

RESTRICTED

AIR HISTORICAL BRANCH

TRANSLATION NO. VII/III

THE LOCATION AND STRATEGIC
IMPORTANCE OF ANGLO - AMERICAN
BASES IN 1943.

A Study prepared by the German Air Historical Branch
(8th Abteilung) and dated 30th October 1944.

CONTENTS

I. General Observations on the Significance and Purpose of Bases

- (a) What is a base?
- (b) The various types of military bases
- (c) The purposes served by bases

- 1. Bases for land-fighting
- 2. Bases for naval warfare
- 3. Bases for aerial warfare
- 4. The importance of a signals network

(d) Policy regarding the establishment of new bases

- 1. Continental Powers
- 2. Maritime Powers

II. Location and Strategic Importance of the Anglo-American Bases at the Outbreak of War

(a) Bases of the British Empire

- 1. Naval bases in the British Isles
- 2. Air bases in the British Isles
- 3. Shipping route from England to India via South Africa
- 4. Routes Great Britain - Mediterranean - India - Australia
- 5. Routes Great Britain - North America
- 6. Routes Great Britain - South America

(b) US Bases

- 1. US policy regarding the establishment of bases
- 2. Bases situated on the American Coast
- 3. Bases in the Panama Canal zone
- 4. Location and strategic importance of the bases in the Pacific

III. Location and Strategic Importance of the Anglo-American Sea Power in 1941 and their effect on Empire Defense Strategy

(a) The importance of the Anglo-American bloc

(b) Changes brought about in the course of the war

- 1. England's position in relation to Europe
- 2. Position in the Atlantic
- 3. Position in the Mediterranean
- 4. Position in the Pacific
- 5. Cumulative observations on sea bases

IV. Location and Strategic Importance of Land Bases, with particular reference to Empire Defense Strategy

V. References

I. General Observations on the Significance and Purpose of Bases

(a) What Is a Base?

Bases serve primarily to establish a nation's communications in distant parts of the world. These can, however, also be a source of protection and defense against foreign influences, and generally one base serves many purposes.

(b) The various types of Military Bases.

Military bases can be divided into categories, depending either on the purpose which they serve or the type of service that will be based on them. We know certain land, sea and air bases each of which caters for a specific purpose, such as to facilitate communications, to disrupt enemy communications or as a jumping off point for military operations; in addition, they frequently serve as supply depots.

In his "Théorie Stratégique", dealing with numerous strategic principles, the French Admiral Gouraud distinguishes between bases and positions. According to Gouraud, the positions are points from which an advance into enemy territory is planned and they are, therefore, closely connected with military operations.

Bases, on the other hand, are depots where supplies can be stored or repaired carried out. In the same work, Gouraud states that the strategic value of a position depends on its geographical position, on its capacity to withstand enemy attack, and also on its usefulness as a reserve depot. Positions and fighting forces form an integral whole and must supplement one another if full advantage is to be taken of naval supremacy.

(c) The purposes served by Bases

A base must have sufficient space for the deployment of troops and must provide facilities for training and equipping troops. As far as possible, protection must be afforded against enemy attack, either by actual defensive measures or by the most advantageous use of the terrain.

1. Bases for Land-fighting

Sufficient space and a favourable terrain for offensive and defensive fighting. Suitable provisions for food and supplies.

2. Bases for naval warfare

If the term "land influence" may be used in connection with the conduct of naval warfare, coastal areas can perhaps be said to possess this influence.

A sea base, or position as Gouraud calls it, has to fulfill a number of conditions. It must afford protection from wind and sun, good harborage and a water level remaining fairly constant at all times. It must have facilities for re-fuelling and provisioning ships with drinking water and fuel. Other essential requirements are adequate landing and unloading and repair dock facilities. All these installations should be well sheltered and camouflaged against enemy aerial reconnaissance.

In the age of sailing ships the very minimum base facilities were necessary. Given favourable winds, ships could sail practically unlimited distances. Individual bases could therefore be of great distances from each other and there was no need for supply or regular bases.

