicated above) should be met.

The Government of India established a strict machine-tool control under a Deputy Director-General early in 1941. The Director has power to supervise completely the production and distribution in India of all machine tools. He is empowered to license imports and exports. He can prevent the diversion of essential machines to nonessential purposes and can requisition machines required by factories engaged in the production of munitions. In addition, he has the power to determine the type and quantity of machine tools to be manufactured in the country,
and the factories at which such manufacture is to be undertaken. The Government of India is thus able to control completely the manufacture, distribution, and use of machine tools within its own borders.

**Small tools.**

Despite the progress made in the production of small tools, India must continue to import substantial quantities of saws, files, precision measuring tools, and cemented carbide cutting tools. The capacity in India to produce high-speed, carbon-steel twist drills, milling cutters, and reamers is inadequate to fill the essential demand. As a result, one plant, with an annual capacity of 400,000 drills, has been taken over by the Government, and plans have been completed to quadruple its capacity. Orders for necessary equipment have been placed with the United Kingdom and with local manufacturers. The capacity in India to produce high-speed, carbon-steel taps, dies, and thread-forming tools is also inadequate. A project is therefore being considered for the erection of a factory to manufacture these tools, with an estimated annual output of 300,000. The equipment will be ordered in part from the United Kingdom and in part from local manufacturers. The Government of India indicated that it would look to the United States for the supply of tool steel necessary to maintain the production of these plants; this would amount annually to about 120 tons.

The Agrico Works of the Tata Iron and Steel Company produces pick-axes, felling axes, and other hand tools. It has an annual capacity of approximately 2,000,000 such tools, and a project sponsored by the Government of India is under way to double that capacity. Orders for three Bliss Pick-Eye Presses and one Felling Axe Eye Punching Press have been placed on the Lend-Lease Administration by the Indian Purchasing Mission. Other essential equipment will be obtained in India.

The Government of India has instituted a rigid control over the importation, exportation, and distribution within India of all types of small tools. All tools ordered for India, therefore, whether by the Government or by private concerns, are required for the production of munitions or other essential war materials, and will be devoted exclusively to such purposes.

**Other steel manufactures.**

The production of machinery and machine tools in India is retarded by the absence of equipment for the manufacture of certain essential parts, such as roller and ball bearings. A plant for their manufacture would facilitate the production of various types of machinery. Moreover, a plant or plants completely equipped for die casting would expedite the production of shells and components of munitions as well as other war materials. A factory for the production of pipes and tubing would effect a saving in both time and shipping space; it would also expedite essential construction and the repair of locomotives. The existence of such a plant would be a particularly important factor in any project for the construction of a pipeline for the transportation and distribution of gasoline in India. There are a number of wire drawing plants in India, but there is no plant for the manufacture of wire screen. This product would have many war uses, particularly in hospitals and barracks, and would doubtless find a large civilian market in the post-war period.
With the proper equipment, the manufacture of scientific instruments could be undertaken in India on a much wider scale than at present. These instruments would have a number of immediate war uses and are essential in any program for the expansion of industrial production. Small electric motors not exceeding 5 horsepower would also be useful instruments in such a program. By attaching these motors to individual machines, the current use of shaft and belt drive could be reduced with a corresponding saving in the consumption of electric energy. Small motors could be produced in India which affords most of the essential raw materials, with the possible exception of copper.

Assembly of motor vehicles.

The assembly of motor vehicles is a substantial industry in India and is now operating almost exclusively under contracts with the Government. The assembly plants are owned and operated by two United States companies, General Motors and Ford. Their maximum annual capacity is approximately 96,000 units, of which General Motors can assemble 60,000 and Ford, 36,000. The assembly plant of General Motors is located in Bombay. The Ford Company has three plants; the plant in Bombay has an annual capacity of approximately 21,000 units, the one in Calcutta, 9,000 units, and the third in Madras, 6,000 units. All four plants are well-managed and efficiently operated.

The current annual requirements of the Government of India are approximately 84,000 vehicles. Of this number, it is expected that General Motors will assemble 50,000 units and Ford, 34,000. The Mission was informed by Government officials that the capacity for the construction of bodies within India is adequate to meet the requirements of the Government. Inasmuch as the capacity for the assembly of chassis is also adequate, there appears to be no need for expansion in this field.

In order to avoid delays and to permit the most efficient utilization of existing plant capacity, however, the companies concerned should, insofar as possible, provide for the regular shipments of parts from Canada to India. Because such shipments are made in CKD pack, efforts should be made to insure the inclusion of all essential parts in each shipment. The possibility of delay in the assembly of many vehicles would be further reduced if each CKD pack were limited to no more than 24 units. Moreover, because vital parts have occasionally been omitted in packing, the companies may wish to consider the advisability of stocking in India those spare parts which experience has shown are most likely to be overlooked.

Cement.

India has 22 plants for the manufacture of cement; these are owned and operated by 7 companies, and have annual capacities of about 2,600,000 tons. One company owns 12 of the 22 plants and accounts for about 60 percent of their total productive capacity. The raw materials for the manufacture of cement are all available in India.

1/ Two of the 22 plants have not yet been completed; combined capacities of the two uncompleted plants will amount to 75,000 tons annually.
Approximately 90 percent of the current production of cement in India is contracted for by the Government, as compared with about 50 percent in 1941 and 15 percent in 1940. Reserve stocks are being depleted, inasmuch as current production is not keeping pace with the demand. Moreover, it appears likely that the requirements of the Government will increase rather than diminish. Indeed, the industry expressed concern over its ability to meet possible future demands of the Government, and has stated its desire to expand plant facilities in order that it might be better prepared to meet future contingencies. The Mission called the attention of the Government of India to these representations and indicated its willingness to assist in obtaining the equipment required by the industry, provided the Government approved the orders submitted to it.

Radios.

Although radios are serviced in India, no sets are assembled or constructed there. The Mission, however, examined the possibility of producing radio sets in India. After conferences with the trade, with officials of the Government of India, and with technicians in the Army, the Mission concluded that special types of radios should continue to be imported. One general-purpose radio set is required in considerable numbers (approximately 5,000 annually) for use in armored cars, airplanes, and in the field operations of the Army. These, the Mission believed, could be manufactured in part, and assembled, in India. It was the consensus that the purely mechanical parts of the set could be produced locally, but that the electrical components should be imported, although the electrical cables required could be obtained in India. Such an arrangement would substantially reduce the weight of materials to be imported and thus conserve shipping space. It would also provide a centrally located supply base and repair depot for Army divisions operating in South Africa, Egypt, Iraq, Iran, and China. The Government of India, at the suggestion of the Mission, appointed a full-time officer to study the project and to formulate definite recommendations concerning the manufacture of parts and the assembly of this all-purpose radio set in India.

Recommendations.

1. The Mission recommends that a serious effort be made to obtain the maximum utilisation of existing plant and equipment through the application of mass-production, assembly-line methods. It suggests that the production of one or, at most, of a few articles be concentrated within a single plant and that, when necessary to achieve this objective, machinery be transferred from one plant to another. It suggests, also, that production might be increased by improving the arrangement of machinery within individual plants and by making adequate provision for necessary light and air.

2. At the request of the Government of India the Mission agreed to attempt to obtain the services of several production engineers who might advise that Government concerning the methods most likely to result in the achievement of the objectives outlined above.
Recommendations—Continued.

3. The Mission approved the plans of the Government of India for the expansion of the production of machine tools. It agreed to attempt to obtain drawings and blueprints of machine tools in the United States that might serve to assist in that production program. It endorsed a number of orders for machine tools placed on the Lend-Lease Administration through the Machine Tool Control in London and the Indian Purchasing Mission in Washington. And it urges that serious consideration be given to the erection of a factory for the exclusive production of machine tools in order to curtail import requirements as currently estimated.

4. The Mission endorsed the program of the Government of India for the expansion of the production of high-speed, carbon-steel tools and also endorsed the orders for materials and equipment placed on the Lend-Lease Administration by that Government.

5. The Mission recommends that serious consideration be given to the establishment of plants for the manufacture in India of the following articles, all of which are important in the war effort as a part of a program for industrial expansion: Roller and ball bearings, pipes and tubing, die castings, wire screen, scientific instruments, and small electric motors. Should the Government of India give favorable consideration to these projects, the Mission is ready to assist in securing the equipment and materials essential to their implementation.

6. The Mission recommends the manufacture of parts and the assembly of an all-purpose radio set in India, and it is ready to assist the Government of India in securing from the United States the materials and equipment that would be required for this purpose.

Nonferrous Metals

The Government of India maintains a complete control over both imports and exports of all nonferrous metals. Exports are permitted to go only to the United Nations and only for essential purposes. The distribution within India of aluminum, copper, lead, nickel, tin, and zinc is under the control of the Government.

Bauxite and aluminum.

Bauxite. - There are substantial deposits of bauxite in India. Reserves are estimated at about 250,000,000 tons and are located principally in Bihar, the Central Provinces, and Bombay. There are also small deposits in Madras. The better grades of bauxite have an average alumina content of 55 percent. One of the deposits in the Province of Bombay (Tungar Hill, only 30 miles from the city of Bombay), is estimated to contain 750,000 tons of bauxite with an average alumina content of 49 percent. Thus far there has been little mining of bauxite in India, and no aluminum has been made in India from Indian bauxite. Exports have been small and sporadic, being largely trial shipments.
Because of the great demand for aluminum arising out of the war, plans have been made to develop the Indian deposits. Two companies in India have undertaken projects for the manufacture of aluminum from Indian bauxite.

**Aluminum** - The Aluminium Production Company of India, Ltd., is establishing a smelter at Alwayes in Travancore State which, it is anticipated, will be in operation by August or September 1942. This smelter will have an annual capacity of 2,825 long tons of ingots. The plant, however, is so designed that its capacity, exclusive of requirements for power, can be increased to 5,850 long tons by the installation of very little additional equipment, chiefly equipment for melting pots and the rectifier plant.

Sometime ago the Aluminium Production Company entered into a contract with the Government of Travancore State for its electric power. Travancore State, however, was unable to secure the hydroelectric equipment necessary to expand its production and now states that it will be unable to supply sufficient power to operate the smelter at even its initial capacity. Unless additional power can be obtained, the probable output of the smelter will be 1,750 long tons, rather than 2,825 long tons. The office of the Electrical Commissioner has suggested that the power required can be provided by connecting the Travancore State system with the hydroelectric system of the Government of Madras. This could be done by erecting a transmission line between the Pallivasal power station and Udmalpet, a switching station of the transmission system of the Madras Government - a distance of about 45 miles. This plan would provide sufficient power to enable the smelter to operate at least at its initial capacity.

The Aluminium Production Company is planning to establish a plant for the production of alumina from Indian bauxite which it expects to obtain from nearby deposits in Madras. This plant, however, may not materialize for some time, although the Government of India is anxious that it be established as soon as possible, inasmuch as the company is now depending upon alumina imported from Canada. The company has conducted surveys of many bauxite deposits in southern India and has obtained options on some of them.

The Aluminium Corporation of India, Ltd., was organized in 1938 for the production of aluminum from Indian bauxite. It is the intention of the organizers to establish a complete plant, including the production of alumina, aluminum, and sheet at Anupnagar, near Asansol, in Bengal. It is planned to operate the plant with steam-generated power. Orders were placed for the entire plant with Skoda at most favorable prices. At the outbreak of the war about two-thirds of the necessary equipment had been delivered; undelivered equipment, however, included the three main D.C. generators to supply power for the smelter. Delays in obtaining the essential plant have been experienced, in part because of numerous changes of ownership.
Orders were finally placed in March 1941, and shipment from the United Kingdom is scheduled for July 1942. Construction of the plant is proceeding and the production of alumina may be possible by the middle of 1942. It is doubtful, however, that ingots will be produced before the end of 1942, even though the generating plant should arrive as now scheduled. The annual capacity of the smelter at Anupnagar is about 3,000 long tons of ingots.

Various attempts have been made to bring about a merger of the two producing companies, but thus far these efforts have been unsuccessful, largely because of disputes between the Canadian-British and Indian interests over the question of control. Inasmuch as one company will soon have a smelter but will be forced to import alumina, and the other will have a plant for the production of alumina but no smelter, it seems obvious that a merger, or at least a working agreement, could be effected that would be mutually advantageous. It would also appear that the Government of India might use its influence to bring about such an agreement in order to save the shipping space that would be required to import alumina from Canada.

Chromite.

There are deposits of chromite, the oxide of chromium and iron, in Bihar, the Eastern States, Bombay, and Mysore, but 95 percent of the chromite produced in India comes from northeastern Baluchistan. From the mines the ore is transported by narrow-gage railway 46 miles to Khanai, and from there by broad-gage railway 570 miles to Karachi. There is a large dump at Khanai and there are storage facilities for 20,000 tons of ore at Karachi. The industry in Baluchistan is controlled by the Baluchistan Chrome Company with headquarters in London.

The production of chromite in India and exports of the ore from that country in recent years are shown in table 10.

Table 10. - Chromite: Production in, and exports from, India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in long tons)</td>
<td></td>
</tr>
<tr>
<td>1937</td>
<td>62,307</td>
<td>50,367</td>
</tr>
<tr>
<td>1938</td>
<td>44,149</td>
<td>24,452</td>
</tr>
<tr>
<td>1939</td>
<td>49,196</td>
<td>37,826</td>
</tr>
<tr>
<td>1940</td>
<td>55,511</td>
<td>42,704</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

The statistics in table 10 suggest that there is an annual consumption of about 12,000 tons of chromite in India. This material is devoted principally to the preparation of furnace refractories; small amounts are also used in the manufacture of heavy chemicals. There are adequate quantities of ore for the production in India of various chrome alloys, such as ferrochrome and chrome steels.
Copper.

Although it is apparent from old workings that substantial amounts of copper were once mined in India, commercial operations are now conducted in only two places. The more important of these locations is the Singhbhum copper belt in Bihar, where reserves of ore are estimated to be approximately 850,000 short tons yielding 2.38 percent copper; there is also a very small production of copper in Mysore. In recent years the annual output of refined copper has been about 6,600 tons, which is approximately the capacity of the only copper smelter in India. This smelter is located at Maubhander, in the Singhbhum district of Bihar.

Copper ore from the Singhbhum district is nickeliferous, and the refined metal contains as much as one-half percent nickel. The quality of Indian copper is adequate for most alloying purposes, but its value as a conductor of electricity is nullified by its nickel content. There is little likelihood in the near future of substantially increasing the production of copper in India. That country, therefore, will be forced to depend on imports of blister copper from Rhodesia for its requirements of ordinary copper, and on the United States or Canada for electrolytic copper. The only alternative would be the installation of an electrolytic smelter for the processing of blister copper from Rhodesia.

Lead and zinc.

Lead and zinc ores are known to occur in Rajputana and Kashmir, but there is no production of lead and zinc in India. The requirements of that country, therefore, must be met by imports. Since the conquest of Burma, stocks of lead and zinc in India have been rapidly diminishing. In a few months there is likely to be a serious shortage of both these metals, and imports from the United States may have to be provided. Imports of lead and zinc into India in recent years are shown in Table 11.

<table>
<thead>
<tr>
<th>Year</th>
<th>Lead</th>
<th>Zinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>7,500</td>
<td>22,000</td>
</tr>
<tr>
<td>1939</td>
<td>9,500</td>
<td>24,000</td>
</tr>
<tr>
<td>1940</td>
<td>15,000</td>
<td>26,500</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

The most promising deposits of lead-zinc ore in India are the old mines of Zawar in Udaipur State, Rajputana. The Government of India is planning to develop these deposits which have not been worked for about 100 years because, at that time, mining operations were discontinued when the water level was reached. The extent of the deposits is not known, but samples indicate an ore of excellent quality, averaging 28 percent zinc and 20 percent lead, with 40 ounces of silver to the ton. Moreover, because of the character of the rock, little timbering will be required.
Before operations on these deposits can be resumed, it will be necessary to determine the extent of the ore body and to pump out and otherwise rehabilitate the mines. It is estimated that about 12 months will be required to put the mines in working order. Moreover, equipment for a flotation mill and for lead and zinc smelters will have to be imported and installed. In addition, considerable technical assistance will be required in the installation and operation of the mill and smelters, and in the manufacture of retorts for the zinc smelter. Because of the richness of the ore, however, it would appear desirable to develop these properties, provided the proposed investigation establishes the existence of adequate reserves.

Manganese ore.

India customarily accounts for about 30 percent of the world's output of manganese ore. Production in India amounted to 1,051,000 tons in 1937 and to 869,000 tons in 1940, most of which was exported. Formerly, exports went to the United Kingdom, Japan, and France; now they are shipped almost entirely to the United Kingdom and the United States. The iron and steel industry in India consumes about 60,000 tons annually. The chief mining areas are the Balaghat, Bhandara, and Nagpur districts of the Central Provinces; others include Sandur (one of the Madras States), Keonjhar and Bonai among the Eastern States, Singhbhum in Bihar, the North Kanara and Panch Mahals districts of Bombay, and Mysore State. Prior to the closing of the Bay of Bengal, manganese was exported chiefly from Visagapatam which is about 400 miles, via the Bengal Nagpur Railway, from the producing centers in the Central Provinces. Currently, the principal port of export is Bombay. Production and exports of manganese ore, and the production of ferromanganese, in India, for the years 1937-40, are shown in table 12.

