SUMMARY

1. This study which concerns the "ways and means" of implementing a campaign against Japan via the northern route contains a detailed analysis of the feasibility of various routes of attack, the logistical problems involved and estimated forces required.

CONCLUSIONS

2. The conclusions, in part, are briefly summarized as follows:

(a) That we do not have sufficient information at this time to proceed with operational planning.
(b) That the successful support of large units of United States Forces depends upon many factors.
(c) That U. S. air bases on the Aleutians are desirable in protecting the supply line of communication.
(d) That any amphibious operation against Japan proper upon the outbreak of hostilities between Russia and Japan is impracticable.
(e) That operations in force on the Asiatic mainland cannot be undertaken until adequate sea supply lines and interior land supply routes in Siberia can be established.
(f) That it would be possible to dispatch one heavy bomber group (48 operational planes) at the outbreak of hostilities provided Russia can provide necessary logistical support.
(g) That U. S. motor torpedo boats could be operated from Petropavlovsk or Bering Sea Port Areas.
RECOMMENDATIONS

3. The report recommends, among other things, the following:

(a) That the Army be directed to
   (1) Train one reinforced Army division equipped for Arctic climates to be held for dispatch on short notice;
   (2) Prepare a plan to augment the existing Siberian Air Ferry Service facilities.
(b) That the Army and Navy be directed to prepare joint plans for the development of port facilities at Port Teller and Petropavlovsk.
(c) That plans for the efficient operation of U.S. air force units in Siberia be initiated.
(d) That a directive be issued to the Commanders in Chief, Pacific Areas, and the Commanding General, Western Defense Command, to prepare joint plans to
   (1) recapture Kiska as soon as feasible;
   (2) establish air bases on the island of Amchitka and on either Shemya or Agattu;
   (3) reinforce the Russian forces in the Kamchatka Peninsula.
   (4) capture and occupy Paramushiro and Shimushu.
(e) That efforts be continued to secure from the Russian Government information as to
   (1) the strength and disposition of Russian military and naval forces;
   (2) military and naval logistical support;
   (3) transportation and communication facilities;
   and
   (4) existing airfields.
(f) That a joint mission be sent to Siberia to conduct a survey of the areas concerned.
(g) That Russia be invited to state what aid they are likely to require from the United States in the event of hostilities between Russia and Japan.

DECLASSIFIED
JCS memo, 1-4-74
By RHP, NLR, Date APR 24 1974
JOINT CHIEFS OF STAFF

CAMPAIGN AGAINST JAPAN VIA THE NORTHERN ROUTE

Note by the Secretaries

Enclosure "A", a memorandum from the Commander in Chief, United States Fleet and Chief of Naval Operations, dated September 21, 1942, was forwarded to the Joint Staff Planners for study.

Enclosure "B" is the report submitted by the Joint Staff Planners with the recommendation that it be approved as a basis for further planning.

J. R. DEANE,
F. B. ROYAL,
Joint Secretariat.

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DECLASSEIFIED
JCS memo, 1-4-74
By RHP, NLR, Date APR 25 1974
MEMORANDUM

For: Joint Chiefs of Staff.
Subject: Campaign against Japan via the Northern Route.

1. It seems to me that the time has come to take up intensive study of the potentialities of a campaign against Japan via Alaska, the Aleutians, and the Bering Strait into the Kamchatka Peninsula via northeastern Siberia.

2. It is true that we do not now have the "tools" for such a campaign and that we are about to engage in operations on a "9th front", but next summer may see us not only in such case as to enable us to strike at Japan but in such case that it is the most useful, perhaps vital, thing we can do.

3. While it is also true that we can do little or nothing unless or until war begins between Japan and Russia, we should be more ready than we now are with "ways and means" not only to aid Russia but to exploit the availability of Russian territory to strike at Japan proper - which will have to be done chiefly by air from air bases within air striking distance.

/s/ E. J. KING
CAMPAIGN AGAINST JAPAN VIA THE NORTHERN ROUTE

Report by Joint Staff Planners

1. Statement of the Problem.
   (a) To determine the ways and means to implement a campaign against Japan via the northern route in order to:
      (1) Aid Russia.
      (2) Exploit the availability of Russian territory to strike at Japan proper by air.

2. Discussion.
   (a) The study is predicated on the assumptions that:
      (1) Russia has become an active ally in the Pacific against Japan and that Russian territory and facilities have been made available to the United States.
      (2) The Japanese still occupy Kiska, with an estimated strength of about 8,000 men and no land-based air facilities.
      (3) The Russians are able to hold Petropavlovsk for a sufficient length of time to permit our reinforcement (minimum estimate 30 days), and that they are able to hold the heavily fortified areas of the Maritime Provinces, including air bases within effective striking distance of Japan. In view of the conclusions of the Assistant Chief of Staff, G-2, as stated in Annex D, attached, it appears that this assumption may be unduly optimistic.
(b) The following information is pertinent to the study:

(1) The present relative strength of Japanese in North China, Korea, and Manchuko, and the Russian ground forces in the Eastern Siberian area is about equal, approximately one million.

(2) The Siberian Air Force is composed of about 1600 to 1700 planes; about 60% of these are probably modern combat planes and of these only a few are heavy or medium bombers.

(c) "Ways and Means" to implement the envisaged campaign.

(1) The extension of aid to Russia may take the form of one or a combination of the following:

(i) The establishment and maintenance of a supply line to Russia via the northern route.

(ii) The prosecution of a campaign against Japan by:

(aa) Amphibious attack against Japan on the line of the Kurile Islands.

(bb) Ground action on the Asiatic mainland.

(iii) Air support of Russia in the eastern Siberian theater.

(iv) Naval support of Russia.

(2) The exploitation of any of these means of aiding Russia, and the forces involved in the operation depend upon the establishment and maintenance of supply lines or routes. A discussion of the routes follows:

(3) Routes into Siberia:

(i) Through the Arctic ports on the Kolyma, Lena and Yenisei Rivers.

(aa) This route extends from the Pacific and Bering Sea sea-boards of the
American continent, through the Bering Strait and Arctic waters to ports at the mouths of the great Siberian Rivers.

(bb) The shipping season is short, reported to be about 8 weeks.

(cc) The actual port capacities and river shipping facilities are unknown but it is evident, on the basis of present information, that the volume of supplies will be small.

(dd) The distances to the envisaged active theater of operations is excessive.

(ee) This route is relatively secure from enemy action.

(ff) From a practical standpoint the maximum tonnage which can be shipped over this route will obviously be limited and will probably be required for the logistic support of the airfields on the Air Ferry Route.

(gg) The route must, therefore, be rejected as a main supply line but may be of minor value as an auxiliary route.

(ii) Across the Bering Sea to Anadyrsk Bay Area.

(aa) The ports in the area are Providence Bay, Velkal (Holy Cross Bay) and Anadyrsk.

(bb) None of the ports are developed but Providence Bay has a reputed daily capacity of 500 long tons during the ice free period of about 4 to 5 months extending from June to October.
Not considered practicable to plan on any shipping into the area during the period October to June.

Exploitation of this route to the theater of operations depends on development of transportation facilities in Northeastern Siberia as none exist as far as is known.

Relatively secure from enemy action.

Can be used to support an auxiliary or advanced supply base for the Alaskan-Siberian Air Ferry Route.

Although unsuitable for the support of large forces, retained for the support of an advanced supply base for the Air Ferry Route and appropriate steps should be taken to utilize to the limit of capabilities

Air Ferry Route - Alaska to Siberia.

The support or transportation of large forces or heavy and bulky supplies is limited due to the landing facilities and the inherent limitations of air transport.

Retained for the movement of planes, limited personnel, and light supplies.

Air Ferry Route - Aleutians to Kamchatka to Siberia.

This route is subject to the same limitations as the Alaska - Siberian route and in addition is subjected to extremely adverse weather conditions.

Under favorable weather conditions it might be utilized for reinforcing air units operating in the Kamchatka Area.
(v) Across the Bering Sea to the Eastern Siberian Coast and Kamchatka Peninsula north of Petropavlovsk.

(a) There are no developed seaports north of Petropavlovsk.

(bb) It appears feasible to develop a port in Korf Bay, construct a road across the isthmus through the river valleys, estimated distance about 90 miles, develop a port on the Penzhinskaya Gulf, probably at the mouth of the Rekinisuki River for transshipment to other ports in the Sea of Okhotsk. It is estimated that, if construction is started simultaneously at both ports in the early Spring, a small supply can be put over the route about six months thereafter, but would require another six months for operations at full capacity.

(cc) Protection for this route could be augmented by land-based aircraft from fields reported in the Nagayevko, Okhotsk, Ayan, and the Nikolaevsk areas.

(dd) This proposed route must be rejected as a main supply route but should be examined with reference to its development as an alternate route to the ports on the Sea of Okhotsk.

(vi) To Petropavlovsk thence overland to the Sea of Okhotsk and thence to the ports of Nagayevko and Nikolaevsk.

(aa) Petropavlovsk has a reported daily port capacity of 3,000 long tons during the ice free period from May to November and 1,500 long tons during the period November to May.
(bb) A road extends from Petropavlovsk across the Peninsula to Ust-Bolshertonetsk, a small town of unknown port capacity. This road is said to have a clearance capacity of approximately 200 tons per day.

(cc) There is no known overland transportation from Petropavlovsk directly to Nagayev or other locations in the Siberian mainland with suitable transportation facilities to the envisaged theater of operations.

(dd) This route presents possibilities as a supply route but is so close to enemy air bases in the Kurile Islands that its successful use is doubtful.

(ee) Russian airfields in the Petropavlovsk area are reported capable of supporting "5 squadrons", the size or type of the squadron is not known.

(ff) This route is rejected as a main supply route for the support of forces in Siberia, but is retained for the support of forces on the Kamchatka Peninsula.

(vii) Through the Kuril Straits to the Sea of Okhotsk thence to Nagayev and Nikolaevsk.

(aa) Each of the ports have a reported capacity of 1,000 long tons per day during the ice free period of about 5 months per year and about 50% of that during the remaining 7 months.

(bb) Nikolaevsk is only a short distance from the envisaged theater of operations and the transportation facilities appear suitable but it is in such a vulnerable location that successful use by large
ships is doubtful. Nagayovo although located in a more secure position is handicapped until suitable inland transportation facilities can be developed and by the relatively longer distance to the theater of operations.

(cc) This route is somewhat comparable to the route to Murmansk or Archangel as to weather and to Malta as to location.

(dd) North Russia convoys, under severe and short range air attack, have suffered losses in excess of 50%; Malta convoys losses up to 70%.

(ee) It is believed that the losses which would be incurred on this route would be so great as to render it unacceptable so long as the Japanese continue to hold Shimushu and Paramushiro Islands.

(ff) If we elect to reinforce the Russian forces in the lower Kamchatka Peninsula, to capture and hold Shimushu and Paramushiro, and to augment the naval escort and covering forces provided for the convoys with land-based aircraft, this route may become acceptable, although ship losses will be high and the use of the port of Nikolaevsk should be predicated on Allied air superiority in this area.

(gg) The eventual development of a supply route across the isthmus of the Kamchatka Peninsula therefore appears to become a matter of first importance.
(viii) To Vladivostok.

(aa) Since the approach to Vladivostok must be made through the Sea of Japan this route is not acceptable.

(4) Requirements to implement the supply routes into Siberia. (See Annex A for details).

(i) Establish additional advance air bases and recapture enemy occupied Aleutian Islands.

(ii) Reinforce Russian forces, establish a supply base, and expand existing air facilities in the Petropavlovsk area.

(iii) Capture and hold Shimushu and Paramushiro.

(iv) Develop and expand port facilities in the Nikolaevsk, Nagayvo, Anadyrsk Bay areas, and routes inland from those ports.

(v) Develop and expand corresponding transportation facilities in Alaska.

(vi) Develop a route across the isthmus of the Kamchatka Peninsula, Korf Bay, to the Gulf of Penzhinskaya, with port facilities at the termini.

(vii) Provide facilities in Alaska and Siberia to establish an Alaskan - Southeastern Siberian Ferry Route.

(5) The prosecution of the campaign against Japan by an amphibious attack on the line of the Kurile Islands.

(i) The prosecution of such an attack is believed to depend on:

(aa) The establishment of an advance supply base in the Petropavlovsk area capable of supporting the operation.

(bb) The commitment of large naval, ground, and air forces, with a consequent heavy drain on our available shipping.
(ii) Such an operation will be an attack against strength in a theater which is characterized by lack of maneuver area, and must be predicated upon Russian ability and willingness to undertake concurrent offensive operations on the Asiatic mainland and Sakhalin Island.

(iii) The estimated strength of the ground forces required will be not less than 12 divisions, with the necessary air and naval support.

(iv) Such an operation will require extensive preparation including a study of its effect upon operations either present or planned in other theaters. In any case, on the basis of present information, it could not be undertaken immediately upon the outbreak of hostilities between Russia and Japan. It is, therefore, considered to be beyond the scope of this study.

(6) Ground action on the Asiatic mainland.

(i) It has been estimated that an offensive operation on the Asiatic mainland will require a force of from 15 to 18 divisions with heavy air support.

(ii) It will depend upon the establishment of a supply route through the Sea of Okhotsk, the development of adequate ports on the shores of that sea, and the construction and development of supply routes inland from these ports.

(iii) It has the same inherent objections that apply to the operation discussed in (5) above, and it is, therefore, assumed to be outside the scope of this study.

(7) Air Support of Russia.

(i) To exploit Russian territory for striking by air at Japan proper, the employment of bombardment air forces would be required. Vital
targets in Japan proper, appropriate for bomber attack, are largely concentrated in the Kobe-Tokyo area. There are no Russian land bases within Light or Medium Bomber range of this target area; and the only Russian territory within effective Heavy Bomber range is the vicinity of Vladivostok. For planning purposes the maximum effective operational range of heavy bomber equipment of types now available, or in immediate prospect, is accepted as approximately 750 miles. Hence, to accomplish one of the two purposes stated in the problem, heavy bomber units must be employed from bases or staging fields located near the southern extremity of the Maritime Provinces, within approximately 150 miles of Vladivostok.

(ii) The most practicable means whereby the United States may implement heavy bomber operations against Japanese targets from Siberian bases, as a means of aiding Russia and prosecuting the war against Japan, may prove to be a program whereby we will furnish Russia heavy bomber aircraft, for use by Russian squadrons constituting integral parts of a complete, balanced and homogeneous air force, capable of effective team work.

(iii) The strength of the United States heavy bomber force, if any, to be employed in the area in question, should be determined by a consideration of (first) the number of units required to accomplish the desired objective, and (second) the number which it will be practicable to dispatch to the area and operationally support in the area.
(aa) Number of heavy bomber units required. There is attached hereto, as
Annex E, a study of bombardment operations required for destruction of the principal
war industry targets on the main islands of Japan. This study indicates that approxi-
mately 21 heavy bomber groups, operating for a period of six months, would probably be
required to completely accomplish the de-
sired result; that is, a destruction of the
industries and installations vital to a con-
tinuation of Japan’s war effort. It appears,
therefore, that the strength of heavy bomber
forces which may be profitably employed in
the area in question will be initially lim-
ited by the combined Russian and United
States capabilities for the support of air
forces in that area, rather than by theoreti-
cal tactical considerations. Also, that
major air forces will be required to accom-
plish vital strategic destruction by bombing
operations against Japan proper.

(bb) It is apparent that there is a
minimum strength below which it is not
advisable to commit heavy bombers (unsup-
ported by accompanying fighters) against a
well defended enemy area, because of:

aa. The rate of attrition factor.
A single bomber unit, operating alone,
will draw against itself all the de-
fensive forces available for employment
against many units attacking simultan-
eously in the same area, causing losses
at a rate which may be prohibitive.
bb. The time factor. The speed with which destruction of vital enemy installations is accomplished by bombardment must exceed the speed with which restoration or substitution of such installations may be accomplished by the enemy; else the results are inconclusive. Hence the destruction accomplished by one bomber unit in six months is not as effective as the destruction caused by six bomber units in one month.

(cc) A consideration of the study and factors discussed, indicate that judging from the results which could be expected from its employment, a single United States Heavy Bomber group in the area in question would be a token force only.

(dd) Bomber units which may be supported in the area. There is attached here-to, as Annex C, a study of the logistic requirements for the support of heavy bomber operations to be conducted from bases in the Vladivostok - Nikolaevsk area in Southeastern Siberia. From this study, it appears that United States bomber forces, in substantial strength, cannot be dispatched to and supported from the United States, in the area in question, unless and until we can establish and maintain a line of communication by sea from United States and Alaskan ports to ports on the west coast of the Sea of Okhotsk, from which suitable means of communication with the theater of operations would be provided.
are available. Prior to the establishment of such lines of communication over which troops in large numbers and heavy equipment and supplies may be moved, it appears that one or more United States heavy bomber groups (less motor transportation equipment and other items of heavy equipment) may be moved to and operated in the Vladivostok - Nikolaevsk area only in the event Russia is willing and able to provide for our use:

aa. Adequate operational bases within 150 miles northeast of Vladivostok; or suitable staging fields within that area, with suitable air bases located in the Komsomolsk area.

bb. Adequate fighter aircraft, antiaircraft artillery, and ground security protection for the air bases and staging fields made available.

cc. All aviation gasoline and oil required for tactical operations; and a substantial part of the total required for ferrying operations.

dd. Bombs required for the operations.

ee. All motor transportation equipment required for the operations, and supply facilities for the maintenance and operation thereof.

ff. Fourth echelon aircraft and aircraft engine maintenance facilities and service.

gg. Housing, and fuel required for cooking and heating purposes.
hh. Basic rations and a substantial part of miscellaneous supplies required, such as bulky chemicals, sanitary supplies, etc.

(iv) Assuming that Russia is willing and able to provide the supplies, support and services above indicated, it is estimated that 80 transport and cargo type airplanes, operating over a ferry route from Alaska, could furnish the remaining supplies required from the United States to support one Heavy Bomber Group, including all essential Air Corps supplies, auxiliary rations, articles of individual clothing and equipment, and miscellaneous light supplies. See Annex C.

(v) If and when we have established a reasonably secure line of sea and land communication to the Komsomolak area, U.S. Air Force operations on a larger scale might be supported directly from the United States. The logistical requirements for the support in this theater of a typical small air task force, consisting of one heavy bomber group, one medium bomber group, two fighter groups, one air transport group and normal ground service elements, are shown in Annex C.

(vi) In the event it is found that Russia required aid in defending the Kamchatka Peninsula, and in capturing and holding Paramushiro and Shimushu Islands, and it is determined that the United States will supply such aid, Russian Air Forces available for defensive and offensive operations in the Petropavlovsk area may require augmentation. The extent of such augmentation as is likely to be required, and practicable to be provided, is indicated in Appendices 2 and 3.
of Annex A, constituting analysis of requirements for hypothetical operations for reinforcing Russian forces on the Kamchatka Peninsula and conducting operations for the capture and occupation of Paramushiro and Shimushu Islands. The maximum U. S. air forces likely to be required for these operations are indicated as 5 squadrons; 2 fighter, 2 light bomber, and 1 medium bomber squadron, together with an observation flight. Air forces already operating in the Aleutian Area are believed to be sufficient to support an attack on Kiska.

(8) Naval Support of Russia.

(i) Russian naval forces in Siberia are not known with any accuracy, but according to present information, consists mostly of submarines and small vessels for local defense. It is reported that Petropavlovsk is being developed into a major naval base.

(ii) The U. S. Pacific Fleet will be required to support Russian naval forces as:

(aa) Convoy escorts, whether these convoys be for the support of Russian or our own forces.

(bb) Escort and covering forces for any amphibious operations undertaken.

(cc) Support and covering forces to maintain the line of communications and to prevent counter-attacks in force.

(iii) We must also continue submarine operations against Japan in cooperation with the Russian submarine force. Since it is reported that there are about one hundred submarines in the Siberian Forces, no reinforcement will be required in that area.
In addition to the normal naval operations listed in (8) (ii) and (iii) above, motor torpedo boats might be diverted from the Pacific theater and dispatched to reinforce the Russian forces in the Siberian area. Present information indicates that Russian torpedoes cannot be used by our boats. It would, therefore, appear preferable to operate them from Petropavlovsk or Bering Sea ports where the logistic supply could be more readily maintained. This would relieve similar Russian units, now reported in Siberia, for duty elsewhere.

3. Conclusions.
   (a) That sufficient information is not now available upon which to base reasonably supported conclusions, for operational planning purposes, as to ways and means which would be appropriate and practicable for a campaign by American forces against Japan, via the northern route, for the purpose of aiding Russia and exploiting the availability of Russian territory to strike by air at Japan proper.

   (b) That the successful support of large units of United States Forces and/or the extension of supply aid to Russia in appreciable tonnages depends upon:

   (1) Holding the Russian naval base at Petropavlovsk and the airfields in the Lower Kamchatka Area.
   (2) Capture and holding Paramushiro and Shimushu.
   (3) Successful operation of the sea route through the Kuril Straits to ports on the Sea of Okhotsk.
   (4) Development of an alternate supply route to the Sea of Okhotsk across the northern portion of Kamchatka is desirable but is not essential.
   (5) Development and extension of existing Siberian port facilities and the routes inland therefrom.
(6) It would be desirable, prior to the start of hostilities, to develop and stock a base at the Fort of Teller.

(7) Assignment of adequate air and naval forces to cover and protect the supply lines.

(c) That a chain of mutually supporting air bases on the Aleutians is desirable for the participation of land-based air units in the protection of the sea lanes to any of the Siberian ports. This would involve the recapture of enemy occupied positions in the Aleutian Islands, and the establishment of two additional advanced air bases.

(d) That any amphibious operation against Japan proper on the line of the Kurile Islands is impracticable upon the outbreak of hostilities between Russia and Japan.

(e) That operations in force on the Asiatic mainland cannot be undertaken until adequate sea supply lines and interior land supply routes in Siberia can be established.

(f) That Siberian airfields of the Maritime Provinces, within tactical flying range of Japan, must be held by the Russians in order that the United States Air Force may exploit the availability of Russian territory to strike at Japan proper by air.

(g) That, despite the disadvantages attending such employment, it appears possible, prior to the establishment of suitable surface supply lines, to dispatch one heavy bomber group (48 operational planes) for striking at Japan proper from available Russian airfields provided:

(1) Additional facilities are developed in the Alaskan Area.

(2) About 80 transport airplanes are made available for this duty.

(3) Russia can supply gasoline, oil, bombs, motor transportation, miscellaneous supplies, heavy maintenance and essential housekeeping.
(4) Facilities along the Siberian portion of the air ferry route are suitable and adequate.

(5) Russia can and will place at our disposal, airfields of adequate size and proper tactical disposition, protected by ground forces and covered by necessary aviation strength and provided with an air warning service.

(h) Commitment of bombardment forces to the Siberian theater should be predicated upon the assurance that the above conditions are satisfied, and upon the overall strategic situation in consideration of the capabilities of the force involved.

(i) That it is possible to support U.S. motor torpedo boats (PT) in the Petropavlovsk or Bering Sea Port Areas thus releasing similar Russian units for duty elsewhere.

4. Recommendations.

(a) That a directive be issued to the Army as follows:

(1) To take such steps as may now be practicable to maintain one reinforced Army division, constituted as indicated in Annex A, Appendix 2, in training and properly equipped for dispatch to arctic climates on short notice.