/This

Thus it was possible for England to wage a sea war in the 16th Century against the world powers of Spain and Portugal with no fortified sea bases. Under these favourable conditions, England was able to turn her back on the Continent of Europe and devote herself to overseas expansion.

With the advent of the steam engine, shipping movements came to depend on fuel supplies. The distances between bases were determined by the distance a ship could travel without refuelling. Thanks to her monopoly of coal supplies, England was able during this period to strengthen her position as a world power to the detriment of other nations with no overseas bases.

When petrol took the place of coal, the change was an unfavourable one for England. The range of shipping movements was extended. Hence because of less importance on it became less necessary to built so many, and England's control of the world's sea traffic increased.

Bases with coal reserves had now to be equipped, in addition, with oil depots. The English coal supply was supplemented by an Anglo-American oil monopoly, in which the U.S.A. became the chief party. Increased shipping tonnage necessitated increased repair facilities. Only a few bases could be equipped with cranes and docks large enough for battleships and aircraft carriers. These, the most important bases, are termed "First Class" bases.

With the development of aviation, land and sea bases must strong flak and fighter defences and continual defensive patrols by reconnaissance aircraft.

3. Bases for aerial warfare

An air base should not only be a jumping off ground for air operations, but also a point from which other areas can be guarded against enemy attack. The airfield must be suitable for air force ground personnel. In addition, it should be situated as near as possible to the many lines so that maximum fighter penetration and escort can be attained.

Although the use of oil as fuel for shipping made it possible for bases to be more widely dispersed than before, aircraft bases have to be considerably closer to each other. For intruding and communications purposes, the distance between bases should, at the present time, not exceed 200 to 300 kms.

4. Importance of Signals network

With the development of signals techniques, particularly radio, patrol areas in the vicinity of air and sea bases have been greatly increased.

(c) Policies regarding the establishment of sea bases

Decades of foreign policy are often shown by the position and construction of a country's bases and by the order in which these are required. A clear distinction can be drawn between nations confining their interests to Europe, and those which plan in terms of sea and world power.

5. Continental Areas

A purely continental power will build bases only in its own country, or in its immediate vicinity, for the protection of specific areas, e.g. the German use of Heligoland and Frisia. Such a power might, in the course of long term planning, or during a war, try to acquire some jumping off points for operations against enemy encirclement, e.g. the use of German bases in Jersey and Wurzburg against

England. As a general rule, a continental power will not establish bases too far away from the homelands. It has no mind of rapidly and conveniently bases are will, in consequence, often tend to underestimate the value of such bases to others. Germany has been guilty of this fault with regard to Helvo.

Both continental and sea powers can build bases to obstruct enemy operations. Such bases serve to check the power of an army or of an unreliable neutral; the most vital areas in enemy territory such as lines of communication, can be attacked, or political pressure can be applied. Any attempt on the part of the enemy to seize the bases must be resisted. Examples of such spheres of influence include the German use of the Balkans as a threat to Turkey, and the Russian occupation of Hungary against Poland, Austria and Germany.

2. Maritime Bases

A nation aspiring towards sea power must first of all set up and control lines of communication. The role of bases situated along these lines is similar to that played by the arteries in the human blood system.

III. Location and Strategic Importance of the Anglo-American Fleet at the Outbreak of War

(a) Bases of the British Navy

England's development into a great maritime power was a lengthy process. It began in 1700 with the destruction of the Spanish Armada, and between then and the Federation of 1815 in 1839, only one serious setback was suffered, the American War of Independence.

On the map are shown 5 main lines of communication:

(1) England - West Africa - South Africa - India - Australia (extending to Japan and China).

(2) England - Mediterranean - India - Australia

(3a) England - North America

(4) England - South America

(5) West Coast of North America - Japan - Australia - India

The first four of these lines of communication are vital to the carrying of heavy traffic within the Empire.

The loss of, or even a serious threat to these routes would rob the Empire of its importance. To patrol and rule the seas, the Fleet must have a system of sea bases. Their location, number and construction are determined by the purpose they have to serve.

1. Naval bases in the British Isles

Dover, with the fortified harbour of Sespy Point lying to the North, is an important base for operations in the North Sea Atlantic and North Sea; also for the blockade of Germany and escort of convoys to Russia.