Table 12. - Production and exports of manganese ore, and production of ferromanganese, in India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Manganese ore</th>
<th>Exports</th>
<th>Ferromanganese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td></td>
<td>Production</td>
</tr>
<tr>
<td>1937</td>
<td>1,051,594</td>
<td>1,151,834</td>
<td>8,041</td>
</tr>
<tr>
<td>1938</td>
<td>992,795</td>
<td>648,740</td>
<td>18,385</td>
</tr>
<tr>
<td>1939</td>
<td>844,663</td>
<td>781,132</td>
<td>1,613</td>
</tr>
<tr>
<td>1940</td>
<td>868,918</td>
<td>737,735</td>
<td>18,199</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

Tin.

There are no known deposits of tin in India that may be operated profitably, even under present conditions. India, therefore, must continue to import tin to meet its requirements which, in the past, amounted to approximately 3,000 tons a year. By the elimination of most civilian uses, and the curtailment of military uses, it is possible that essential requirements may be reduced below past consumption.
Titanium.

Titanium occurs in India in the form of a double oxide of iron and titanium, known as ilmenite. The oxide is used principally in the pigment industry; small amounts are also consumed in the manufacture of steel. In recent years most of the world’s supply of ilmenite has come from Travancore State in southern India; there it occurs in the sea sand which also contains monazite and zircon sands. The ilmenite sands in Travancore vary somewhat in metallic content but cover a large area which extends some distance beyond the actual beach and for several miles along the coast. At the water line the sands are renewed each year by wave action. Most of the ilmenite produced in India is exported, and most of the exports are shipped to the United States. The production of ilmenite in India and its exports from that country in recent years are shown in Table 13.

Table 13. - Ilmenite: Production in, and exports from, India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>181,047</td>
<td>204,653</td>
</tr>
<tr>
<td>1938</td>
<td>252,220</td>
<td>225,592</td>
</tr>
<tr>
<td>1939</td>
<td>237,835</td>
<td>236,476</td>
</tr>
<tr>
<td>1940</td>
<td>263,152</td>
<td>200,490</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

Recommendations.

1. The Mission recommends that a survey of the route for the proposed transmission lines between the Pallivasal power station and Urdumalpet be undertaken forthwith, and that every effort be made to effect the early erection of the line, in order that adequate power may be obtained to operate at capacity the smelter of the Aluminium Production Company.

2. It recommends that the capacity of the smelter at Always be expanded to 5,850 tons of ingots as promptly as possible.

3. It further recommends that a plant for the production of alumina from bauxite be erected at Always with a capacity adequate to provide for the expanded smelter.

4. The Mission is ready to assist the Government of India in obtaining the materials necessary for the erection of the proposed transmission line and for the expansion of the capacity of the plant now under construction at Always by the Aluminium Production Company.

5. The Mission recommends that every effort be made to expedite the completion of the plant of the Aluminium Corporation of India, Ltd., in Bengal.
Recommendations—Continued.

6. It is possible that the two plants for the production of aluminum in India might be operated more efficiently under a single management. The Mission suggests that this possibility might be the subject of an investigation by the Government of India.

7. The Mission recommends that India’s requirements for copper continue to be supplied by Rhodesia, Canada, and the United States, inasmuch as there is a shortage of power in India and little saving in shipping would be effected even if the machinery necessary for an electrolytic smelter were made available.

8. The Mission recommends an immediate survey of the old mines of Zawar in Udaipur State, Rajputana.

9. Should the reserves prove adequate, the Mission recommends that the mines be rehabilitated and that the necessary equipment for the mining and smelting of lead and zinc be acquired and installed.

10. The Mission is ready to assist the Government of India in obtaining the equipment and material essential for the execution of this project.

Other Strategic Products

Mica.

India accounts for about three-fourths of the world’s supply of sheet and block mica. Deposits of mica are widely distributed throughout the country, but it is estimated that nearly 80 percent of the total is obtained from Bihar and most of the remainder from the Nellore district of Madras. Deposits of mica are also found in Rajputana, Mysore, Gwalior, and Travancore. Phlogopite is found in Travancore; the other deposits are muscovite. Workers in mica, chiefly women, have a special skill in dressing and splitting the mineral, and this is an important factor in the preeminence of the Indian industry. Indeed, block mica from other countries is often imported into India and then exported in the form of fine splittings no more than one one-thousandth of an inch in thickness. No additional capital or equipment is required to increase production which responds directly to the stimulus of price. Production in 1942 is estimated at 22,000,000 pounds, and officials of the Government of India state that this could be increased to 25,000,000 pounds in 1943, if orders were placed sufficiently far in advance to permit the necessary scheduling of operations. Exports of mica from India go chiefly to the United States and the United Kingdom, and these are shown for recent years in table 14.
Table 14. - Mica: Exports from India, 1937-40

<table>
<thead>
<tr>
<th>Year</th>
<th>Block and splittings</th>
<th>Scrap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>13,554</td>
<td>12,352</td>
</tr>
<tr>
<td>1938</td>
<td>8,902</td>
<td>9,376</td>
</tr>
<tr>
<td>1939</td>
<td>10,799</td>
<td>7,251</td>
</tr>
<tr>
<td>1940</td>
<td>10,990</td>
<td>4,535</td>
</tr>
</tbody>
</table>

Source: Department of Supply, Government of India.

Rubber.

In recent years India has produced annually about 16,000 tons of crude rubber. It is anticipated that by 1943 the annual production of crude rubber will be increased to 18,000 tons, and that the output of reclaimed rubber will be established to yield 5,000 tons, thus giving India a total annual production of 23,000 tons. Machinery for the manufacture of reclaimed rubber, however, must be imported and installed, inasmuch as there is now no such equipment in India. Crude rubber is produced in southern India in the Malabar district of Madras and in northeastern India in Assam.

The current Indian requirements for rubber are estimated by officials of the Government to be 32,610 tons. If India is to be self-sufficient in rubber products, it must secure 9,610 tons of crude rubber or its equivalent from sources outside the country. It has been estimated that as much as 25 percent of total requirements may consist of reclaimed rubber; the deficiency in India, therefore, could be met by imports of crude rubber from Ceylon and of reclaimed rubber from the United States, as follows:

<table>
<thead>
<tr>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude rubber from Ceylon 6,460</td>
</tr>
<tr>
<td>Reclaimed rubber from the United States 3,150</td>
</tr>
<tr>
<td>Total 9,610</td>
</tr>
</tbody>
</table>

There are two plants for the manufacture of rubber tires in India; one is owned and operated by the Dunlop Company of the United Kingdom, and the other, by the Firestone Company of the United States. In 1941 the capacity of the Dunlop plant was expanded appreciably, and orders have been placed for additional equipment for the Firestone plant. It is anticipated that this equipment will be installed and in operation by November 1942. At that time these two plants will have approximately equal capacities for the manufacture of tires and other rubber goods. The present capacity of plants for the production of rubber goods in India, the expanded capacity of these plants with the installation of machinery now on order, and the further expansion proposed by the Government of India are shown in table 15.

1/ This does not include the production of crude rubber in Ceylon, the annual output of which is reported to be approximately 100,000 tons.

2/ 25 percent of total requirements (32,610 tons) is 8,150 tons, from which must be deducted the 5,000 tons of reclaimed rubber that it is anticipated will be produced in India in 1943.
Table 15. - Rubber: Current and proposed plant capacities in India

<table>
<thead>
<tr>
<th>Product</th>
<th>Present plant</th>
<th>Expanded plant</th>
<th>Proposed expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tires</td>
<td>8,200</td>
<td>14,500</td>
<td>23,500</td>
</tr>
<tr>
<td>General rubber goods</td>
<td>1,200</td>
<td>2,500</td>
<td>3,400</td>
</tr>
<tr>
<td>Bicycle tires</td>
<td>1,800</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Ground sheets and proofed fabrics</td>
<td>2,000</td>
<td>1,250</td>
<td>1,250</td>
</tr>
<tr>
<td>Camelback</td>
<td>-</td>
<td>500</td>
<td>1,000</td>
</tr>
<tr>
<td>Cable</td>
<td>360</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Respirators</td>
<td>360</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>Carriage tires</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Footwear</td>
<td>2,657</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>17,977</td>
<td>22,210</td>
<td>32,610</td>
</tr>
</tbody>
</table>

1/ In terms of customary dry rubber content.
2/ Equipment already shipped or on order.
3/ Hose, sheetings, belting, and miscellaneous rubber goods.
Source: Department of Supply, Government of India.

Imports of rubber and rubber goods, principally tires, have entered India chiefly from Canada and the United States. Small quantities have been supplied by the United Kingdom. The estimated imports into India of various rubber goods for the 12 months ending June 30, 1943, together with the sources of such imports, are listed below in terms of rubber content:

<table>
<thead>
<tr>
<th>Source</th>
<th>Long tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Canada:</td>
<td></td>
</tr>
<tr>
<td>Tires</td>
<td>7,560</td>
</tr>
<tr>
<td>From the United States:</td>
<td></td>
</tr>
<tr>
<td>Tires</td>
<td>2,800</td>
</tr>
<tr>
<td>General rubber goods</td>
<td>100</td>
</tr>
<tr>
<td>From the United Kingdom:</td>
<td></td>
</tr>
<tr>
<td>Aero tires and original equipment on vehicles</td>
<td>300</td>
</tr>
<tr>
<td>General rubber goods</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>11,060</td>
</tr>
</tbody>
</table>

According to the estimates it would appear that imports in the current fiscal year will be approximately equal to the deficiency in rubber as calculated by government officials.

The Government of India exercises a strict control over rubber. It regulates by license both exports and imports; it allocates the supply and controls the purchases and sales of raw rubber. Stocks in the hands of estates, dealers, and factories are required to be reported monthly. All sales or transfers of rubber to manufacturers are prohibited except by permit, and consequently the manufacture of rubber for anything but authorized requirements is prevented. Since June 15, 1942, automobile tires have been strictly rationed. The purchase of new tires or tubes has been restricted to operators of vehicles which are essential for the maintenance of war production or for the health or safety of the community. Permits are required for the retreading of tires.
Shellac.

India is the world’s largest producer of lac, a resinous substance secreted by a scale insect living on the twigs of trees. Production in India is centered in the northern part of the country, and ranges from 40,000 to 50,000 tons of raw lac a year, most of which is exported. Cultivation is distributed extensively in small holdings. By far the principal market is the United States where it is used chiefly in the production of varnishes and lacquers. Should India develop a substantial industry for the manufacture of paint, it is possible that increased quantities of lac would be used locally. An increase in the quantity of lac gathered or in its production, however, does not appear necessary. The chief problem is that of securing adequate transportation to the United States.

Recommendations.

1. While in India, the Mission recommended that the United States and the United Kingdom purchase jointly their requirements of mica. It is gratified to note that this recommendation was favorably received and that a Joint Purchasing Mission has been established.

2. The Mission recommends that the orders of the United States and the United Kingdom for mica be placed as far in advance as possible, in order that the industry may adequately schedule its production program and provide for the continuous employment of the workers.

3. The Mission believes that considerable saving in shipping could be effected by providing for the self-sufficiency of India in the production of most rubber products, particularly tires. Such a development would also reduce the hazard of shipping crude material to the United States or Canada and of reshipping the finished product to India. Moreover, the armed forces in India could probably be supplied more effectively by a local industry than by imports because of the frequent delay in the movement of ships.

4. For these reasons, the Mission recommends that the Combined Raw Materials Board allocate to India the amount of crude and reclaimed rubber necessary to make that country self-sufficient in the production of rubber products.

5. If the Board acts favorably upon this recommendation, the Mission recommends that the necessary equipment and material be acquired for the expansion of plant capacities.

6. The Mission also recommends that the necessary equipment and materials be acquired for a plant to produce annually 5,000 tons of reclaimed rubber.

7. The Mission further recommends the acquisition of machinery and materials necessary for the retreading or recapping of tires, inasmuch as a considerable saving in rubber would be effected thereby.
8. The Mission is ready to assist the Government of India in securing the equipment and materials necessary to implement these recommendations.

Chemicals and Drugs

Chemicals.

Most of India's requirements for fine and heavy chemicals are met by imports, although in 1938 there were 30 chemical factories in India with about 4,500 employees. That country's dependence on imports for chemicals is indicated by the value of the different types received from abroad in 1939, as shown below:

<table>
<thead>
<tr>
<th>Types</th>
<th>Value in rupees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyes and tanning materials</td>
<td>34,725,889</td>
</tr>
<tr>
<td>Industrial chemicals</td>
<td>34,308,188</td>
</tr>
<tr>
<td>Drugs and medicines</td>
<td>22,865,081</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>12,048,971</td>
</tr>
<tr>
<td>Paints and painters' materials</td>
<td>8,805,556</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2,353,930</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>115,107,615</strong></td>
</tr>
</tbody>
</table>

The chemical industry in India, however, is expanding. Notable increases have occurred recently in the production of sulphuric and nitric acids and of aluminum sulphate; there has also been some increase in the production of hydrochloric acid, sodium sulphate, and magnesium sulphate.

In general, the importation of chemicals into India is due to the absence of necessary equipment and technical personnel. For most basic chemicals the essential raw materials are available in India. Various projects for the production of chemicals are set forth in the following memorandum submitted to the Mission by the Government of India:

"This statement shows India's position in regard to 24 chemicals which are important to the war effort, and for the increased production of which, in India, American assistance might be possible. In the basic alkali group the most important shortage is that of caustic soda. If India is to be made self-sufficient, manufacture to the extent of 20,000 tons per annum will have to be established. If this step were taken, and the electrolytic process used, chlorine and bleaching powder which are also at present in very short supply, could be made in sufficient quantities to meet all Indian requirements. At present indigenous production of caustic soda amounts to about 6,000 tons. New plant is under erection.

1/ 15 of the 30 factories are located in Bengal.
2/ Includes printers' ink, gelatin, glue, perfumed spirit, and denatured spirit.
3/ Source: Compiled from official statistics of the Government of India.
which is expected to produce a further 8,700 tons by the summer of 1942. A further capacity of 20,000 tons is needed. The establishment of such a plant would also enable bleaching powder and chlorine deficiencies to be met.

"There is a shortage of what are generally known as coal-tar chemicals with the exception of benzene. Production could be increased if the iron and steel industry were expanded and new coke ovens set up. Benzene is at present being used mainly as a petrol substitute. It could be utilized as one of the primary chemicals for a dyestuff industry but considerable plant and technical knowledge would have to be obtained to produce the vast range of products necessary. Furthermore, other basic dyestuff chemicals such as toluene and naphthalene are at present in short supply on account of heavy defense demands. Phenol is also required for the manufacture of plastics, as are formaldehyde and urea. Formaldehyde manufacture is being established on a small scale in Mysore and the production of urea is very little beyond the experimental stage. Both these chemicals as well as phenol would have to be imported in order to establish a plastics industry to manufacture bakelite and beetleware.

"Chemicals required by the ordnance factories for ammunition production. - These are acetone, nitric and sulphuric acids, ethyl alcohol, ammonia and ammonium sulphate, lime, toluene, dimethylaniline and glycerin. Indigenous production of sulphuric acid, while ample to meet ordnance factory requirements, is not sufficient to meet all the needs of Indian industry. For this purpose an additional plant to expand production by about 10,000 tons will be required. The position is satisfactory in the case of other chemicals required for ammunition production, except toluene and dimethylaniline, and possibly ammonia. The toluene deficiency is about 1,300 tons. Increased production, as stated above, under coal-tar chemicals depends upon expansion of the iron and steel industry and the setting up of new coke ovens. Dimethylaniline requires methyl alcohol as one of the primary materials, and production of this alcohol is at present limited to recovery from the wood distillation plants of the Mysore Iron and Steel Co. There is a project under consideration in connection with the production of antigas ointment for the setting up of acetic acid production by wood distillation, and methyl alcohol would be obtained as a byproduct. Advice and plant may be required for production of acetic acid from alcohol or molasses.

"Other ammunition requirements are the carbonates, nitrates and peroxides of barium and strontium and potassium chlorate and perchlorate for pyrotechnics; reduced hammerscale and aluminium powder for incendiary bombs; also sodium azide and mercury for detonators. Most of these chemicals are required in comparatively small quantities and production is being established wherever possible. In other cases imports should not present difficulty as the total quantities involved will only amount to a few tons."
Large volcanic deposits of sulphur rock have been found in Baluchistan and the Government of India has arranged to excavate and sell crude sulphur for direct use in Chamber sulphuric acid plants. It was originally intended to refine the sulphur rock, but difficulties have been experienced and it has not been possible to place refined sulphur on the market. Technical advice and assistance might enable a useful contribution to be made towards strengthening India's supply position in essential chemicals by the evolution of a practicable refining process.

Plans are now going forward for the acquisition of a plant for the production of refined sulphur from the sulphur rock of Baluchistan which contains about 50 percent of siliceous impurities. A project is also under consideration for the establishment in India of a plant for the manufacture of coal-tar derivatives which are the essential bases in the manufacture of explosives and chemical products. The byproducts of such a plant would include coke, gas, ammonium sulphate, light oils, and tar. The light oils are used in the production of T.N.T. and the ammonium sulphate in the manufacture of fertilizer. Tar has many uses; it is especially important in the construction of roads. Coke and gas are valuable byproducts that could be used by iron and steel mills.