(2) That a plan be developed to augment the existing Air Ferry Service facilities for the support of an Alaskan - Southeast Siberian Ferry Route.

(b) That a directive be issued by the Joint Chiefs of Staff to the Army and the Navy as follows:

(1) That joint plans be developed for:

   (i) Development of the Port of Teller, Alaska, as a supply base and an advanced naval base for the support of small light forces.
(ii) Predicated on Russian cooperation, the extension and development of the port and harbor facilities in Petropavlovsk, Siberia, in order to support the ground and air force reinforcements indicated in Annex A, Appendix 2, as well as the Russian forces stationed in the area estimated at 15,000 men.

(c) That, although the commitment and dispatch of air forces is not specifically recommended, for the reasons outlined in the preceding portions of this paper or previous allocations, it is recognized that political and other considerations may require their employment.

(1) Make all planning preparations now practicable for the efficient operation of air force units in Siberian territory for the purpose of aiding Russia and striking at Japan proper by air.

(d) That a directive be issued by the Joint Chiefs of Staff to the Commander in Chief, Pacific Areas, and the Commanding General Western Defense Command as follows:

(1) That joint planning action be initiated to:
   (i) Recapture Kiska as soon as feasible.
   (ii) Establish air bases on the island of Amchitka and on either Shemya or Agattu.

(2) That joint plans be developed for:
   (i) The reinforcement of the Russian forces in the Kamchatka Peninsula.
   (ii) The capture and occupation of Paramushiro and Shimushu.

(e) That in case of a change of policy by the Russian Government efforts be continued, through the proper channels, to secure from the Russian Government:

(1) Current information as to the strength, composition and disposition of Russian military and naval forces.
(2) Current information as to essential military and naval stores, supplies and facilities.

(3) Complete information as to port, airport, rail, road, river, and communication facilities.

(4) Complete information as to basic mineral, agricultural and industrial resources in Eastern Siberia.

(5) Permission for a limited number of United States Military and Naval representatives to visit Siberia for the purpose of familiarizing themselves with conditions which might bear on cooperative action and would be mutually beneficial.

(6) Information as to what aid Russia would likely require, or desire, from the United States in the event of hostilities between Russia and Japan.
ANNEX "A"

INDEX

Appendix 1 - Establish advanced air bases and recapture enemy occupied Aleutian Islands.

Appendix 2 - Petropavlovsk Area, Requirements for.

Appendix 3 - Capture and Hold Shimushu and Paramushiru.

Appendix 4 - Port facilities, Nikolaevsk, Nagayovo and Anadyrsk Bay Areas.

Appendix 5 - Alaskan Area, development and expansion of facilities.

Appendix 6 - Supply Route Across Kamchatka.

Appendix 7 - Make necessary preparations to establish an Alaskan-Southeast Siberian Ferry Route.
Establish Advanced Air Bases and Recapture Enemy Occupied Aleutian Islands.

From the statement of the basic problem, it is apparent that time is of the essence. The delay involved by the attack and capture of Kiska is not justified, nor is the elimination of the Japanese occupation force from Kiska a pre-requisite to the success of an attack on Paramushiru or Shimushu.

It is accordingly recommended that Task III (Capture and occupation of Paramushiru and Shimushu) be given precedence over Tasks I and II which will be subsequently or concurrently initiated in the order named. It is felt that the enemy forces on Kiska can be contained by air operations from Adek until such time as Tasks I and II can be accomplished.

(NOTE. The operations indicated in Tasks I and II are already contemplated as a part of the existing mission of the Army and Navy in Alaska and might be accomplished independently and in advance of action contemplated in the present study).

**TASK I**  Occupy Amchitka and Construct Airfield Thereon.

   a. Ground Forces.
      (1) None on Amchitka
      (2) Reinforced Brigade (9,800) at Kiska 65 miles distant.
   b. Air Forces.
      (1) Single float fighters: None on hand at present. (These are apparently assembled at Kiska in lots of 5 to 12 from ship borne parts stored on Kiska).
(2) 4 motor seaplane (bombers): None now present at Kiska. 4 previously present were destroyed. These were apparently flown from Japan via Paramushiro.

2. Naval Forces.

(1) Four to six Destroyers convoying and on patrol in area.

(2) Submarines: 2 large, 5 small, base at Kiska.

d. Reinforcements.

(1) Ground - unknown - (1 Division believed to be in Kuriles)

(2) Air - unknown.

(3) Naval: In Kuriles - 1 CA, 3 CL, 6 DD, 6 SS.

2. United States Forces Required.

a. Ground Forces:

One regimental combat team (6,000)

1 Infantry Regt. 3,472
1 Bn. AA Comp. (Reinf.) 900
1 Btry. CA (155mm g.) 179
2 Btry. FA (105 H) 256
1 Co. Tanks (L) 121
1 Bn. Engrs. (Avn.) 805
Total 5,733

Services 680
6,413

b. Air Force. 2 Sq. Fighters - Bombers will base at Adak and refuel and rearm only at Amchitka.

(2 Sq. Fighter 574
Ground maintenance crew 222
Total 794

2. Naval Forces: Destroyers and submarines under Comalsec for protection of movement of force by infiltration.
3. Shipping Required.
      (Note: Using infiltration tactics, 1 AP (combat loader) in
      shuttle service can move troops forward from Adak in 3 Trips
      and 1 AK can be used to bring up equipment in 2 trips).
      Heavy freight (including steel landing mat) will
      be brought up by tugs with towed barges available in Alaska
      Defense Command.
   b. Monthly supply. 2 A.K.

TASK II Capture and Hold Kiska.
      Same as 1. for Task I.
   2. United States Forces Required.
      a. Ground Forces.
         1 Brigade Task Force, amphibious trained (10,000)
         divided in 6 Bn. Combat Teams. 2 Bn. teams each include
         1 Co. Tanks (L)
      b. Air Force - operating from base on Adak and
         advanced base on Amchitka.
         2 Sq. Bomb (M)
         1 Sq. Bomb (H)  (Available in Alaska Defense Command.
         3 Sq. Fighter
      c. Naval Forces - Minimum requirements (approximately
         those for Task Force 8):
         Two CA, 3 CL, 12 DD, 12 SS with auxiliary craft.
   3. Shipping Required - Initial.
      a. 6 A.P. combat loaded. 4 A.K.
      b. Monthly supply - 1 AK. (For small garrison re-
         maining on Kiska after release of combat teams).
ANNEX "A"

APPENDIX 2

PETROPAVLovSK AREA
Requirements For

1. Task:
Reinforce Russian Forces. Establish an Advanced
Base and Expand Existing Landbased Air Facilities in the
Petropavlovsk Area.

2. Estimated Forces Required - Petropavlovsk Area.
(a) Combat Forces.

1) All the information at hand indicates that
Russia is building up the Petropavlovsk Area as a
major base and defensive area. It seems probable
therefore that the defenses would be able to resist
all but a major Japanese offensive for at least 30
days. It is reported that at least one division of
infantry (10,000 troops) and some mountain artillery
units are stationed in the area.

2) The minimum ground and air combat troop
reinforcements considered essential for planning
purposes:

<table>
<thead>
<tr>
<th>Ground Combat Troops</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Infantry Division, Triangular.</td>
<td>15,514</td>
<td></td>
</tr>
<tr>
<td>1 CA Bn, Gun, AA, Semimobile.</td>
<td>722</td>
<td></td>
</tr>
<tr>
<td>2 CA Bns, Sep, Automatic Weapons, AA, Semimobile.</td>
<td>1,578</td>
<td></td>
</tr>
<tr>
<td>1 CA Plat, searchlight, Semimobile.</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>2 FA Bns, Sep, 105mm How, Truck-drawn.</td>
<td>1,186</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,082</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air Combat Troops</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 AC Fighter Squadrons (SE).</td>
<td>574</td>
<td></td>
</tr>
<tr>
<td>2 AC Bombardment Squadrons (L/D).</td>
<td>604</td>
<td></td>
</tr>
<tr>
<td>1 AC Bombardment Squadron (M).</td>
<td>373</td>
<td></td>
</tr>
<tr>
<td>1 Observation Squadron (VOS) (Navy)</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>1 AC Hq. Bomb. Gp.</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,725</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Combat** 20,807
(b) Air Force Services.

(1) It is known that there are airfields, both military and civil, in the immediate vicinity of Petropavlovsk and at least one military field in the vicinity of Cape Latoga, the south tip of the Kamchatka Peninsula. The capacity of these fields, facilities and other details are not known. No accurate information is available on the disposition of Russian air forces in the area. It is unofficially reported that this area can support the operation of five squadrons, medium bombers, largest type, and upon this estimate the initial forces indicated below should be prepared to reenforce the Russian Air Forces for local defense and offensive missions:

<table>
<thead>
<tr>
<th>Planes</th>
<th>Operating</th>
<th>25%</th>
<th>Reserve</th>
<th>20% 1st Mo.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fighters</td>
<td>50</td>
<td>13</td>
<td>10</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>B(D)</td>
<td>32</td>
<td>8</td>
<td>6</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>B(M)</td>
<td>16</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Observation</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air Force Services</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Serv Sq.</td>
<td>222</td>
</tr>
<tr>
<td>1 Type B Weather Station</td>
<td>20</td>
</tr>
<tr>
<td>1 Det, Ord Co, Serv Gp</td>
<td>16</td>
</tr>
<tr>
<td>1 Det, Sig Co, Serv Gp</td>
<td>17</td>
</tr>
<tr>
<td>1 MP Co, Avn</td>
<td>104</td>
</tr>
<tr>
<td>1 Sig AW Co</td>
<td>360</td>
</tr>
<tr>
<td>Total</td>
<td>739</td>
</tr>
</tbody>
</table>

(c) Miscellaneous Forces.

(1) Communications Zone Troops.

**AGD**
1 Machine Records Unit, RS, Mobile 27 o
1 Army Post Office 12

**CWS**
1 Section, Cml Decontamination Co 16
2 Plt, Cml Co, Air Operations 56 p
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**JCS memo, 3-14-74**

By HRP, NLR, Date APR 24 1974

<table>
<thead>
<tr>
<th>Base</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>Co, Avn</td>
<td>183 q</td>
</tr>
<tr>
<td></td>
<td>Regt (GS)</td>
<td>1,322 g</td>
</tr>
<tr>
<td></td>
<td>Plat, Depot Co</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Co, Equipment</td>
<td>146</td>
</tr>
<tr>
<td>MD</td>
<td>Plat, Supply, Avn</td>
<td>21 r</td>
</tr>
<tr>
<td></td>
<td>Evac Hospitals (750 bed)</td>
<td>93 f</td>
</tr>
<tr>
<td></td>
<td>Sta Hospitals (250 bed)</td>
<td>804</td>
</tr>
<tr>
<td>OD</td>
<td>Ammunition Co (w/Gen Sup personnel included)</td>
<td>186 s</td>
</tr>
<tr>
<td></td>
<td>Heavy Maintenance Co</td>
<td>223</td>
</tr>
<tr>
<td>OM</td>
<td>Co, Composite</td>
<td>284 t</td>
</tr>
<tr>
<td></td>
<td>Co, Depot Subsistence, Avn</td>
<td>57 u</td>
</tr>
<tr>
<td></td>
<td>Co, Depot, Class III, Avn</td>
<td>32 w</td>
</tr>
<tr>
<td></td>
<td>Co, Serv</td>
<td>227 w</td>
</tr>
<tr>
<td></td>
<td>Co, Truck</td>
<td>124 x</td>
</tr>
<tr>
<td>SC</td>
<td>Section, AC Depot</td>
<td>63 y</td>
</tr>
<tr>
<td>TC</td>
<td>Fort Battalion</td>
<td>944</td>
</tr>
<tr>
<td>Sp Serv</td>
<td>Unit</td>
<td>121</td>
</tr>
</tbody>
</table>

**Total** 5,723

**NOTES:**

- m Maintenance Section only.
- n Radio, radar and telephone repair sections only.
- o Less 1 machine trailer unit.
- p 1 Plat per 2 bombardment sqs in view of concentrated operations.
- q Augments combat bns to serve entire force.
- r Serves entire force.
- s Handles Ordnance regular supplies in addition to ammunition items for the entire force.
- t Includes: 2 Plats, Laundry Co; 1 Plat, Refrigeration; and 1/2 Co, Depot Supply.
- u Stores & issues subsistence for entire force.
- v Stores & issues Class III supplies for entire force.
- w Provides labor for all communications zone installations.
Provides force for transportation pool.
Stores, issues and maintains signal equipment for the entire force.

(2) Naval personnel and material of a Navy "Cub" required for the expansion and development of Port Facilities to include:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Officers</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters, Base Maintenance Administration</td>
<td>31</td>
<td>304</td>
</tr>
<tr>
<td>Ships Service and Stevedore</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>41</td>
<td>404</td>
</tr>
</tbody>
</table>

(d) Shipping Requirements for initial movement.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Convoy loaded</th>
<th>Convoy loaded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AF (1)</td>
<td>AK (2)</td>
</tr>
<tr>
<td>Combat Forces</td>
<td>11 (3)</td>
<td>14 (3)</td>
</tr>
<tr>
<td>and Air Force Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Forces (4)</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

NOTES: (1) Assuming a capacity of 2000 per ship and 3000 measurement tons per ship.

(2) Assuming a capacity of 10000 measurement tons per ship.

(3) Assuming initial cargo requirement @ 8 measurement tons/man.

(4) Assuming initial cargo requirement @ 12 measurement tons per man of Army unit and 35,000 measurement tons for Navy unit.

(e) Shipping Requirements for continued logistic support.

(1) Total estimated personnel (U.S.) 27,714

(2) At 1 1/2 measurement tons per man per mo. 41,571 tons

(3) Cargo vessels (AKs) required per mo. 4.15 or per annum 50

(4) If this tonnage is brought into the port during the six month period when the harbor is

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By HHP, NRL, Date
naturally ice free it will absorb the estimated port capacity (3000 tons per day) leaving little or no capacity for Russian cargo. It appears necessary to prolong the open period by use of ice breakers or to increase the capacity of the port.

(5) It is probable that the United States will also be required to supply the Russian Forces in the Area; these forces have been estimated at about one division (10,000) and an undetermined number of mountain troops and headquarters units. It is probable that 100,000 ship tons per year (or 10 AKs) will satisfy Russian needs.

(6) The total yearly maintenance is therefore estimated at say 60 AKs. The continuous operation of the port to capacity will permit this cargo to be discharged in 7 months. The port can in all probability be kept open for that period. This makes no provision, however, for delays and interruptions. The increase in harbor capacity is therefore indicated as probably necessary.
1. Estimate of Japanese forces in the area that are in position to affect the operation.
   (a) Ground forces.
      (1) Forces at present on Paramushiru and Shimushu Islands.
         Naval guards 300
         Naval base facilities personnel 500
         Total 800
      (2) Reinforcements available.
         The 7th Japanese Division (25,000 men) normally stationed in Hokkaido, is at present in Karamfuto. The distance from Toyohara, Karafuto to Paramushiru is 572 miles, a distance that can be covered in 64 to 80 hours by troop transport, except in the months of January, February, March, and April when the Sea of Okhotsk is full of pack-ice. The distance from Muroran, Hokkaido to Paramushiru is 800 miles. This distance can be covered in 4 or 5 days by troop transport, and normally the eastern approach to the northern Kuriles is free of pack-ice throughout the year. Ground forces to reinforce Paramushiru and Shimushu should be available within 7 days. It is estimated that the Japanese could have the equivalent of one or two combat teams ashore within two days after arrival. Within ten days of their sailing they can probably have a division ashore with its supplies. The bulk of the force must come from Hokkaido and Honshu. The Japanese will probably rush one regiment from Karafuto.
Air forces.

(1) The air force at present on Paramushiru and Shimushu is unknown.

(2) Reinforcements available.

The latest estimate of Japanese air strength in Japan Proper, Karafuto, and the Kurile Islands indicates a total of 327 planes. A portion of this number is undoubtedly on Paramushiru and Shimushu. The last report on numerical strength on these islands showed two naval air groups, with a possible combined strength of 80 planes. These planes have been transferred since that report.

Reports on landing fields show the following distances:

Hokkaido to Paramushiru 750 miles
Etorofu (Kurile Island) to Paramushiru 426 miles
Matsuwa Island to Paramushiru 200 miles

Aircraft reinforcements to a probable strength of 80 planes could reach the Paramushiru-Shimushu area within 4 to 6 hours.

(c) Naval forces.

(1) Forces at present in Paramushiru-Shimushu area:

1 Heavy Cruiser
2 Light Cruisers
1 Light Cruiser (flagship of destroyer squadron)
6 Destroyers
6 Submarines
10 Supply Vessels
(2) Reinforcements available.

Units of the Japanese fleet are regularly stationed in the Hokkaido-Karafuto area within a maximum distance of 900 miles. The following are distances from known fleet bases in the area:

- Buroton Bay (minor naval base) to Paramushiru 275 miles
- Muroran naval base (Hokkaido) to Paramushiru 800 miles
- Otomari, Karafuto to Paramushiru 618 miles

Naval reinforcements could be expected to reach Paramushiru as follows:

- Light Cruisers and Destroyers - within 1 to 4 days
- Submarines - within 2 to 8 days

2. Estimate of Russian forces in the area between Petropavlovsk and Cape Lopatka (Exclusive of the forces at Petropavlovsk).

(a) Ground forces.

Soviet forces on the east coast of Kamchatka Peninsula, south of the Petropavlovsk area are not believed to exceed 500 men of all arms and services.

Reinforcement of the area is possible by small boats. There are no housing facilities, and the lack of other local resources limit the reinforcements to a few hundred men. There is said to be a road suitable for military use in the southern part of Kamchatka (the Cape Lopatka area) that can also be utilized.

(b) Air forces.

No airfield or seaplane anchorage has been definitely located in the area. Total air strength in the area does not exceed 12 planes.

(c) Naval forces.

Strength of Russian naval units in Petropavlovsk cannot be accurately estimated.
The Russian naval force in the Far East is estimated to be:

- Destroyers 19
- Submarines 103
- Mine layers 5
- Mine sweepers 18
- Ice breakers 10
- Motor torpedo boats 100

(d) Few if any reinforcements for the above forces can be expected.

3. United States Forces Required for the Operation.

(a) Ground forces.

(1) Assault Echelon.
   One Infantry Division with amphibious training.

(2) Support Echelon.
   Two Triangular Infantry Divisions.

(3) Garrison Troops.
   One Triangular Infantry Division. Total Garrison, 3 Triangular Infantry Divisions.

(4) Reinforcing Echelon.
   Two Triangular Infantry Divisions to be held in readiness on the West Coast of the United States until released by the commander of the operation. These divisions are to be prepared to move immediately to reinforce the assault force, or the occupying force, as required.

The amphibious trained division will make the initial landing and assaults. It will be closely supported by the two Triangular Divisions. Once the resistance has been crushed and the island has been occupied, the amphibious division will be withdrawn and the third Triangular Division substituted. There will thus be three Triangular Divisions garrisoning the islands of Paramushiro and Shimushu.
Although the islands of Paramushiru and Shimushu are relatively close to Japan and their occupation will doubtless bring a violent reaction by the Japanese, the ground and air forces were limited to their present sizes after a careful analysis of the situation that the United States forces would very probably face.

First, there is the assumption that the Japanese and Russians are fighting each other.

Second, the proven fighting ability of the Russians is relied upon to pin the Japanese forces in the Asiatic mainland and further to force them to commit, or at least hold in readiness to commit, in Asia the reserves now held in Japan. The Japanese then can probably have two combat teams, or at most one division to face us on the two islands. If the islands are heavily garrisoned, then the forces set up would not be enough, and in fact it would probably be too costly to attempt the assault with any force available to us.

(b) Air Forces.

The air forces that can be brought into Petropavlovsk area are limited to the units that can be handled by the fields. It is estimated that the fields can accommodate 5 squadrons as a maximum. Available data does not show the number or lengths of the runways. There is no recent information concerning the surfaces of these runways, the base facilities, etc. It is assumed that the fields will accommodate the same size planes as those of the Alaska-Siberia Air Ferry Route, that is, the largest plane would be the medium bomber, (B-25). The assault on the islands will be supported by the aviation brought into Petropavlovsk with the force set up to occupy that port. The combat echelons of the aviation units that are to operate from
Paramushiru and Shimushu in defense of the islands and the convoy routes will go initially to Petropavlovsk and then fly the airplanes to the two occupied islands. Ground crews and aviation service elements will proceed directly to Paramushiru with the other service elements.

(c) United States Ground Forces Required.

Ground Combat Troops

Assault Force.

<table>
<thead>
<tr>
<th>Force Headquarters</th>
<th>451</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphibious Division</td>
<td>15,514</td>
</tr>
<tr>
<td>Light Tank Battalion</td>
<td>473</td>
</tr>
<tr>
<td>Chemical Company (Smoke)</td>
<td>101</td>
</tr>
<tr>
<td>CA Battalions (AA) (A Wpns)</td>
<td>3,228</td>
</tr>
<tr>
<td>CA Battalions (AA) (Gun)</td>
<td>1,598</td>
</tr>
<tr>
<td>Engr. Regts. (C)</td>
<td>2,930</td>
</tr>
<tr>
<td>FA Battalion (105 mm)</td>
<td>608</td>
</tr>
<tr>
<td>FA Battalions (75 mm How., Pk)</td>
<td>2,691</td>
</tr>
<tr>
<td>Signal Company</td>
<td>322</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27,916</strong></td>
</tr>
</tbody>
</table>

Garrison Force.