Southampton, Plymouth: exist mainly as bases for operations in the Channel and against the Continent. Apart from these "first class" naval bases, many secondary harbours are dispersed along the coast.

2. Air bases in the British Isles

These are scattered over the entire island, but are rather more concentrated in Central and S.E. England. They serve for defence

and as bases for air operations against Europe.

3. Shipping route from England to India via South Africa

This route is safeguarded by the following bases: Gibraltar, Algiers, Port Said, St. Helena, Capetown, Simonstown, Durban, Port Louis, Aden, Colombo and Singapore. Gibraltar, Simonstown, Colombo and Singapore are also valuable jumping off points for operations as follows:

Gibraltar: for operations in the western Mediterranean and the central part of the Northern Atlantic. It dominates the western approaches to the Mediterranean and is therefore at all times in a position to prevent a fusion of the Spanish and French Mediterranean and Atlantic Fleets. Combined operation of these two powers is therefore impossible. Owing to lack of space and unfavourable terrain, Gibraltar is of little value as an air base. It has only a medium sized airfield.

Aden: base for operations in the Indian Ocean and South Atlantic; serves as a strongpoint on the route round the Cape of Good Hope.

Colombo: after Singapore the most important base for operations in the Indian Ocean and against the Dutch East Indies, but owing to its geographical position is of less use than Singapore as a barrier to Japanese expansion.

Singapore: is in a position to dominate the straits of Malacca, the most important connecting link between the Indian Ocean and the Pacific. Singapore was thus able to control, distract or throttle the traffic between the oceans. Fifty percent of all Japanese and Chinese foreign trade passed along this route.

Since foreign trade is as important to Japan as a ~~MARITIME~~ power, as it is to England, Singapore in British hands was a potential threat to the Japanese. Singapore and Hongkong in combination controlled the southern approaches of the China sea and safeguarded British and Chinese trade. In the course of the war Japan has succeeded in eliminating this danger.

The route to the East via South Africa is, however, of only secondary importance so long as the shorter route to India, via the Mediterranean, remains unthreatened. Danger spot on this route is S.E. Africa with the French base of Dakar. The greater part of this area is practically undefended, but in mid-ocean there is little danger of attack from the coast.

4. British Empire - Mediterranean - India - Australia

The map shows the following bases: Gibraltar - Malta, Alexandria - Aden - Colombo - Melaka - Melbourne - Sydney

Malta: like Gibraltar, Malta is a "First Class" base and carries mainly to safeguard convoys and communications on this route; it is also a base for operations in the central Mediterranean. Its special strategic importance is due to its position on the sea route from Italy to the Italian North African colonies. It flanks the narrow between Sicily and Cap Bon and the Straits of Messina.

Alexandria and Aden guard the Suez Canal and are bases for operations in the Eastern Mediterranean and the Persian Gulf. Both are equally important as both rail and air bases for the safeguarding of British interests in the Near East.

Colombo, Melaka, Melbourne and Sydney, serve to protect and safeguard the sea route from the Indian Ocean to the Pacific.

Other strategically important bases shown on the map are:

Cyprus, in the Eastern Mediterranean, from which British naval traffic can be disrupted, the Bahrein Islands with their vast oil resources, together with Aden and Bombay help to safeguard the Persian Gulf from Russian influence.

Bombay, the most important terminal for British troop transports and the largest harbour available to Anglo-Indian fleet.

Singapore: The entire Mediterranean route is threatened from the coasts of Spain, France and Italy. The Northern part of the Indian Ocean and Iran are threatened by Russian influence. A conflict between British and Japanese or U.S. interests, in the area between the Dutch East Indies and New Zealand, could jeopardize British interests in this area.

6. Routes: Great Britain - North America

Portsmouth and St. John. Harmonic well protected bays provide good harbours.

Halifax: A useful supply and defence base lying at the mouth of the St. Lawrence river, with harbour ice-free all the while year. It is the starting point for convoys heading North. The Brasilia serve as a communications link and safeguard the route from Great Britain to the West Indies. Together with Kingston they are a potential threat to the U.S.A.