The Government of India already has on order equipment for a plant to produce ammonia. And it is considering the possibility of securing the necessary equipment for plants to manufacture sodium sulphide and antiperspirants, a chemical to counteract the effect of poison gas. Although there are several factories for the production of paint in India, imports are substantial. Moreover, the requirements for paint in India are likely to increase because of the enlarged war demand. A considerable saving in shipping could be effected if India were to become self-sufficient in the manufacture of this product. Nearly all of the necessary raw materials for the production of paint are available in India.

Drugs.

India is responsible for the supply of medical stores of all kinds to the armed forces in the Far Eastern command, and for the supply of those medical stores that it produces, to the armed forces in the Middle Eastern command. Considerable difficulty has been experienced in obtaining medical supplies from the United Kingdom, and consequently the production of drugs in India has been expanded. Whereas before the war only 25 percent of the medical stores for the Army were manufactured in India, 60 percent of the Army's requirements are now produced there. There are many items, however, that are not manufactured in India, and the quantity of drugs produced there is not always adequate to meet both the military and civilian demands.

The production of drugs in India is chiefly in Government depots. There is a private industry but it is of recent origin and small in capacity. The policy of the Government has been to continue the manufacture of drugs in its own depots until private industry is able to supply the demand. In pursuance of this policy, the Government is considering the installation of an additional plant for the manufacture of drugs in India, in order that that country might become practically self-sufficient in these important products. The installation and the operation of such a plant would doubtless require the services of
experts and technicians who would have to be obtained from either the United Kingdom or the United States. Such a plant, however, would eliminate the possibility of the loss of drugs at sea and would provide a central location for the supply of these essential articles in the Eastern and Middle Eastern areas. Most of the raw materials for the manufacture of drugs can be obtained in India.

In addition to the plant for the production of drugs, the Government of India wishes to obtain the equipment and materials necessary for the establishment of plants to manufacture coal-tar intermediates (for the production of synthetic drugs), surgical instruments, record syringes, and surgical gloves. The annual requirements of the Army in India are 600,000 syringes and 630,000 pairs of surgical gloves.

**Recommendations.**

1. The Mission recommends the acquisition of a plant for the refining of sulphur now being mined in Baluchistan.

2. It recommends the establishment of a plant for the manufacture of coal-tar derivatives.

3. It endorsed the projects of the Government of India to establish plants for the manufacture of sodium sulphide and antivers.

4. It agreed to use its influence to obtain early deliveries on equipment already ordered for a plant to produce ammonia.

5. It suggests that consideration be given to the establishment of an additional factory for the production of paint, in order that India may become self-sufficient in this product and thereby effect a saving in shipping.

6. It recommends the establishment in India of an additional plant for the manufacture of drugs in order that India may be nearly self-sufficient in these important products.

7. The Mission recommends the acquisition of the necessary equipment and materials for the production of coal-tar intermediates, surgical instruments, record syringes, and surgical gloves.

8. The Mission agrees to assist the Government of India in obtaining the machinery and materials necessary for the erection of these various chemical and drug plants.
Textiles

**Jute and Jute Manufactures.**

India is the sole source of the world's supply of jute, and that product, next to cotton, is India's largest agricultural export. Production is centered in Bengal which accounts for about 90 percent of the total; other producing areas are the Provinces of Assam, Bihar, and Orissa. In recent years production has ranged from 5,500,000 bales (1931) to 13,000,000 (1940); the average annual production has been about 9,000,000 bales.

Sowing begins each year toward the end of February and is completed by the end of May; the crop is harvested in the months of July through September. Approximately one-half of the total crop is exported as raw jute, and the remainder is manufactured into hessian or gunny cloth and bags in Indian mills. Most jute manufactures are also exported, inasmuch as India's requirements are not large. Before the war continental Europe was the principal market for Indian exports of raw jute and the United States was the principal market for jute manufactures, especially the cloth known in this country as burlap.

In the decade 1930-39 the jute mills of India suffered severely from overproduction. As a result the Government of Bengal, in 1938, promulgated an ordinance restricting output. Under the Bengal Jute Regulation Act the Government of Bengal has the authority to control the amount of jute sown in each season.

With the outbreak of the war an unusual demand was placed upon the jute mills, and the plantings of jute were increased. The crop in 1940 amounted to 13,100,000 bales which, together with the 2,300,000 bales left over from the previous season, created unusually large stocks for manufacture or export. The fall of France and the closing of continental European markets curtailed the exports of raw jute so that 7,900,000 bales remained in stock when the harvesting of the 1941 crop began. This crop was the first to be regulated in Bengal and the acreage sown was two-thirds of that in 1940. The yield in 1941 was about 5,400,000 bales, making a supply of 13,300,000. The probable demand for the fiscal year 1941-42 is estimated at about 8,500,000 bales, and the carry-over before the 1942 crop, at 4,800,000. Sowings in the 1942 season will be so regulated as to satisfy all probable demands in the fiscal year 1942-43, but no margin above estimated requirements has been allowed because of the necessity for stimulating the production of rice, the supply of which has been curtailed by the fall of Burma.

Before the war, when the jute mills in India were working 45 hours a week, they consumed annually about 6,750,000 bales. Shortly after the war began, the Government allowed an extension of working time beyond the normal maximum of 54 hours a week permitted by the Factory Act to 60 hours a week on single shift. On this basis the mills would consume about 7,200,000 bales annually. The raw material position, therefore, is satisfactory.

---

1/ Each bale weighs 400 pounds.
2/ As reported by officials of the Department of Supply, Government of India.
India has 110 jute mills, most of which are in or near Calcutta in the Province of Bengal. These mills have more than 1,300,000 spindles and 68,676 looms, and employ more than 250,000 persons. Operating on the basis of 60 hours a week, their annual production of cloth and bags exceeds 1,300,000 tons. India's war and essential civilian requirements for jute goods are estimated at about 45,000 tons; the remainder is available for export. The primary problem affecting jute and jute products, therefore, is labor and transportation which has been adversely affected by the closing of the Bay of Bengal to ships of the United Nations. Jute and jute products, exported from India, must first be transported across the country by rail to Bombay or one of the other west-coast ports, and shipments are being retarded because of this and other unusual burdens placed on the railroads.

Cotton and cotton manufactures.

India is the world's second largest producer of cotton, being exceeded only by the United States. Annual production averages about 7,000,000 bales of 400 pounds each. The cultivation of cotton is widely distributed throughout India, but there are two principal producing regions: The south-central section of the country embracing Bombay, the Central Provinces, the State of Hyderabad, and Madras; and the northern section including the Punjab and the United Provinces. The average annual yield of cotton per acre is appreciably lower in India than in the United States, and very much lower than in Egypt. Customarily, about one-half of the cotton produced in India is used by local cotton textile mills and the remainder is exported. Before the war the principal market was Japan. The closing of this market has created a surplus of raw cotton in India which is only partially offset by the enlarged demand of Indian mills. These mills have increased their production to meet war demands and to compensate for the cessation of imports of cotton manufactures from Japan. Although India has a surplus of cotton available for export, it is short-staple cotton. India, therefore, must import annually about 42,000 bales each of East African and Egyptian raw cotton for the spinning of fine thread counts to be used in the manufacture of certain war supplies.

The manufacture of cotton textiles is undoubtedly the largest industry in India. There are about 390 mills in the country, with 10,000,000 spindles and 200,000 looms. The workers employed number about 450,000. The annual output of these mills is between 5 billion and 6 billion yards. The cotton spinning and weaving industry is centered in the Presidency of Bombay which accounts for approximately two-thirds of the total production. The two principal centers of production in the Province are the cities of Bombay and Ahmedabad. India's total production of 8 billion yards, which includes the annual output of the hand-loom industry of 2 billion yards, is sufficient to meet that country's military and civilian requirements. Indeed, the cotton textile industry has pledged 20 percent of its production to meet military requirements and would, if necessary, increase this percentage.

Inasmuch as the capacity of the cotton textile mills is adequate to care for India's requirements, no major projects for new plants are necessary. A limited amount of additional equipment, however, is required to obtain the maximum potential capacity of existing mills. Most of this machinery will be obtained from the United Kingdom which supplied the initial installations. In order to obtain additional
power and to have adequate facilities for emergencies, however, the Government of India has requested that the United States supply a few electric motors for use in the cotton textile industry.

**Wool and wool manufactures.**

The total wool clip of India is estimated at about 200,000 bales of 330 pounds each, or 66,000,000 pounds. Production is widely distributed throughout India, but the principal centers are the Punjab, the United Provinces, Sind, and Baluchistan. Before the war exports from India ranged from 40,000,000 to 50,000,000 pounds. The United Kingdom and the United States were the principal markets. In 1941-42 India imported 13,400,000 pounds of Australasian and South African wool and 10,600,000 pounds of Australian tops.

The production of wool in India is more than adequate for that country's manufacturing capacity for blankets, both machine- and hand-woven. Most Indian wool, however, is not suitable for combing, although a few frontier types and the Tibetan wools, with a combined clip of about 5,000,000 pounds annually, can be combed for use in the coarse varieties of worsted and hosiery yarns. The quality of the finished article, however, is inferior, and the combing yield is 40 percent less than for Australian and South African wools. The combing of local wool, therefore, would greatly reduce the efficient use of combing equipment which, even when employed to capacity on imported wools, is only sufficient to meet about 40 percent of India's war requirements. The remainder must be imported chiefly from the United Kingdom or Australasia in the form of tops, finished woolen materials, knitted garments, or knitting yarn which is utilized by the cottage industries as well as the mills.

There are about 30 woolen and worsted mills in India. The woolen industry is small, with limited output. The industry has about 45,400 spindles with an adequate complement of looms, and is engaged in the production of heavy woolens, such as blankets, heavy coating materials, and serges to meet the military demand. The blankets are made entirely from Indian wool, and mill production, amounting to 2,500,000 annually, is supplemented by hand-woven and hand-spun blankets which are being produced at the annual rate of about 2,000,000. Annual requirements for use in India and for export, however, amount to 5,000,000 blankets; thus there is an annual deficiency of about 500,000. The heavy coating materials and serges are customarily made from imported wool. The coating materials can be made from Indian wools, but the quality does not compare favorably with those made from imported wool. The worsted industry in India has about 33,700 spindles and an adequate number of looms, but these are quite insufficient to meet the demand for worsted materials and hosiery.

The entire output of the wool manufacturing industry has been taken over by the Government of India for the duration of the war. To increase India's manufacturing capacity for woolens and worsteds to meet war demands, the Government has estimated that the following additional equipment would be required.
Spindles for woolens 70,000 with all necessary complementary equipment
Spindles for worsteds 50,000 with combing and other complementary equipment
Looms 3,000

To provide the necessary raw material for this additional plant, it is further estimated that 45,000,000 pounds of raw wool would be required annually. Most of this wool would have to be imported, but wool for the manufacture of blankets could be obtained locally. Inasmuch as all, or nearly all, of the machinery required for this industrial expansion would come from the United Kingdom, the Government of India made no request for assistance from the American Technical Mission.

Silk and silk manufactures.

Raw silk is produced in southern India in Mysore State and Madras, and in northern India in the Provinces of Bengal, Bihar, Assam, and Kashmir. Annual production amounts to about 1,600,000 pounds, but of this quantity only about 350,000 pounds is filament-reeled, the remainder being hand-reeled and not of standard quality. Only silk that is filament-reeled is suitable for the manufacture of parachutes. The total production of this type of silk is being purchased exclusively by the Government. India is not a large exporter of silk. Indeed, the country is a net importer of that commodity which is used in the production of special types of hand-woven textiles characteristic of India.

The annual value of the silk goods produced in India has been estimated to range from $20,000,000 to $25,000,000. There are three small mills, in Calcutta, Bombay, and Mysore, in which silk fabrics are manufactured on power-driven looms, but the quantity of raw silk utilised in these mills is a very small part of the total, the hand-loom weaver being by far the largest consumer. Important weaving centers are Benares, in the United Provinces, and Surat, in the Presidency of Bombay. Other centers are in the Punjab, Bengal, the Central Provinces, Bihar, Mysore, Madras, and Kashmir. Exports of silk goods are not large, most of the production being consumed locally. The hand-loom industry is protected by a duty imposed on both silk and rayon, effective May 1934.

Recommendations.

1. The Mission recommends that every effort be made to expedite the movement of jute products by rail, although it recognises the unusual conditions under which the railroads of India are now operating.

2. Inasmuch as the capacity for the manufacture of jute products in India exceeds the effective export demand, the Mission recommends the conservation of electric power by the closing of those jute mills, the products of which are not now required.
Recommendations—Continued.

3. The Mission recommends that the request of the Government of India for electric motors to provide additional power and emergency equipment for the cotton textile industry be supplied through the Lend-Lease Administration.

4. The Mission recommends that efforts be made to expand the capacity for the production of filature-reeled silk in order that more substantial quantities of this important material may be made available for the manufacture of parachutes for India and others of the United Nations.

Hides, Skins, and Leather

It is estimated that there are about 200,000,000 cattle, 26,000,000 goats, and 22,000,000 sheep in India. Because of the religious tenets of a large number of the Indian people, only a small percentage of Indian raw hides are from animals actually killed or slaughtered; most of the hides are from animals that have died from natural causes. The annual production of marketable raw hides is estimated at about 7,000,000. In relation to the number of cattle, this production is considerably below that in most other cattle-raising countries. Moreover, the average quality of the hides from India is lower than that of hides from the United States and Argentina.

India is the world's third largest producer of sheepskins, being exceeded only by the United States and Australia; average production in India is somewhat in excess of 15,000,000 skins. India, however, is the largest producer of goat and kid skins in the world; annual production amounts to about 34,500,000 skins, or approximately 30 percent of the world total.

India is a large exporter of hides and skins. Exports of these products from India in recent years are shown in table 16.

Table 16. - Hides and skins: Exports from India

<table>
<thead>
<tr>
<th>Type</th>
<th>Fiscal year: 1935-36</th>
<th>Average: 1934-38</th>
<th>April 1, 1941 to March 31, 1942</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons : 1,000 pcs.</td>
<td>Tons : 1,000 pcs.</td>
<td>Tons : 1,000 pcs.</td>
</tr>
<tr>
<td>Hides1/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw</td>
<td>22,677 : 4,556</td>
<td>8,915</td>
<td>2,126</td>
</tr>
<tr>
<td>Tanned</td>
<td>14,029 : 16,994</td>
<td>16,994</td>
<td></td>
</tr>
<tr>
<td>Skins2/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw</td>
<td>21,195 : 50,012</td>
<td>25,878</td>
<td>36,682</td>
</tr>
<tr>
<td>Tanned</td>
<td>6,275 : 3,632</td>
<td>3,632</td>
<td></td>
</tr>
</tbody>
</table>

1/ Principally cattle hides.
2/ Principally goat and sheep skins.
The recent decline in the exports of hides and skins from India is due to the closing of markets in continental Europe and Japan to the products of India, and to the increased demand for hides and skins within India. The decline in the exports of hides occurred entirely in raw hides, tanned hides having increased somewhat over previous years. The decline in exports of skins, however, is due chiefly to the reduction in exports of tanned skins. Most of the hides are customarily exported from Calcutta, and most of the skins, from Calcutta, Bombay, Karachi, and Madras. Since the closing of the Bay of Bengal, however, this traffic has been diverted to ports on the west coast.

In 1933 there were 14 leather and shoe factories, 32 tanneries, and 9 hide and skin processing plants in India. These plants are located principally in Cawnpore, Bombay, and Madras. Since the out-break of war the production of leather and leather goods has been expanded appreciably because of the increased demand for consumption within India and for export to the United Kingdom. Exports of boots and shoes, for example, were 4,000,000 pairs in the 12 months beginning April 1, 1941, as compared with 3,000,000 pairs in 1939. The United Kingdom is the principal overseas market for tanned hides and skins from India; it is also the principal market for leather goods, especially boots and shoes. India's military and essential civilian requirements for boots and shoes, and the orders placed in India for these products by the United Kingdom, exceed India's productive capacity. This matter was called to the attention of the Mission by the Government of India which requested assistance in obtaining additional machinery and equipment for the manufacture of boots and shoes.

**Recommendations.**

1. The Mission recommends that the additional equipment necessary for the Government of India to meet its requirements for boots and shoes be made available through the Lead-Lease Administration.

2. The Mission suggests that any substantial increase in the productive capacity for shoes and other leather goods may place a severe burden on the tanneries of India. The Government of India, therefore, may wish to consider the possibility of expanding the capacity of tanneries as well as leather factories. The Mission is willing to assist the Government in obtaining the machinery and equipment necessary for such expansion.

**Timber and Lumber**

Forests cover about one-fifth of the land area of India. British India has nearly 95,000 square miles of timberland, or more than 11 percent of the country's total area; in addition, there are extensive tracts of timber in the Indian States. It is estimated that the annual yield of timber and fuel from India's forests amounts to about 376,000,000 cubic feet. The forest areas are well-distributed throughout the country; in the north are the great coniferous forests of the Himalayas, in the south the teak and furniture woods of the Western Ghats, and in the central region the varied timbers of the jungle areas. There are about 28 different Indian woods already in commerce, and in some instances, as many as 12 different grades of one kind of timber are recognised.
Large quantities of timber are required by the armed forces within India and in other Empire countries. In response to this demand, India has exported substantial quantities of timber and lumber to Empire countries and to others of the United Nations. Because of the enlarged demand, it is anticipated that the production of sawed timber in India may amount to as much as 750,000 tons in 1942. In addition, the lumber industry is currently engaged in the production of 10,000,000 tent poles and 76,000,000 tent pegs. Large quantities of lumber are required for the construction of barracks, munition boxes, and other products for the armed forces. Moreover, timber is of course in demand for such indirect war uses as the construction of telegraph poles, railway ties, wharf timbers, and bridges.