<table>
<thead>
<tr>
<th>Force Headquarters</th>
<th>451</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantry Divisions</td>
<td>46,542</td>
</tr>
<tr>
<td>Light Tank Battalion</td>
<td>473</td>
</tr>
<tr>
<td>Cml. Company (Smoke)</td>
<td>101</td>
</tr>
<tr>
<td>CA Battalions (AA) (A Wpns)</td>
<td>7,263</td>
</tr>
<tr>
<td>CA Battalions (AA) (Gun)</td>
<td>2,397</td>
</tr>
<tr>
<td>CA Battalion (AA Slt)</td>
<td>509</td>
</tr>
<tr>
<td>CA Regiment (155 mm gun)</td>
<td>1,754</td>
</tr>
<tr>
<td>Engineer Regts. (C)</td>
<td>3,595</td>
</tr>
<tr>
<td>FA Battalions (105 mm How.)</td>
<td>2,432</td>
</tr>
<tr>
<td>FA Battalions (155 mm How.)</td>
<td>1,282</td>
</tr>
<tr>
<td>FA Battalion (155 mm gun)</td>
<td>692</td>
</tr>
<tr>
<td>FA Battalions (75 mm How., Pk)</td>
<td>2,691</td>
</tr>
<tr>
<td>M.P. Company</td>
<td>197</td>
</tr>
<tr>
<td>Signal Battalion</td>
<td>222</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72,112</strong></td>
</tr>
</tbody>
</table>

S.O.S. and Ground Force Services

<table>
<thead>
<tr>
<th>Type Unit</th>
<th>Number</th>
<th>Unit Strength</th>
<th>Aggregate Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hq &amp; Hq Co SOS</td>
<td>1</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>C.W.S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co Composite (3-277)</td>
<td>1</td>
<td>184</td>
<td>184</td>
</tr>
<tr>
<td>Co Impreg (3-77)</td>
<td>2</td>
<td>160</td>
<td>320</td>
</tr>
<tr>
<td>M.P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co (19-37)</td>
<td>2</td>
<td>197</td>
<td>394</td>
</tr>
<tr>
<td>Type</td>
<td>Unit</td>
<td>Number</td>
<td>Unit Strength</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>C.E.</td>
<td>Co Depot (5-47)</td>
<td>1</td>
<td>194</td>
</tr>
<tr>
<td></td>
<td>Reg G.S. (5-21)</td>
<td>1</td>
<td>1321</td>
</tr>
<tr>
<td></td>
<td>Hq &amp; Hq Co Port C &amp; R (Tent)</td>
<td>1</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td>Co Cm (5-297)</td>
<td>1</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Dump Truck (5-88)</td>
<td>1</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Bn Avn (5-415)</td>
<td>1</td>
<td>805</td>
</tr>
<tr>
<td>M.D.</td>
<td>Platoon Supply (8-497)</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Bn (Corp) (8-15)</td>
<td>1</td>
<td>505</td>
</tr>
<tr>
<td></td>
<td>Ev Hospital (8-680)</td>
<td>2</td>
<td>417</td>
</tr>
<tr>
<td></td>
<td>Gen Hosp (8-550)</td>
<td>1</td>
<td>662</td>
</tr>
<tr>
<td></td>
<td>Vet Det</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Field Hosp (8-510)</td>
<td>1</td>
<td>252</td>
</tr>
<tr>
<td></td>
<td>Sta Hosp (8-560)</td>
<td>5</td>
<td>201</td>
</tr>
<tr>
<td>O.D.</td>
<td>Co Depot (9-57)</td>
<td>1</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td>Co M.T. Supply (10-48)</td>
<td>1</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td>Co HM. (10-47)</td>
<td>1</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>Co MM (Field Army) (9-9)</td>
<td>1</td>
<td>223</td>
</tr>
<tr>
<td></td>
<td>Co MM (9-7)</td>
<td>1</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>Co Bomb Disposal (9-177)</td>
<td>1</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>Bn Am (9-15)</td>
<td>1</td>
<td>1171</td>
</tr>
<tr>
<td></td>
<td>Bn Main (Corps) (9-75)</td>
<td>1</td>
<td>476</td>
</tr>
<tr>
<td>Q.M.</td>
<td>Co Depot (10-227)</td>
<td>2</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Co Com Sales (10-157)</td>
<td>1</td>
<td>208</td>
</tr>
<tr>
<td></td>
<td>Co Refrig (10-217)</td>
<td>1</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>Co Bakery (10-147)</td>
<td>3</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>Bn SR (10-236)</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Co Laundry (10-167)</td>
<td>2</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Co Stor (10-177)</td>
<td>1</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>Co Selv Repair (10-237)</td>
<td>1</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>Co Depot Class III (10-467)</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Co Depot Sup (10-477)</td>
<td>2</td>
<td>234</td>
</tr>
<tr>
<td></td>
<td>Co Truck (10-57)</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Plat Graves Reg (10-297)</td>
<td>1</td>
<td>941</td>
</tr>
<tr>
<td></td>
<td>En Ser (10-65)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>S.C.</td>
<td>Co Depot (11-107)</td>
<td>1</td>
<td>191</td>
</tr>
<tr>
<td></td>
<td>En Const (11-25)</td>
<td>1</td>
<td>595</td>
</tr>
<tr>
<td></td>
<td>Co Op (11-97)</td>
<td>1</td>
<td>297</td>
</tr>
<tr>
<td></td>
<td>Co Port Serv (11-327)</td>
<td>1</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>Co Repair (11-127)</td>
<td>1</td>
<td>188</td>
</tr>
<tr>
<td>A.G.</td>
<td>Base FO (12-601)</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Army FO (12-605)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Machine Records Unit (12-317-B)</td>
<td>1</td>
<td>55</td>
</tr>
<tr>
<td>P.D.</td>
<td>Finance Det.</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Type Unit</td>
<td>Number</td>
<td>Unit Strength</td>
<td>Aggregate Strength</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------</td>
<td>---------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>T.C.</td>
<td>1</td>
<td>944</td>
<td>944</td>
</tr>
<tr>
<td>Bn Ft</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repl Det.</td>
<td>1</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Repl Bn.</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Spec Serv Unit</td>
<td>3</td>
<td>121</td>
<td>363</td>
</tr>
</tbody>
</table>

(a) Naval Forces required. (United States)
As required.

4. Estimated Air Force to Operate from Paramushiru and Shimushu after the Islands have been Secured.

(a) Operational Reserve Attrition Total

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Squadrons P-38 or P-47 (Fighters)</td>
<td>50</td>
<td>12</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td>2 Squadrons A-20 (Light Bombardment)</td>
<td>32</td>
<td>8</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>1 Squadron Observation (VOS) (Naval)</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>17</td>
</tr>
</tbody>
</table>

(b) United States Air Forces Required.

Air Combat Troops

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 AC Bombardment Sqns. (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 AC Fighter Sqns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 AC Hq.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 VOS (Navy) Obsn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Air Force Services

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Serv. Sqn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Type B Weather Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 QM Co., Truck, Avn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ord Co., mm, (Q) Avn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 MP Co., Avn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Sig. AW Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 1,352

NOTE: In the event of an emergency requiring fighter squadrons much sooner than previously estimated, the fighters might be brought close in by carrier and then flown ashore.
**Shipping Required to Implement the Operation.**

(a) **Ground Forces.**

To move initially the assault echelon of the forces, combat loaded, with 60 days supply will require (initial movement):

**NOTE:** Basis of calculations:

<table>
<thead>
<tr>
<th>Combat Loaders</th>
<th>1500 Personnel</th>
<th>2500 Ship tons supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convoy Loaded Transports</td>
<td>2000 Personnel</td>
<td>4500 Ship tons supplies</td>
</tr>
<tr>
<td>Cargo vessels</td>
<td>11000 Ship tons supplies</td>
<td></td>
</tr>
</tbody>
</table>

(1) **Assault Echelon Ground Forces. (Tonnages)**

<table>
<thead>
<tr>
<th>Assault Force</th>
<th>-</th>
<th>27,443</th>
</tr>
</thead>
<tbody>
<tr>
<td>27,443 x 12</td>
<td></td>
<td>329,316 S/T</td>
</tr>
<tr>
<td>1 Armored Battalion (Light)</td>
<td></td>
<td>473</td>
</tr>
<tr>
<td>473 x 15</td>
<td></td>
<td>7,095 S/T</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>336,411</td>
</tr>
<tr>
<td><strong>27,916</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(2) **Support Echelon Ground Forces. (Tonnages)**

<table>
<thead>
<tr>
<th>Personnel</th>
<th>(72,112 - 27,916)</th>
<th>44,196</th>
</tr>
</thead>
<tbody>
<tr>
<td>44,200 x 12</td>
<td></td>
<td>530,400 S/T</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>530,352 S/T</td>
</tr>
<tr>
<td><strong>44,196</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) **Air Forces, Combat Echelon. (Tonnages)**

2 - AC Bombardment Squadrons (L/D) | 604 |

Total tonnage w/o planes:

| 604 x 16.7 | 10,086.8 S/T |
| 2 - AC Fighter Squadrons (S.E.) | 574 |

Total tonnage with planes:

| 574 x 18.7 | 10,733.8 S/T |
| 1 - WOS (Navy) Oben. | 119 |

Total tonnage with planes:

| 119 x 18.7 | 2,225.3 S/T |
| 1 - AC Headquarters | 55 |

**Total tonnage:**

| 55 x 12 | 660 S/T |
| **TOTAL** | 23,705.9 S/T |
| **1,352** |         |
(b) (1) S.O.S. and Ground Force Services (Tonnages)

S.O.S. and G. F. Services
19,766
19,766 x 12 = 237,192 S/T

(2) Air Force Services

929 x 12 = 11,148 S/T
TOTAL 248,340 S/T 20,695

(c) Sustaining Tonnages and Replacement Personnel.

(1) Ground Forces

Replacements (10%)
91,878
Tonnages:
91,878 x 1.3 = 119,441.4 S/T
TOTAL 119,441.4 S/T 9,187.8

(2) Air Forces

Replacements (10%)
2,281
Tonnages:
2,281 x 1.3 = 2,963.3 S/T
TOTAL 2,963.3 S/T 228.1
GROUND AND AIR TOTAL 122,404.7 S/T 9,415.9

(d) Ships Required (Initial)

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Tonnages (S/T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault Echelon (Ground)</td>
<td>27,916</td>
</tr>
<tr>
<td>Support Echelon (Ground &amp; Air)</td>
<td>45,548</td>
</tr>
<tr>
<td>Service Units (Ground &amp; Air)</td>
<td>20,695</td>
</tr>
</tbody>
</table>

(1) Assault Echelon

Total Personnel 27,916

27,916 x 1500 =

Total supplies 336,411
Supplies in combat loaders.
2500 x 18.61 = 46,525
Total for carriage by cargo vessels 289,886
Total Cargo Vessels Required

289,886 x 11,000 = 26.35 Cargo Vessels
(2) Support Echelon

Total Personnel 45,548
45,548 + 2000 = 22.77 Transports

Total Supplies 554,057.9
Supplies in Transports
4,500 x 22.77 = 102,465
Total for carriage by cargo vessels 451,592.9
Total Cargo Vessels Required
451,592.9 + 11,000 = 41.05 Cargo Vessels

(e) Ships Required (Sustaining)

Total Personnel 9,415.9
9,415.9 + 2000 = 4.70 Transports

Total Supplies 122,404.7
Supplies in Transports
4,500 x 4.7 = 21,150
Total for carriage by cargo vessels 101,254.7
Total Cargo Vessels Required
101,254.7 + 11,000 = 9.20 Cargo Vessels

(f) Recapitulation

<table>
<thead>
<tr>
<th></th>
<th>Combat Loaders</th>
<th>Transports</th>
<th>Cargo Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault (Initial)</td>
<td>16.61</td>
<td>---</td>
<td>26.35</td>
</tr>
<tr>
<td>Support (Initial)</td>
<td>---</td>
<td>22.77</td>
<td>41.05</td>
</tr>
<tr>
<td>Total</td>
<td>18.61</td>
<td>22.77</td>
<td>67.40</td>
</tr>
<tr>
<td>Sustaining</td>
<td>---</td>
<td>4.70</td>
<td>9.20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>---</td>
<td>4.7</td>
<td>9.2</td>
</tr>
</tbody>
</table>
PORT FACILITIES
Nikolaevsk, Nagayevoko and Anadyrsk Bay Areas.

(For resume see page 6, paragraph 6)

1. Task.
   Expand and develop port facilities in the Nikolaevsk, Nagayevoko, and Anadyrsk Bay Areas.

2. Estimated Present Port Facilities.
   (a) From the meager information available the estimated present port capacity is as follows:

<table>
<thead>
<tr>
<th>Port</th>
<th>Open</th>
<th>Daily Capacity (Long Tons)</th>
<th>Bunkerage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nagayevoko</td>
<td>June - Nov.</td>
<td>*1000</td>
<td>Coal.</td>
</tr>
<tr>
<td>Nikolaevsk</td>
<td>May - Oct.</td>
<td>*1000</td>
<td>Coal, Oil.</td>
</tr>
</tbody>
</table>

   * Capacity during the ice bound period is estimated at 50% of that indicated; not considered practicable to supply Anadyrsk Bay Area during ice bound period.
   (b) Total annual capacity available at all three ports before expansion - 1,425,000 measurement (ship) tons.
   (c) Assuming it will require 1-1/2 measurement tons per man per month, the present facilities will support approximately - 79,166 men or about 3-1/2 divisions at 23,000 men per division.

3. Estimated Forces Required to Expand Present Port Facilities.
(a) Naval Requirements.

(1) A study of the meager information available indicates that the areas are suitable for expansion and for planning purposes this will be assumed. It does not appear to be practical to plan on expanding the facilities beyond 3,000 Long Tons per day and this figure will be used in this study.

(2) It appears desirable to provide each area with the following Navy facilities:

(i) From material under cognizance of the Bureau of Ships to include:

- Small Boats
- Chemical Defense Equipment.
- Visual Communication Equipment.
- Radio Equipment (shore and boat, underwater sound; sonobuoy; Radar).
- Office, Navigation and Miscellaneous equipment.
- Mine Sweeping and Salvage Gear.
- Galley and Mess Gear.
- Clothing and Bedding Supplies for cold climate.

(ii) From material under cognizance of the Bureau of Yards and Docks to include:

- Housing for Naval units.
- Storage Buildings, total capacity about 2,000,000 cu.ft. (Approx. 920,000 cu.ft. per reinforced division per month required).
- Magazine Buildings, as necessary in accordance with ammunition allowance for Army and Navy units in Area.
Chlorinating System for water supply of Naval units.
Refrigeration required for Naval units.
Tank Farm of one Navy Cub.
Electrical equipment selected in accordance with other units supplied.
Water front Structures of one Navy Cub to include piers and dolphins; self propelled barges; pontoon tank barges; 2 ten ton crane barges; pontoon gate vessel.
Transportation Facilities including tractor type trucks and trailers.
Moorings for three ships; 1 cruiser and 2 auxiliary ships.
Passive Defense Material including camouflage, fire fighting and decontamination equipment.
Construction equipment of Navy Cub selected or prepared for "Cold Climate".

(iii) From material under cognizance of the Bureau of Ordnance to include:

Nets
Mine testing and assembly gear.
Machine Guns for Naval units.
20mm Guns for Naval units.
Machine Guns for small boats.
Depth Charge Racks for small boats.
Pyrotechnic equipment for general use.
Depth Charge Equipment.
Demolition equipment, ten allowances.
Ammunition to include 1/2 allowance of 20mm; 1/4 allowance of .30 cal.
and .45 cal.; depth charges;
mines; Y-Gun charges; projector
charges.

(iv) From ships under construction or in
commission for each port area:

Ice Breakers
Tugs, suitable for operations in ice
bound ports.

(v) From the material under the cognizance
of the Bureau of Medicine and Surgery to include:
200 bed hospital (mobile).

(vi) From Navy Lions or Cubs the personnel
necessary to administer, operate and maintain
the port facilities. It is estimated that this
will require for each port:
200 Officers
2000 men.

(b) Army Requirements.

(1) It is recommended that the following Army
Units be detailed for each port area:

(i) Engineer Regiment, General Service.

<table>
<thead>
<tr>
<th>Officers</th>
<th>Enlisted Men</th>
<th>Ship Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>1259</td>
<td>5262</td>
</tr>
</tbody>
</table>

(ii) Engineer Company, Dump Truck.

<table>
<thead>
<tr>
<th>Officers</th>
<th>Enlisted Men</th>
<th>Ship Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>121</td>
<td>3550</td>
</tr>
</tbody>
</table>

(1ii) The tonnage required to support the
above Army units is calculated on a basis of 2
tons per man per month.
4. Estimated Port Capacity Available to Support Forces in the Siberian Area.

(a) Nagayevo and Nikolaevsk.

(1) Estimated total measurement (ships) tons:
   - June to Nov.:
     \((30 \times 3000 \times 5 \times 2.5)\) = 1,125,000 M. Tons.
   - Nov. to June:
     \((30 \times 1500 \times 7 \times 2.5)\) = \(787,500\)
   - Total Annual = 1,912,500 M. Tons.

(2) Estimated Annual Requirements to support each local unit \((12 \times 10000)\) = 120,000 M. Tons.

(3) Available to support other units \((1)-(2)\) = 1,792,500 M. Tons.

(4) Both ports \((2 \times 1,792,500)\) 3,585,000 M. Tons.

(b) Anadyrsk Area.

(1) Estimated total measurement tons:
   - June to Oct.:
     \((30 \times 3000 \times 4 \times 2.5)\) = 900,000 M. Tons
   - Note: Not considered practicable to keep any port open in the area from October to June.

(2) Estimated Annual Requirements to support Local unit 12 x 10000 = 120,000 M. Tons.

(3) Available to support other units \((1)-(2)\) = 780,000 M. Tons.

(c) Grand total available per annum after expansion

\(4,365,000\) M. Tons.

(d) Proposed expanded facilities will support approximately 363,750 men.

5. Ship Requirements.

(a) Cargo Resume.

<table>
<thead>
<tr>
<th>Initial Move (1)</th>
<th>Monthly Requirements (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Naval Requirements -35,000 M.T.</td>
<td>5,000 M.T.</td>
</tr>
<tr>
<td>For Army Requirements - 8,900 M.T.</td>
<td>5,000 M.T.</td>
</tr>
<tr>
<td><strong>Total</strong> 43,900 M.T.</td>
<td>10,000 M.T.</td>
</tr>
</tbody>
</table>

Note: (1) Measurement tons for each port or area where units are established.
Ships.*

<table>
<thead>
<tr>
<th>Type</th>
<th>Initial Move</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>2</td>
<td>None</td>
</tr>
<tr>
<td>AK</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *Based on total personnel of 3630; transport capacity of 2000 passengers and 3000 M.T.; cargo ship capacity of 10,000 M.T.

6. Resume.

(a) As to present port capacity:

(1) Will support from the three areas at 23,000 men per division - 3 1/2 Divisions

(2) Will require the following cargo vessels @ 10,000 meas. tons:

(i) Nikolaeivsk
   Ice free period
   (May to Oct.)  - 7 1/2 ships per mo.
   Icebound period
   (Oct. to May.)  - 3 3/4 " " "

(ii) Nagayoiv-
   Ice free period
   (June to Nov.)  - 7 1/2 " " "
   Icebound period
   (Nov. to June.)  - 3 3/4 " " "

(iii) Anadyrsk Bay Area
     (Providence Bay)
     Ice free period
     (June to Oct.)  - 3 3/4 " " "
     No shipping considered during ice bound period.

(b) As to expanded port capacity:

(1) Will require to expand to 7,500 measurement tons per day at each port area:

(i) At least 1 year.

(ii) About 4,000 officers and men.

(iii) About 45,000 meas. tons of material initially.

(iv) About 10,000 meas. tons per month.
(2) Could support from the three areas, in addition to port personnel, @ 23,000 men per division-
11 Divisions.

(3) Will require the following cargo vessels @ 10,000 measurement tons:

(1) Nikolaevsk -
    Ice free period - 22-1/2 ships per mo. (May to Oct.)
    Icebound period - 11-1/4 ships per mo. (Oct. to May)

(ii) Nagayevo -
    Ice free period - 22-1/2 " " " (June to Nov.)
    Icebound period - 11-1/4 " " " (Nov. to June)

(iii) Anadyrsk Bay Area -
     (Providence Bay)
    Ice free period - 22-1/2 " " " (June to Oct.)
    No shipping considered during icebound period.

7. (a) No satisfactory estimate can be made concerning the facilities available for the movement of these supplies beyond the ports of entry discussed above.

(b) If highway construction is required in the vicinity of these ports of entry, an additional Engineer Regiment General Service and an additional Engineer Company, Dump Truck will be required at each area where this construction is contemplated.
ALASKAN AREA, DEVELOPMENT
AND EXPANSION OF FACILITIES.

1. The following developments are under construction:
   (a) Establishment of Barge Line through the protected waters of the Inside Passage from P.O.E., Seattle and Sub Port Prince Rupert to Sub Ports at Juneau, Skagway and Excursion Inlet. At Excursion Inlet it is contemplated that trans-shipment will be made by seagoing vessels to Alaskan ports on the Gulf of Alaska and the Bering Sea. For capacities see Tab "A".
   (b) The following developments are under control of the Northwest Service Command:
      (1) The Alcan Highway from railhead at Dawson Creek, B.C., to join the Richardson Highway at Big Delta in Alaska. This will be in condition for winter use about December 1, 1942.
      (2) Rehabilitation of the White Pass and Yukon RR from Skagway to Whitehorse which will increase tonnage handled.
      (3) Construction of pipeline from Skagway to Whitehorse which will permit pumping of oil and gasoline from tankers at Skagway to storage tanks at Whitehorse for supply of motor and airplane fuel.
      (4) Development of the Norman Wells oil field and construction of a pipeline to Whitehorse which will provide a local source of supply of oil products.

2. The following developments are under study:
   (a) Plans are being made for a port at Teller (Port Clarence) and/or Golofnin Bay with the following capacity:
      350,000 Tons per month general freight.
      50,000 " " oil.
      350,000 Tons storage capacity freight.
      100,000 BBLS gasoline Storage.
DECLASSIFIED

(b) Plans for a railroad from Prince George to Fairbanks and thence to Port or Ports in 2 (a) above with following capacity:

300,000 Tons per month Westbound.
150,000 Tons per month Eastbound.

(c) Supply route along Yukon River by boat in Summer and by sled in Winter with capacity of 100,000 Tons per month.

TAB "A"

Prince Rupert (Sub Port)

Staging Area (2500 capacity) complete July, 1943.
3 Berth space (Total - 1220 ft.) complete Dec. 30, 1942.
Covered storage, 120,000 sq. ft. " " " 
Open " , 211,400 " " " 
Cold Storage , 17,600 cu. ft. " Oct. 23, " 
2 Heavy lifts (50 T.) " " " 

Juneau (Sub Port)

Staging Area - none.
Berth space - 350 ft. - complete now.
" " 900 " " March 1, 1943
Covered storage 70,800 sq. ft. complete Mar. 1, 1943
Open " 2,700,000 " " Jan. 15, "
Cold storage " Nov. 15, 1942
9 Heavy Lifts (75 T.) " " " 
3 Barge Grids " Mar. 15, 1943.

Skagway (Sub Port)

Staging Area - none.
2 Berth Space, 800 ft. complete Oct. 23, 1942.
Covered Storage 24,000 sq. ft. complete Oct. 23, 1942.
Open " 25,000 " " " 
Covered " 8,140 under construction
Open " 16,000 " "

- 50 - DECLASSIFIED
JCS memo, 1-4-74
By RHP, NRL, Date APR 24 1974
Excursion Inlet (Sub Port)

Housing for E.M.  7200
  "  " Off.  260
  "  " Hosp.  360 beds.

Port Facilities

3 Main Docks  300,000 sq. ft.
1 Munitions Docks  4,000 " "
1 Oil Dock  4,000 " "
2 Barge Docks  80,000 " "

Storage Facilities

3 Transit Sheds  432,000 " "
1 Warehouse  65,600 " "
Open Storage  500,000 " "
Other Bldgs.  388,000 " "

Total  1,385,000 " "

Estimated cost  $18,059,000
  " date for use Dec. 31, 1942.
  " complete Feb. 28, 1942.
SUPPLY ROUTE ACROSS KAMCHATKA

1. The Japanese air bases on Paramushiro and Shimushu dominate the Kurile Straits and restrict the use of other passages between the Kurile Islands farther to the south. The need for a land route across Kamchatka to link the sea lanes of the Pacific Ocean with those of the Sea of Okhotsk as an alternate supply line to Siberian Russia, is therefore apparent. The Kamchatka Peninsula is about 750 miles long and varies from 80 to 300 miles in width. It is narrowest at its northern end where it joins the Siberian mainland. The highlands of the peninsula itself, and those of the mainland to the north, break down at this neck which is comparatively flat with a low divide and which is known as the Parapolsky Lowland. This lowland is composed largely of tundra and appears to be characterized by sluggish drainage flowing down wide, gently sloping valleys.