Kingston is in a position to control traffic to the Pacific Coast.

6. Routes: Great Britain - South America

This route is the least protected of all. It has only the supply bases Port Stanley and Port Stanley in the Falkland Islands. Port Stanley is also in a position to influence French West Africa. The Falklands might possibly serve as a defence point for the approach to the Magellan Straits and the latter can be used as an alternative route to the Pacific if the Panama Canal should be closed. The Falklands are a powerful block conserning the Eastern States of South America.

The Falklands are also a potential danger to South America.

The map of the world shows more bases in New Zealand and along the West Coast of Canada. In the N.E. Pacific there are scattered British possessions but no bases.

Conclusion

At the outbreak of war, England had an almost uninterrupted chain of strategically important bases stretching round the world. The American declaration of Independence at the end of the 18th century caused the most serious break in this global chain of bases.

(b) U.S. Bases

Before we explore in greater detail the development of English bases during the present war and their effect on the defense of the Empire, mention must be made of the development of U.S. bases. England and America are so closely allied that they cannot be separated when discussing the defense of the Empire. Illustration 3 (Gambleton's note: Illustration missing) shows the United States with their overseas possessions and their bases in 1939.

1. U.S. policy regarding the establishment of bases

Up to the middle of the 19th Century the U.S. sphere of interest remained confined to the American Continent, and the American attitude during that period is epitomized by the Monroe Doctrine of 1823.

Not until 1853, the year of the first U.S. Naval expedition to Japan, did America make her first attempt at overseas expansion. The basic assumption underlying England's development into a world power was that bases were a means of holding together the various parts of her Empire. First of all these parts had to be controlled and made as strong and self-sufficient as possible and then the bases constructed. The building of these bases coincided closely with economic or political territorial expansion. The same tendency is to be seen in the disposition of U.S. bases in the Pacific Canal area. In the Pacific and in S. America the sequence is reversed: the bases were established first and the economic and political expansion followed. ~~Just as~~ warns against the establishment by an ~~asymmetrical~~ nation of points of the globe outside that power's sphere of influence or even within the sphere of influence of another nation.

Danger zones are areas in which rival influences confront each other, for such a situation often leads to war.

The case of the U.S.A. and Japan may be cited in proof of Admiral Gorst's theory.

In South America such conflicts rarely arise because of the combination of the Latin-American States. British policy regarding the bases is clearly modelled on Gorst's theories. As soon as Hong Kong entered into the Japanese sphere of influence, England's interests in it as a base flourished.

2. Bases situated on the American Coast

American defences are concentrated in the Pacific. Here the sea routes are safeguarded and protected by Seattle, those Island near San Francisco, San Pedro and San Diego; these ports serve also as bases for operations on the East Pacific. The Atlantic sea routes are safeguarded by Boston, New York and Norfolk. There are no weak points in this chain of bases which lie at regular intervals along the length of the coastline.

3. Bases in the Panama Canal zone

With the opening of the Panama Canal in 1914, the Gulf of Mexico and the Caribbean sea became vital links in one of the most important of world trading routes. To the west the Canal is protected by a line of bases stretching from Florida to Port au Prince in Haiti. Potential danger points were neighbouring English bases and in particular Kingston in Jamaica.

During the war these were voluntarily ceded to the U.S.A., and the area was further strengthened by the occupation of French bases on the Antilles. This meant an expansion of the chain of bases protecting the waters between N. and S. America, from the Virgin Islands via the Antilles as far as Trinidad. To the east, the Canal is defended by close fortifications and locks. The easier patrolling of the approaches to the Canal the Galapagos Islands were also occupied during the war.

4. Location and strategic importance of the bases in the Pacific

The sea route from America through the Pacific to Japan, Australia, India is, from an Anglo-American point of view, the most vulnerable of all. In the Western Pacific there is one important base, Truk Harbour in the Marshall Islands. Whoever possesses this group of islands dominates the entire Western Pacific. They are the only base for supply and protective purposes in this area, and serve also as a jumping off point for offensive operations. Midway and Wake Islands are primarily conventional bases, but serve also to defend the Mariana. Iwo Jima on form is steadily rising in importance as a supply base on the route from the U.S.A. or the Mariana to Australia, the Philippines and Dutch East Indies.