In addition to timber, India's forests provide a variety of raw materials for the manufacture of paper, and substantial amounts of such materials are annually exported. There are several pulp and paper mills in India, located in Bombay, Bengal, the United Provinces, Madras, Punjab, and Travancore. These mills produce wood pulp and, prior to the war, they also manufactured annually 33,000 tons of bamboo pulp and 22,000 tons of sabai grass pulp. India's paper mills produce kraft, writing, and printing paper, and supply about one-fifth of local requirements.

The forests of India are under the direct control of the Government. Private lumbering operations are conducted under license and have been a source of considerable governmental revenue. The forest resources of the country, however, do not appear to have been adequately developed, and only a small part of the total is actually being exploited. The Department of Supply, operating through the Provincial Governments, now exercises considerable control over the distribution of timber in India. The Timber Directorate of the Department arranges for all purchases of timber, lumber, and woodwork required by the defense services. The agencies for obtaining timber are the Forest Departments of the Provinces and States which, in this connection, operate as executive branches of the Timber Directorate. The Directorate maintains timber depots at Karachi, Bombay, Cochin, and Calcutta, having a capacity of about 60,000 tons of timber. These depots are designed to meet the demands of Overseas Commands.

The estimated direct and indirect requirements of sawed timber for the armed forces in 1942 are 750,000 tons. Of this quantity, only about 450,000 tons can be sawed by hand in the forests; the remainder must be sawed at the mills. Although there has been a considerable increase in mill capacity, the current annual output is estimated at only 150,000 tons. In order to meet defense requirements, therefore, the Government of India requested that additional equipment for sawmills be made available. It suggested that the most efficient type of machinery for work in India would be small, portable mills, driven by steam, and that the aggregate annual capacity of these mills should be 100,000,000 board feet, or 166,666 tons. All sawmill equipment, including band and circular saws, must be imported into India, with the exception of small band saws suitable only for cutting softwoods.
The Mission observed that saved lumber from the forests was trans­
ported to manufacturing centers without being dried or seasoned. This
policy greatly increases the weight of the lumber transported by the
railroads. It adds, of course, to the cost of transportation and repre­
sent an inefficient utilisation of transportation facilities. If dry­
ing kilns were erected adjacent to the sawmills or to lumber mills at
the railheads, it would be possible to season the lumber prior to ship­
ment, thereby affecting an increase in transportation efficiency and a
reduction in its cost.

In addition to indigenous woods, India requires annually between
15,000 and 20,000 tons of Oregon pine for shipbuilding and ship repairs,
there being no adequate substitute available there. Supplies of Indian
fir and spruce are located in the northwestern Himalayas, and are too
far from the shipbuilding and ship-repair yards to permit their econom­
ical transportation. Moreover, the timber must be floated down narrow
streams to reach the railways and therefore can only be supplied in
short lengths. The Indian Government requested that adequate amounts
of Oregon pine be supplied by either the United States or Canada.

Although the plywood industry in India has recently been expanded,
its annual production is now about 5,000,000 square feet and is just
adequate to meet military requirements and those for the manufacture of
tea chests. India has additional and increasing need for plywood for
the assembly and repair of aircraft and for the manufacture of light
pontoons and assault boats. For the manufacture of such plywood, the
Government of India requires modern machinery, including hot presses;
it would also require equipment for the manufacture of synthetic resin
which is now produced only in very small amounts.

India consumes annually about 3,500,000 square feet of wallboard,
such as Celotex or Masonite, most of which is imported. It would be
possible to expand appreciably the consumption of this product for both
military and essential civilian requirements, and thus eliminate some of
the nonessential uses of lumber. India has adequate supplies of raw
materials for the production of wallboard but lacks the necessary
machinery and equipment.

Recommendations.

1. The Mission recommends that the Government of India
review carefully its administration of forest resources in an
attempt to improve their development and exploitation, not
only because of the advantages to be derived from such a
policy in the present emergency, but also because of the
benefits that would be certain to accrue in the future.

2. It recommends that India be supplied with portable
steam-driven sawmills, having a combined annual capacity of
at least 100,000,000 board feet.
3. It suggests that careful study be given to the problem of transporting lumber made of Indian fir and spruce from the Himalayas to the principal consuming centers. Should this prove impractical, the Mission recommends that adequate quantities of Oregon pine be made available to India for use in the repair of ships and in essential ship construction.

4. It also recommends that additional machinery and equipment for the manufacture of plywood be made available to India in order that the Government may meet the increased demand that military necessity has placed upon it.

5. It further recommends that the machinery and equipment necessary for the manufacture of wallboard be made available to the Government of India in order that local production may replace imports.

Foodstuffs

Inasmuch as most foodstuffs are products of agriculture, they do not come directly within the purview of the Mission. It wishes, however, to make a few comments on related subjects which it believes might affect, at least indirectly, India's industrial war effort. India has long been a very large producer of rice, the annual quantity harvested being about 25,000,000 tons. Although production in India accounts for about two-fifths of the world total, this rice has all been consumed within the country and large quantities, ranging from 1,500,000 to 2,500,000 tons, have regularly been imported from Burma, Thailand, and French Indochina. These regions are not now possible suppliers and, therefore, production in India must be increased to meet basic requirements. Because of the urgency of this situation, the Mission was gratified to note the energetic steps being taken by the Government of India to stimulate the cultivation of this essential cereal. Tea is also a major agricultural crop in India, but it presents no special problem, except that of transportation from the principal producing centers in Assam, Bengal, Travancore, and Madras to the United Kingdom and the United States.

The Mission feels impelled to call attention to the lack of modern slaughterhouses and refrigeration plants in India. Such equipment, it believes, is essential to the proper rationing of the armed forces of the United Kingdom and the United States. Despite possible political difficulties, it suggests that the Government of India, as a war measure, may wish to consider the advisability of erecting such plants. Similarly, the Mission observed what appeared to be a need for the purification of two basic constituents in diet, salt and water. Inasmuch as salt is a Government monopoly, the installation of a salt purification plant should present no great difficulty. And the chlorine produced in India could be used to assist in the purification of the water supply at locations judged to be strategic by the armed forces.
Two specific problems relating to foodstuffs were placed before the Mission by the Government of India. One of these was the preserving of fruits, vegetables, and jams, the raw materials for which are all produced locally. India's annual requirements for these products were reported to be as follows:

<table>
<thead>
<tr>
<th>Product</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canned vegetables,</td>
<td>6,000</td>
</tr>
<tr>
<td>including tomatoes</td>
<td></td>
</tr>
<tr>
<td>Canned fruits</td>
<td>4,000</td>
</tr>
<tr>
<td>Jam and marmalade</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Inasmuch as the preservation of these foodstuffs would conserve India's already inadequate supplies, and would effect an appreciable saving in shipping, the project appears worthy of serious consideration.

The Government of India reported to the Mission that its annual capacity for producing army service biscuits was only 5,000 tons and that the annual demand of the armed forces was for 10,000 tons. It requested the assistance of the Mission in obtaining additional equipment with which to double its present biscuit-making capacity. If the capacity for the production of biscuits and bread should be appreciably increased, it might be necessary also to expand the capacity of flour mills in India to meet the increased demand of the bakeries for flour of the proper type. The Mission suggests that the Government of India may wish to investigate this possibility.

Recommenations.

1. Should it be requested by the Government of India, the Mission recommends that efforts be made to secure for India machinery and equipment necessary for the preservation of vegetables, fruits, jams, and marmalades as a measure for the conservation of both food and shipping.

2. The Mission strongly urges that the request of the Government of India for the equipment necessary to produce annually 5,000 tons of army service biscuits be promptly granted.

Experts and Technicians from the United States

The recommendations made by the Mission are designed to increase the capacity and production of a number of Indian industries essential to the war effort. The implementation of these recommendations for the expansion of production will take three principal forms: (1) The erection of new plants, (2) the installation of additional equipment in existing plants, and (3) the rearrangement of the machinery and equipment in existing plants. For this work the services of a number of experts and technicians will be required and India will be unable to provide all of the skilled personnel necessary to accomplish the task.

1/ The army service biscuit in India is made from heavy dough; when baked, it weighs 16 biscuits to the pound and is 3 inches by 2-3/4 inches by 5/16 inch in size.
The Government of India, therefore, requested the Mission to assist it in obtaining the services of several trained technicians and experts from the United States who, by virtue of their knowledge and experience, could act as temporary advisers on industrial production.

As a result of its investigations the Mission suggested to the Government of India that experts be sent from the United States to assist in solving the problems in transportation that have arisen because of the unusual burdens placed upon the railways and the congestion at west-coast ports. Moreover, to stimulate industrial production, the Mission suggested that six production engineers from the United States be sent to India. These experts, acting as advisers to the Government of India, would be able to offer constructive suggestions for the improvement of plant arrangements and methods of production in privately owned factories and in those owned by the Government.

The Government of India approved these suggestions and offered to make such experts its guests during their stay in India. The Mission, on its part, agreed to recommend that the salaries of these experts and their traveling expenses should be borne by the Government of the United States.

Because of plans to increase the production of essential war materials, officials of the Government of India have stated that, for special assignments, they would require the services of additional experts from the United States and requested the assistance of the Mission in obtaining them. The traveling expenses and salaries of all such experts would be paid by the Government of India. Officials of the Government asked for three technicians for the manufacture of machine tools who could supervise the programs of existing workshops, and who could teach and demonstrate production technique. It asked for two expert jig and tool makers and two expert jig and tool setters. It requested the services of an expert in the manufacture of tools, particularly shell tools, and for an expert in nonferrous metals who has training and experience in metallurgical work, including casting, drawing, and rolling. It also asked for two instrument makers skilled in the manufacture of surveying and other scientific instruments. These requests were endorsed by the Mission and a telegram was despatched to the Government of the United States asking that inquiries be made concerning the possibility of obtaining the services of such men.

Should other recommendations of the Mission be implemented, officials of the Government of India indicated that they would require additional expert assistance. Specific mention was made of experts for die casting, sulphur refining, coal-tar distillation, and the manufacture of record syringes and surgeons' gloves. Concerning these possible requests, the Mission agreed to render whatever assistance it could when the need should arise.

Officials of the Tata Iron and Steel Company asked the Mission, while it was in Jamshedpur, to assist the company in obtaining from the United States the services of two production engineers. It is the plan of the company to make one of the engineers superintendent in charge of its railroad wheel, tire, and axle plant. The other engineer would advise the company concerning the operations of its machine shops, with a view to increasing their load and efficiency.

1/ See Recommendations, section on Transportation and Communication.
1. The Mission recommends to the Government of the United States that experts be made available to advise the Government of India on problems pertaining to transportation and industrial production.

2. It agreed to assist the Government of India in obtaining from the United States various technicians and experts to assist in its program for the expansion of the production of essential war materials.

3. It agreed to assist the Government of India in obtaining additional expert assistance when specific needs should arise.

4. It further agreed to assist the Tata Iron and Steel Company in obtaining from the United States the services of two production engineers.

Labor

The Government of India and some of the Indian States have inaugurated schools for the training of various types of technicians, ranging from chauffeur mechanics to machine-tool operators. In addition, several of the large factories have training programs for young and inexperienced employees. The Mission was impressed with the good quality and excellent potentialities of Indian labor. The Indian is skillful with his hands, and, given satisfactory working conditions with security of employment, is dependable and industrious.

In a number of plants visited by the Mission, workers who had never been in an industrial plant until recently were doing skilled work, and the labor turnover was small. These plants are the exception rather than the rule, but the accomplishments there could be achieved elsewhere. Even in zones subject to air attacks, laborers have remained at their work. The Tata Iron and Steel Company is a good example. While some plants in and around Calcutta have been losing as high as 50 percent of their labor because of apprehension concerning hostilities, the Tata Company in an equally hazardous position has had almost no loss. The flight of labor from the Calcutta area, where about 75 percent of war production is taking place, presents a serious current and future threat to sustained production. The Mission is not impressed by the argument of many industrialists that special wage bonuses in danger areas will stimulate, rather than diminish, the "flight from plant" because laborers will wish to spend these extra earnings in their home villages. The Tata Company and some other plants have had no such experience. The Tata Company has a system of bonuses and has acquired a 4 weeks' supply of food near the plants; it also has hostels and air shelters which give the workers a sense of security from the hazards of air attack. Workers are much the same the world over. They will respond favorably to good working conditions, security of employment, and opportunity for increased earnings.
The labor training program of the Department of Labor seems well conceived and ably directed. It is doubtful, however, that its present scope is adequate for the required expansion of industrial production in India. At least twice the present number of trainees would seem to be necessary. While training by the Department must be supplemented in the plants where the young men will be employed, it reduces the time of training that would otherwise be required in the plants. The Mission feels strongly that plant training must also be greatly augmented. Plant managers are somewhat reluctant to make investment in training, but the experience of industrial countries like the United States demonstrates that sums spent for this purpose are fully justified from the standpoint of both the volume and cost of production.

The technical personnel which the Mission is seeking in the United States will aid in attaining the aims of the training program by the introduction of refinements in the technique of mass production. Trained personnel can usually increase its production if the ratio of machinery to manpower is also increased. Moreover, mass-production plants require less skill per unit of output than do jobbing plants.

The increased industrialization in India, whether for purposes of war or peace, and the effective training of labor, will be largely conditioned by the attitude of the Government and the industrialists toward wages and labor conditions. There must be a real incentive in increased earning power to induce young men to seek and accept training. Given the possibility of steadily increasing earnings, favorable working conditions, and adequate security, India will rapidly develop a body of skilled labor adequate for the expanding program of war production.

Recommendations.

1. The Mission recommends that the training programs conducted by the Department of Labor of the Government of India and by some of the Indian States be expanded, as rapidly as possible, to at least twice their present size.

2. It recommends that the Government of India encourage the expansion of training programs in private industries and the inauguration of such programs in those industries which are not now conducting them.

3. It further recommends that the Government of India adopt a policy designed to enhance the earning power of labor, to improve its working conditions, and to provide increased security against both hostilities and unemployment.
Conclusion

In concluding this report, the Mission wishes to reemphasize its belief in the strategic importance of India to the cause of the United Nations. It desires again to call attention to India's great potentials for industrial production because of its vast natural and human resources. The Mission feels that the utilization of the natural resources can be greatly developed and expanded, provided adequate tools are made available for that purpose, and it has seen evidence of the mechanical aptitude of Indian workmen who, given the proper incentives and working conditions, can become skilled craftsmen after a short period of training.

The American Technical Mission to India is strongly of the opinion that the prompt implementation of the recommendations contained in this report will not only strengthen the defense of India but will also permit that country to become a base for decisive offensive action against the enemy. It believes that India affords a unique opportunity to turn the tide of battle on the Eastern Front against the Axis Powers. It urges, therefore, that the most serious consideration be given to its recommendations by the Governments of India, the United Kingdom, and the United States, in order that full advantage may be taken of the opportunity thus presented.

Henry F. Grady, Chairman

Dirk Dekker

A. W. Harrington

Frank A. Waring, Executive Officer
MEMORANDUM ON
PERSONNEL AND TRAINING

Submitted to
Henry F. Grady, Chairman
American Technical Mission

By
Dirk Dekker
Member of the Mission
Personnel and Training

Maximum efficient production requires a balance in (1) material, (2) machinery, (3) methods, and (4) men. The Mission has dealt elsewhere with material and machinery, and to some extent with methods. The following recommendations deal with men, and, by inference, with methods.

The problem under highly stimulated production and expansion is essentially one of quick conversion of sheer "manpower" into "productive power" on a large scale, in a short time, to a maximum degree.

Training efforts in Indian industries range from none to those that are comparable with the best in the United States. Allowing for some handicaps inherent in India, the technical training scheme of the Department of Labor (March 1942) forms a good basis upon which to give young men fundamental training in the usual trades or crafts.

In view of the above, and other personal observations, I now recommend:

1. The appointment of a Commissioner of Industrial Training, directly under the Labor Member.
2. The utilization of the present recruiting, inspecting, and visiting organisations in the Department of Labor, which cover practically the whole of India, to advance the program of training within industry.
3. The enlargement of these groups by selecting additional personnel for the same purpose.
4. The schooling of this entire personnel in how to teach and train.
5. The giving of short courses by this specially trained personnel to groups of 12 foremen and skilled men (who will be, or are, doing training in war industries) on how to instruct new workers.2
6. All technicians and experts sent from the United States should be given this short course before their departure from the United States.
7. Technical or supervisory personnel must be obtained:
   a. From abroad, for the most highly specialized.
   b. From Indian universities and colleges.2
   c. By systematic help, encouragement, and "upgrading" of the skilled Indian worker.3

1/ This program follows essentially the plans of the War Production Board for Training Within Industry now used effectively in the United States. In minor respects it should be adapted to India.
2/ To expedite the program the college years should be shortened.
3/ Prerequisites must be relaxed to a minimum.
8. Visual instruction aids should be used to help in the training of young men for the machinist trades. Excellent sound movie films are available in the United States for this purpose.