2. The only known road across the Kamchatka Peninsula extends from Petropavlovsk westward to the fishing village of Ust-Bolsheretek on the Sea of Okhotsk. There are indications that it extends north from this point for some distance along the west coast of the Peninsula. It has been stated that winter traffic from its northern terminus to the Siberian mainland or westward across the Gulf of Penzhinski is possible, but there is no known record that any appreciable tonnage has been transported over this winter route. The port capacity of Petropavlovsk is stated to be 3000 tons per day and the clearance capacity of the road to Ust-Bolsheretek is estimated at 200 tons per day. A narrow gauge railroad is said to be projected between the two termini but its state of completion is not known. The port capacity of Ust-Bolsheretek is unknown, but is presumed to be inconsiderable.
3. Although the Petropavlovsk - Ust-Bolshevertsk route is perhaps the most suitable one across the Peninsula from an engineering standpoint, it is unacceptable on account of close proximity to the Japanese air bases and consequent interdiction by the enemy. Such a route is probably no better than the sea route through the Kurile Strait.

4. So far as is known, the east coast of Kamchatka possesses no practicable harbor for a port between Petropavlovsk and Korf Gulf. Several harbors are, however, located in that Gulf. Of these, Slobaleva Harbor is the largest. It can accommodate vessels drawing up to 28 feet. Vessels of deeper draft can enter the harbor but cannot anchor close to shore. The harbor is frozen from late October until May, but probably can be kept open by ice breakers, except between late December and early March. Korf Gulf is roughly 750 miles from the Japanese air bases, or about the limit of range of land-based bombers. It, therefore, appears to be the most practicable site for the eastern terminus of a trans-Kamchatka land route.

5. The possibilities for a port on the west side of the Peninsula are not known. The Gulf of Penzhinski is said to be shallow. It is probable that some difficulty may be experienced in finding a site where the construction of dockage for deep draft vessels is possible. It may be necessary to resort to the use of lighters or shallow draft vessels, or both, in the Sea of Okhotsk. The possibility of the use of seagoing barges and tugs should be explored provided adequate protection against hostile sea and air action can be provided. Winter travel westward along the north shore of the Sea of Okhotsk may be practicable.

6. The operation of a winter road from Korf Gulf across the peninsula should present no great difficulties. The frozen tundra will carry winter traffic and the gentle slopes and low elevations which are said to characterize the region are favorable
for winter travel with tractors and sleds. The road would be short, probably in the neighborhood of 90 miles in length. A road for heavy summer traffic will, on the other hand, be difficult to build. The surface of the tundra becomes soft and saturated with water in the summer. The use of gravel or any similar heat-conducting road material will cause abnormal thawing of the sub-grade and will increase the difficulty. It may be necessary to prolong the summer road very considerably above 90 miles in order to obtain a suitable location. However, by the careful selection of a route and the extensive use of corduroy road, it will probably be possible to construct a practicable route for summer traffic.

7. On the basis of present information it is difficult to estimate the time required to develop this route for winter and summer use. Much will depend upon the season of the year during which construction is undertaken. If it is possible to begin port construction at both termini simultaneously, much time will be saved. Otherwise, it will be necessary to construct port facilities on Korf Gulf and to transport material and equipment across the peninsula by winter road for construction of the port at the western terminus.

8. Probably the most expeditious method of construction will be to begin work at Korf Gulf as early in the Spring as personnel and equipment can be put ashore. Preliminary work on the summer road should begin as soon as practicable. This should include location and clearing the route to be followed, and the felling and hauling of timber for corduroy construction. This last-mentioned operation will probably be laborious and time-consuming as high stands of timber are not ordinarily found in the vicinity of tundra. The marking and clearing of a winter road should also be undertaken immediately. During the summer months port construction should be pushed on both termini. In
six or seven months (say by October) the port and summer road construction should be advanced far enough to permit a small amount of tonnage to be carried across the peninsula. After the Fall freeze-up, the winter road should be used. Tonnage over the route will be light, however, as the progress of port construction and the necessity for landing large amounts of construction equipment and supplies will not permit the flow of any great amount of "through" tonnage until both ports are practically completed. The ports will probably be ice-bound before any substantial traffic can be built up.

9. The following Spring the route will probably be interrupted for a period of one month to six weeks during which both winter and summer roads are too soft for traffic. Thereafter, traffic will be uninterrupted except when the ports are ice-bound and during the Spring thaw.

10. It is therefore estimated that, assuming construction is started simultaneously at both ports in the early Spring, a small flow of supply can be put over the route about six months thereafter, but the route would not be open to full capacity traffic for approximately one year after construction begins.

11. The construction of a narrow gauge railroad between the two ports would, if found practicable, facilitate land transportation to a very great degree. However, present information does not indicate that such a railroad will be practicable.

12. The above study is based on incomplete and fragmentary information. So far as is known, no reconnaissance of the route, either by air or on the ground, has been made except possibly by the Russians. No Russian reports are available for use. Experience in Alaska and Canada cannot be considered as final. The Alcan Highway, the most extensive road in that region, does not traverse any extensive tundra country. The construction of that route cannot, therefore, be considered as entirely typical of the difficulties to be expected in constructing the Trans-Kamchatka highway.
TOPIC: Make Necessary Preparations to Establish an Alaskan-Southeast Siberian Ferry Route.

1. Role of Alaska-Komsomolsk Air Ferry Route:
   a. In the event of Russia becoming a co-belligerent with the United States against Japan, an air ferry route from Alaska to Southeastern Siberia would probably be an immediate requirement:
      (1) For delivery of Lend-Lease aircraft to Russia on the new front.
      (2) Over which to move any U.S. air striking force which may be assigned to that front.
      (3) As a means of communication (principal or auxiliary) with any U.S. Air and/or Ground Combat Forces which may be assigned to the Maritime Provinces area to aid Russia and to utilize air bases there found, within effective bombing range of the vital industrial, military, and political centers of Japan.

2. Preparations in Alaska:
   a. The present policy of Russia prevents any preparatory action on our part requiring accurate knowledge of conditions in Siberia, or access to it. Activation of such an air ferry route (in addition to the Fairbanks-Moscow ferry route now in limited operation) and/or the dispatch of an Air Task Force over it, would require the accomplishment of certain preparatory measures in the continental United States, and more particularly in Alaska; including the provision of Arctic and sub-Arctic type Air Corps and Quartermaster equipment and supplies adequate in quality and
quantity; specially trained aircraft crew and ground service personnel; and the provision in Alaska of additional or enlarged air bases and facilities, and appropriately placed stores of aviation gasoline, oil and miscellaneous Air Corps supplies. Ordinary foresight dictates that the extent to which these latter requirements are anticipated be limited only by:

1. Our resources;
2. Priorities in the use of those resources, imposed by our over-all war strategy; and
3. The protection which can and will be afforded for facilities constructed and stores accumulated in Alaska.

b. Existing facilities in Alaska.

Available in Alaska proper for all Army Air Forces purposes, including tactical and ferrying operations, are the principal air bases at Fairbanks, Anchorage, Annette Island and Yakutat. In the Aleutian area the principal Army Air bases are at Cold Bay, Kodiak, Umnak, and Naknek. Army air bases, auxiliary, emergency and civilian fields, aggregate thirty-nine in Alaska and six in the Aleutian area. Data on runways, facilities, gasoline and oil storage capacities, and existing stores of aviation gasoline and oil, are shown on Tab "A" hereto attached. Relative locations of the principal fields, and distances between them, are shown on Tab "B."

c. Requirements in Alaska.

The implementation of an additional air ferry route to Southeastern Siberia, utilizing an estimated one hundred transport aircraft (two Troop Carrier Groups less Glider Detachments, and one Air Service Group) would require:

1. Construction of an additional hangar at Edmonton and at White Horse, Canada, and two additional hangars at Fairbanks or an alternate central Alaskan base.
(2) Construction in the Nome-Teller area (or other location selected for the principal Alaskan terminal point) of complete air base terminal facilities, including two hangars and housing for 3,500 officers and men. Current operations have taxed the capacity of Ladd Field, at Fairbanks. Additional housing facilities would be required there and along the ferrying route from Fairbanks to the Nome-Teller area. All this construction would have to be done during the summer months.

(3) Existing aviation fuel storage facilities appear to be adequate for operations now contemplated, and to initiate the Southeast Siberian ferry route. Existing stocks would have to be replenished, and somewhat increased, during the summer months.

(4) The present Air Transport Command construction program contemplates additional housing at ferry stops between Calgary, Canada, and Fairbanks, that will double the present capacity for handling a maximum of seven hundred and fifty aircraft movements per month, as far as Fairbanks, assuming normal traffic control to prevent excessive concentration of aircraft. This program includes storing 40,000 barrels of aviation gasoline (1,680,000 gallons) in drums for movement north over the Alcan highway between December and March. A two way teletype circuit should be constructed from Edmonton to Fairbanks, and extended to Nome or Teller.

d. Port facilities, including facilities for transferring gasoline and oil from tankers to storage tanks, should be provided in the vicinity of Teller.
   a. In anticipation of a requirement for the establishment of the proposed ferry route with minimum delay, steps should be taken to assign to the Air Transport Command, "earmarked" for duty immediately in Alaska and possibly ultimately in Siberia, 30 officers (5 pilots and 25 administrative, supply, communications, weather and aviation engineering officers) and 60 enlisted men (10 administrative, 20 communications, 10 weather, 10 airplane engine technicians, and 10 aviation engineers) who are able to read and speak the Russian language. If such personnel are not available in the Army Air Forces, classes for instruction of such officers and men in the Russian language should be instituted.
   b. The requirements for Arctic type clothing and individual and unit articles of issue and for complete winterizing of AAF equipment should be a matter of continued research, development and test, together with adequate procurement and storage.

4. Location of the Air Ferry Route in Siberia:
   a. Information now obtainable indicates that in Siberia the air ferry route would utilize the following bases: Velkal (with Anadyr as an alternate initial base) to Markovo, to Seimkan, to Okhotsk, to Ayan, to Nikolaevsk, to Komsomolsk. Yakutsk might be used as an auxiliary refueling base, as determined by the reconnaissance hereafter mentioned. From Seimkan an alternate route would lead directly to Petropavlovsk, approximately 750 miles. See map attached hereto as Tab "C."
   b. For the purpose of ferrying aircraft only, refueling and servicing bases, radio communications stations and weather stations at Velkal and/or Anadyr, Seimkan,
Nikolaevsk, and Petropavlovsk would suffice; but for efficiency of sustained operations, improvement of cargo capacity, and reduction of fuel storage requirements at Seimkan, landing fields, refueling and servicing stations, radio communications and weather reporting stations should also be provided at Markovo, Okhotsk, Ayan and Komsomolsk.

5. **Preparations in Siberia.**

   a. Promptly upon the occurrence of events giving us access to Siberia, an air-ground reconnaissance of Eastern and Southeastern Siberia should be made in a light two engine airplane, as an essential initial step, to determine:

   (1) The location, condition and capacity of available landing fields.

   (2) Existing fuel supplies, housing and other facilities, and labor and materials locally available for construction of facilities.

   (3) Facilities and conditions bearing on the development of a land and/or water transportation system for supporting landing fields suitably located along the ferry route, and in the Southeastern Siberian Area to which the ferry route will lead, including one or more principal supply and service bases.

   (4) All other data required for detailed logistical planning, incident to establishing the proposed ferry route.

   b. Contemporaneously with the initial air and ground reconnaissance referred to in paragraph 5a above, a reconnaissance should be conducted by use of light trucks or sleds (depending upon the season), traversing roads and trails indicated to exist from Anadyr to Seimkan, thence via

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**DECLASSIFIED**

JCS Memo, 1-4-74
By RHJ, RLB, Date APR 2 4 1974
Nagasevo and Ochotsk to Ayan, thence by the most practicable route to Komsomolsk, thence to Yakutsk, Seimkan and return to Anadyr. The purpose of this reconnaissance would be to determine the feasibility of establishing overland communication, in summer or winter, or both, over all or any portion of the routes indicated, by trucks or caterpillar tractor-drawn sled trains. Consideration should be given to establishing such lines of communication as the reconnaissance indicates to be practicable, making use of overland, river and rail communication.

c. Fort facilities at Velkal and Anadyr should be improved to the extent found necessary and practicable, utilizing Velkal as the principal of the two ports.

d. An Engineering, Servicing, Weather and Communication Detachment of approximately sixty officers and men should be stationed at each of the stations Velkal, Seimkan, Nikolaevsk and Petropavlovsk, for the purpose of establishing and operating these principal refueling and servicing bases. Detachments of approximately thirty officers and men should be stationed at each of the intermediate landing fields, refueling and servicing stations, enumerated in paragraph a above. The garrisons would be supplied locally, as far as possible, and supplemental supplies transported by air.

e. For operations over a period of one year by an estimated total of 100 ferrying aircraft, stores of aviation gasoline and oil would be required approximately as follows:

(1) At each of the principal refueling bases, Velkal, Seimkan and Nikolaevsk, 3,200,000 gallons of gasoline and 160,000 gallons of oil.

(2) At Petropavlovsk and each of the intermediate landing fields and refueling stations, approximately twenty-five percent of the quantities above indicated.
Such stores of aviation gasoline and oil as Russia may have provided, or be able to provide, at Velkay and/or Anadyr, could be augmented by the United States, via the Bering Sea, during the period from early June to late November. Russia is known to have stocked some aviation fuel at Yakutsk and at Seimkan, but information as to quantities has not been available. It may be necessary for the United States to supply all or the major part of the aviation fuel required at Seimkan and/or Yakutsk to support the Alaskan-Southeast Siberian ferrying operation. The only practicable means of so doing appears to be by cargo vessel convoys to the mouths of the Kolyma and Lena Rivers during the months of August and September, supplemented by river boats and barges transporting the supplies approximately 750 miles up the Kolyma River to Seimkan, and approximately 1,038 miles up the Lena River to Yakutsk. If sufficient river transportation can be provided, it is believed that in this manner 15,000 tons of supplies (3,529,410 gallons of fuel in 50 gallon drums, 425 lb. per drum) could be delivered at Seimkan and 5,000 tons at Yakutsk, in one season.

Substantial river traffic is known to operate on the Lena and Kolyma Rivers, and this traffic is believed to have increased, and river navigation facilities to have been improved, during the past two or three years. It should, nevertheless, for planning purposes, be assumed that for delivery of supplies in quantity to Seimkan or Yakutsk, to support the ferry operations under discussion, the United States would be required to furnish river craft to supplement existing transportation. No definite conclusion can be reached, without more information than is now available, as to the number or specification of the craft which we would
have to provide. On the basis of information now available it is believed that self-propelled decked steel barges of 100 to 250 short tons capacity, with shelter and mess facilities for crews, and spotlights for use at night, will be desired. Stern-wheel craft may prove to be better suited to navigation of these rivers (particularly the Kolyma) than screw-propeller driven craft. Ice harbors and safe havens during flood will be needed.

h. It is contemplated that local labor and material will be utilized to make necessary improvements of landing fields and to provide necessary housing and other facilities.

i. When and if the Sea of Okhotsk is available for our naval convoys, air bases at Okhotsk and Ayan may be supplied by cargo vessels during approximately six months each year, without ice-breakers, probably during any part of the average year with ice-breakers. The season of availability of Nikolaevsk to shipping, without ice-breakers, will probably not exceed four months on the average.
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<td>875,000</td>
<td>305,000 (100 Oct.)</td>
<td>85 450</td>
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<tr>
<td></td>
<td>6000' x 300'</td>
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<tr>
<td>Juneau</td>
<td>5000' x 500'</td>
<td>2</td>
<td>Drums</td>
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<td>700,000</td>
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<td>(Ft. Richardson)</td>
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<tr>
<td>Birchwood</td>
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<td>Campbell Creek</td>
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<td>Goose Bay</td>
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<td>Merrill</td>
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<td></td>
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<tr>
<td>Gulkana</td>
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<td>Drums</td>
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<td>3600' x 500'</td>
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### ALASKA AIR FIELDS (MILITARY)

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<td>Tanana Crossing*</td>
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<td>3600' x 300'</td>
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<td>Big Delta*</td>
<td>4500' x 150'</td>
<td>5300' x 150'</td>
<td>4 Drums</td>
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<td>Fairbanks (Ladd Field)*</td>
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<td>1,013,483 (100 Oct.)</td>
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<td>4800' x 300'</td>
<td>2,916,000</td>
<td>145,000 (91 Oct.)</td>
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<td>McGrath</td>
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<td>Bethel</td>
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<td>4500' x 150'</td>
<td>2 Drums</td>
<td>653,000 (100 Oct.)</td>
<td>45 302</td>
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<tr>
<td>Moonlight Springs</td>
<td>5400' x 300'</td>
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*Fields now being used by the Transport Command for the ferrying route.
<table>
<thead>
<tr>
<th>Location</th>
<th>Runways</th>
<th>Hangars (In or Under Construction)</th>
<th>Gasoline Storage (Gallons)</th>
<th>Estimated Present Gasoline Stocks (Gallons)</th>
<th>Facilities (O) (EM)</th>
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<tr>
<td><strong>Aleutians and Alaska Peninsula</strong></td>
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<td>Naknek</td>
<td>5000' x 150'</td>
<td>4</td>
<td>Drums</td>
<td>1,250,000 (100 Oct.)</td>
<td>85 (450)</td>
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<td></td>
<td>5000' x 150'</td>
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<td>Kodiak (Ft. Greely)</td>
<td>7200' x 100'</td>
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<td>Navy</td>
<td>Navy</td>
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<td>5200' x 150'</td>
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<td>Port Heiden (Ft. Morrow)</td>
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<td>Drums</td>
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<td>Cold Bay (Ft. Randall)</td>
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<td>1,050,000</td>
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<td>Unnak (Ft. Glenn)</td>
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<td>350,000</td>
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<td></td>
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<tr>
<td>Adak</td>
<td>Under Construction</td>
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<td></td>
<td>Bulk Total 6,198,000</td>
<td>Total 17,276,983</td>
<td></td>
</tr>
</tbody>
</table>

**CAA Airfields Used by the Army**

<table>
<thead>
<tr>
<th>Location</th>
<th>Runways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniak</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td></td>
<td>3400' x 300'</td>
</tr>
<tr>
<td>Barrow</td>
<td>3000' x 300'</td>
</tr>
<tr>
<td>Farwell</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td></td>
<td>4300' x 300'</td>
</tr>
<tr>
<td>Hangars (In or Under Construction)</td>
<td>Gasoline Storage (Gallons)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Gakona</td>
<td>4000' x 250'</td>
</tr>
<tr>
<td>Homer</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td>Iliamna</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td>Kenai</td>
<td>5500' x 400'</td>
</tr>
<tr>
<td>Minchumina</td>
<td>4600' x 300'</td>
</tr>
<tr>
<td>Moses Point</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td>Nenana</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td>Ruby</td>
<td>2500' x 255'</td>
</tr>
<tr>
<td>Summit</td>
<td>4000' x 400'</td>
</tr>
<tr>
<td>Talkeetna</td>
<td>3000' x 300'</td>
</tr>
<tr>
<td>Tanana</td>
<td>5000' x 300'</td>
</tr>
<tr>
<td>Weeks Field (Fairbanks)</td>
<td>2000' x 120'</td>
</tr>
<tr>
<td>Yakataga</td>
<td>5000' x 300'</td>
</tr>
</tbody>
</table>
TOPIC: Reinforce the Russian Air Establishments in the Southeastern Siberian area for the Purpose of Aiding Russia, Neutralizing Japanese Air Offensive Action Against Our Shipping Route, and Striking at Japan Proper.

1. It is believed that under any circumstances likely to exist the minimum U. S. Air Force which should be contemplated for operations in the Siberian Coastal Area and adjacent Sakhalin Island (other than for a very limited, specific, mission) would be a composite group composed substantially as follows (plus normal administrative and security elements):

<table>
<thead>
<tr>
<th>Operational Airplanes</th>
<th>Reserve Attraction 25%</th>
<th>30 Day</th>
<th>Total Airplanes</th>
<th>Operating Engines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 B (H) Sq.</td>
<td>12</td>
<td>3</td>
<td>18</td>
<td>48</td>
</tr>
<tr>
<td>1 B (M) Sq.</td>
<td>16</td>
<td>4</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>2 F (SE) Sq.</td>
<td>50</td>
<td>13</td>
<td>73</td>
<td>50</td>
</tr>
<tr>
<td>1 Troop Carrier Sq.</td>
<td>13</td>
<td>4</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>(less Gliders)</td>
<td></td>
<td>0</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1 Service Group</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>94</td>
<td>25</td>
<td>135</td>
<td>164</td>
</tr>
</tbody>
</table>

2. The personnel involved and the normal maintenance requirements of such a composite group are shown on Tab "A" hereto attached.

3. A consideration of the initial tonnage required to be transported and of the normal monthly maintenance requirements of such a single composite group, as shown in Tab "A," leads to the conclusion that it would be impracticable to move and entirely support from the U. S., by air transport alone, such an air combat group for operations in the Maritime Provinces and/or adjacent Sakhalin Island. This is believed to be the case, irrespective of whether a refueling and servicing station can be made available at Seimkan.
4. If aviation gasoline, oil, and bombs were provided in the Maritime Provinces by the Russians, it is estimated that the monthly maintenance requirements of the single composite group would be reduced to approximately 2,870 tons per month. On that basis it would be possible to supply such a force, (less fuel and bombs) by air transport, if refueling and servicing facilities were made available at Seimkan and Nikolaevsk. In this case the maximum flight would be approximately 800 miles. Due to the limited number of C-46 airplanes apt to be available, C-47 and C-53 cargo planes would likely be used. Such planes can transport, over maximum hops of 800 miles, approximately 3-1/2 tons of useful cargo. Therefore one such cargo plane, making four round trips per month, could deliver at Nikolaevsk approximately fourteen tons of cargo per month. Two hundred and seventy-three such cargo aircraft (estimated as required to keep 205 in operating condition) under favorable weather conditions, might be expected to meet the normal requirements of the composite group, excluding aviation gasoline, oil, and bombs. These requirements might be materially reduced by Russian cooperation.

5. For normal operations such a composite group as above referred to would require organizational equipment, including motor transportation, which it would not be practicable to transport by air. Such equipment, or its equivalent, would have to be furnished by the Russians.

6. A preliminary reconnaissance of the area in question might indicate the desirability of adding to the above force one or more Aviation Airborne Engineering Companies. Each of these units has an aggregate of 120 officers and men, and is equipped with two bulldozers, scraper, grader, four jeeps, air compressor, electric light plant, and other miscellaneous equipment. Each company requires 20 C-47 airplanes to move, in one flight,
1,000 miles, with 4,400 pounds maximum load per airplane. Such a unit would be of value in extending landing strips, preparing dispersion areas, and doing other light construction work. It appears probable, however, that in the Maritime Provinces local labor and equipment could be secured for such construction.