The Philippines, in the Western Pacific, are of great economic importance. They are however situated within the Japanese sphere of influence, and must therefore be regarded as a potential danger area. They are too far distant from the American mainland to be of any use as operational bases. The present war has shown that, although fortifed, they could not be held owing to supply difficulties.

III. Location and Strategic Importance of the Anglo-American Air Bases in 1943 and their effect on future Japanese Strategy

(a) The importance of the Anglo-American bloc

The first part of this lecture has shown how England tried, even in vain, to establish an ever increasing number of bases. Well aware of the fact that the flow of supplies to and from the various parts of the Empire must remain uninterrupted, if the Empire is to be held together, England has constantly tried to gain added protection for her sea routes. The Anglo-American bloc covers the strain on the defence policy of the Empire. Areas in which conflicts between Britain and the U.S.A. might have arisen have been eliminated by the cutting or lessening of individual bases. While U.S. Groups took over the defence of these bases, English forces became free to defend the Empire at other points. The future effect of these concessions to the U.S.A. on the British Empire cannot yet be assessed.

Map 4 (Translator's note: missing) shows the Anglo-American bloc at the time of the American entry into the war. The following critical appreciation of the role played by bases in the defence policy of the Empire, will point out those bases which serve not only for defence purposes but can also be used as starting points for offensive operations.

The present localized American offensive in the Pacific proves the truth of the motto "Attack is the best form of defense". This offensive is pinning the Japanese forces down to such an extent that Japan is not in a position to attack India or any other part of the British Empire. An instructive treatise on operational bases must therefore not limit itself solely to a discussion on the vulnerability of bases for defensive purposes.

(b) Changes brought about in the course of the war

A comparison between Maps 4 and 5 shows the changes which have come about during the war. Map 5 shows the present positions.

1. England's position in relation to Europe

Since the occupation of Norway and France a complete blockade of Germany has been technically impossible. Through the development of war weapons - especially those used by the Royal Air Force - the entire British Isles are now threatened. Bases on the British Isles serve primarily as a protection against air attacks; in the second place as a protection against enemy landings. They are also starting points for landing and air operations against the Continent.

Russia or Scotland and alternative routes for protecting the Northern supply route from Hull/Harwich direct to Scotland and to Ireland - an alternative by railroads and inland waterways preferable to seaborne shipping - aided by Hitler - also able to pick up my ships leaving the coastal or Northern waters of Gm H. Goss. Ireland is also a potential base for operations against North or Central Europe.

No. 8. Situation in the Atlantic

The following basic strategic conditions must be fulfilled in all events. Supply routes must be kept open and enemy intervention within these routes must be prevented. Internally, a strengthened must be maintained on German submarine shipping. To achieve this, Britain needs not only a fleet based on the main but also friendly organizations or informants from other neutral nations.

In this war, with the possible exception of German naval forces, there is no probability of the Atlantic being threatened from the Southern shores. There is little fear of any danger from Japan because of that country's economic conditions and military weakness. Perhaps this will include the British sphere of influence, particularly since the expansion of the Japanese.

With the existing power by Hitler of some of our bases in the U.S. and the threat to the West Indies' merchant community. The U.S. are already spreading their influence over the entire S. American continent. Under cover of a propaganda campaign emanating reported threats to the S. American countries from the Nazi powers, the U.S. have acquired various bases there. These are explicit from those known during 1942 and 1943 until the December 1943 meeting had very relations with the Nazi powers. These bases were at first of very little military importance. They can be important as advanced ports for the economic expansion of the U.S.