9. Those engaged in training should also be made aware of the rudiments of time and motion study.

10. The development of this program should be the responsibility of the Commissioner of Industrial Training.

Dirk Dekker

Calcutta, May 8, 1942
I report for the information of my colleagues that the Governor of Burma has proposed and that I have agreed that he should issue a Proclamation under Section 139 of the Government of Burma Act declaring that all his functions shall be exercised by him in his discretion and assuming to himself all the powers of the Legislature. This action is necessary owing to the impossibility of summoning the Chambers of the Legislature (which have in fact already been dissolved) and consequently of conducting the affairs of Burma in accordance with the provisions of the Act.

One consequence will be that the two Ministers who accompanied the Government of Burma to India will cease to be "Ministers".

I anticipate, however, that Sir R. Dorais-Smith will appoint them to posts on the salaries drawn by them as Ministers. He will thus be able to continue to avail himself of their services in an advisory capacity as he does at present. It is proposed that the Proclamation should issue in the near future as soon as certain points of detail as to its contents have been settled.

L. S. A.

Burma Office,

October 13, 1942.
WAR CABINET.

PROPOSED SCHEME FOR RECEPTION IN SWITZERLAND OF CHILDREN FROM OCCUPIED EUROPE.

Memorandum by the Secretary of State for Foreign Affairs.

ON the 2nd June the War Cabinet postponed further consideration of a proposal that limited quantities of milk for children should be allowed to enter enemy-occupied Allied territories; and the Prime Minister subsequently informed the Belgian Ambassador of the reasons why we could not at present agree to such a proposal as regards Belgium.

2. I think my colleagues will be interested to know that the Minister of Economic Warfare and I have considered whether some means could not be found of offering alleviation of the lot of children in Belgium and other Allied occupied territories, without impairing the principle that Germany is solely responsible for feeding the countries she has overrun. We reached the conclusion that the best way of doing this would be to encourage the Swiss Government to develop arrangements they have already made for receiving Allied children in Switzerland for recuperative visits. Our encouragement would take the form of offering to grant navicerts, over and above Switzerland's normal rations, for certain goods which Switzerland might need to import to feed and look after a fairly considerable number of Allied children. This plan is now under consideration with the United States Government, who appear to be strongly in favour of it, and who have already broached it to the Swiss Government.

3. While the Germans are quite likely to sabotage the scheme, partly at least on the ground that they cannot afford to make the necessary arrangements to transport the children to Switzerland, it represents in present circumstances a most desirable gesture on our part towards helping these children in some way, without impairing the blockade or aiding the enemy. As such, and particularly in view of Field-Marshal Göring's recent threat that the occupied countries must starve to feed Germany, this scheme is, I think, well worth proceeding with.

A. E.

Foreign Office, October 13, 1942.
SUMMARY OF OPERATIONS OF BOMBER COMMAND FOR FORTNIGHT ENDING 1200 HOURS, SUNDAY, SEPTEMBER 27.

Memorandum by Secretary of State for Air.

HEAVY attacks were delivered on Bremen, Wilhelmshaven, Essen, Saarbrücken and Munich; Vegesack, Flensburg and Wismar were attacked by smaller forces; daylight attacks were made on Ijmuiden, power stations in the Lille-Bethune area, and on the Gestapo headquarters at Oslo.

The mining effort was considerable, and though the full results cannot yet be confirmed there is good reason to believe that the number of vessels sunk and damaged was greater than any yet achieved.

Operations.

Bombing.

Night—

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bremen</td>
<td>13/14</td>
<td>448</td>
</tr>
<tr>
<td>Wilhelmshaven</td>
<td>14/15</td>
<td>202</td>
</tr>
<tr>
<td>Essen</td>
<td>16/17</td>
<td>309</td>
</tr>
<tr>
<td>Munich</td>
<td>19/20</td>
<td>90</td>
</tr>
<tr>
<td>Saarbrücken</td>
<td>19/20</td>
<td>118</td>
</tr>
<tr>
<td>Vegesack Submarine Yard</td>
<td>23/24</td>
<td>24</td>
</tr>
<tr>
<td>Flensburg Submarine Yard</td>
<td>23/24</td>
<td>28</td>
</tr>
<tr>
<td>Wismar Town and Aircraft</td>
<td>23/24</td>
<td>83</td>
</tr>
</tbody>
</table>

Day—

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Submarine Patrols</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Cherbourg</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Wiesbaden</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Anti-Submarine Patrols</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Ijmuiden Steel Works</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>Haarlem Gas Works</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>Power Stations in the Lille-Bethune area</td>
<td>22</td>
<td>18</td>
</tr>
</tbody>
</table>
Day (continued)—

Anti-Submarine Patrols 22 September 7 aircraft
Anti-Submarine Patrols 23 ,, 5 ,,
Anti-Submarine Patrols 24 ,, 5 ,,
Anti-Submarine Patrols 25 ,, 5 ,,
Oslo Gestapo Headquarters 25 4 ,,
Anti-Submarine Patrols 26 ,, 6 ,,

Mining.

790 mines were laid during the period under review, of which a large proportion was of a new type.

There is every reason to believe that the results have exceeded anything achieved before, but reports of sinkings are often long delayed and it will probably be some time before full results are known. The following recent sinkings have been reported, some of which may have been due to the new type of mine:

(i) Recently the German cargo ship Hamburg of 5-6,000 tons was in dock at Copenhagen being repaired after hitting a magnetic mine.
(ii) On the 7th–8th September the Swedish wireless announced that the Swedish steamer Tynningbo of 4,272 tons was mined off the German North Sea Coast.
(iii) On the 17th September a steamer was damaged by striking a mine on the Kattegat.
(iv) On the 19th September the Danish Koldinghus (6,742 tons) sank in Aalborg Bay.
(v) On the 19th September the Danish wireless announced that a steamer sank in the Kattegat, south of the Centre lighthouse.
(vi) On the 24th September the Finnish Freighter Navigator (8,000 tons), with a cargo of ore, was damaged off Trelleborg.
(vii) On the 25th September the Dutch steamer Vladderveen (133 tons) sank in the Sound.
(viii) On the 17th August the German transport Wuri (7,000 tons) was mined and sank off Limfjord in the Kattegat. She carried 500 G.A.F. mechanics and 1,000 other men and equipment. 400 casualties were landed at Aalborg, and it is known that at least 100 men were lost.

Operational Achievements.

2. Bad weather has seriously restricted reconnaissance during the past fortnight; consequently there is little information available about results of attacks, some of which are known to have been successful.

Bremen (13th/14th September).

3. After the raid on 4th/5th September it was estimated that about one-fifth of the centre of the city had been demolished. 448 aircraft, including 138 drawn from training units, attacked again on 13th/14th September. There is evidence that by the end of the attack fires had obtained a good hold and that concentrated damage was caused both in the city and in a large industrial area in the South-Eastern suburbs.

The "Solglimt" (15th September).

4. The Norwegian whale oil factory ships Solglimt (12,246 tons) and Olewegger were captured by a German raider in the Antarctic and sent to Bordeaux with prize crews. Recently both ships made their way up the West Coast of France and into the Channel. Olewegger is now at Rouen, but Solglimt was sunk on the 15th September by Bostons of No. 2 Group at Cherbourg. (Print No. 1.) Subsequent photographs show the ship lying on her port side with water covering her decks.

Wilhelmshaven (14th/15th September).

5. Although activity at Wilhelmshaven is now much reduced, it is still producing a few submarines, and carrying out repair work to naval units. It will be recalled that the raid on the 8th/9th July resulted in widespread damage on three sides of the Bauhafen, including the submarine building yard; on the 14th/15th September 202 aircraft attacked again. A good concentration of aircraft was achieved over the city and harbour, and large fires and explosions were seen. The attack is thought to have been most effective.
Essen (16th/17th September).

6. A force of 369 aircraft, including 126 drawn from training units, was directed against Essen. Cloud over the target was greater than expected, and this, together with the industrial smoke always present and the density of the defences, made the task the most difficult undertaken in recent weeks. Night photographs indicate that a considerable proportion of the force dropped their bombs near Essen, while some crews definitely found and bombed either the town or Krupp's works. Results cannot be assessed until day photographs have been taken.

Reports continue to be received concerning damage done to Krupp's and workers' houses by the '1,000 raid' on the 1st/2nd June. Hitherto these reports have not been quoted in view of the lack of supporting photographic evidence, but their number is such that some credence can now be given to them. It is said that the section of Krupp's making Flak was put out of action; that the boiler works, rolling-mill and a foundry were hit, and that the main timber store was completely destroyed. 500-600 buildings are said to have been severely damaged. Another source states that, owing to the high proportion of night work in Essen, casualties were heavier there on the night of the 1st/2nd June than in Cologne on the night of the 30th-31st May.

These results may have been achieved by a small proportion of the total force only, since it is known that the main weight of this attack fell on Oberhausen, where damage was very great.

Munich and Saarbrücken (19th/20th September).

7. 90 Heavies attacked Munich while another force of 118 aircraft attacked Saarbrücken. Details of results cannot yet be given, but an assessment of damage at Munich will be available for the next Summary.

IJmuiden (22nd September).

8. Low-level attacks were carried out in daylight by Mosquitos against the steel works at Ijmuiden, and led by Boston's against the important group of power stations in the Lille and Bethune areas. Photographs taken at very low level during the attacks show many hits with delayed action bombs.

Oslo (25th September).

9. At the request of the Norwegian Government an attack was carried out on the Gestapo Headquarters in Oslo.

It was known that an important Nazi-Quisling rally was to be held in the afternoon and that the morale of the loyal Norwegians was sinking as the time drew near because they feared that Quisling's powers would be increased. It was thought that a demonstration of our determination to support the loyal elements would raise their spirits and indirectly increase the Nazi's problems of internal security.

Four Mosquitos reached Oslo as Quisling was making his speech. They flew at roof-top height and had no difficulty in identifying the Gestapo building with its Nazi flag. Bombs hit the centre and both wings of the building; a photograph taken by the leader is attached showing a direct hit with his first bomb. (Print No. 2.) The aircraft were attacked before reaching the target and were chased for 30 miles after leaving it. One was shot down into the Fiord.

Flensburg (23rd/24th September).

10. The submarine building yard was attacked by 28 aircraft. Photographic reconnaissance has not yet been possible.

Wismar (23rd/24th September).

11. 63 Lancasters attacked the town of Wismar and the Dornier aircraft factory nearby. Low cloud covered both targets, but some crews report that they were able to find and bomb the factory and the town, and that they saw fires in both. Weather has prevented photographic reconnaissance.

Information regarding Previous Raids.

Düsseldorf (10th/11th September).

12. It is now apparent that, measured by the extent of destruction to industries and communications, this attack was the most profitable of all our...
bombing raids, with the exception of that on Cologne on 30th/31st May. Large areas were devastated in both Rostock and Lübeck but this did not result in more than a fraction of the industrial damage done in Düsseldorf.

13. In Düsseldorf’s 380 acres of complete devastation no less than 30 factories and important works were either completely destroyed or so damaged that output must be seriously curtailed. Among them were six factories making steel products or machinery, two factories making steel tubes, one making machine tools and magnetic mines, two chemical works and many other factories producing a variety of commodities such as enamel, paper, boilers, wire, insulating materials, railway wagons and harvesting machinery. This formidable list of destroyed or seriously damaged factories is additional to the 24 factories damaged in the raid of the last night of August.

14. Communications were seriously affected by an 8,000-lb. bomb on the main railway station, and by another direct hit on the important railway junction at Neuss. Considerable damage was also caused to railway sheds and rolling-stock.

15. Two prints (Nos. 3 and 4), showing typical devastated areas in the business quarters of Düsseldorf, are attached, also a “black-out” print showing the areas of complete devastation (No. 5). The estimate of 380 acres of complete devastation mentioned above does not include innumerable isolated incidents of bomb and blast damage throughout the city and its suburbs.

Karlsruhe (2nd/3rd September).

16. Evidence of the great destruction wrought in Karlsruhe continues to flow in. Details of the more important industrial damage, together with extracts from reports of reliable ground sources, are given below:

(i) 9 acres of the Junker und Ruh works, which makes mountings for machine guns, and

(ii) 14 acres of the Karl Metz factory, which makes fire-fighting equipment, totally destroyed.

(iii) An electro-motor factory more than half destroyed.

(iv) 4¼ acres of a saw mill burnt out and the huge briquet stone house (417 yards × 85 yards) still on fire nine days after the raid.

(v) The generating house of the main power station partly destroyed.

(vi) Five railway repair shops destroyed; and much damage to the main station.

(vii) “Five days after the raid three quarters of the town was still without electric current. The harbour was heavily damaged, many silos being burnt out and cranes destroyed. 500 trucks of coal and 12 locomotives were destroyed.”

(viii) “Over 800 houses have been heavily damaged.”

(ix) “Several thousand inhabitants were evacuated 48 hours after the raid. There was evidence of panic.”

The total area of complete devastation, not including many isolated incidents of damage whose exact area cannot be assessed, is now estimated to be 300 acres. A “black-out” of Karlsruhe is attached. (Print No. 6.)

Duisburg (6th/7th September).

17. Additional items of damage in Duisburg, resulting from the successful raid of the 6th/7th September, are now revealed.

A building 270 × 190 feet of an iron works has been completely gutted; a tram depot, hit on a previous raid, further damaged; 5 buildings of a tobacco factory gutted; 4 buildings of a chemical works severely damaged by fire; 2 buildings of a starch factory destroyed.

Cologne.

18. The “1,000 raid” on Cologne at the end of May is still seriously affecting submarine production. The Deschimag Yard at Bremen, which is normally building and fitting out twenty-nine submarines, has received no parts for diesel engines since the raid, and there is an acute shortage of induction distributor pumps. The two diesel-engine factories of Humboldt-Deutz at Cologne were both damaged in the raid and some of their sheds, thought to contain stores, are known to have been gutted.
Two further items of important damage resulting from this raid may now be added to the enormous list of destruction—

(i) An Army depot containing spare engines for military vehicles was hit and over 1,000 engines were destroyed or damaged.

(ii) The Administrative Headquarters for North-West Germany controlling the organisation of war industries was completely destroyed.

Saargemünd.

19. On the 1st/2nd September two important factories were damaged at Saargemünd, 10 miles south of Saarbrücken; one made shells, the other parachutes.

The Reich's Rehousing Problem.

20. The Appendix to this Summary gives a short note on the rehousing problem, which has now become an important factor affecting not only the morale of the Reich's home front, but also the ability of German workers to maintain the present rate of production.

German Reactions to Bombing Raids.

21. A Prague paper:

"British bombers carried bombs of a size which had until now seemed impossible. The German population are able to judge exactly and unmistakably the terrific effect of these new British weapons."

A letter from Dortmund:

"The Tommies are doing what they like again. At night we go to bed filled with terror."

A letter from Altenstadt (near Kassel):

"I am completely exhausted. I cannot stand it any longer."

Letters from Bremen:

"I am crying from fear. I am surprised I have not gone out of my mind."

"The attacks are ghastly and our poor Bremen is like a ruin."

"The worry over whether one can retain one's goods and chattels through this murderous destruction is nerve-racking."

Other extracts from intercepted letters:

"Hamburg is unrecognisable. It looks as if an earthquake has taken place."

"Very soon there won't be even ruins in our Duisburg."

"If the Tommies keep on bombing us like this Western Germany will soon cease to exist."

"I cannot understand what you are doing at the front that we should be bombed four nights in succession."

This is the sort of personal news which is spreading among the German troops in Russia and Egypt.

A. H. M. S.

October 13, 1942.

APPENDIX.

NOTE ON RE-HOUSING PROBLEM IN THE REICH.

THERE is a growing body of evidence that, notwithstanding the direct damage to German industry that has been caused in recent attacks, the most serious problem confronting the German authorities is that of re-housing the bombed-out population and providing them with clothing and other necessities of life.
2. The position to date may be summarised as follows:—

(i) Before the war, Germany was short of at least one and a half million apartments, and building was stopped as soon as war began. The absence from home of Germans who are in the fighting forces has been offset to some extent by the large bodies of foreign workers that have been brought into the country.

(ii) The destruction of houses and other domestic property that has already occurred has led to a serious housing difficulty in the Rhineland, where every day accommodation has to be found. The extent of the problem is such that a recently high German official travelled to Budapest in an endeavour to arrange for accommodation in Hungary.

(iii) The position has been met up to the present by housing the people in temporary quarters which are unsuitable to the German winter conditions. At Bremen there is considerable concern as to what can be done with the workers at the Focke-Wulf factory, who have lost their dwellings and who are temporarily re-housed under these conditions, and this was prior to the recent successful attack upon that city, which must have greatly aggravated the problem.

(iv) The German does not take kindly to billeting, and there is evidence of friction in houses where persons have been billeted on others. A Special Party Court has been set up to arbitrate in conflicts regarding housing. The feeling is on occasion so strong that sentences up to two years' imprisonment have been passed on people who have refused to take in evacuees.

(v) Apart from the difficulty of re-housing, there is also the difficulty of supplying the necessary clothes and other amenities to those who have lost all their possessions. It is now a common feature, when a successful attack has been made, for an immediate suspension of the use of clothes ration cards to be put into operation. This is to enable the small stocks that are available to be supplied only to those who have lost all their possessions in the attack.