7. Upon development of circumstances opening to us Eastern Siberia for military operations against Japan, in cooperation with and support of the Russians, it may conceivably be ascertained that we will have adequate assurance of Russian support of our operations to the extent of providing anti-aircraft protection, locally available aviation fuel for ferrying as well as combat operations, bombs, ground security forces, motor transportation, and such other heavy equipment as it would not be practicable to transport by air. In that event it might be found practicable to send a small Air Task Force to the Southeastern Siberian Area, to be supported by air transport alone, without a sea lane of communication to Sea of Okhotsk ports. The extent, as well as the nature, of the supplies, services and support which would locally be made available, would determine the size and composition of any Air Task Force we might send to the area. In view of the reported predominance of fighter aircraft in the Russian Air Forces in Siberia, it may be found practicable to send a heavy bomber unit only, adequate air defense being provided by the Russians.

8. Based on such assumptions, there is attached hereto as Tab "B" a tabulation indicating the logistical requirements for the initial movement and for monthly maintenance of a single heavy bombardment group "streamlined" as to equipment and personnel, with only such ground service elements as it is believed would be essential to accompany the group. Motor transportation, personnel, and equipment, together with aviation gas and oil, bombs and ammunition, are included but segregated with an
indication that they are to be supplied by the Russians (figures relative thereto being marked by an asterisk). No tentage or stoves are included, it being assumed that housing with heating facilities would be supplied by the Russians. In the preparation of this table, lighter and more mobile equipment has been substituted for certain standard unit equipment, such as ground radio stations, which could not be transported by air. The tonnage of monthly maintenance requirements to be supplied by the Russians, and the minimum monthly maintenance requirements which would have to be transported by air from Alaska, are separately shown. It has been necessary to make certain more or less arbitrary assumptions, such as the percentage of rations which could be procured locally, and the percentage which would have to be supplied from the United States.

9. As shown by Tab "B," it is estimated that eighty transport and cargo type airplanes (C-47's and C-53's) would be able to provide the necessary support from Alaska for the Heavy Bomber Group, supplementing supplies expected to be obtained from the Russians. The personnel and equipment to be moved from Alaska could be transported by one hundred operational airplanes, making two round trips, and seven transport airplanes making a third trip within a period estimated at fifteen days of flyable weather.

10. It might conceivably become desirable to send to the Vladivostok area for limited operations against Japan a single Heavy Bomber Squadron, only. In that case it is assumed that Russia would supply Fighter Aviation support, antiaircraft defense, ground security personnel, aviation gasoline and oil, bombs and ammunition, vehicular transportation equipment and personnel and supplies to operate and maintain same, housing and heating facilities, and basic ration requirements, all as assumed in connection with the Heavy Bomber Group operations, discussed
in paragraphs 8 and 9, above. On the basis of such assumptions it is believed the minimum Ground Service Detachment to accompany the Heavy Bomber Squadron would consist of approximately two hundred and thirty-four officers and enlisted men, aggregating, with the two hundred and forty-three ground echelon of the squadrons, four hundred and seventy-seven ground personnel to be transported by air. The impedimenta to be flown would amount to approximately one hundred and fifty tons (including only 10 days special supplies). Monthly maintenance requirements to be flown from Alaska are estimated at two hundred and twelve tons. Twelve operational transport airplanes could move the ground personnel in two round trips. Forty-three cargo aircraft could move the one hundred and fifty tons of impedimenta in one trip. Twenty cargo airplanes, of which it is assumed fifteen would be kept in operation, could transport the two hundred and twelve tons of auxiliary supplies monthly, weather permitting, making four round trips per month. Air depot facilities would have to be provided by Russia. There are reported to be one or more military airplane and airplane engine (each) factories in the Maritime Provinces of Siberia.

11. Present Army Air Forces commitments to Alaska include the following:

<table>
<thead>
<tr>
<th>Type of Squadron</th>
<th>Number</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Bomber Squadrons</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>Medium Bomber Squadrons</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Fighter Group</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Observation Flight</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Transport Squadron</td>
<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>

It appears therefore that one composite group, substantially as described in paragraph 12 hereunder, could be supplied from forces operating in Alaska. If a single heavy bomber group is assigned to operations in the Vladivostok area, two of the four squadrons could be withdrawn from Alaska. Two additional squadrons would have to be supplied from other sources. After the present commitment of one Heavy Bomber Group to the India-China
Theater has been met, the airplanes and Air echelons of one or two Heavy Bomber Squadrons might be transferred from that Theater to the Vladivostok area to take advantage of an exceptional opportunity for profitable employment there requiring immediate action.

12. In the event Russian operations, augmented by the support which we are able to furnish by naval action and by land and air forces based on Kamchatka, render feasible our use of the Sea of Okhotsk for the transport of personnel and supplies, it is believed that any U. S. Air Forces dispatched to operate in the Sakhalin Island-Maritime Provinces Area, for the purpose of reinforcing the Russian effort, neutralizing a Japanese air offensive against our sea lanes of communication, and striking at Japan, should be a balanced force substantially larger than a single composite group such as described in paragraph 1, above. For such operations the minimum air task force assigned would likely be composed substantially as follows:

1 Air Forces Eq. & Eq. Sq.
1 Heavy Bomber Group
1 Medium Bomber Group
2 Fighter Groups
1 Troop Transport Group (less Glider Detachment)
1 Air Depot Group
2 Service Groups
8 Military Police Companies
8 Security Battalions

13. The logistical implications of such a force are shown on the accompanying chart, Tab "C."

14. In the event of the utilization of an American Air Force in this theater, it is believed that it should be accompanied by such ground forces, if any, with appropriate air support, as are at the time indicated to be required to aid available Russian forces in operations to capture and occupy Karafuto (the Japanese-held Southern end of Sakhalin Island), and to capture and occupy Northern Manchukuo approximately to the railway line Manchuli-Vladivostok. Success in these operations would provide the desired depth and width of our positions in the two areas; particularly in the Vladivostok area from which effective bombing operations against Japan should be conducted.
### LOGISTICAL DATA ON MOVEMENT AND SUPPORT OF ONE COMPOSITE GROUP

(With all Normal Equipment and Supplies, incl. Tentage & Stoves)

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>PERSONNEL</th>
<th>Total Short Tons Required for Movement including 30 days supplies</th>
<th>MONTHLY MAINTENANCE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 &amp; EM</td>
<td>0 &amp; EM</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Air Ech</td>
<td>Grad Ech</td>
<td>Total</td>
</tr>
<tr>
<td>1 AF Sq (Sp)</td>
<td>8</td>
<td>117</td>
<td>125</td>
</tr>
<tr>
<td>2 AP (1 CE &amp; 1 TB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 B (M) Sq</td>
<td>160</td>
<td>242</td>
<td>402</td>
</tr>
<tr>
<td>16 AP</td>
<td>171</td>
<td>201</td>
<td>372</td>
</tr>
<tr>
<td>2 F Sq</td>
<td>234</td>
<td>340</td>
<td>574</td>
</tr>
<tr>
<td>50 AP</td>
<td>220</td>
<td>43</td>
<td>263</td>
</tr>
<tr>
<td>1 TC Sq (less Glid Det)</td>
<td>15 AP</td>
<td>10</td>
<td>1110</td>
</tr>
<tr>
<td>1 Serv Op 3 AP</td>
<td>0</td>
<td>446</td>
<td>446</td>
</tr>
<tr>
<td>2 MP Co Avn</td>
<td>0</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>1 Security En</td>
<td>0</td>
<td>1440</td>
<td>1440</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>803</strong></td>
<td><strong>2701</strong></td>
<td><strong>3504</strong></td>
</tr>
</tbody>
</table>
### Table B

**Logistic Requirements of One Heavy Bomber Group**

with Minimum Ground Service Elements.

(No Tents or Stoves Included)

<table>
<thead>
<tr>
<th>Personnel Officers &amp; E.M</th>
<th>Organizational Equip. &amp; 10 days Special Supply</th>
<th>Monthly Maintenance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fown from U.S. Tons Ca. Per. Furnished by Ally (Tons)</td>
<td>Avn. Gas &amp; Amm'n Eng. (Tons) (\text{Table II, III} \text{Tons})</td>
</tr>
<tr>
<td>Gp Sq Bomb (H) Gp</td>
<td>19 36 55 11.5 - 1,250 6 vehicles</td>
<td>100* 140* 50 50</td>
</tr>
<tr>
<td>A Bomb Sq (H)</td>
<td>160 243 403 69.0 - 12,400 54</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>B Bomb Sq (H)</td>
<td>160 243 403 69.0 - 12,400 54</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>C Bomb Sq (H)</td>
<td>160 243 403 69.0 - 12,400 54</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>D Bomb Sq (H)</td>
<td>160 243 403 69.0 - 12,400 54</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>Eq Sq &amp; Gp Serv Gp</td>
<td>167 157 324 17.5 - 2,150 66</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>Ord Co (Avn) Serv Gp</td>
<td>75 69 13.5 - 1,375 27</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>GM Co Serv Gp (av)</td>
<td>61 81 3.1 - 432 4</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>Sig Co Serv Gp</td>
<td>73 73 16.8 - 1,275 15</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>MC Co (Avn)</td>
<td>104 104 13.5 - 1,140 12</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>Ord Co MM (q)</td>
<td>82* 82* 12</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>GM Co Truck (Avn)</td>
<td>102* 102* 109</td>
<td>600* 140* 50 50</td>
</tr>
<tr>
<td>Security Bn (A.B.)</td>
<td>451* 451* 25</td>
<td>600* 140* 50 50</td>
</tr>
</tbody>
</table>

**Total from U.S.**

| 659 1710 2369 4208.7 - 68,540 | 0 0 201 | 268 | 160 178 0 13 0 822 |

**Total by Ally**

| 601* 601* 0 0 | 0 0 2635 560* 0 | 0 | 290* 45* 222*150*25* 3927* |

**Aggregate**

| 659 2311 2970 | | | |

**Notes:**

1. Gasoline and Oil for servicing Transport Airplanes engaged in ferrying supplies.
   - It is assumed that these or equivalent units, personnel, equipment and supplies will be furnished by our ally and will not be transported from the United States.
Cargo Aircraft Requirements

For the initial movement of the above Heavy Bomber Group and Service Detachment 100 Transport airplanes would be employed, each making two round trips, and 7 airplanes making a third trip, as follows: 1st trip - 35 Transports carry 702 Service Detachment personnel; 65 cargo airplanes carry 227.2 tons of equipment and supplies. 2nd Trip - 44 Transports carry 860 Ground Echelon personnel; 56 cargo airplanes carry 195.2 tons of equipment and supplies. 3rd Trip - 7 Transports carry 126 Ground Echelon personnel. Maximum hop between refueling assumed to be 800 miles. 50 Cargo type airplanes (C-47 and C-53), of which it is assumed 59 will be kept in operation, each making an average of 4 round trips per month, carrying 3 1/3 tons each trip, would transport from Alaska the 822 tons of supplies per month estimated as required to sustain operations, supplementing Russian supplies. This program would be subject to delays caused by protracted bad weather.
### LOGISTICAL DATA-PROVISIONAL AIR FORCE (With Normal Equipment & Supplies)

#### TAB "C"

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>PERSONNEL</th>
<th>Total Short Tons Required for Movement including 30 days supplies</th>
<th>MONTHLY MAINTENANCE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF Eq. (VI AF)</td>
<td>(tons)</td>
<td>(tons)</td>
<td>(tons)</td>
</tr>
<tr>
<td>4 AP</td>
<td>16</td>
<td>237</td>
<td>253</td>
</tr>
<tr>
<td>1 B (H) Op</td>
<td>695</td>
<td>968</td>
<td>1663</td>
</tr>
<tr>
<td>4 Sq &amp; Eq</td>
<td>736</td>
<td>806</td>
<td>1544</td>
</tr>
<tr>
<td>1 B (M) Op</td>
<td>604</td>
<td>1020</td>
<td>1624</td>
</tr>
<tr>
<td>4 Sq &amp; Eq</td>
<td>880</td>
<td>172</td>
<td>1052</td>
</tr>
<tr>
<td>2 F Ops (SE)</td>
<td>-</td>
<td>896</td>
<td>856</td>
</tr>
<tr>
<td>6 Sq &amp; 2 Hq</td>
<td>-</td>
<td>1020</td>
<td>1824</td>
</tr>
<tr>
<td>1 TC Op (less Glider Det.)</td>
<td>-</td>
<td>852</td>
<td>652</td>
</tr>
<tr>
<td>1 Air Dep Op</td>
<td>-</td>
<td>3520</td>
<td>3520</td>
</tr>
<tr>
<td>8 AF</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Serv Ops</td>
<td>20</td>
<td>2260</td>
<td>2240</td>
</tr>
<tr>
<td>6 AF</td>
<td>-</td>
<td>852</td>
<td>652</td>
</tr>
<tr>
<td>8 MP Co (Avn)</td>
<td>-</td>
<td>3520</td>
<td>3520</td>
</tr>
<tr>
<td>8 Security Bns</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3151</td>
<td>10633</td>
<td>13784</td>
</tr>
</tbody>
</table>
ANNEX "C"

SUMMARY OF BOMBING OPERATIONS AGAINST INDUSTRIAL TARGETS IN JAPAN, REQUIRED FOR DESTRUCTION OF HER PRINCIPAL WAR INDUSTRIES

<table>
<thead>
<tr>
<th>System of Targets</th>
<th>No. of Targets</th>
<th>Percentage of Total Production Represented by Targets</th>
<th>Total Number of Sorties Required (in terms of B-17 E's sorties)</th>
<th>Operational Bomber Force Required (B-17 E's)</th>
<th>Total Bomber Force Requirements (B-17 E's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aircraft and engine manufacturing and assembly plants</td>
<td>14</td>
<td>78.1</td>
<td>4800</td>
<td>96</td>
<td>128</td>
</tr>
<tr>
<td>2. Submarine yards</td>
<td>5</td>
<td>100</td>
<td>1260</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>3. Naval and commercial bases</td>
<td>20</td>
<td>99.2 (naval) 92.7 (commercial)</td>
<td>22,440</td>
<td>436</td>
<td>581</td>
</tr>
<tr>
<td>4. Alumina and Aluminum</td>
<td>20</td>
<td>100 (Alumina) 77.1 (Aluminum)</td>
<td>2760</td>
<td>55</td>
<td>73</td>
</tr>
<tr>
<td>5. Iron and Steel</td>
<td>21</td>
<td>100 (iron) 94.3 (steel)</td>
<td>9060</td>
<td>175</td>
<td>233</td>
</tr>
<tr>
<td>6. Oil</td>
<td>15</td>
<td>87</td>
<td>105</td>
<td>153</td>
<td>204</td>
</tr>
<tr>
<td>7. Chemicals</td>
<td>14</td>
<td>unknown</td>
<td>1520</td>
<td>36</td>
<td>46</td>
</tr>
<tr>
<td>8. 1 Rubber</td>
<td>14</td>
<td>100</td>
<td>1320</td>
<td>28</td>
<td>37</td>
</tr>
</tbody>
</table>

NOTES:

1. Target systems have been indicated in order of priority believed to correspond with the probable effectiveness of attack based upon the vulnerability and importance to the Japanese war effort.
2. The first system is a combination of aircraft assembly and air engine manufacturing plants. Destruction of the 14 targets referred to would reduce the aircraft building program of Japan to a point which would render her unable to continue her air force operations. Of the 14 targets the first four in importance are believed to contribute to Japanese total production capacity as follows:

<table>
<thead>
<tr>
<th>Plant/Location</th>
<th>Airplane Production</th>
<th>Engine Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Kawasaki Plants, at Kobe</td>
<td>14.4%</td>
<td>25.5%</td>
</tr>
<tr>
<td>b. Mitsubishi Plants, at Nagoya</td>
<td>16.2%</td>
<td>12.6%</td>
</tr>
<tr>
<td>c. Nakajima Plants, at Tokyo</td>
<td></td>
<td>20.8%</td>
</tr>
<tr>
<td>d. Nakajima Plant, at Ota</td>
<td></td>
<td>16.8%</td>
</tr>
</tbody>
</table>

3. The second system relates to submarine yards. Definite information available is limited to a comparatively few relatively small submarine construction yards, principally as follows:

<table>
<thead>
<tr>
<th>Yard/Location</th>
<th>Percentage of Known Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Mitsubishi, at Kobe</td>
<td>36% of known total.</td>
</tr>
<tr>
<td>b. Kawasaki, at Kobe</td>
<td>25%</td>
</tr>
<tr>
<td>c. Sasebo Naval Yard, at Sasebo</td>
<td>15%</td>
</tr>
<tr>
<td>d. Kure Naval Yard, at Kure</td>
<td>13%</td>
</tr>
<tr>
<td>e. Yokosuka Navy Yard, at Yokosuka</td>
<td>11%</td>
</tr>
</tbody>
</table>

4. The third system relates to Naval and Commercial Bases, which covers shipbuilding yards, repair yards, docks, ports and concentrations of shipping. It is considered that shipping is one of the most important items in the Japanese war program and for that reason an extremely heavy scale of attack is proposed against these objectives. The heavy interference in transportation which would result from successful attacks on shipping and ship yards would render Japan impotent to continue her war effort more rapidly than any of the individual remaining industrial objectives.
These targets include the following:

a. Navy Yards:
(1) At Kure 27.2% Building and repair capacity
(2) Yokosuka 23.5% 
(3) Sasebo 23.3%
(4) Maizuru 13.9%

b. Commercial Yards:
(1) Nagasaki (2 yards) 16.1% Building and repair capacity.
(2) Kobe (2 yards) 14.4%
(3) Osaka (6 yards) 12.6%
(4) Yokohama (2 yards) 10.8%

5. The fourth group - Alumina and Aluminum - are of paramount importance to Japan, particularly in respect to her aircraft industry and the destruction of the plants proposed would have an immediate effect upon that industry.

6. The fifth group - Iron and Steel - are also of great importance to Japan and the destruction of the various plants proposed would have a great effect on her war effort. This industry can also be attacked indirectly by heavy attacks on shipping and transportation.

7. The three remaining systems represent what are believed to be the three Japanese industrial systems next in importance to her war effort.

8. The water supply system of Japan has not been included due to its relative invulnerability against bombing attack. The Japanese power production system has been omitted for the same reason although her total electrical power supply is unquestionably restricted. It is widely dispersed among approximately 1200 Hydro-electric plants and approximately 400 thermal plants, aggregating approximately 1600 plants. It is estimated that a destruction of at least 500 of these plants will be required to
substantially effect the power supply for Japanese war industry. This estimate is based in part upon lack of information as to the electrical distribution system. The power generating plants are generally of concrete and steel construction at isolated locations; many of them being in narrow mountain valleys and gorges.

9. The number and weight of bombs required to be dropped on each target have been calculated according to vulnerability and areas of target. Weights vary between 300 and 1000 pound bombs.

Completion of the program indicated by the foregoing schedule would involve the dropping of approximately 209,000,000 pounds of bombs. It is estimated that by use of the operational aircraft above indicated 60 days operations in favorable weather would be required, utilizing a total estimated period of six months.
MEMORANDUM FOR THE ASSISTANT CHIEF OF STAFF, O.P.D.

Subject: Estimate of Russian Defensive Capabilities at Petropavlovsk and in the Maritime Province.

1. In reference to the inquiry of the Operations Division (November 5, 1942) concerning Russian defensive capabilities in the Far East, the following data are submitted.

2. Simple and unqualified statements of capabilities cannot be made because of the extreme significance of the following factors:

   a. The season of the year at which operations would commence. Thus the paucity and feebleness of Japanese ice breakers would make winter naval operations against Vladivostok or Petropavlovsk very difficult. In contrast, winter land operations against the Vladivostok - Khabarovsk line would be abetted by the neutralization of the Ussuri River defensive barrier. Again, the large scale of movement of Japanese fishermen to the west coast of Kamchatka and the Litke Strait - Olyutorski area in the spring could cover extensive naval operations. Spring fogs in the Vladivostok area would aid landings. On the other hand, in the spring major mechanized or even infantry movements would bog in mud, while the Ussuri and Amur Rivers would then be major defenses.
As a result, several alternative Japanese plans must be envisaged. For example, direct assaults on Vladivostok and Petropavlovsk would necessitate far greater land, air and naval concentrations than would tactics of frontal holding attack and aggressive infiltration from secondary landings at such localities as Olga Bay or Bolshevertas. However direct assaults might achieve decisions far more quickly.

c. The Japanese air and naval forces available represent a critical factor. While ample land-based aircraft would be on hand at least in the initial phases of an attack upon the Maritime Province, air operations against Petropavlovsk would have to be primarily carrier-based until fields could be seized or developed in the Litke Strait - Korf Bay, Komandorski or Bolshevertas areas. The northern Kurile and Kiska have a limited landing field capacity with very poor flying conditions at all seasons of the year.

The paucity of available Japanese destroyers and other anti-submarine craft would be a definite hindrance to large scale landing operations in the face of the sizable Soviet submarine fleet (105 vessels) based at Vladivostok and Petropavlovsk, and the numerous torpedo boats in Peter the Great Bay. Increases in Japanese anti-submarine craft would have to be made at the expense of the Home Fleet or other operational units, or through new construction. Otherwise, operations against Vladivostok would have to be primarily overland, while landing at secondary points with ensuing infiltration would be used against Petropavlovsk.

d. The success of initial shock action would greatly influence the nature and length of resistance. According to an authoritative Soviet source, Russian operational plans in the Far East are based upon active defensive-offensives by
three self-contained mobile armies (First Red Banner Army at Voroshilov, Second Red Banner Army at Khabarovsky, and 15th Army at Chita). The river systems would be extensively used for supply and amphibious infiltration. Gaps between the main forces would be covered by armored trains, small regular and partisan units, and air liaison. Specifically, a Japanese effort to cut the Trans-Siberian railroad at Iman would be countered by a Russian offensive from Turui Rog to Mishan aiming to cut off and destroy the threatening salient. Success by either force would be achieved very rapidly. At Petropavlovsk, the success of the Japanese in catching the Russians unaware and destroying grounded aircraft and docked submarines, or of the Russians in torpedoing approaching Japanese aircraft carriers and other vessels, would have a similar crucial effect.

2. The speed and volume of U. S. naval and air reinforcements would determine the effects of attrition upon the strength of Soviet resistance. Uncontested Japanese control of the Bering Sea, and subsequent blockade of the Russians, would achieve rapid success. In regard to aircraft, it is estimated that, with the feeble local replacement capacity of the entire Far East, the initial Soviet air force would be reduced by at least 50% after 90 days' operations. Reinforcements from the Soviet Western Front are out of the question. On the other hand, a flow of aircraft over the Alaska-Siberian air route at about the present planned rate (200-250 planes per month) would balance attrition. The maintenance or increase of this rate of flow are dependent upon United States - Soviet defense of the route, particularly at Nome, Anadyr Gulf and Korf Bay, upon the rate of winterization of U. S. planes and personnel, and upon the effectiveness of the system of fuel and spare parts supply, especially from the United States via the Northern Sea Route.
The nature and degree of Japanese air interdiction of Russian air bases in question are significant factors. While Soviet antiaircraft defenses are of uncertain quality, the wide dispersion of aircraft, fuel supplies and facilities on the numerous fields in the Maritime Province would make physical control of the fields difficult for the Japanese. On the other hand, fuel supplies and spare parts are critical factors: oil in the Far East comes in significant quantities only from Sakhalin or the United States; refineries exist only at Khabarovsk, Nikolayevsk and possibly Komsomol. Likewise, Komsomol has the only aircraft factory in this area. Concentration upon these targets would be a far easier and more profitable technique of interdiction than attempted control of the fields.