The Sea Route

The map of 1943 shows the possibility of patrolling the whole of the Northern route from Iceland to Novaya Zembla, Novaya Zembla, Novorossiisk and Murmansk. The establishment of bases in the Azores, in the same way as the occupation of Ireland and Greenland, brought with it an department in the straitsland, and this with respect to allied countries. Aircraft based on the Azores and along the gap in the transatlantic system between the British Isles, Newfoundland, the Azores, Gibraltar and N.W. Africa. The development of air reconnaissance patrols that created has a tightening effect on the long distance blockade against Germany. As a concluding point the large convoys, we can consider the building of traffic piers through the Central Shetlands, and this in spite of the fact that these are so well defended bases in the Azores.

No. 9. Situation in the Mediterranean

The Mediterranean is probably important as a supplement to Hitler; in addition it is a base for operations against Africa. The sea route through the Red Sea has been safe for British shipping - especially after 1943. The threat from the Hitler has been removed by the designation of the Suez Canal as a major objective. Yugoslavia, Italy, Northern Italy, Sicily and Sicilia, the British Islands, form a defensive wall against the Nazis and also serve as bases to any operation from Southern France. Hitler's control did not extend to the Mediterranean. Hitler must bring no longer consider the Southern and Central Mediterranean as a danger zone. On the other hand Greece and Crete still dominate the Southern Mediterranean. Hitler is taking a particular target area. In Africa, more so than in any other part of the world, German, Anglo-American and French interests are

From the German side, Germany's concern is throughout observed the movements, from the British side through Germany and the American bases on the Atlantic Ocean. American forces are in Germany, especially since the American bases have been well developed and are among the best along the North coast of the Baltic Sea. The final point of the Mediterranean has shifted to the west of the sea from the Atlantic Ocean to the British Isles and France. The course of the Italian campaign to date has shown the importance of the bases in the Mediterranean as jumping off points for the operations against Europe.

In the Central Mediterranean area, Italy has become a major link through which can be sent for air raids from either against Germany itself or against other occupied territories.

For long operations against the Balkans and Southern Russia, England can use her bases in No. Africa and Italy. Operations against Russia can also be carried out by means of a submarine route via the Black Sea. Spain and Portugal is one military weakness and their possible cooperation in August could cause the former to do so, but again it must be watched the unpredictable nature of the Spanish.

The next to the Balkans through Turkey Russia operated contributions for the following two reasons:

1. English has already set up in Turkey an air force general staff organization and flying operations could therefore be conducted with great precision.
2. In the Balkans and especially in Turkey, communications and supplies between the conflicting and, should this now become of front line importance, the question will arise of how much distance the Anglo-American alliance can stand without breaking down.

To Britain in the Pacific

Illustration 6 (General's map showing) shows Japanese expansion in 1936 via the Malaya route to the Chinese Islands, the Ryukyu in the East and as far as Manchuria in the North. It also shows the general Japanese position since the beginning of the Japanese aggression in the year of 1931.

British, American and French territories known in the Pacific have been occupied by various Japanese bases.

From a military point of view the present Anglo-American would have been more stable than in 1936-38. At that time the Japanese were a geographically large but at same respective weak links in the Japanese sphere of influence they were difficult to rapidly move either west or the Indian or from Indonesia. In spite of strong resistance, the Japanese could not be held because of the great distances necessarily the Indian from any other Japanese invasion bases. An additional factor was probably that the Japanese had been heavily beaten by the Japanese attack on Pearl Harbor.

Today the bases at Pearl Harbor have been strengthened. The Japanese offensive is supported by a well planned network of bases. The Japanese occupation of Singapore, a base which like Malaya can also strangle a sea route, has added the wings of the Anglo-American campaign against Japan. In less as Singapore is in the Indian Ocean fear no danger from that direction. This does not apply to the threat from the Arctic since there the situation has changed the favor of the British.

Japan can, after (—) the building of the Canal, no longer be separated from the So. L. To. In addition as well as

In Northern Canada, important bases, particularly air bases, have been built for operations in the Northern part of the Pacific. Apart from this, the movement of the Merchant Marine has supplied facilities for establishing advanced bases, a task which the U.S. Government has already begun. In the North Pacific the U.S. are now in a position to safeguard and protect the supply route to Russia and they may, in time, launch an offensive from this direction against Japan or even against Russia.