(vi) To bolster up morale, the Rhineland papers have recently contained articles informing the population that claims should be made in respect of damaged premises, and that State Grants would be made to assist in rebuilding. It is not, however, stated when rebuilding will commence.

3. The further destruction of houses is considered to be of the greatest importance, especially as the approach of winter will accentuate the problem. The following are the principal factors:—

(i) The loss of one's home and possessions has been found in this country to be one of the most important points with regard to morale. Judging by the strict measures in force to prevent information of the results of air raids reaching the soldiers at the front, it would appear that the German authorities are aware of the effect it may also produce upon the morale of the fighting services.

(ii) The damage is cumulative. Save only where slight damage has been caused, there has been no evidence of any attempt to rebuild or repair, as has happened in the case of factory premises, and it is considered that with the present shortage of labour, any such attempt can only be at the expense of factory repair work.

4. The social and administrative difficulties of victualling and accommodating de-housed populations are more pronounced, and the effect on the morale more widely distributed, when attacks are made on medium-sized towns which are not close to any of the major centres of Germany. It is known that the people evacuated from Rostock to cities such as Hamburg, Berlin and Kiel spread such alarm and despondency that they had to be recalled to their own home province.
1. SUNK. Daylight attack by Bostons on the Chelmsford Victory Ship SCIGLEET on 15.9.42. Direct hits on the ship and the gun. Subsequent photographs taken the following day show the vessel sunk, heavily listed to port against the Dockside and with severe damage showing on her starboard side.
30th September, 1942. Raid on the Gestapo H.Q. by Mosquitos. This photograph was taken stern by the first aircraft as it flew away from the building. The other three aircraft which survived claimed to have hit the same building.

A: Direct hit on Gestapo H.Q.
B: The central cupola on which the Nazi flag is flying.
C: The University.
DUSSELDORF. 10/11 September, 1942. The business and commercial centre of the city almost entirely destroyed by fire and blast. Note the hollow burnt out and gutted buildings and the severe destruction by heavy bombs. The damage is so apparent that no annotation is required.
HISSELSDORF. 10/11 September, 1942. An area of residential and business property almost completely gutted by fire. Very few buildings have escaped. Note the "smokey" effect of the burnt out buildings throughout the photograph.
WAR CABINET.

REPORT ON A VISIT TO NORTH-WEST CANADA AND ALASKA.

Memorandum by the Secretary of State for Dominion Affairs.

I think the attached despatch from the United Kingdom High Commissioner at Ottawa, reporting on a visit he recently made to the North-Western Provinces of Canada and Alaska, will be of interest to my colleagues.

C. R. A.

Dominions Office, October 13, 1942.

Office of the High Commissioner for the United Kingdom,
Ottawa, September 4, 1942.

I have the honour to inform you that I have recently returned from a northern journey. My companions were Mr. T. A. Crerar and Dr. Charles Camell (the Minister and Deputy-Minister of Mines and Resources respectively) and Mr. Ian Macleman of this Office. We made the trip in an amphibian aeroplane, and in three weeks travelled some 8,700 miles. We landed in various places in Northern Alberta, Northern British Columbia, the Yukon and the North-West Territories, flew over a part of Alaska, and at our furthest point alighted 120 miles north of the Arctic Circle, at Aklavik. Generally speaking, this vast area is a land in which the virgin forest still reigns undisturbed over plains and mountains. Its spruce and poplar trees crowd to the edges of thousands of lakes and along the banks of many rivers. It is populated by millions of moose, caribou, wolves, bears and other fur-bearing animals, but only by small scattered communities of human beings.

2. We had two main purposes in making this journey. The first was to inspect the progress of the Alaska Highway and other works now being undertaken in Canada for the military defence of Alaska and Western Canada. There are three such main efforts. The first is the building of the Highway itself, the second is the construction of a chain of airfields along a similar route, and the third is the development of oil production at Norman Wells (on the banks of the Mackenzie River), with the laying of a pipe-line to transport this fuel to Alaska. The Canadian authorities are responsible for the building of the Highway. Canadian contractors are constructing the airfields, the Canadian officers of the Imperial Oil Company are charged with the production of oil at Norman Wells, and the American army is undertaking the laying of the oil pipeline. Some Americans are also surveying the terrain for a railway to Alaska, but this is a more remote project.

3. Our second purpose in going north was to meet the white settlers, Indians, Eskimos and half-breeds in those outlandish places, and to have a look at the conditions and prospects of fur-trading, mining and other activities there.
The Alaska Highway.

4. The Alaska Highway is to run for some 1,500 miles from Dawson Creek (the terminal of the Northern Alberta Railway) through the passes and along the valleys of the Rocky Mountains to Fairbanks in Alaska. I need not enlarge upon the difficulties of a piece of construction which bids fair to be the greatest bit of road-making yet attempted by man. I will simply state that those difficulties have a way of disappearing before American imagination, boldness and mechanical resource. Whilst you look at it the road grows by leaps and bounds before your eyes. We motored along some miles of it and flew along some hundreds of miles of it. It is being constructed in a series of pieces, each of which stretches through the forest until it joins with the next-door bits. The Americans are being unnecessarily extravagant and making some mistakes. It does not matter. They are driving the road through. They have mobilised great herds of the most modern construction vehicles, which are worthy associates of the moose, bears and other wild creatures who are also sometimes to be seen careering amongst the trees. But the newcomers are much more powerful than those old-timers. There is, for instance, the bull-dozer. I was told that each bull-dozer along the Highway can clear each day a strip of ground seven miles long through the dense forest. There are many of these pugnacious creatures continuously on the job, for work on the Highway proceeds without interruption day and night. First the pioneer road is cleared, and after it follows the more finished gravel road. The Americans expect to complete the 1,500 miles of pioneer road and long patches of the gravelled road before winter freezes construction this year. They expect to complete the whole gravel road next year. Along the entire route the cleared ground will be 36 feet wide with a gravelled strip 24 feet wide running along its centre. There is some talk of hard-surfacing the road later, but no decision about this has been taken.

The Airfields.

5. The chain of airfields (which does not coincide everywhere with the route of the Highway) is also being rapidly made. We landed on all of the fields save one, and looked upon that one from the air. Some of them are close to existing settlements or Hudson Bay Company forts, whilst others are being cut straight out of the untamed bush. There are seven airfields between Edmonton and Fairbanks inclusive, and in addition landing strips are now being put down every hundred miles. All of them are to have 5,000-foot runways, and in some cases runways of nearly 7,000 feet are being constructed. On them also work proceeds without interruption day and night. I slept two nights in a sleeping-bag on one of the fields, and was often woken by the rumble and crash of the grading-machines in action.

6. Already a considerable traffic is making gigantic hops-skips-and-jumps along this air route northwards. Fighter and bomber aircraft and huge transport planes speed in a steady stream to Alaska. The transports are carrying men and materials. It is strange to meet them in the forest. One day I watched one of these creatures alight on a runway amidst the surrounding trees, open its door and eject a couple of jeeps. It was easy to imagine that one was really watching a prehistoric monster giving birth to twins.

7. R.C.A.F. administrative staffs are to be in charge of all the Canadian airfields but the groundcrews to service aircraft passing through will be provided by the United States Army Air Corps. I beg the Air Ministry to keep a close eye on this important air route. Unless I am mistaken it will be the simplest, speediest and busiest airway from the Americas to the Orient in the future. And the air route which the Americans are now planning across Canada and through Hudson Bay, Greenland and Iceland to Europe will have similar prospects in the opposite direction. The Agreement between Canada and the United States provides that after the war the Alaska Highway, the airfields across Northern Canada and the other defence works shall all revert in unqualified ownership to the Dominion. But I confess that I do not trust all the responsible authorities amongst our American allies, and I saw enough in the north-west to give me an unpleasant feeling that they will seek to use their power after the war to gain control of these vital air-routes. Mr. Crerar and I have communicated our opinions on this to members of the Canadian Government. It is primarily for them to defend British interests in Canada, but I trust that in Britain we shall be alert to stimulate and support them in any efforts that may be needed.
8. At present the oil for Alaska has to travel from distant places to the American Pacific seaboard, then up the coast by ship to Skagway, across the mountains by rail to Whitehorse and thence by road to its destination in Alaska. The route is long and vulnerable to a daring enemy. There is a much closer potential source of oil supply a few hundred miles away from Whitehorse, at Norman Wells in the Mackenzie flats. The main obstacle is the barrier of the Rocky Mountains lying between Whitehorse and Norman Wells. But the engineers on the job exclaim: "To hell with the Rocky Mountains!"

9. Oil was being produced from a single well at Norman before the war started. It is fuel of excellent quality. So now the production is being stepped-up as rapidly as possible. The production figure originally aimed at by the authors of the scheme was 3,000 barrels a day, and they roughly estimated that perhaps as many as 30 wells would be required to achieve that figure. But already some half-dozen wells have been developed to the production stage, and their capacity has exceeded expectation. Some of them have not been properly tested and have had to be "capped" for the time being, because neither the pipe-line to carry the oil away nor adequate tankage to store it at Norman Wells have yet been provided. But the evidence seems to show that most if not all of these wells will produce three or four or even more hundred barrels of oil a day. Therefore many authorities at Norman now consider that much fewer than 30 wells will attain 3,000 barrels a day, and that a much larger production can be comfortably achieved if necessary. Other authorities, however, still speak more cautiously of the future.

10. The production side of the business is therefore proceeding satisfactorily so far. The erection of a pipe-line to convey the oil to Alaska has not made the same good progress. At the best of times the problem of conveying from Edmonton to Norman Wells about 1,200 miles away the immense length of 4-inch pipe and all the other equipment required to accomplish the task is difficult. These supplies cover the first 300 miles of the journey by rail. But after that there is neither rail nor road. The customary route is by boat down the Athabaska River, across a small space of Lake Athabaska, down the Slave River, across a large stretch of Great Slave Lake and along the Mackenzie River to Norman Wells. Some of the freight can be carried in aircraft, and adequate air transport is now being developed. But this cannot carry the heavier loads.

11. The first difficulty on the waterways was lack of sufficient boats. The Americans, however, have now built the boats. The second difficulty was more formidable. It was Great Slave Lake. This is one of the most treacherous water passages in the world. The lake is broad, shallow and exposed, and when the wind blows straight at it from the Arctic its choppy waves are the grave of any unwary craft. They have been an obstacle to explorers and voyagers from the days of Sir Alexander Mackenzie onwards, and are proving no more amenable to exasperated American engineers to-day. Six precious bull-dozers and some other vehicles are already nestling in the mud at the bottom of the lake, and their loss has been a serious deterrent to the American attempt to hustle the northern lakes and forests. Colonel Wyman, the experienced American officer who is in charge of the laying of the pipe-line, told me that he would "rather bring the stuff across the Pacific Ocean than across Great Slave Lake." He ought to know, because until six months ago he was constructing the line of military airfields across the ocean from the United States of America to Australia.

12. The third difficulty in the way of transport this year has been created by forest fires. This has been a remarkably dry season in the north, so fires galore are raging. Consequently, a thick pall of smoke, as dense as a bad fog, has hung over the whole country between Edmonton and Great Slave Lake week after week, at a time when air and river transport is usually very active. For long periods every aeroplane in the place has been grounded, and small craft like scows have been tied up. The pipe and much other important equipment got stranded hundreds of miles south of where it was needed.

13. However, these difficulties are being overcome as quickly as possible. But the proposal to start the actual laying of the pipe-line this year has been abandoned. The surveying of the best route over the plain and across the Rocky Mountains is proceeding, but the laying of the pipes is now postponed until the ice and snow have loosed their grip on the land next spring. Those responsible hope to complete the work before another winter can intervene.

[24490]
14. Some well-qualified judges doubt whether the Americans’ present plan will ever work effectively. They think it would be wiser not to take the pipe-line due west from Norman Wells and across the Rockies to Whitehorse, but to lead it in a north-westerly direction from its starting-point, keeping it in the lower country east of the mountains until it can outflank their northern tip and continue over easy ground to Fairbanks in Alaska, giving Whitehorse a miss. This would be a longer but more practicable route, the sceptics say.

15. But the Americans and the experienced Canadian who is their chief surveyor are determined to make a direct assault upon the Rockies, seeking out the mountain passes. Even by this route the pipe-line will be about 300 miles long. It will cross three distinct mountain ranges, climbing from 200 feet above sea level at Norman Wells to about 4,500 feet at the highest point of its journey. The temperature in those parts may fall as low as 50° or 60° below zero in the winter. But laboratory tests show that the oil continues to flow at a temperature of 70° below zero. So there is no need to sink the pipe-line underground; it will be built over the surface of the ground and covered with earth and moss, which, in any case, is a good insulator against cold.

16. Certain minor difficulties are inevitably associated with all these works. Generally, the qualities of ability and tact in the American officers in charge of their sections of the undertakings are impressive, the conduct of their troops (including battalions of negroes) has been good, and relations between them and the Canadian authorities are excellent. But some of the Americans throw their weight about in an unfortunate manner, and the fact that the pay of American civilian workers on these projects is about double that of the Canadian is also perhaps storing up friction between them for the future. The customary troubles connected with wine and women (though not yet noticeably with song) are now invading the north, and setting a few posers for the Yukon and North-West Territories authorities. Another severe difficulty is mosquitoes. Nature is sending her air-squadrons to attempt to defeat the violation of her virgin wilderness. Some of the insects are of a devilish size. I was told of an occasion when one of them alighted on the runway of an airfield and was filled up with eighty-seven gallons of petrol before the airman realised it was a mosquito and not a bomber. But none of these various difficulties are being allowed to hamper the progress of the vital defence works.

17. The figures in all the above paragraphs were given me by high American or Canadian officers engaged on the undertakings. I presume that they are correct.

18. We had many interesting and entertaining experiences amongst the regular inhabitants of the north, with which I need not trouble you. But it will gratify you to know how eagerly these remote people are following the fortunes of the war. For example, many of the white trappers and some of the better-off Indians and Eskimos possess portable wireless sets. When they disappear into the northern forests, the Barren Lands or the Arctic islands for the long winter months of trapping they take these prized instruments with them so that they may keep in touch with events in the outside world. It is strange to think of these men, often living in solitude amidst the ice and snow with only their dog-teams as companions, travelling along their trap-lines to secure their catch of fox, marten, mink and other fur-bearing animals—and tuning-in their wireless sets each day to catch also the latest news from the distant war fronts.

19. These sturdy men are eager to play their part in the world-wide struggle of Liberty against Tyranny. Usually the white traders and trappers are too old to make any contribution other than taxes. These they pay with enthusiasm! Some of them make good money. Thus, we spent one day some seventy miles north of the Arctic Circle in the small summer settlement of half-a-dozen white trappers and traders. One or two of them had already departed for the season’s work on their trap-lines, but the others had lingered to greet us. Most of these six men had immigrated into Canada as young prospectors, had taken part in the Gold Rush to the Klondyke in ’98, and have been trading or trapping in the Arctic ever since. They are a cosmopolitan company of old boys—an Englishman (from Yorkshire), a Canadian, an American, a Norwegian, a Dane and a Pole, whilst the married men amongst them have Indian wives and
their children are half-breeds. This year those half-dozen citizens paid the Canadian Government more than $3,000 in income tax, and their eyes sparkle with pleasure as they speak of that contribution to the undoing of Hitler.

20. The Indians and Eskimos do not pay income tax. But many of them also do their bit. For example, we stayed two days in the Indian village of Old Crow on the banks of the Porcupine River in the Arctic, a redskin community containing only 150 inhabitants counting every man, woman and child. A year ago their chief turned up one afternoon at the local Royal Canadian Mounted Police post and handed the corporal in charge $393. The villagers had spontaneously collected this, and asked that it should be sent across the continent and the ocean as a gift to London children who had been orphaned in air raids. Since that gift they have collected close on another $500 for other war charities.

Fruits of the Soil.

21. We watched the gold dredges at work in Bonanza and other creeks on the Klondyke. The company expects to produce about $2,500,000 worth of gold this year, but their operations look like being restricted thereafter by shortage of labour. Gold-mining operations at Yellowknife, on the shore of Great Slave Lake, are being steadily reduced for the same reason. Tungsten is being found there in various places, and is being sought elsewhere in the north, but has not yet been discovered in worth-while quantities. At Great Bear Lake we saw the radium miners hard at work.

22. On our way north, crossing more than a thousand miles of prairie from Eastern Manitoba to the Peace River country, we saw the largest crop of golden corn that has ever been grown in Canada being harvested. The experts in Winnipeg are still expecting a yield of 550 million bushels. The Granary of Democracy is filled to bursting-point.

I have, &c.
MALCOLM MACDONALD.
WAR CABINET.

Mr. MYRON TAYLOR'S VISIT TO ROME.

Memorandum by the Secretary of State for Foreign Affairs.

On the 6th October I was invited by the United States Ambassador to meet Mr. Myron Taylor. Mr. Myron Taylor told me that he had given the Prime Minister a copy of his memorandum to the Pope (Annex A), and he also showed me a copy of the Pope's answer. This was in friendly but vague terms and indicated that the Vatican fully understood that the moment was not ripe for peace overtures. It is therefore clear that what appears to have been the main purpose of Mr. Myron Taylor's journey to Rome was fulfilled, namely, to discourage the Vatican from any untimely peace initiative.