Japanese air superiority could rapidly insure against Soviet air offensives. On the other hand, the degree to which the defensive capabilities of the Russian Air Force could be neutralized depends greatly upon the Soviet defensive scheme. Thus, during the siege of Moscow, the Russians withheld their last fighter reserves from action even though this resulted in far greater damage to the city.

G. "Effective striking distance" of the Kobe - Tokyo area of Japan is a variable factor. Even at present, the Russians are unable, for reasons both of the quantity and quality of their bombers, to attack the Japanese industrial areas with more than token bombardments. As a result, aircraft from the United States would have to be provided for such missions. The distances even from Vladivostok to the Japanese industrial area are maximal for fighter support even with auxiliary tanks. Logistical difficulties, particularly in regard to fuel and maintenance personnel, add to the improbability of saturation bombings. On the other hand, specialized high-altitude forces (B 24's and B 17's) could be based at fieldwell beyond Japanese control, at Komsomol or even Yakutsk.
3. Information on the strength of Soviet defensive installations may be summarized as follows:

a. Petropavlovsk lies on an inlet of Avacha Bay, an enormous landlocked bay protected by exceptional natural defenses. Less than 20 miles to the north and south are ranges rising from 7,000 to 11,500 feet. The coast is rocky with many reefs and cliffs and no real landing beaches. Storms and fogs add to the dangers. Vilyuchinskaya and Sarennaya Bays afford bare possibilities for frontal assault. In general, the most practical approach to Avacha Bay is from the west along the road from Bolsheretsk, the site of several Japanese fisheries.

The town of Petropavlovsk has at least 20,000 persons, while other settlements are found at Avacha and the naval base at Rakovaya Bay. Available troops number about 10,000, with few home guards in addition. Fishermen increase the military manpower by some 5,000 during the summer. At least 15 heavy batteries protect the coast, while the town and naval base are guarded from the north by 5 forts. The bay is forbidden to all Japanese traffic. Combat aviation, principally naval fighters and patrol bombers, is in excess of 75 planes. Possibly 12 destroyers and 30 submarines are stationed here.

Major supply and repair facilities for land, air and naval equipment are found.

b. Vladivostok - Khabarovsk: these two sectors have considerable natural strength. The intervening stretch between Lake Khanka and Kazakevich Ridge (15 miles south of Khabarovsk) is guarded principally by the Ussuri River.

The coast of Peter the Great Bay from Pasyet to Cape Povorotnyi has many inlets and chains of islands which form the basis for a complex and extremely powerful system of coastal defenses, particularly between Slavyanka and
Shkott Island. Landings on this coast would be exceedingly hazardous; Olga Bay, 150 miles to the north, is the closest harbor the defenses of which allow some landing possibilities. Soviet information states, however, that the principal landing effort is expected at De Kastri in the Far north.

Natural land defenses consist of 15 to 30 miles of rolling, forest-covered hills. Approximately 250,000 regular and home guard troops, with extensive fortifications fed by an adequate system of railroads and roads, defend Vladivostok. Between 500 and 700 military naval planes plus 50 to 70 submarines and many motor torpedo boats are stationed here.

The Khabarovsky sector is defended primarily by Kazakevich ridge, a height which dominates the confluence of the Amur and Ussuri for at least 20 miles. The two bridges connecting Khabarovsky with Birobidzhan and the railroad line to KomsomolSK are vulnerable. Only amphibious operations are possible on the right flank except in winter. Total troops of all sorts in this sector number 250,000; between Khabarovsky and KomsomolSK there are about 450 planes. The Russian Amur River flotilla consists of 12 monitors and 10 gunboats.

4. If certain probable assumptions are made, Russian defensive capabilities may be tentatively estimated. For example, it may be assumed that Japan will attack on May 1, 1943. Japanese fisheries in West Kamchatka and the Litke Strait area will have secretly prepared landing fields and will be equipped for local defense. After heavy aerial bombardment, the defenses of Petropavlovsk will have been 30% reduced. An intense frontal attack will have been launched by land against Vladivostok; air operations will be fierce but not immediately decisive. Japanese air forces will not be engaged in other theaters and replacements will be adequate; sufficient anti-submarine craft will be available.
Shocked action will have resulted in great damage at Petropavlovsk and Vladivostok but no disorganization of the defenses. American air reinforcements will maintain their present rate; Japanese naval activity in the Bering Sea will be intermittent but her domination of the Sea of Okhotsk will be adequate. Great damage will be inflicted on Russian fuel supplies and aircraft factories.

Granting these assumptions, it is probable that, on July 1, 1943, the following conditions would exist.

a. The Japanese would have penetrated to Avacha Bay from the west, but Petropavlovsk would be holding out under close siege.

b. The Posyet Bay area and the Trans-Siberian railroad north of Iman would be held by the Japanese. Vladivostok and Khabarovsky would be in Russian hands.

c. Some fields would remain in operating condition, particularly between Khabarovsky and Komsomolsk, and to the west. However, lack of fuel, ground crews and spare parts would markedly restrict air activities. Few, if any, offensive operations against the Japanese mainland would be attempted.

GEO. V. STRONG,
Major General,
A. C. of S., G-2.

by

/s/ R. S. BRATTON,
Col., G.S.C.,
Chief, I.G.
JOINT INTELLIGENCE COMMITTEE

JAPANESE CAPABILITIES IN SOUTHEAST ASIA
IN VIEW OF COMMITMENTS IN MELANESIA

Note by the Secretary

The attached paper is the text of an informal memorandum prepared by the military members of the Subcommittee at the request of members of the Joint Strategic Committee. It is submitted for consideration as a J.I.C. paper with a view to wider distribution.

L. L. MONTAGUE,
Secretary.

DECLASSIFIED

\ JCS memo, 1-4-74
By RHF, NLR, Date APR 24 1974
ENCLOSURE

1. At present Japan is able to conduct only one major operation at a time because of her air and naval situation and logistical difficulties.

2. Japan can maintain her present scale of operations in Melanesia and simultaneously (a) invade Yunnan with no more than five divisions and with very limited air support; or (b) invade Bengal-Assam on the same scale; or (c) defend Burma-Thailand-Indo-China with eight divisions, but with very limited air strength. It should be noted that an attack on India in comparatively limited strength (up to five divisions) might be sufficient, in present circumstances, to occupy Assam and Bengal east of the Ganges Delta, with serious strategic, political, and economic consequences to the United Nations.

3. Japan cannot reduce materially her air and naval requirements in Melanesia without abandoning Rabaul as well as eastern New Guinea and the Solomons. If she were to do so, withdrawing to take up a strategic defensive on the western New Guinea-Mandates line, she could (a) invade Yunnan with ten divisions, with adequate air support; or (b) invade Assam-Bengal on the same scale; or (c) seize Ceylon.

4. It is highly improbable that Japan would adopt the course indicated in paragraph 3 above; in fact, all indications point to an intensification of Japanese effort in Melanesia. The situation in Southeast Asia is relatively satisfactory to Japan, while consolidation of the New Guinea-Solomons position is of critical importance to her for strategic as well as psychological reasons.

5. Conclusions.

It appears that Japan will probably increase her effort in Melanesia while defending her position in Southeast Asia. That defense will be vigorous and could include limited attacks on Yunnan or on Assam-Bengal.
ANNEX

JAPANESE FORCES AVAILABLE

1. Ground forces.
   a. Southeast Asia.
      (1) Burma. 5 divisions, with headquarters at Rangoon, Taunggyi, Mongwa, Mandalay, and Lashio. These divisions are distributed throughout Burma in the general area Rangoon-India Border-Nyikkyina-Salween River-Southern Shan States. In addition, 2 Tank Regiments are believed to be present. An unknown number of Burmese nationalists and irregulars form an auxiliary force under Japanese leadership.
      (2) Thailand. Probably 2 divisions, one in the Bangkok area and one in north central Thailand. The cooperation of the Thai government and the Thai army relieves Japanese forces of many duties normal to occupation.
      (3) Indochina. Probably 1 division, scattered throughout the country.
      (4) Malaya. Probably 2 divisions, one in the Singapore area and a second in the north. There is evidence that these Japanese troops are being assisted in police and patrol work by Indian and Malay troops formerly employed by the British.
   b. Southwest and South Pacific.
      (1) Melanesia. Five divisions, reinforced, totaling about 100,000 men, are estimated to be present in the area, with additional units believed en route. These reinforcements and the scale of naval and air forces operating in the area indicate that the Japanese consider these operations of major, if not primary, strategic importance.
      (2) Mandates. Probably 2 divisions.
      (3) Philippines. 2 divisions.
      (4) Netherlands East Indies.
         (a) Borneo: 1 division
         (b) Celebes: 1 division
         (c) Java: 2 divisions
         (d) Sumatra: 1 division
         (e) Banda Sea: at least 1 division; strong reinforcements have arrived at Timor, where total Jap strength is now 12-15,000.
Possibility of reinforcement. It is estimated that without reducing her present strength in Manchuria and North China, Japan can find thirteen divisions with which to reinforce either Southeast Asia or the Southwest Pacific. It is unlikely that more than five additional divisions could be profitably employed in the Southwest Pacific in present circumstances. Hence it appears that, while maintaining a maximum effort in Melanesia, Japan could also provide substantial ground reinforcement for Burma.

This capability is limited, however, by logistical considerations discussed in paragraph b.

2. Air Forces.

a. Present strength (as of 30 November).

<table>
<thead>
<tr>
<th>Land-based Aircraft</th>
<th>F</th>
<th>B</th>
<th>FB</th>
<th>O</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast Asia (Army)</td>
<td>165</td>
<td>108</td>
<td>0</td>
<td>48</td>
<td>369</td>
</tr>
</tbody>
</table>

Timor - Inner Seas

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Navy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Navy</td>
<td>145</td>
<td>36</td>
</tr>
</tbody>
</table>

Melanesia *

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Navy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>145</td>
<td>0</td>
</tr>
<tr>
<td>Navy</td>
<td>108</td>
<td>16</td>
</tr>
</tbody>
</table>

* There are also 92 ship-based FP's in Melanesia.

b. Replacements and possible reinforcements. Known Japanese combat losses in the Southwest and South Pacific areas during the last four months have averaged approximately 200 planes monthly. To these must be added 100 planes a month to cover "probables," irreparably damaged planes, and operational losses. Similar attrition in Southeast Asia has averaged 30 planes a month during the last four months. These losses are replaced from current production. The remaining 170 planes produced monthly are scarcely sufficient to supply the replacement needs of other theaters.

It is evident that the areas under consideration can receive air reinforcement only by diversion of strength from inactive fronts. The maximum that can be accomplished in this respect (so long as Japan undertakes to maintain a strong air force in Manchuria) is believed to be a reinforcement of 210 fighters and 216 bombers drawn from Malaya, China, Japan, and Manchuria.
In the circumstances, it appears that Japan could not undertake major operations in Southeast Asia and in Melanesia simultaneously. While continuing current operations in Melanesia, Japan might be able to conduct a limited offensive in Southeast Asia, provided that it could be concluded in sixty days. Even adequate air support for a prolonged defense of Burma would be prejudiced by continuation of Melanesian operations. Only by the conclusion of major operations in Melanesia could sustained major operations in Southeast Asia be undertaken.

3. Naval forces. The principal Japanese naval forces are now actively engaged in the Pacific. Those available for operations related to Southeast Asia are only the Southwest Area Fleets, composed of a few cruisers, destroyers, and auxiliaries. Of these, the First is based on Camranh Bay, Saigon, Singapore, and Penang; the Second, on the Netherlands East Indies; the Third on the Philippines.

The employment of important naval forces in the Indian Ocean would involve substantial risks in view of the present situation in the Pacific. However, operation on interior seas and overland communication between Thailand and Burma would permit major operations in or from Burma without heavy naval support. The movement of convoys, however, would require a large number of escort vessels, of which there is a present acute shortage. Japan has in all only six or seven heavy cruisers, fifteen light cruisers, and 76 destroyers, of which a number are at present unserviceable. The diversion of any appreciable number from other areas for escort duty in connection with major operations in Southeast Asia would handicap the continuance of major operations in Melanesia and of defensive patrol in the Mandates.

4. Logistical considerations.
   a. Deficiency of local supply. Japanese forces in Melanesia are dependent upon overseas sources for virtually all items of supply. In Southeast Asia there is an available surplus of foodstuffs, but most other items of supply must be imported by sea.
   b. Shipping. After provision of merchant vessels for essential economic and auxiliary needs and deduction of those under repair, Japan has an estimated surplus of 500,000 tons of shipping above existing commitments, including those in Melanesia. However, the rate of attrition is now so high (125,000 tons lost monthly, against less than 35,000 tons of new construction)
as to impose a need for conservation of merchant tonnage. This considera-
tion creates a demand for naval escorts, of which there is a shortage
(paragraph 3). A further consideration is that, to the degree that this
surplus tonnage is diverted to additional military operations, the economic
exploitation of recent conquests is hindered. Rapid exploitation of the
newly conquered areas is essential to the development of a self-sufficient
Japanese economy.
AUGUST 31, 1942

JOINT U. S. CHIEFS OF STAFF

MEMORANDUM FOR INFORMATION NO. 22

JAPANESE ECONOMIC CAPABILITIES

The attached study, prepared by the Joint Intelligence Committee on its own initiative, is circulated to the Joint U. S. Chiefs of Staff for information.

The subcommittee of the Joint Intelligence Committee presented a preliminary draft to representatives of the Chinese Mission and discussed the subject with them at a meeting held on August 26. The attached study represents a combined view.

W. E. Smith,
L. R. McDowell,
Joint Secretariat.

DECLASSIFIED

JCS memo, 1-4-74
By RHP, NLR, Date

APR 24 1974
ENCLOSURE

JAPANESE ECONOMIC CAPABILITIES

1. Prior to December 7, 1941, Japan was deficient in a number of essential raw materials and if access to these could have been denied her, the consequence in respect to Japan's economy and her capacity to make war would have been devastating.

2. Japan's conquests in Southeast Asia since December, 1941, have, however, given her access to basic raw materials which, if fully exploited, will make her almost completely self-sufficient economically. If she is given time (about 18 months) and opportunity to develop the processing of these materials, Japan's economic position will be such that it will be useless to attempt to crush her merely by an economic blockade of the area under her control. While there is no area outside that now controlled by Japan which has economic resources of sufficient importance to the Japanese war economy to constitute of themselves alone a military objective, the following regions do have certain resources which, if taken, would contribute substantially to Japan's industrial production:

   India-Ceylon
   Free China
   Australia-New Zealand
   New Caledonia
   Eastern Siberia

   (The areas are listed in the order of their relative importance to Japanese economy.)

3. In order to cripple Japan's economy and her capacity to make war it would be necessary either (a) that the United Nations regain control over certain key areas in Southeast Asia (especially Burma, Malaya, N.E.I., and the Philippines) or else, (b) prevent the Japanese from fully utilizing their raw materials by attacks upon their shipping.
Because of the dependency of Japan on overseas supplies, the destruction of a substantial portion of the Japanese merchant marine would be almost as damaging as the loss of the raw material producing areas. Confronted already with a strained maritime transportation system and a lack of shipbuilding materials and facilities for replacement (especially of tankers), Japan can ill afford the loss of any substantial amount of shipping. Taking everything into account, the total merchant ship building construction during 1942 will probably not exceed 300,000 tons. Any losses inflicted by the United Nations in excess of that figure would strongly affect the Japanese war economy.

It is estimated that between December 7, 1941, and July 1, 1942, the Allies were able to sink about 1,000,000 gross tons of Japanese merchant shipping.

4. Japanese economy is vulnerable because the processing of raw materials is concentrated to a high degree in a few industrialized areas (Tokyo, Osaka-Kobe, Moji-Shimonoseki, Nagoya). In addition to Japan proper there is a high and increasing degree of concentration of industry in Manchuria, especially in Mukden, Dairen and Puchun. This means that if and when the United Nations are in possession of air bases from which effective bombing attacks can be made on these areas, the whole of Japan's economic position becomes seriously imperilled, irrespective of whether or not Japan still has control over raw material producing regions.
APPENDIX A.

AREAS OF MAJOR IMPORTANCE TO THE
JAPANESE WAR ECONOMY

I. Japan Proper.

Japan proper is in a relatively favorable position as regards food stuffs. Even so, Japan must import about 15% of her rice (the basic food). For her fish (the principal animal food), Japan must rely not only upon adjacent waters but also upon her deep sea fisheries which are vulnerable to submarine attack.

As regards industrial raw materials, Japan produces large quantities only of sulphur, of coal, and of copper. As regards sulphur, she is completely self-sufficient; she produces about 2/3 of the required coal, and about 1/2 of the required copper.

As regards iron and the ferro-alloys (the basis of all heavy industry), Japan is in a very weak position. She produces less than 10% of the required iron ore. As regards the ferro-alloys she produces considerable but insufficient quantities of manganese, chrome, cobalt, nickel, but no molybdenum, tungsten, or vanadium.

As regards the non-ferrous metals, Japan produces 10% of her lead, about 25% of the required antimony, and about one half of the required zinc. She produces no or only negligible quantities of bauxite (for aluminum), mercury, platinum, and tin.

As regards non-metallic minerals, Japan produces practically no asbestos, graphite, mica, or phosphate.

As regards Petroleum, Japanese production (including synthetic) is approximately 20% of her requirements.

As regards fibers, fabrics, etc., Japan produces a surplus of silk and an adequate amount of wood pulp (for rayon, etc.), but almost no cotton, wool, or hard fiber (hemp, etc.).
She produces no rubber. She has adequate supplies of most types of lumber but no hard lumber (mahogany, teak, lignum vitae) of the type required for many naval and aviation purposes. Her production of hides and skins is negligible.

In summary, it is obvious that Japan proper is in an extremely weak position as regards most critical and strategic materials, and that her war economy would be crippled if she were denied access to outside sources of supply. At the same time it should be pointed out that Japan has built up a stockpile of most of these materials sufficient to last her for from 18 months to two years.

   (Chosen, Taiwan, Mandated Islands, Manchuria, Eastern Mongolia, Occupied North China.)

(a) Chosen (Korea) provides Japan with additional supplies of rice, coal, lead, iron ore, and zinc; with a certain amount of graphite, and with small and inadequate amounts of various ferro-alloys. It also supplies Japan with large amounts of alunite, but this material is an unsatisfactory substitute for bauxite in aluminum production.

(b) Taiwan (Formosa) provides Japan with small additional supplies of coal and rice, and with considerable quantities of sugar, tea, and camphor.

(c) Mandated Islands provides Japan with a small amount of bauxite and with considerable amounts of phosphate.

(d) Manchuria supplies Japan with additional supplies of coal and iron ore. She also provides a large amount of soya beans (important for their fat and oil content), with alunite, and with a negligible amount of nickel.

(e) Occupied China (including Eastern Inner Mongolia) provides Japan with substantial amounts of coal (and is the major source of coking coal), and with smaller amounts of iron ore. This area also provides Japan with a substantial but inadequate supply of cotton and wool.
In summary: With the addition of supplies from these areas (rice, soya beans, sugar) Japan becomes almost self-sufficient as regards foodstuffs, though because of bad harvests and shortage of agricultural labor it has been necessary to import large quantities of rice from S. E. Asia.

With the addition of these areas Japan becomes completely self-sufficient as regards coal. She secures a substantial amount of iron ore, zinc, and graphite, but still not sufficient for her full war time requirements. She still has inadequate supplies of the ferro-alloys.

As regards the non-ferrous metals, Japan secures substantial quantities of alumite, but still needs large additional quantities of bauxite to make her aluminum position secure. The addition of these areas still leaves Japan with completely inadequate supplies of lead, mercury, platinum, tin. In like manner, even with these areas Japan still has completely inadequate supplies of petroleum, asbestos, mica, rubber, hard fibers. She is still in a weak position as regards cotton, wool, leather, and heavy lumber.

It can thus be seen that access to these dominated areas greatly improves Japan's economic position but still leaves Japan far from self-sufficient as regards many basic raw materials.

3. Newly Occupied Areas.
(The Philippines, Indo-China, Thailand, Malaya, Netherlands East Indies, Burma.)

(a) The Philippines. Possession of this area provides Japan with enough chrome to make her self-sufficient. This area also provides Japan with substantial amounts of iron ore, manganese and a smaller but important amount of copper.

This area gives Japan almost a world monopoly of abaca (manila fiber). It also provides Japan with large amounts of sugar and molasses for industrial alcohol, and with copra and coconut oil and with mahogany...
Indo-China and Thailand. Possession of this area provides Japan with large quantities of rice, making the Japanese completely secure as regards their food supply. There are also small but important amounts of iron ore, manganese, tin, and tungsten. There are also sizeable amounts of sisal, hides, and heavy lumber (teak, etc.).

(c) Malaya. Possession of this area makes Japan self-sufficient for tin and rubber. There are also substantial amounts of iron ore, and appreciable quantities of manganese, tungsten and bauxite.

(d) Netherlands East Indies. Possession of this area gives Japan additional supplies of tin, rubber, ample supplies of petroleum, kapok, sisal, and large additional supplies of bauxite and nickel. This area makes Japan secure as regards vegetable fats and oil (coconut oil, palm and palm kernel oil).

(e) Burma. The possession of this area gives Japan large additional supplies of rice, petroleum, and zinc. Japan can also secure important amounts of cobalt, tungsten and lead; and smaller amounts of nickel, copper.

In summary: If and when Japan is in a position fully to exploit this area she will be amply protected as regards her food position. She will have ample supplies of coal and petroleum. She will have more than enough rubber, tin. She would be in a very favorable position as regards iron ore, manganese, tungsten, nickel, bauxite, and lead. She would have ample supplies of abaca, sisal, kapok, tropical woods, and vegetable fats and oils.

Her principal deficiencies would be an inadequate supply of carbon black, of copper, of mercury, of such ferro-alloys as vanadium and molybdenum, of asbestos and mica, of such fibers as cotton, wool and jute. Her supply of hides and skins might prove scanty. In every case, however, Japan could carry on warfare for an indefinite period, by cutting down on non-essential consumption or by the use of substitutes.
The possession of these newly occupied areas puts Japan in a very strong raw materials position (which is considerably more favorable than are the Axis powers in Western Europe).

4. Outside Areas of Especial Interest.

Although Japan's recent conquests put her in a very favorable position, the possession of certain additional areas would greatly aid in improving and easing her economic structure. Of especial importance are:

(a) India and Ceylon. The possession of India would give Japan for the first time adequate supplies of mica, cotton, and jute. It would enormously strengthen her position as regards iron ore and manganese. It would be of especial benefit to Japan if she secured control of the steel processing facilities near Calcutta. Possession of Ceylon would give her an ample supply of crystalline graphite.

(b) Free China. Were Japan to succeed in crushing Free China she would secure ample supplies of antimony and tungsten. The Japanese would be glad to make use of Chinese bristles and tung oil. Control of Free China would greatly aid Japan's mercury position.

(c) Australia and New Zealand. The possession of this area would give Japan for the first time adequate supplies of wool, meat, wheat, and leather. Up to the present time these items have been of only minor importance to Japan, but this importance is steadily increasing. Possession of this area would also give Japan a surplus of coal, iron ore, and zinc, and greatly improve her position as regards lead and copper.