3. Operational considerations on sea bases

To meet existing Empire defence needs, threatened by the development of the German U-boat and Air Force, the British network of bases had to be extended considerably.

Aircraft carriers, used as floating air bases, provided a temporary solution. During the course of the war, Britain and America have succeeded in establishing their influence over all maritime nations with the exception of Japan, France, Norway and Greece.

Several danger areas were eliminated, i.e. the S. Mediterranean, N.W. Africa, Central America and N. America, by the setting up of well established coastal bases for which no complete reconnaissance coverage was possible. This facilitated convoy protection and was also of value to air operations generally. It also used the strain put on aircraft carriers and other naval escort vessels. The forces could then be concentrated in areas which had few bases to protect them or could assist in landing operations.

^{The} England need not fear her German fleet since her own fleet is superior in numbers and training. Warships and armed raiders used to attack convoys, present no great danger. Since Germany, having few bases, has to confine her operations to certain convoys, which are usually heavily escorted.

Vince the French were captured by Italy, the Italian Fleet is no longer a factor to be taken into consideration.

To what extent allied bases will, in the future, be threatened by Japan cannot yet be assessed. At the moment there seems to be no danger since the bulk of the Japanese fighting strength is pinned down by the American offensive.

IV. Formation and Strategic Importance of Joint Bases, with particular reference to British Defense Strategy.

The construction and use of joint bases and joint routes has so far only been lightly touched on in this lecture.

The British think of lines of communication in terms of the sea. Due to the fact that Britain is an island, she could concentrate the greater part of her fighting strength and armament in her base. In order to exercise world domination by means of this fleet and to protect her Empire, Britain's primary aim has been to encourage world traffic to confine itself to sea routes and to close all land routes leading to various parts of the Empire.

History shows how England tried to sabotage the building of all other lines and seas of world communication. In the course of the present war, England has forced to break this basic principle of her policy, and in order to find a way out of a temporarily unavoidable military situation and to minimise the effect of new heavy weapons, land routes had to be constructed. In Africa, the supply route from West Africa to the Upper Nile; in Iran, the supply route to Manchuria; in Central Asia the link with China across Burma.

Individual land bases are not strong enough to safeguard and protect these land routes, and it is doubtful whether England will in the future be able to defend these land routes as well as her sea communications.

England must reduce her armament industry if she is to maintain her land and sea power and her land and sea bases and at the same time meet the demands of a growing air force. While these land routes with their bases at the moment help to ease the strain on the defense of the empire, they must inevitably also endanger its future existence.

V. SOURCE.

A mass of literary material has been at our disposal. A short summary follows of the principal sources from which this lecture has been drawn.

1. British and American Staff Officers' Handbook - Details on individual bases, their construction and fortifications. Contains statistics on world economies, world lines of communications and density of traffic during the last years of peace; information on the importance of supply routes.
2. Gordon's "Naval Strategy", treated as a ~~German naval~~ ~~antifunctional~~ handbook (Vol. 1, Marine Rundschau 1930). Dealing with geographical strategy chapter on bases and positions, Gordon states some opinions on the value of bases, explaining the dependence of naval warfare on these bases and quotes historical examples in support of his theories.
3. "The changes in policy and strategy re the establishment of bases necessitated by the changed conditions of warfare", by Admiral Verner, in the 1933 issue of "Navalism". After questions whether, in the light of modern developments in warfare, it is possible for an Empire to be held together by a network of bases. He endeavours to show to what extent modern naval fighting forces are dependent on naval bases.
4. Admiral Maximilian "Naval bases in modern sea warfare" in the 1931 issue of "Navalism". He describes the varied purposes which naval bases have served through the course of history and the role played by bases in modern sea warfare.
5. SCHUDEKOPF
6. Woldeberg, "British naval policy 1880-1910"; shows the fundamental principles underlying the establishment of British bases.
6. Haworth, "U.S. Policy with regard to bases" - Deals with the history of American expansion.
7. Bonhag, "U.S. policy with regard to bases" in Volume 3 of the 1942 issue of the "Weltwirtschaftliche Rundschau". A criticism of American imperialism, tending to underestimate the importance of the British Empire.