2. Mr. Myron Taylor had also given the Prime Minister a memorandum by the First Secretary of the United States Legation in Lisbon, about the Church in Russia (Annex B), and he gave me a further memorandum on this subject (Annex C) summarising remarks made to him by Mgr. Tardini, the Cardinal Under-Secretary of State for Foreign Affairs. Mr. Myron Taylor also handed me a copy of a memorandum which he had received from Count Dalla Torre, director of the Osservatore Romano, about the anti-Fascist opposition in Italy (Annex D).

3. On his return journey, Mr. Myron Taylor told me, he saw both General Franco and Dr. Salazar. At the outset of his visit to the former, General Franco gave an account of his reasons for believing that Germany would win the war, but when Mr. Myron Taylor spoke of the campaign in Russia General Franco admitted that it was not likely to be concluded this year. Mr. Myron Taylor formed the impression that Dr. Salazar was now fully convinced of an Allied victory.

4. Mr. Myron Taylor told me that he was treated throughout with the greatest courtesy, being conveyed by Italian civil aircraft from Lisbon to Rome. He did not leave the Vatican City, though he was given an opportunity of visiting his villa in Florence. From all he heard, the food position in Italy is grave.

A. E.

Foreign Office, October 13, 1942.
To His Holiness Pope Pius XII.

A STATEMENT by Myron Taylor made the 19th September, 1942, as a basis on which the parallel efforts for a just and moral peace of His Holiness and President Roosevelt may rest.

IT is of high importance that, at this juncture when the Allied Powers are passing to the offensive in the conduct of the War, the attitude of the United States Government with respect to the present world struggle be restated to the Holy See.

Before the war became general, President Roosevelt, in parallel effort with the Holy See, explored every possible avenue for the preservation of the peace. The experience of those days of fruitful cooperation, when the high moral prestige of the Holy See was buttressed by the civil power of the United States of America, is a precious memory. Although totalitarian aggression defeated those first efforts to prevent world war, the United States looks forward to further collaboration of this kind when the anti-Christian philosophies which have taken the sword shall have perished by the sword, and it will again be possible to organize world peace.

In the just war which they are now waging the people of the United States of America derive great spiritual strength and moral encouragement from a review of the utterances of His Holiness Pope Pius XII and of his venerated Predecessor. Americans, Catholic and non-Catholic, have been profoundly impressed by the searing condemnation of Nazi religious persecution pronounced by Pope Pius XI in his Mit Brennender Sorge; by the elevated teaching on law and human dignity contained in the Summi Pontificatus of Pope Pius XII; by the famous Five Points laid down in 1939 by the same Pope as the essential postulates of a just peace; and by the forthright and heroic expressions of indignation made by Pope Pius XI when Germany invaded the Low Countries. Now that we are fighting against the very things which the Popes condemned, our conviction of complete victory is one with our confidence in the unwavering tenacity with which the Holy See will continue its magnificent moral leading.

Because we know we are in the right, and because we have supreme confidence in our strength, we are determined to carry through until we shall have won complete victory. The only thing that would make us lay down the arms taken up in defense of national security and world decency would be the complete and forthright acceptance of the Atlantic Charter and the Manifesto of the United Nations—the provisions of which, by the way, are in substantial agreement with the Holy Father's above-mentioned postulates for a just and lasting peace. Our cause is just. We fight, with conscience clear, for the moral rights of our nation, and for the liberties of our people; our victory will ensure those rights and liberties to the world. Even our enemies know that we seek no aggrandizement. Precisely for the reason that our moral position is invincible, we are not open to the compromises usual to those who look for merely material gains, and who will bargain for half a loaf if they cannot have the whole. A peace-loving people, we exhausted every honorable means to remain at peace; in the midst of peace negotiations, we were foully attacked by Germany's partner in the Orient. Like Austria, Czechoslovakia, Poland and the rest, we were made the victims of Axis aggression at the very moment when their diplomats were talking peace. How then could we have confidence in the word of any Axis Power? In the conviction that anything less than complete victory would endanger the principles we fight for and our very existence as a nation, the United States of America will prosecute this war until the Axis collapses. We shall not again allow ourselves to be imperilled from behind while we are talking peace with criminal aggressors of the kind referred to in the Summi Pontificatus as men without faith to the plighted word.

Our confidence in final and complete victory is based upon the most objective foundations. There is nothing of emotional optimism or wishful thinking in it. We are prepared for a long war. We foresaw early reverses. But, in the end, we know that no nation or combination of nations can stand against us in the field.

In the first place, we are a nation united as never before in our history. Axis propaganda had made itself felt in the United States as elsewhere before our entry into the war, and we know they are boasting of divisions among us. Let
no one be deceived. Our very love of peace made it difficult for some of our people to see the world menace of nazism. Pearl Harbour opened their eyes. The dishonourable attack of Japan at the very moment when her special ambassador was talking peace at Washington united overnight Americans of all shades of opinion. Among the architects of this unity are the foremost Catholic leaders in our country, the bishops and the prominent laymen of all racial strains. Their public utterances and the editorial statements of Catholic papers after the aggression of Pearl Harbour can be summed up in these words: Prosecute the war to a victorious conclusion; and then bend every effort for a peace that will be just, charitable and lasting. Most notable of all Catholic pronouncements was that contained in the letter of the Catholic Hierarchy to the President of the United States pledging the whole-hearted co-operation of Catholics in the national war effort. This letter, individually authorized by the Bishops of the United States, solemnly engaged “‘the lives, the treasure and the sacred honor” of American Catholics in the defense of their freedom against aggression. The response of the President was historic: “We shall win this war,” wrote Mr. Roosevelt, “and in victory we shall seek not vengeance but the establishment of an international order in which the spirit of Christ shall rule the hearts of men and of nations.”

The same unity based on high purpose pervades all the people of the United States. Contrary to Axis propaganda claims, the vast majority of our people are responsive to Christian inspiration, even though many may not be practical church-goers. The Axis charge that there are sixty million atheists in the United States is sheer nonsense—a perversion of statistics on church membership and attendance by which the persecutors of religion are trying to use the church for their own sinister purposes.

It would be equally misleading for outsiders to be influenced by Axis propaganda about political differences in the United States. We are a democracy and even in war time we insist upon our political freedom. Members of the Democratic and Republican political parties are even now contending for many public offices, and no one, whatever his position or power, can or will force people to vote in any predetermined manner. We glory in that freedom. It is a practical demonstration of the liberty we are fighting to preserve. But let it be remembered that in these political contests no candidate would have the slightest chance of election unless he declared himself to be whole-heartedly in favor of the national war effort. Only recently, the whole country applauded the court prosecution and punishment of certain men who had tried to sabotage our national unity. In fact, any individual or group who would presume to go against that unity or suggest compromise with the enemy would invite the odium of his fellow citizens, would be thoroughly discredited as a patriotic American and would forever disqualify himself from any further role in national affairs.

Finally, our certainty of victory is based upon military considerations. The justice of our cause and the unbreakable unity of our people are supported now by a growing military establishment which, when it reaches its peak, as shortly it will, cannot be withstood. Germany has already lost heavily in men and in material; her war industry and her reservoir of man-power have been tapped to the utmost. She still has to face an England with forces intact, fully mobilised and in crescendo. Above all, she still has to face America. With 4,500,000 men under arms, we have not yet called but a small part of our man-power. And the youth of America knows machines. Our production of the engines of the war has already surpassed the forecast of the President which but a few months ago seemed fantastic. Our shipyards are producing ocean-going ships for combat and commerce at a rate hitherto undreamed of. The entire industry of the world’s greatest industrial nation is now directed to one only objective—to manufacture by mass production methods in which we excel, the implements of war. We have only begun and yet we have already surpassed the arms output of Germany at her peak. The world has never seen such an avalanche of war weapons, manned by skilled mechanics and stout-hearted freemen, as we shall loose in 1943 and 1944 against the Axis. In some few sectors, we have already taken the offensive, months ahead of our original plans. That offensive will rise in irresistible crescendo, more and more rapidly, more and more powerfully, until totalitarianism, with its menace to religion and freedom, is finally and utterly crushed.
The Axis knows this, knows that its ill-gotten gains cannot be held by continuing the war. What they won through treacherous war, they may now try to retain by a treacherous peace. They timed this war to begin when they were at the zenith of their strength, and when the freedom and peace-loving nations were unprepared. Their plans have miscarried; now, we have reason to believe, they are casting about for someone to make a peace proposal which will enable them to escape the inexorable results of defeat in the field. It is the first sign of a breach in Nazi confidence; their peace offensive is a confession of weakness.

We Americans are new at world politics. Our geographical position in the past isolated us from Europe and the other continents. Modern communications have forced us from our isolation into world affairs. We are learning. One of the first lessons we have grasped is this: that cunningly timed and craftily planned peace proposals may be used by faithless aggressors as instruments of war. A peace move may be a snare; for the Nazis, it has always been a part of military strategy. Their record in Austria, Czechoslovakia, Poland and elsewhere is too recent to be forgotten. Japan talked peace to us at Washington while she was preparing and consummating the treachery of Pearl Harbour. Thus world experience of Axis “peace” has been bitter. In our case it has also been salutary. Since the Nazis, conscious of their waning power, are likely to be searching for an intermediary to put forth peace-feelers, it is well that those whom we trust should know in advance the position of the United States Government on any tentative proposal from such a source: we shall not be led away from principle by any stop-gap peace. Our Christian ideals, as well as our national existence, would be in jeopardy if we consented to forgo now our manifest advantages. An indecisive peace would be a partial victory for the Axis, and would lead later to a resumption of the conflict under conditions which might be disadvantageous to us and what we stand for. We want none of it. We will have nothing of an armed truce which would be a breathing space for the enemies of Christian civilization. We will not permit Axis grand strategy which includes, in its arsenal the hypocrisy of false peace, to hold the initiative in the conduct of this war. We have determined that we cannot deal with faithless men; that the peaceful ways of diplomacy have utterly failed against Axis duplicity, ruthlessness and insensibility to all moral considerations. This is no time for a recourse to diplomacy. Having made every effort to avoid this war, we shall not now be weakened by Axis cunning when we have taken the field. We consider that Axis-inspired proposals of “peace” would be nothing less than a blow aimed at us.

There is reason to believe that our Axis enemies will attempt, through devious channels, to urge the Holy See to endorse in the near future proposals of peace without victory. In the present position of the belligerents, we can readily understand how strong a pressure the Axis Powers may bring to bear upon the Vatican. We therefore feel it a duty to support the Holy See in resisting any undue pressure from this source. It is for this reason that we feel impelled to make known our views on the subject of peace, and to point out that the growing power of the United States is now being applied to re-establish those principles of international decency and justice which have been so well expounded by the Holy See. We are not so close geographically to the Vatican as some of our enemies, nor are we in a position to enjoy as many of the indirect day-to-day contacts as they. None the less, we have the fullest confidence that due weight will be given to the considerations advanced by a nation which numbers among its citizens so many millions of devout Catholics, and whose Government is in such close agreement with the principles enunciated by the Holy See on the issues of this war and the kind of peace which must follow it. The people of the United States have a deep and sympathetic understanding of the Holy Father’s desires for peace as he looks out upon a world convulsed with the harrowing spectacle of death and destruction on every side. The promotion of world peace, we know, is one of the great functions of the Holy See. Though deferred, that peace will come—not a specious peace of strategy, nor a short-lived peace of compromise. It will be the peace of “justice and charity” for which the Holy Father has so often prayed; it will be the peace “in which the spirit of Christ will rule the hearts of men and of nations” as promised by the President of the United States. The United States and its Allies will win that peace. And in its consolidation, we should want nothing better than a continuation of those parallel efforts made by the Pope and the President before the war became general. In such a continuation, so devoutly to be hoped for, much can be accomplished to ensure that the peace will be lasting.
The war aims of the United States are peace aims. The world knows them. The Atlantic Charter lays down conditions which in our deepest conviction are irreducible. Any proposal under the plausible title of a "negotiated peace," which falls short of these aims, would only tend to confuse issues which we are determined to keep clear and to decide definitely.

With renewed assurances of esteem and respect, I offer the foregoing in the hope that they may be helpful in furthering the cause to which our nation has dedicated itself.

MYRON C. TAYLOR,
The Personal Representative of the President of the United States of America to His Holiness Pope Pius XII.

September 19, 1942.

ANNEX B.

Memorandum on the Church in Russia.

Mr. Taylor, Lisbon, October 2, 1942.

In response to your request, I am submitting the following observations with respect to religion in Russia and its relation to the present situation.

These are my own personal views. I do not know to what extent they coincide with those of my colleagues in the Department of State, whose information is more up-to-date and whose opinions should bear more authority.

The conditions under which the early Communists fought their way to power in Russia made it necessary for them to claim the full spiritual devotion of their own followers. This caused them to see in the Church not only a stronghold of conservative feeling, and therefore a political opponent, but also a spiritual rival. As a result of this, they entered into power in violent opposition to the Russian Orthodox Church. In the course of a few years they were entirely successful in smashing the Church's economic position, its organisation, the independence of its leadership, and, to a very great extent, its spiritual authority, particularly among the youth of the country.

The outwardly moderate provisions of the Soviet Constitution, which was promulgated some six years ago, have been rendered largely ineffective by the restrictions placed on religious education and by the predominant role played in the Soviet system by the Russian Communist Party and the Communist League of Youth, with their subsidiary organisations. Participation in these organisations remained practically irreconcilable with the public profession of religion; and without participation in such organizations the individual had very few chances of advancing his own interests in any field of Soviet life.

In addition to its open opposition to the Christian Church, the regime did all in its power to build Communist ideology into something like a competing religious life in its own right, with similar requirements of spiritual devotion and even of public profession in ceremony and symbol.

That this latter effort could not be successful—that Christian faith could not be adequately replaced by a materialistic economic doctrine which had no answers to the problems of suffering and death—is obvious to all of us who have been brought up in a Christian atmosphere.

When, consequently, the Germans began to occupy large portions of Soviet territory, they found a genuine hunger for religious experience in large parts of the Russian population. The Nazis have been exploiting this situation for their own purposes with characteristic cynicism and, I am afraid, with some success. While they have been careful not to give the religious element in Germany any indirect support by permitting them to take part in the restoration of religion in the occupied areas of Russia, they themselves claim to have reopened churches on a large scale and to have encouraged a "great resurgence" of religious life among the people. Reports from German correspondents in the East to the Nazi-controlled newspapers in Germany last winter described striking manifestations of religious enthusiasm in the occupied territories, which—if not actually encouraged—were certainly not being opposed by the German authorities. It was said that in the city of Pskov, for example, where there had been some 40 active churches in 1918, the Germans found no priests left in the city at all, but that they promptly imported two priests from the Russian Orthodox Church in Riga.
to take charge of religious life, that the great Cathedral was reopened in time for the Russian Christmas in January, and that on Christmas Eve not only was the Cathedral packed with worshippers, but that thousands of people stood in the square outside in 30 degrees of frost to participate in the service. Other stories are told of how untrained laymen, in some cases even old women, conducted services informally in railway stations and other premises at their disposal, and how people flocked to these meetings. These tales, however much truth there may be in them, are naturally not without their effect on the religious populations of the other eastern European countries. They doubtless tend to increase the horror with which these people view the prospect of Russian occupation after the war, and to reconcile them to the hardships of German rule at the moment.

It should, in these circumstances, be evident to anyone that a greater real tolerance of religious life in Soviet-controlled territories would be in the interests of the Soviet Government itself, both now and in the future. Possibly, an appreciation of this fact is already present in the minds of the Soviet leaders, and is finding expression in the reported present relaxation in their hostility toward religion.

Undoubtedly when this war is over, understanding and co-operation in the religious field would present one of the best means of bridging the psychological gulf which two decades of Communist education and intellectual isolation have created between the present mature generation of Russia and the countries of the outside world.

It would be idle, however, to underestimate the difficulties of achieving such co-operation and understanding. It would be possible only if it could be proved to the Soviet leaders that religion need no longer constitute a challenge to their political authority. Of this they will not be easily convinced. They are extremely suspicious of all suggestions from foreign quarters, and fearful—as Russian rulers have always been—of foreign influence of any sort on the Russian popular mind. Just as in the 15th and 16th centuries the Czars of Russia fought Roman religious influence, not so much out of convictions of dogma as out of fear of foreign influence on a backward and credulous people, so the present rulers tend to feel that any foreign influence, religious or otherwise, challenges the security of their rule.

If these preoccupations could be overcome and if the Kremlin could be induced to tolerate religion at home and to receive the proffered co-operation of Western religious movements in the spirit of friendliness and confidence, I believe one of the greatest barriers to a sound future peace would have been removed.

George Kennan.

ANNEX C.

Strictly Personal Memorandum giving Summary of Considerations expressed by Mgr. Tardini in Conversation with Mr. Myron Taylor.

There is no indication that any of the numerous churches closed to the faithful in past years have been reopened, nor that high taxes, imposed for the exercise of public worship on those few churches which have remained open, have been reduced. Father Leopold Braun, Rector of the only Catholic Church in Moscow, writes: "There is talk of a reopening (of the churches), but I have no certain proof."

2. Nor is there any indication that any priest, who is a Russian citizen, has been freed from prison or from the sentence of deportation to which he had been previously condemned. According to latest available statistics, it would seem that there are still approximately one hundred Catholic priests of the Archdiocese of Mohilew detained in prison or in concentration camps.