(d) New Caledonia. Possession of this area would give Japan a surplus of chrome and a large potential supply of iron ore. Of even greater importance would be the control of the nickel produced in this area as it would obviate the difficulties inherent in developing the nickel deposits of Celebes (N.E.I.).
(e) Eastern Siberia. The principal economic advantage to be derived by Japan from controlling this area would be in having free access to the petroleum of Northern Sakhalien and to the fisheries off the coast of the Maritime Provinces.
APPENDIX B

JAPANESE SHIPPING POSITION

1. It is estimated that as of July 1, 1942, the total Japanese tonnage available for military and commercial transport was about 5,500,000 gross tons (exclusive of sailing vessels and ships under a hundred tons). Although the Japanese merchant fleet is, on a comparative basis, considered to be modern and fast, it possesses less than 2,500,000 gross tons of modern vessels of medium to large size and with speeds of twelve knots and over. The remaining tonnage is composed of small ships or vessels of the older tramp type, usually more than twenty years old, slow, and in considerable need of repairs. It is believed that the small, slow tonnage is being kept mainly for the services between Japan and the Asiatic mainland and for Japanese coasting trade. This means that the transportation of troops, of military supplies, and of essential raw materials from the newly occupied territories, must depend in large measure upon the two and a half million tons of modern shipping.

As a result of this situation it is believed that the Japanese merchant marine, although large, is now barely adequate for essential transport use and for the movement of commodities necessary to the Japanese war effort.

2. It is estimated that between December 7, 1941, and July 1, 1942, the Allies were able to sink about 1,000,000 gross tons of Japanese merchant shipping and seriously damage another 330,000 gross tons. To date these losses have not had a crippling effect upon Japanese shipping, partly because of the size of the Japanese merchant marine (6,700,000 gross tons) at the beginning of the war, and partly because of the fact that Japan was able to make use of 300,000 gross tons of Axis and French shipping and also of an additional 290,000 gross tons captured from the Allies.
If Japanese ships can be sunk during the remainder of 1942 at the rate maintained during the first part of the war, the Japanese merchant marine will prove quite inadequate for its task because (a) it is unlikely that any considerable tonnage of Axis, French, or Allied ships will fall into the hands of the Japanese, and (b) because new construction will necessarily be small. The maximum naval and merchant marine construction of Japan for steel vessels is 800,000–1,000,000 gross tons a year, but shortage of workers and materials, and preoccupation with ship repairs and naval construction, make it impossible for the Japanese to give preponderant attention to the construction of merchant tonnage. It is estimated that in 1942 200,000 gross tons of steel vessels (ships of 100 gross tons or more) may be built in Japan proper, and about 50,000 gross tons in Hongkong, making a total of 250,000 gross tons. In addition, about 50,000 gross tons of wooden ships may be completed.

In view of the whole situation, it is believed that the Japanese war and productive effort should suffer progressive deterioration if the attack on Japanese shipping can be successfully pressed home. If, by a special effort, the current rate of sinking cannot be only maintained, but increased, the effect upon Japanese war economy would prove crippling within the next nine months.

3. Any special effort to destroy a seriously damaging percentage of the Japanese merchant shipping should be based upon an analysis (a) of the different types of ships and their relative importance, and (b) the major shipping routes and the relative concentration and vulnerability of ships along these routes.

Thus, for example, an analysis of the different types of Japanese ships and their relative tonnage makes it clear that an increase in the sinking of tankers would be
especially damaging to Japan. Japan now has, potentially, ample petroleum supplies in the Netherlands East Indies, but a large portion of this petroleum must be transported in tankers to Japan before it can be of use to the Japanese economy. It is believed that the Japanese have now lost about 18 tankers, or about 20% of the tanker fleet. As a result, it can be hoped that there is already fundamental inadequacy. If the loss can be brought to around 50%, Japan's war effort will be so seriously impaired as to vitally affect every branch of her armed services. Japan is already placing the construction of tankers in a preferred category, but it is believed that she will be unable to build more than 100,000 gross tons a year. Vigorous action against Japanese tankers should therefore lead to a considerable deterioration of the Japanese position in the next few months.

The major shipping routes and the relative concentration of ships within each route are indicated in the accompanying chart.
APPENDIX C
THE PROCESSING OF JAPANESE RAW MATERIALS

1. There are at least thirteen industries in Japan which are concentrated in relatively few plants and are of immediate importance to the Japanese war effort. The destruction of any serious percentage of these plants would nullify to a very large degree the recent improvement of Japan's raw material position.

2. Five concentrated industrial areas in Japan proper contain a significantly large percentage of the military important Japanese industries. These areas are:

(A) Tokyo-Yokohama (hereinafter called "A")
(B) Osaka-Kobe (hereinafter called "B")
(C) Moji-Shimonoseki (hereinafter called "C")
(D) Nagoya (hereinafter called "D")
(E) Kure-Hiroshima (hereinafter called "E")

"A" and "B" concentrations are contained in the cities and close environs. Area "C", however, embraces a larger area; the northern sixth of Kyushu Island and the western half of Yamaguchi Prefecture (approximately), on the main island of Honshu.

Typically, these important Japanese industries are located principally in these three areas, with often one, and occasionally more than one, additional city or cities also prominent in the industries. By industry, the geographic concentrations are as below:

(a) Aircraft and aircraft engines "A", "B", and "D"
(b) Petroleum refining and storage "A", "B", "C", and Niigata
(c) Iron and Steel "C", "B", and Muroran
(d) Copper (an exception; not concentrated heavily in any area) "B", "C", Nihama, Naoshima, Shibauchi, Nikko, Kosaka, and Osarizawa.
(e) Rubber tires
"A", "B", and "C".

(f) Trucks, automobiles, armored automotive
equipment.
"A", "B", and Koromo

(g) Shipbuilding and ship repair
"A", "B", "C", and "E".

(h) Aluminum (an exception; not concentrated heavily
in any area)

(i) Critical railway points
"A", "B", "C", "D", and throughout Japan

(j) Ball and roller bearings
"A", "B", Kuwana, and Toyama

(k) Nitrogen branch, chemical industry
"C", "A", and scattered throughout Japan

(l) Soda ash branch, chemical industry
"C" and scattered.

(m) Chlorine branch, chemical industry
"B", "A", and scattered throughout Japan

The accompanying chart gives a graphic representation
of the high degree of concentration of some of Japan's major
industries.

3. In addition to Japan proper, there is a high degree
of concentration of industry in Manchuria, especially in Mukden,
Dairen, & Pushun.
THE JAPANESE SHIPPING POSITION FOR 1942

ESTIMATED CARGO MOVEMENTS BY ROUTES AND COMMODITIES, OF RAW MATERIALS NECESSARY TO A FULL JAPANESE PRODUCTIVE EFFORT

SCALE OF FLOWLINES (IN THOUSANDS OF TONS)

16,000 8,000 4,000 2,000 1,000 500 250 100

MILES

DECLASIFIED
State Dept. Letter 1-11-73
By R. H. Baker and L. A. C.

APR 24 1974

BOARD OF ECONOMIC WARFARE, OFFICE OF ECONOMIC WARFARE ANALYSIS, FAR EASTERN DIVISION

MAP NO. 826 (REV. 4/65), AUGUST 8, 1942, DRAWN IN THE GEOGRAPHY DIVISION, O S S
CONCENTRATION OF SOME JAPANESE INDUSTRIES

The Bar Charts show the percentage of total Japanese production concentrated in the three major industrial areas. The shaded portion of each circle represents the combined output in each category of these areas in proportion to total Japanese production. The major activity localized in the other important industrial areas shown is indicated by color.
COMBINED CHIEFS OF STAFF

MEMORANDUM FOR INFORMATION NO. 25

JAPANESE INTENTIONS

Note by the Secretaries

The enclosure, an appreciation of Japanese intentions prepared by the Combined Intelligence Committee on its own initiative, is presented for information of the Combined Chiefs of Staff.

V. DYKES,

J. R. DEANE,

Combined Secretariat.
ENCLOSURE

1. Japanese strategy is governed by the following main factors:

   (a) The balance of naval power in the Pacific.
       So long as the relative strengths of the opposing fleets remain as at present, Japan is unlikely to attempt to extend her conquests in any direction which involves large-scale commitments distant from home.

   (b) Limitation of air forces.
       Japanese air strength will prevent her from simultaneously embarking on operations against Russia, India and Australasia or even against any two of them simultaneously. However, her air strength will permit operations against any one of them.

   (c) Need for developing war resources in the captured territories before Japan can face prolonged hostilities.

   (d) Limitation of shipping.

2. Japan's immediate aims are:

   (a) to establish strategic security for her East Asiatic sphere.

   (b) to develop the resources of the area now within her control so as to enable her to sustain prolonged hostilities.

   There are increasing signs of coordinated strategy between Germany and Japan, but as yet little evidence that any coordinated action has been put into effect.

3. These aims involve the creation of a strategic barrier to the north of Australia and include occupying the Solomons, the Gilberts, and possibly other islands, and completing the occupation of New Guinea.
4. Japan will try to weaken the Allies' power of counter-offensive by striking at their naval and air forces, whenever favorable opportunity offers, and by denying them bases within operating distance of the East Asiatic Sphere. So long as the relative strength of the opposing fleets remains as at present, she is not likely to undertake any major seaborne operations beyond those indicated in paragraph 3 above.

5. In particular Japan is unlikely at present to attempt to occupy Australia*, New Zealand, India, Ceylon or the Hawaiian Islands or to push her conquests further in the Aleutians.

6. Her shipping limitations, though not sufficient seriously to hamper her present military operations, are preventing her from exploiting her conquests to the full and from expanding to the full her own industrial productive capacity. The need to conserve shipping for these important purposes will act as a further deterrent against undertaking seaborne operations, not essential to her strategic security, in areas in which she cannot freely operate.

7. In India, Japan's principal aim is to neutralize it as a base for Allied counter-attack. For the reasons given above, her operations to this end are likely to be limited at present to fomenting internal unrest, to air raids and to submarine attacks in the Indian Ocean, possibly to limited operations against northeastern India designed to cut the air ferry route to China, and to raiding operations in the Calcutta area designed to interfere with Indian economic life.

8. To establish peace in China on her own terms remains a Japanese aim. She will pursue it by political and economic pressure and by comparatively limited military operations.

* The British J.I.C. feel that the possibility of Japanese occupation of Darwin cannot be excluded.
9. An attack on Russia is probably not an immediate aim of Japan though preparations in Manchuria are complete and extreme military elements might precipitate an attack at any time.

10. Japan cannot conclusively defeat the United States or Britain by any land operation. To win the war, therefore, she must hope to resist whatever counter-offensive the Allies can bring against her whilst they are engaged in hostilities in the West; to profit by their defeat there, if that should occur; and so to build up her strength in the meantime that, even if Germany were defeated, she could still defend her Sphere against the Allies and rely on their exhaustion and war weariness to secure a negotiated peace.
APPENDIX "A"

1. Japan's strategy in the various areas in the Far East is likely to be as set out in the following paragraphs.

2. South West Pacific
   If Japan's plans for strategic security are not to be jeopardized, she cannot afford to leave the Americans and Australians in occupation of the Southern Solomons. She is likely also to aim at the capture and development of strategic bases in islands further to the East and South East.

3. New Guinea
   Japan will endeavor to capture Port Moresby and other Allied bases in Southern New Guinea. With these in Japanese hands, the effectiveness of Allied aircraft in Northern Australia would be greatly reduced, the Torres Straits would be denied to Allied shipping and the threat to Northern Australia would be increased. Operations to capture these bases could be carried out concurrently with operations against the Solomons.

4. Australia
   The occupation of Australia is not practical. It would cost Japan a major war in yet another Continent to occupy the strategically and economically important areas in East and South East Australia. Her other commitments, and the naval situation in the Pacific, would not allow Japan to do this. She would hope, by occupying bases on islands covering the approaches, to prevent a counter-offensive being launched from Australia.

   So long, however, as points in Northern Australia remain available to the Allies for use as naval and/or air bases, they will constitute a menace to the Japanese position in the East Indies and to shipping in the South China Sea. Accordingly, Japan may attempt to neutralize such points, but it is unlikely that any attempt would be made to occupy them.

* The British J.I.C. hold the view that the occupation of Darwin, which is isolated from the rest of the Continent, is a possibility.
5. New Zealand

The occupation of New Zealand by Japan, unless the balance of naval power in the Pacific turns overwhelmingly in her favor, is unlikely to be attempted.

6. India

Japan's need for the resources of India is not so urgent as to warrant her accepting the heavy military and shipping commitments which an attempt to invade India would entail. Her interest in India is mainly to ensure that no offensive can be launched against Burma or Malaya from that country. Her cheapest method of doing this is by increasing the internal security problem in India. She will attempt to do this by propaganda, subversive activity and, unless deterred by considerations of policy, by air raids on the Calcutta area. Now that the monsoon period is ended, the Japanese air force in Burma will probably feel compelled to carry out attacks against Allied air bases to interfere with the build up of an Allied counter-offensive and to reduce Allied air activity against their positions in Burma, which activity is known to be causing them concern. An invasion is unlikely, except possibly a limited operation to cut the air ferry route to China. Naval and air considerations are also likely to deter Japan from invading Ceylon.

7. Indian Ocean

Japan will maintain a few submarines in the Indian Ocean with the object of striking at British shipping whenever she can and of delaying the development of a counter-offensive from India. These submarines will operate as conditions allow, off East Africa or in the Gulf of Aden. Except possibly for raiders, surface forces are not likely, in view of the present balance of naval power in the Pacific, to operate in the Indian Ocean.
8. China

The detachment of China from the Allied cause is a Japanese aim. The experience of the last five years has probably taught Japan that the subjugation of China by military methods is too formidable a task, but China's present state of morale presents an admirable opportunity for Pan-Asian propaganda and Japan probably hopes to achieve the detachment of China by a combination of political and economic pressure and limited military operations.

9. Aleutians and Hawaii

The occupation of the Western Aleutians is a measure of defense against attacks on Japan itself. These islands would also be a valuable outpost if, at any time, Japan should attack Russia. This occupation is likely to be consolidated but probably not extended, Kiska being considered a sufficient counter to Dutch Harbor as an air and submarine base. The capture or neutralization of Hawaii will not be attempted as long as the balance of naval power in the Pacific remains unfavorable to Japan.

10. Russia

So long as the Maritime Provinces remain in the hands of the Russians, they will constitute a threat to Japan and, in consequence, to the whole of her structure in the Eastern Asiatic Sphere. Whatever her intentions, therefore, in regard to Russia, Japan is bound to maintain powerful land and air forces in Manchuria, and these forces will constitute an ever present threat to the Maritime Provinces. Any serious weakening of Russia's Far Eastern army, or signs of political disintegration consequent upon a Russian collapse in the West, would probably result in a Japanese attempt to occupy the Maritime Provinces and the Northern part of Sakhalin Island.

The Japanese Military High Command cannot ignore the risk of further overseas commitments distant from Japan unless the balance of naval power in the Pacific alters substantially in
her favor. The position in Manchuria is different since the sea communications are short and concentration of troops and supplies in Manchuria has already been effected. The addition of Russian submarines and aircraft to Japan's present preoccupation regarding sea communications and the vulnerability of her towns to bombing are deterrent factors. Such evidence as is available indicates a desire on the part of Japan to avoid any provocative action for the time being. In spite of these factors, however, the Military High Command might be willing to precipitate a crisis at any time.
JOINT INTELLIGENCE COMMITTEE

THE JAPANESE TANKER POSITION

Note by the Secretary

Attached hereto is a London J.I.C. estimate on the subject, dated to December.

L. L. MONTAGUE,
Secretary.

DECLASSIFIED

JCS memo, 1-4-74
By RHF, NLR, Date APR 24 1974
THE JAPANESE TANKER POSITION

Report by the Technical Sub-Committee on Axis Oil

INTRODUCTORY

This report is submitted in response to a request from Lord Finlay's Committee on Japanese Shipping for estimates:-

(a) of the quantities of oil that the Japanese will require to ship during the period 1st October 1942 to 31st March 1943, together with details of voyages and assumed turn-round times.

(b) of the gross registered tonnage of the commercial tanker fleet as at 30th September, 1942; together with a statement upon the adequacy or otherwise of the Japanese tanker fleet.

THE JAPANESE OIL POSITION

Before the outbreak of war, Japan was supplied largely by imports from the Western Hemisphere and from the East Indies. She now has to rely upon her own resources and the oil that can be won from the oilfields of the East Indies and Burma.

Assuming the eventual exhaustion of the stocks accumulated before the war, a production of 5,450,000 tons per year will be necessary from the East Indies and Burma, if Japan's minimum annual wartime requirements are to be met. (However, the production that may be obtained in Burma during the next few months is expected to be consumed locally and consequently it is assumed that there will be no exports from Rangoon.)

In estimating probable tanker movements, there are three phases in Japan's changing oil economy to be taken into consideration:
Firstly, the distribution of supplies of oil products to the fighting zones from pre-war stocks and from Japanese indigenous sources;

Secondly, a transition phase when crude oil is forthcoming in growing volume from the captured fields in the South. During this phase it may be expected that there will be a larger proportion of crude shipped from the South for refining in Japan than will be the case in the third phase when finished products most conveniently shipped from the South will be refined in that area;

Thirdly, the final phase when supply and distribution will be on a relatively settled basis with the required supply of products available for shipment to the nearest consuming areas.

It is expected that the six months ending 31st March, 1943, will include the transition from the first to the second phase and also the beginning of the third phase. An accurate analysis of tanker movements during this second phase is particularly difficult; it will include the movement of substantial quantities of crude oil from the East Indies to Japan for refining, and it is probable that a number of tankers will be employed for the dual purpose of delivering finished products from Japan to the bases in the S.E. Pacific, proceeding thence to the East Indies to load crude for Japan.

For the purpose of this study it is assumed that:

(a) Requirements in the Mandated Islands will be shipped either from Japan or the East Indies, the voyages being approximately equal. It is also assumed that shipments to Occupied China, which will comprise only a small number of voyages, will take the same amount of time as to the Mandated Islands.

(b) Requirements of finished products in the Southern zone will be shipped from the re-constructed East Indian Refineries.
In the case of (b) this may only apply towards the end of the period under review but the amount of total tanker tonnage required will not be affected for the reason that the economy in vessels resulting from the shorter hauls in comparison with Phase I will be offset by the growing volume of East Indies crude requiring shipment to Japan.

ESTIMATED TANKER TONNAGE REQUIRED

White Oils

Shipments of white oils during the six months under review are not expected to exceed 90,000 tons, of which 10,000 tons will be required in the Mandated Islands and the remainder will be required at the principal ports between Saigon and Port Arthur inclusive.

It is considered reasonable to assume that 4 tankers will be required for white oil movements, having a total tonnage of

...30,800 G.r.t.

Black Oils

Shipments to Occupied China and to the Mandated Islands may be made from either Japan or the East Indies. The calculations for these movements are therefore based on an average voyage of 1,600 miles, i.e. 3,200 miles round trip at an average speed of 9 knots. (This speed is lower than normal and allows for reduced rate of travel in convoy).

Mandated Islands. Naval requirements will amount to approximately 625,000 tons.

625,000 tons of oil will need 511,000 g.r.t.

The average g.r.t. of the 50 non-naval tankers (see Appendix "A") is equal to 7,700 g.r.t.

Therefore the number of voyages required = 66.

\[
\begin{align*}
\text{Round voyage sailing time} & \quad = \quad 15 \text{ days} \\
\text{Loading and Discharge} & \quad = \quad \frac{8}{23} \text{ days}
\end{align*}
\]

This equals 8 voyages for 6 months.
Therefore the number of ships required will be 66, equivalent to a minimum of 8 ships totalling 62,600 g.r.t.

However, 8 ships represent a theoretical minimum and more will be necessary. An additional 25% should be added to cover partial loadings, diversions, convoy delays, repairs, dry docking etc. It is therefore considered that not less than 10 tankers will be required, having a total tonnage of 77,000 g.r.t.

Occupied Areas. It is estimated that approximately 50,000 tons of black oils will require to be shipped to the Occupied Areas, exclusive of the East Indies. It is estimated that one tanker will suffice for this movement. As it is unlikely that vessels will bunker to any large extent at the oilfield shipping points, it is assumed that not less than two tankers will be required for replenishing bunkering installations at Singapore, Sourabaya and any other fuelling installations in the Southern Zone. It is therefore considered that the delivery of black oils in the Occupied Areas will utilise not less than $\frac{1}{2}$ tankers, having a total tonnage of $\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ld - 4 -
With a round trip of 6,000 miles and allowing 8 days for loading and discharge, a voyage would total 36 days, or 5 voyages in 6 months.

A total of 1,660,000 tons of oil will need 1,358,000 G.R.T. The number of voyages required will be 176, equivalent to 35 tankers. Adding 25% for delays and contingencies etc., this is equivalent to 44 ships, making a total tonnage of 338,800 G.R.T.

**Total Tonnage Required**

It is therefore estimated that if Japan's war effort is not to be handicapped by an eventual shortage of oil, some 54 tankers will be required, having a total tonnage of 492,800 G.R.T.

**TANKER TONNAGE AVAILABLE**

A summary of the estimated tanker tonnage available is given in Appendix "A". Including Naval Oilers, there is a total, excluding vessels under 1,000 G.R.T., of 61 vessels, totalling 462,747 G.R.T.* Excluding Naval Oilers, there are 50 vessels, totalling 385,546 G.R.T.

According to the requirements estimated above (64 tankers, totalling 492,800 G.R.T.) there is a theoretical deficiency of 14 tankers, or about 107,000 G.R.T.

It is necessary, however, to take into account the use of Naval Oilers and the possible use of Whale Oil Factories.

The method of utilizing naval oilers introduces an uncertain factor. While theoretically these vessels load their cargoes at main or advanced bases, it is probable that they draw supplies to a certain extent from the producing areas. It is possible that a tonnage equivalent to three naval oilers might at any one time be detached from the fleets for procuring oil from source points. The deficit in tankers indicated above might therefore be regarded as alleviated to the extent of another three ships.

* There have been further sinkings since Sept. 30th and the total since the beginning of the war is now put at 12 tankers sunk and 6 more possibly sunk. No allowance has been made for vessels that have sustained damage and have been put out of commission for repairs. Japanese deficiency in tankers can, therefore, now be regarded as more serious than this report indicates.
The six whale oil factories, totalling 100,430 g.r.t., must also be considered as potential oil carriers. It is believed that a number of them have been adapted for transporting aircraft and other equipment. It may be expected that at least some of these ships are being used for carrying oil.

CONCLUSIONS

1. As of September 30th, 1942, the Japanese ocean-going tanker fleet is estimated to have comprised 61 vessels, having an estimated total gross registered tonnage of 462,747.*

2. It is not known to what extent the tanker fleet is operating at the present time as this is dependent upon the amount of oil that is being produced in the East Indies and the extent to which Japan is still drawing upon pre-war oil reserves.

3. When the flow of oil necessary for Japan to maintain her present war effort is forthcoming from the East Indies, the existing tanker fleet will not be adequate to cope with it.