3. For more than a year now there has been no news of His Excellency M. Edward Profittlich, Titular Archbishop of Adrianopli and Apostolic Administrator of Estonia. Archbishop Profittlich, a citizen of Estonia, was arrested at Tallinn, the 28th June, 1941, and deported to the Urals, probably to Kasan.
4. Communists in Albania and Montenegro were recently found to be in possession of "instructions" from Moscow recommending that they "cultivate the division between the various religions and direct their attack particularly against the Catholicism."

5. Father Braun has pointed out that the organisation of the militant Russian atheists ceased some time ago to be active, and that, furthermore, official anti-religious publications are no longer printed; but he noted that copies of some such publications are still on sale.

Father Braun has also communicated that excerpts from Russian authors "inspired by lofty patriotic sentiments" have been broadcast from Moscow, and in official newspapers (Pravda and Izvestiya) certain references to religious practices have been published.

These few simple facts, like the content of the newspapers (which Father Braun has forwarded and which have been closely scrutinized), may be explained easily in the light of the circumstances of the present stage of war, without supposing a change in the general programme of Communism with regard to religion.

September 26, 1942.

ANNEX D.

Memorandum from Count Dalla Torre, director of the Osservatore Romano, Vatican City.

The anti-Fascist opposition consists of four groups:

I. Politicians (former Secretaries of State, Members of Parliament, Senators); (a) Liberals; (b) Popolari (Christian Democrats); (c) Social reformers (like Bonomi, former President of Cabinet Council); (d) Socialists.

II. Generals, like Badoglio, Caviglia.

III. Writers, professors, members of Liberal or Catholic aristocracy, like Prince Doria-Panfili; Duca T. Gallarati Scotti, Conte Visconti Venosta, Conte Taciini Stefano, Conte Casati, Alberto Albertini, B. Croce, De Raggero, Calogero, Parri, Calamandrei, Carnelutti, Salvatorelli, Brecchi, Galletti, La Pira. Some of these are in prison, like Calogero and Parri.

IV. Communists. It is very difficult to estimate the real forces of the Communist party; their chiefs and organisers are confined on the island of Ventotene, near Ponza (population about 2,000), whence they keep in touch secretly with their partisans. Many infiltrations are noted in the war factories.

After the breakdown of fascism, the constitution of a stable Government, based on the solidarity of I, (a), (b), (c), and perhaps (d), II and III, with the co-operation of the American emigrants (like Sforza and Sturzo) is possible, on condition that this Government is able to save money and to preserve Italy from essential mutilations. Such a Government will certainly find the support of the members of the very strong Catholic Associations, of the Liberal intellectual youth, of the bureaucracy and of many business men. However, the manifestation of Montevideo and the nomination of Pacciardi to be chief of the Italian Legion (Pacciardi was already a member of the Partito Repubblicano Italiano) caused in the quarters of the opposition some perplexity. The politicians sub I and III are not all and not unconditionally for the monarchy, but many consider an intervention of the dynasty would facilitate the solution of the crisis (traditions of the carabinieri) and avoid the advent of Communists. Every effort must be made—they say—to win over the Prince, and it is reported that the Princess Mary seeks to get into contact with the aristocrats of the opposition.

Concerning the future chief of the Government, it is true that the dictatorship blocked the way to the development of great personalities, but there are still former presidents of Cabinet Council and leaders of former parties or generals who have the qualities and capacity to preside at least for a first period over the united forces of anti-fascism.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET.

INDIA.

CONNECTION OF ENEMY AGENCIES WITH THE RECENT DISTURBANCES.

Memorandum by the Secretary of State for India.

THE War Cabinet at their meeting on the 24th August (W.M. (42) 117th Conclusions, Minute No. 1) invited me to report the considered view of the Government of India on the extent to which the recent disorders might have been provoked by agencies working directly on behalf of the enemy.

This is a matter which has been engaging the close attention of the Government of India since the disturbances revealed themselves as having the purpose of an attack on points of strategical importance; but the Viceroy reported a few days since that the Intelligence authorities still have no direct evidence to support the theory of enemy agency. It is recognised that it is a possibility that cannot be ruled out, and it is not overlooked that the large numbers of refugees from Burma have almost certainly included some Japanese agents. It is to be recognised, also, that Axis broadcasts may well have played some part, though its extent cannot be estimated, in stimulating subversive activities, particularly in areas such as Bengal, where the influence of Subhas Chandra Bose persists.

L. S. A.

India Office,
October 14, 1942.

[24488]
MEMORANDUM BY THE SECRETARY OF STATE FOR WAR

1. On his return to this country from his recent tour, the Prime Minister raised at the War Cabinet (118th (42) meeting, held on 25th August, 1942), the need for improving the supply of books and periodicals for the troops in the Middle East, and I was invited to put forward proposals to this end. I accordingly submit for the information of my colleagues the various plans I have in mind. If there are any difficulties which I require the authority of the War Cabinet to solve, I will ask for it in due course. At present I am hopeful that what is possible may be done without the need of any special Cabinet authority.

2. The present system for the supply of books and periodicals to the Army is as follows:

(a) The Services' Libraries and Books Fund, of which the Lord Mayor of London is Chairman, receives a grant from Army funds from which books are purchased and distributed to the three Services through the Services' Central Book Depot. For the financial year 1941-42 this grant amounted to £12,000 (together with an additional grant for administrative expenses). For 1942-43, this grant has been increased to £30,000. The Services' Central Book Depot also purchases books on behalf of units at reduced rates, and distributes to the Forces books and magazines given by the public.

(b) At present 3,500 bound books and 7,700 illustrated magazines and 4,000 copies of "Blighty" are being despatched to the Middle East for all three Services each week. In addition, about 500,000 Penguin books, purchased by units themselves, have been shipped.

(c) In addition to the above figures, the position will be slightly improved by the newly formed Forces Book Club. Units of the three Services can subscribe to this Club, a minimum annual subscription being £3, which entitles the unit to a monthly parcel of ten different volumes in a special edition similar to that of Penguin books. Books from this source will be sent to the Middle East at once, but as only ten fresh volumes will be produced each month, the Club will only go a little way towards helping the problem.

3. The following steps are being taken to improve the position:

(a) The public in the past have made a valuable contribution of books and magazines but this source of supply has recently been drying up. The Prime Minister on the request of the Lord Mayor has recently signed a letter of appeal to the public for books and magazines for the Forces overseas, and I am confident that we may look for a generous response.

(b) As a special measure, the Director-General of Welfare and Education at the War Office has recently despatched about 17,000 books of the Penguin type to the Middle East over and above the regular quantities despatched weekly as in paragraph 2 (b) above.

(c) As was shown in the recent Report of the Lord President's Sub-Committee on Book Supply (L.P. (B) (42) 17), the book publishers are now restricted to 37 per cent. of their pre-war consumption of paper, whilst periodicals and newspapers are only allowed about 20 per cent. of such consumption. The War Office have approached the Ministry of Supply with the suggestion that more paper should be
made available for the book and magazine trades on the condition that it is solely used for the purpose of exporting books and magazines to overseas forces, and have received an offer of an allotment of 100 tons of paper. This will greatly ease the position for the time being.

(d) Until some six months ago there was a very large American contribution of periodicals and magazines for the Forces, of which the bulk went overseas. This source of supply has been cut off by the ban placed on the shipping in bulk of periodicals and magazines from America. I have taken up with the Ministry of War Transport the possibility of finding shipping space for literature from this source, and they have suggested that it would not be difficult to arrange direct shipment from the United States to the Middle East. If we can arrange the necessary sorting at the American end to ensure the exclusion of subversive, pornographic, or unreadably dull literature, we should be able to organize something on these lines, and I am looking further into the possibility.

(e) A similar proposal, on a smaller scale, is that magazines made available for the Forces by the American public, could be brought over in small parcels by aircraft crossing the Atlantic without any sacrifice of accommodation for essential war supplies. The Air Ministry are sympathetic to this proposal but here, too, detailed examination of the possibilities is necessary.

(f) I have also examined the question of printing books in South Africa and the Middle East. As far as South Africa is concerned, this is not a practicable proposition on account of paper difficulties, copyrights, and other technical difficulties. As far as Egypt is concerned, Messrs. Allen Lane (Publishers of the Penguin series) are trying to arrange for the production of Penguin books in Cairo, though the quantity involved will be very small.

4. I would mention that the Ministry of Supply are contemplating a "national recovery" of books campaign for salvage purposes. Without wishing to minimize the urgent need of books for pulping, I suggest that when new printing is so drastically restricted, every effort is made to ensure that the literature surrendered by the public is carefully examined with the object of setting aside all suitable books, etc., for the object which the Prime Minister has in view and to which the proposals in this Paper are directed. I have been in touch with the Ministry on this point and understand that they have the needs of the Forces very much in mind.

5. In the course of discussions with the Lord Mayor's Book Fund on the implementation of certain proposals in paragraph 3 above, attention was drawn to an interesting suggestion made by the American military authorities in London for a planned provision of literature for the troops, both British and American, in the various theatres of war. The Americans point out that their own troops in this country and the Middle East are short of reading matter, and they suggested that in order to economise shipping and distributive agencies, literature for all troops in the United Kingdom, British, American or others, should be provided from British sources, while America should furnish literature for English-speaking troops in overseas theatres, e.g., the Middle East, Persia, India, etc.

6. The suggestion referred to in paragraph 5 is in some ways attractive. There are, however, some obvious disadvantages: our troops abroad might find their reading matter very largely spiced with an American flavour; and selection and censorship from the British point of view might not be easy. But on the other hand the sources of supply in America are much larger than obtain, at this stage of the war, in this country; literature could be distributed, like munitions of war, on a planned allocation basis, and shipping would be economised. At any rate there is, I think, sufficient in the scheme to have it further examined in consultation with the American military authorities here, and this, unless my colleagues see objection, I propose to have done. I shall then be in a better position to form a judgment on the desirability and practicability of the proposal.

P. J. G.

The War Office.

26th October, 1942.

(B42/157) 80 10/42 W.O. 11894
WAR CABINET.

MORALE IN ITALY.

Memorandum by the Secretary of State for Foreign Affairs.

I CIRCULATE to my colleagues herewith a paper on morale in Italy which represents the agreed views of the various Departments concerned with this question, including the Service Departments.

A. E.

Foreign Office,
October 14, 1942.

ANNEX.

ITALIAN MORALE.

IN considering Italian morale it must be remembered that Mussolini's declaration of war never evoked any enthusiasm. It was thought that at worst the Duce's action implied little more than the staking of claims against Great Britain and France, whose collapse seemed imminent; the resulting disappointment when it became apparent that Italy was committed to a long and arduous war led to a general feeling of apathy towards it.

2. This lukewarm spirit no doubt accounts very largely for the reverses in Albania, Libya and East Africa, and Italian morale reached a very low level in the winter of 1940-41. Mussolini lost much of his popularity, and discontent with the regime was so widespread that after six months of war it seemed possible that the Duce might be overthrown and Italy might be detached from the Axis.

3. Hitler, however, lost no time in forestalling such a possibility. Not only did he retrieve the military position in the Balkans and Libya but, owing to his hold over Mussolini and the Fascist Party and by the presence in Italy (though not for the express purpose of intimidation) of one of the German Air Fleets of German army formations in transit and the Gestapo, he created an atmosphere of fear and suspicion which would stifle any attempt at revolt. Apart from the Nazi grip it may also be said that the individualism of the Italian which had made it difficult for Fascism to whip up collective enthusiasm now impeded the possibility of organised resistance.

4. At the beginning of 1941, as stated above, morale reached a low ebb, but rose to a certain extent as a result of Axis victories in the Balkans and Libya, declined again with Germany's attack on Russia, while the extension of the war to Japan and the U.S.A. have added to the prevailing gloom as it becomes increasingly obvious that the end of the war is further off than ever. In recent months the rapid capture of Tobruk may have produced feelings akin to enthusiasm but the failure to follow up this success with the occupation of Egypt has no doubt brought home the fact that such successes can only prolong the war, which many Italians in any case do not expect to win.

5. There has been dissatisfaction in Sicily necessitating the wholesale transfer of Civil Servants from that island to other parts of Italy and air raids are said to have had considerable effect on civilian morale both in Sicily and
Southern Italy. Strikes and food riots are also reported but the Italian can adapt himself to a very low standard of living and he accepts cold and even hunger with resignation. Evidence of difficulties within the régime has been provided by the dismissal of Ministers and minor officials and recently over 60,000 persons were expelled from the Fascist Party. Nevertheless, dislike and fear of Germany, discontent with the régime and hunger have only succeeded in producing apathy and there is no evidence of any sabotage excepting through peasant hoarding and evasion of rationing regulations, the prevalence of black markets and lack of discipline in the administration of industrial and economic affairs. Nor is there any evidence of organised opposition to the régime, or even of embryo plans for an internal upheaval. Mussolini is still in control and commands the self-interested obedience of the Fascist Party machine. The Royal Family, formerly counted on as a counterweight to Mussolini, no longer appear to be seriously looked to for a lead. Generals such as Badoglio seem to be too well guarded to have any prospect of forming any anti-Mussolini movement round them and there are no signs of any serious disaffection in the armed forces.

6. At the same time, there are certain latent factors which, if conditions are at a later date propitious, might rouse the average Italian from the prevailing mood of apathy and generate a spirit of active opposition to the present rulers of Italy and the German stranglehold. The educated classes, while accepting the Fascist system so long as it worked, have as a whole always disliked it and now seem to appreciate that the results of that system are the disasters of the war and the war itself. Mistrust and dislike of Fascism is growing among the masses, who are now feeling the real effects of the corruption and favouritism of the system. The armed forces, moreover, are, at the moment, considerably extended and large garrisons have to be maintained in the Balkans. It is possible that disaffection might arise among the troops of occupation in that area as a result of Allied successes elsewhere. The effect of this would be twofold; discontent would spread to the homeland, on the one hand, while, on the other, Germany would have to send her own troops to replace Italians and under present conditions these could ill be spared.

7. As regards the future, the latent unpopularity of the Fascist system, coupled with an almost universal dislike of the Germans, might be capable of provoking an explosion if conditions of living deteriorated, Italy suffered severe reverses in Africa and Italian towns were subjected to widespread and continuous bombing. For such an explosion to pass to the stage of a major event such as the overthrow of Mussolini and the Fascist Party, or overtures for a separate peace, two factors would be essential pre-requisites. The first is the emergence of an alternative leader; though none has arisen either in Italy or abroad, this possibility should not be excluded in a country which habitually throws up leaders from among the masses. The second postulate would be impotence on the part of the Germans to control the situation. At present the Fascist Party is sufficiently strong to suppress any potential leader, and the Germans, who are not appreciably extended by the existing measure of control exercised by them, would probably be in a position, at some sacrifice to their resources in other areas, to maintain the Fascist Party in power by force and snip any incipient revolt in the bud. It seems unlikely, therefore, that unrest could ever reach dangerous dimensions until Germany had reached the point of being unable to spare the necessary forces to increase her grip on Italy, i.e., until Germany herself was nearing dissolution. Any signs of dissolution in German morale would have an especially marked effect in the Italian forces. As a result of German stiffening the Italians in Libya have recently fought comparatively well; if this stiffening were removed, the decline in the Italian will to fight would probably be extremely rapid.

8. To sum up:

(i) At present Italian morale has sunk to a condition of general apathy and does not impose any severe strain on Germany.

(ii) A deterioration in living conditions, severe reverses in Africa and widespread and continuous bombing of Italian towns would probably produce such conditions of increased discontent and tendencies to revolt as to force the Germans considerably to reinforce their grip on Italy, with a consequent increased drain on German resources.

(iii) Discontent is unlikely to reach dimensions dangerous for the Fascist régime so long as Germany has forces available to maintain her control, i.e., until Germany herself is reaching breaking-point.
TO BE KEPT UNDER LOCK AND KEY

It is requested that special care may be taken to ensure the secrecy of this document.

WAR CABINET.

THE RUSSIAN CONVOYS.

Note by the Secretary.

THE attached information regarding the number of escorts and the merchant ships used, together with casualties in both warships and merchant ships, as well as Merchant Navy crews known to be lost, is circulated to members of the War Cabinet by direction of the Prime Minister.

(Signed) E. E. BRIDGES, Secretary.

Great George Street, S.W. 1,
October 15, 1942.

Total number of passages made by British warships: 12 battleships, 2 battle-cruisers, 6 aircraft-carriers, 54 cruisers, 211 destroyers, 50 minesweepers, 43 anti-submarine trawlers, 24 corvettes, 64 submarines, 10 anti-aircraft ships, 2 auxiliary aircraft-carriers.

(The corresponding figures for United States warships are: 3 battleships, 5 cruisers, 12 destroyers.)

<table>
<thead>
<tr>
<th>British</th>
<th>U.S.A.</th>
<th>Russian</th>
<th>Other Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailed</td>
<td>Sailed</td>
<td>Sailed</td>
<td>Sailed</td>
</tr>
<tr>
<td>Sunk</td>
<td>Sunk</td>
<td>Sunk</td>
<td>Sunk</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Merchant Ships ... 192 22 124 31 74 5 69 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals ... 460 66 893</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.M. Ships sunk ... 2 cruisers, 3 destroyers, 3 minesweepers, 1 submarine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naval Casualties ... Killed: 766 Wounded: 137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchant Navy personnel known to be lost 378 79+ 20+ 57+ 543+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note.—In the majority of cases there is no information from either British, American or other sources, as to the number of crew or casualties in American, Russian or Panamanian ships.)