4. It will, therefore, be necessary for additions to be made to the tanker fleet, over and above the replacement of sinkings, if Japan's war effort is not to be impaired by lack of oil.

* See Footnote to Page 5.
APPENDIX "A"

JAPANESE TANKERS AND NAVAL OILERS

Estimated Position as of September 30th, 1942.

The known Japanese Commercial Tanker Fleet of vessels exceeding 1,000 g.r.t. (see Appendix "B") totals 49 vessels, with an estimated tonnage of...

383,975

Axis tankers under other flags in Japanese occupied waters are believed to be 2, and with a tonnage of...

6,571

Naval Oilers are believed to total 11 vessels with an estimated tonnage of...

77,201

Estimated new tanker tonnage built -
From Jan. 1940 to Feb. 1942 (i.e. 14 months at 36,000 g.r.t. per annum)...

42,000

From Mar. 1942 to Sept. 1942 (i.e. 7 months at 43,000 g.r.t. per annum)...

25,000

Possibly 7 ocean-going tankers...

67,000

TOTAL...

534,747

*Less estimated sinkings up to 30.9.42
8 tankers averaging 9,000 g.r.t. ...

72,000

Making 61 vessels in all having a total tonnage of...

462,747

Whale Oil Factories

Japan also has six whale oil factories, with a total gross registered tonnage of 100,430 equivalent to approximately 130,000 d.w.c. It is believed that at least a number of these vessels may have been adapted for transporting aircraft and other equipment. These vessels must nevertheless be considered as potential oil carriers.

Note: Twenty-one vessels of under 1,000 g.r.t. totalling 11,827 tons, are not included in the above figures.

* See footnote to Page 5.
**APPENDIX "B"**

**JAPANESE TANKERS AND NAVAL OILERS**

Estimated Position as on 30th September, 1942

<table>
<thead>
<tr>
<th>VESSEL</th>
<th>OVER 1,000 G.R.T.</th>
<th>VESSEL</th>
<th>UNDER 1,000 G.R.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKATUKI (White Oil) MARU</td>
<td>10,216</td>
<td>FUKUYEI MARU</td>
<td>250</td>
</tr>
<tr>
<td>DAI-IJI-OGURA</td>
<td>7,270</td>
<td>HADATTI</td>
<td>989</td>
</tr>
<tr>
<td>DAI-NI-OGURA</td>
<td>7,311</td>
<td>HALABAN</td>
<td>662</td>
</tr>
<tr>
<td>DAI-SAN-OGURA</td>
<td>7,350</td>
<td>HINODE</td>
<td>321</td>
</tr>
<tr>
<td>DAISIN</td>
<td>8,378</td>
<td>HIJI</td>
<td>422</td>
</tr>
<tr>
<td>EIY0 (White Oil)</td>
<td>8,674</td>
<td>HISONO No. 2</td>
<td>867</td>
</tr>
<tr>
<td>GENYO</td>
<td>10,019</td>
<td>HUNAGAWA</td>
<td>869</td>
</tr>
<tr>
<td>HAKKO</td>
<td>6,025</td>
<td>KOAN</td>
<td>885</td>
</tr>
<tr>
<td>HOKKI</td>
<td>5,601</td>
<td>KORYO</td>
<td>588</td>
</tr>
<tr>
<td>HORAI (White Oil)</td>
<td>1,083</td>
<td>KOSIN</td>
<td>420</td>
</tr>
<tr>
<td>HOYO</td>
<td>8,692</td>
<td>KYOEI</td>
<td>603</td>
</tr>
<tr>
<td>HOZOYO</td>
<td>2,417</td>
<td>HAGATA No. 28</td>
<td>670</td>
</tr>
<tr>
<td>HUZISAN</td>
<td>9,527</td>
<td>MANKU</td>
<td>47</td>
</tr>
<tr>
<td>ITUKUSIMA</td>
<td>10,007</td>
<td>NIPPO No. 15</td>
<td>486</td>
</tr>
<tr>
<td>KAISOKU</td>
<td>1,136</td>
<td>NOHAI</td>
<td>374</td>
</tr>
<tr>
<td>KAIZYO</td>
<td>8,637</td>
<td>PEGASUS</td>
<td>284</td>
</tr>
<tr>
<td>KENYO</td>
<td>3,271</td>
<td>TAKATORI (No. 1)</td>
<td>879</td>
</tr>
<tr>
<td>KIY0</td>
<td>7,251</td>
<td>TAKATORI (No. 2)</td>
<td>521</td>
</tr>
<tr>
<td>KUROSIO</td>
<td>10,519</td>
<td>TAKATORI (No. 3)</td>
<td>224</td>
</tr>
<tr>
<td>KYODO</td>
<td>1,090</td>
<td>TOKYO</td>
<td>903</td>
</tr>
<tr>
<td>KYOKUTO</td>
<td>10,052</td>
<td>TORA</td>
<td>503</td>
</tr>
<tr>
<td>MANZU</td>
<td>6,515</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MINUROSAN &quot;appx&quot;</td>
<td>9,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITU</td>
<td>5,682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NICHIHAI</td>
<td>9,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIPPO</td>
<td>9,974</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NISSYO</td>
<td>10,526</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NITIEI (White Oil)</td>
<td>10,020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OMUROSAN</td>
<td>9,205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTOWASAN</td>
<td>9,205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIKKO</td>
<td>9,181</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN CLEMENTE</td>
<td>7,335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN DIBGO</td>
<td>7,269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN LUIS</td>
<td>7,269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN PEDRO</td>
<td>7,269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN RAMON</td>
<td>7,309</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINKOKU</td>
<td>10,020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYOYO</td>
<td>7,499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAKASAGO</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TATEKAWA</td>
<td>10,090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TATIBANA</td>
<td>6,522</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEIYO</td>
<td>9,850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOA</td>
<td>10,052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOEI</td>
<td>10,023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOEN</td>
<td>5,232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTO</td>
<td>9,987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOMO</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZUIY0</td>
<td>7,385</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

49 vessels 383,975

21 vessels 11,827

**NAVAL OILERS**

<table>
<thead>
<tr>
<th>VESSEL</th>
<th>11 vessels 77,201</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKEBONO</td>
<td>10,182</td>
</tr>
<tr>
<td>HAYATOMO</td>
<td>6,500</td>
</tr>
<tr>
<td>IRO</td>
<td>6,500</td>
</tr>
<tr>
<td>KOKUYO</td>
<td>10,519</td>
</tr>
<tr>
<td>MARUTO</td>
<td>6,500</td>
</tr>
<tr>
<td>ONDO</td>
<td>6,500</td>
</tr>
<tr>
<td>SABA</td>
<td>6,500</td>
</tr>
<tr>
<td>SHIRETOKO</td>
<td>6,500</td>
</tr>
<tr>
<td>SHIRITA</td>
<td>6,500</td>
</tr>
<tr>
<td>SUNOSAKI</td>
<td>4,500</td>
</tr>
<tr>
<td>TSURUMI</td>
<td>6,500</td>
</tr>
</tbody>
</table>

The ERINO is known to have been sunk and has therefore been excluded from this list of Naval Oilers.

**TANKERS IN JAPANESE OCCUPIED WATERS UNDER OTHER FLAGS g.r.t.**

| WINNETOU (German) | 5,113 |
| SAMUI (Thailand) | 3,458 |
| | 6,571 |
Proposed Radio to Premier Stalin

After reading your reply to my radio concerning the Far East I am afraid I did not make myself clear.

As I previously explained reference South Caucasus, it is not practicable to send heavy bombers to Russia at this time other than in existing organized units.

Our proposal regarding the 100 planes referred to a situation where hostilities had actually broken out between Japan and Russia. Under those conditions we calculated that by regrouping our air units in the Pacific Theater 100 planes in organized units could be concentrated in Eastern Siberia because their action as well as your battle there would enable us to reduce our air strength elsewhere in the Pacific Theater.

My radio was intended to be in the nature of anticipatory protective planning against a possibility only. The immediate action recommended was in reference to the survey and discussions by General Bradley with Soviet officials. Only by such preliminary survey and advance planning will it be possible to render reasonably prompt assistance in the event of an outbreak of hostilities in Siberia.

I should like to send General Marshall to Moscow for a visit in the very near future and if this can be arranged I hope that you will be able to discuss this matter with him at that time. He will be able to tell you about the current situation in Africa and also about planned operations for balance of this year in all war theaters. I think this will be very helpful and he will have the latest news. Meanwhile, I would appreciate an early reply to my proposal of December 21 that General Bradley and his party proceed without delay to the Far East for survey and staff discussions.

My deep appreciation for the continuing advances of your armies. The principle of attrition of the enemy forces on all fronts is beginning to work.

Original Message of 1/8/43 stopped. This draft taken to Mr. Hopkins' Office by General Bradley for clearance, 1/8/43.

The President approved radio with minor grammatical changes, the essence of the text remaining the same.
From: Opnav
To: Alusna, Moscow

From the President to Premier Stalin.

In a recent message to you I proposed sending 100 bombardment airplanes to the Far East in the event of war between the Soviet and Japan and at the same time suggested that General Bradley proceed to the Far East Theater in order to make a survey as to the advance preparations which would be necessary in order to insure effective participation of our units promptly on the initiation of hostilities.

After reading your reply I am afraid that I did not make my proposal clear. It was intended to be in the nature of anticipatory protective planning against a possibility only. The only immediate action recommended was in reference to the survey to be made by General Bradley in conjunction with Soviet air officials.

I would like to send General Marshall to Moscow for a visit in the very near future and if this can be arranged I hope that you will be able to discuss this matter with him at that time. He will be able to tell you about the current situation in Africa and also about planned operations for balance of this year in all war theaters. I think this will be very helpful and he will have the latest news.

My deep appreciation for the continuing advances of your armies. The principle of attrition of the enemy forces on all fronts is beginning to work.

ROOSEVELT

January 8, 1943

Released from the White House Map Room at 1300 EWT, January 8, 1943, but not transmitted.
PERSONAL AND CONFIDENTIAL MESSAGE
OF PREMIER STALIN TO PRESIDENT ROOSEVELT.

I have received your message concerning the Far East. Please accept my appreciation of your willingness to send 100 bombers for the Soviet Union to the Far East. However, I must say that at the present time we want aid in airplanes not at the Far East, where the U.S.S.R. is not engaged in war, but at the front of the fiercest war against the Germans, i.e., at the Soviet-German front. The arrival of these airplanes, without fliers, (we have enough fliers of our own), at the south-western or the central front would play an enormous role on the most important sectors of our struggle against Hitler.

As regards the course of the war on our fronts, the development of our offensive has so far been on the whole satisfactory.

January 5, 1943.
JOINT CHIEFS OF STAFF

BRADLEY MISSION

Memorandum by the Chief of Staff, U. S. Army

1. Upon his return to the United States, General Follett Bradley submitted a report on his Mission to Russia, a summary of which follows:

(a) The Alaska-Siberian Air Ferry Route has been established, is in operation, and has made possible the delivery of War Aid airplanes to Russia through Siberia.

(1) The delay in the initiation of ferry operations through Siberia was attributable in the main to weather, difficulties of supply, maintenance, and the delay occasioned by winterizing aircraft for flight over the Siberian route.

(2) The Russians are working efficiently and conscientiously to perfect the development of this route.

(3) Efficient operation of this route will only be achieved after many months of perseverance and complete cooperation on the part of the U. S. and Russian authorities. Improvement is steadily being made.

(4) Personnel of the U. S. Air Forces have now made four flights over the most difficult parts of the route and have a keen appreciation of the problems connected with the route.

(b) Authority for a survey flight by United States Military Personnel to obtain detailed information of existing Military establishments and facilities in the Siberian areas has been granted to General Bradley. Mr. Stalin stated that he had "no objections" to the proposed survey.
(1) General Bradley recommends that a physical survey of the area should not be made until the U. S. Government is prepared to make a definite commitment of air units for operation in Siberia in event of war between Russia and Japan. This due to the fact that Russia is not entirely convinced of the ability of the U. S. to meet its commitments. Russian faith in American intention is constantly improving but this faith cannot be maintained in the face of failure to meet commitments.

(2) U. S. Staff studies should continue with information at hand so as to determine the advisability of employing U. S. Air Forces in operations from Siberian bases in event of war between Russia and Japan.

(c) The Russian Government will not at this time enter into any agreement with the U. S. Government for joint and cooperative action against Japan. This is due primarily to the desire of the Russians to retain their present relations with Japan and to devote their entire attention to the defeat of Germany. Stalin will not agree to the establishment of any U. S. bases, or the location of any U. S. Army units in Siberia prior to the outbreak of hostilities with Japan.

(1) As the result of a conference with General Korolenko, Russian Army, General Bradley obtained the following information on Siberian border provinces:

a. Suitable airdromes are available in Manchurian area for limited U. S. Air Force.

b. Russian supplies are available for this force; bombs, ammunition, food, fuel, lubricants, and communications.
c. Russian strategic plan is offensive and not defensive against Japan.

d. Japan has no large air force in Manchuria, and no indication to date of a Japanese offensive. The Russians claim to have a sizable and well-trained air force ready for instant action.

e. The major operational difficulty for an air force in this area during winter is fog, snow, and extremely low temperatures.

(d) In order to make final plans for the operation of U. S. Army Air Forces from Siberian bases it is essential that the War Department have complete information on the capabilities of Russian facilities in that area. Our knowledge at the present time is extremely limited. We have only the Russian statement that adequate facilities exist in Siberian Russia to support and to permit the operation of elements of our Air Force. To make final plans it is mandatory that a survey of Siberian Russia be accomplished with a view toward determining the adequacy of facilities in that area, the size air force that can be maintained, and the probable capabilities of that force.

2. In view of General Bradley's report summarized above, it would seem highly desirable for the War Department to initiate plans for the tentative commitment of Air Force units for employment in Siberia, in event of war between Russia and Japan. This commitment should be made with the understanding that the final decision on the employment of U. S. Army Air Forces in Siberia is dependent on the findings of the group designated to accomplish the survey of Siberian military establishments and facilities.

3. It is proposed that the Commanding General, Army Air Forces, will be directed, upon approval of this project by the
Joint Chiefs of Staff, to prepare plans for the tentative allocation and logistic support by air of three heavy bombardment groups with an operational strength of 105 airplanes, logistic support to be calculated on the assumption that bombs, fuel, oil, wire communications, shelter, heat, transportation, and a few items of food will be furnished by the Russians.

4. It is therefore recommended that the Joint Chiefs of Staff:

(a) Approve the development of the Alaska-Siberia Air Ferry route to the extent necessary to process all Russian Protocol planes by May, 1943 (272 planes monthly).

(b) Recommend to the President that he dispatch a message to Mr. Stalin requesting his permission to send a mission to Southeastern Siberia for the purpose of making surveys and formulating plans for combined Russo-American operations in that area in the event of war between Russia and Japan. (Draft of proposed cable from the President to Mr. Stalin attached as enclosure)

5. Upon approval of this project by the Joint Chiefs of Staff and the President, I will issue appropriate directives to the Commanding General, Army Air Forces, and to General Bradley.

/s/ G. C. MARSHALL,
Chief of Staff.

Encl.

Draft of proposed cable from the President to Mr. Stalin.
PROPOSED RADIO FROM PRESIDENT OF THE UNITED STATES TO MR. STALIN

In the event that Japan should attack Russia in the Far East, I am prepared to assist you in that theater with an American Air Force of approximately 100 four-engined bombardment airplanes as early as practicable, provided that certain items of supply and equipment are furnished by Soviet authorities and that suitable operation facilities are prepared in advance. Supply of our units must be entirely by air transport, hence it will be necessary for Soviet Government to furnish such items as bombs, fuel, lubricants, transportation, shelter, heat, and other minor items to be determined.

Although we have no positive information that Japan will attack Russia, it does appear to be an eventual probability. Therefore, in order that we may be prepared for this contingency, I propose that the survey of air force facilities in the Far East, authorized by you to General Bradley on October 6, be made now, and that the discussions initiated on November 11 on your authority between General Bradley and General Korolenko be continued.

It is my intention to appoint General Bradley, who has my full confidence, to continue these discussions for the United States if you so agree. He will be empowered to explore for the United States every phase of combined Russo-American operations in the Far East Theater and, based upon his survey, to recommend the composition and strength of our air forces which will be allocated to assist you should the necessity arise. He will also determine the extent of advance preparations practicable and necessary to ensure effective participation of our units promptly on initiation of hostilities. His party will not exceed twenty persons to fly into Russia in two American Douglas DC-3 type airplanes.
If this meets with your approval, I would suggest that they proceed from Alaska along the ferry route into Siberia; thence under Russian direction to the Headquarters of the Soviet Armies in the Far East, and thence to such other places in Russia as may be necessary to make the required surveys, and discuss operating plans.

It would be very helpful if an English-speaking Russian officer, such as Captain Valdimirov now in Washington or Captain Smolyarov in Moscow, is detailed to accompany General Bradley as adjutant and liaison officer.

I seize this opportunity of expressing my admiration for the courage, stamina, and military prowess of your great Russian Armies as reported to me by General Bradley and as reflected in your great victories of the past month.

Franklin D. Roosevelt.
JOINT INTELLIGENCE COMMITTEE

THE CAPACITY OF SOVIET FORCES TO DEFEND SOUTH CAUCASIA

Note by the Secretary

Attached hereto are two London J.I.C. estimates bearing on the subject dated 14 and 30 November.

L. L. MONTAGUE,
Secretary.

DECLASSIFIED
JCS memo, 1-4-74
By RHP, NLR, Date APR 24 1974
LONDON 14TH NOVEMBER, 1942

THE CAPACITY OF THE SOVIET FORCES TO DEFEND
SOUTH CAUCASIA

Report by the Joint Intelligence Sub-Committee
(see map attached)

1. In this report we assess the ability of the Soviet armed forces to defend South Caucasus between now and April 1943, assuming that during this period the Germans occupy the entire North Caucasian foothills including Makhach Kala. We express no opinion on the probability of this assumption.

2. The Russians have forces adequate to meet any scale of attack the Germans will be able to deploy. The ground is decidedly in favour of the defence, and this advantage will be accentuated by weather conditions during the winter. The supply position is adequate with regard both to food and munitions. Morale in the armed forces has been restored and any disaffection which may exist in the civil population is under control.

3. A German advance by land into South Caucasus would be hampered by increasing difficulties of maintenance and lengthening lines of communication. These difficulties are likely to be greater than any the Germans have yet met in Russia. Invasion by sea of the Black Sea or Caspian coasts is unlikely to be attempted. Even if the attempt were made it would meet with failure.

4. We consider, therefore, that the Soviet forces can prevent the Germans from passing the main Caucasus range at least until April 1943, if not longer.

5. Details of the opposing forces and other factors are set out in the Annex.
ANNEX

A. ROUTES AND METHODS

1. Winter conditions in Caucasus are already making themselves felt at the higher altitudes and should become fully effective by mid-December. The land approaches from the North to South Caucasus will then be limited to three long narrow passages, since all the passes, with the exception of the Krestovoi Pass on the Georgian military highway will be snowbound. This fact quite apart from any consideration of supply or availability of forces, will limit the scale of attack by land. Blizzards, changeable weather, cold and lack of cover will impede operations on the north side of the main Caucasus range; while winter conditions will seriously interfere with sea and air operations on the Black Sea Coast, and to a less extent on the Caspian Coast.

2. The problem confronting the Soviet forces is therefore essentially one of the defence of three narrow defiles from attack by land and of the coasts of the Black Sea and the Caspian sea from attack by sea. These lines of approach are examined in the following paragraphs.

3. Black Sea coast route

The slowness of the German advance from Novorossiisk on Tuapse is a good indication of the advantages offered to the defence in this area. Should the Germans capture Tuapse, they will be faced with even greater difficulties along the 146 miles of coastal road from Tuapse to Sukhum. In many places, rough, densely forested mountains run down to the sea, and the road passes along precipitous cliffs. There is a gap of 50 miles in the railway to the north-west of Sukhum. The mountains south-east of Tuapse are much higher and more irregular than those north-west of it. This route is, therefore, easily defended and should prove impassable.
4. The Georgian Military Highway and Adjacent Passes

The 132 miles route from Ordjonikidze to Tiflis (TBILISI) offers so many natural advantages to the defenders that the Germans are unlikely to succeed in forcing a passage through it. In the gorge of Daryel the road passes between precipices several thousand feet high and in the Krestovoi pass (7805 feet) from the end of October onwards the road can only be kept open by continual clearing.

It is possible that the Germans might employ parties of mountain troops, maintained by sleigh transport, through a number of high passes lying between the Ossetian and Georgian military roads. Any threat by these routes would not be on a substantial scale and should easily be stopped.

5. The Caspian Sea Coast route

Of the three land routes this is the easiest and the only one suitable for an advance in any strength and the employment of armoured forces. As, however, it follows in general a narrow coastal strip 235 miles long (Makhach Kala to Baku) between rough and precipitous mountains and the sea, it presents a very difficult problem to the attacker. The maximum width of the coastal strip does not exceed 25 miles and the first 80 miles average in width not more than five to six miles, with a bottleneck some two to three miles wide at the "Derbent Gate". A railway and an indifferent road runs along this strip. There are scores of bridges crossing small rivers and streams between Makhach Kala and Baku. This route is therefore easily blocked by demolition, favours the defence, and should prove difficult to penetrate.

6. Invasion by sea of the Black Sea coast

Successful combined operations can be ruled out as long as the Soviet Black Sea Fleet remains in being. Even in the unlikely event of the Germans succeeding in neutralising the Black
4. The Georgian Military Highway and Adjacent Passes

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6. Invasion by sea of the Black Sea coast

Successful combined operations can be ruled out as long as the Soviet Black Sea Fleet remains in being. Even in the unlikely event of the Germans succeeding in neutralising the Black
Sea Fleet by making its two remaining bases, Poti and Batum, untenable, such operations are improbable. Although some landing craft have been collected in the Roumanian and Crimian ports and in the Sea of Azov, their use in winter would be hazardous. Axis shipping in the Black Sea is at present quite inadequate for combined operations on a large scale. In any case, there is no opportunity for the Axis to procure adequate seagoing escort against air and land opposition. Even if combined operations should be attempted in the face of all these difficulties, they would have little chance of success, especially against a powerfully defended coast.

7. Invasion by sea of the Caspian Sea coast

The Germans are planning to bring small naval craft into the Caspian as soon as they have captured Makhach Kala; but the object of this is probably to harass Russian traffic in the Caspian.

They are unlikely to capture or to be able to bring overland sufficient craft for combined operations of any importance. Even should they succeed in doing so, the Soviet Caspian Flotilla could probably deal with the situation.

B. ATTITUDE OF THE LOCAL POPULATION

8. Some nationalities and tribes of Caucasus are not whole-hearted supporters of the present Soviet regime and there are elements engaged in underground anti-Soviet activities. At the same time all evidence leads to the conclusion that the Soviet authorities have the situation well in hand, and that latent disaffection is not likely seriously to impede the defence of South Caucasus.
LONDON, 14th NOVEMBER, 1942

C. THE AXIS ARMED FORCES

9. Land

The German land forces at present operating in the Caucasian Sector constitute Army Group A, which is known to include:

- 3 Armoured divisions
- 4 Motorised or light divisions
- 2 Mountain divisions
- 11 Infantry divisions

In addition, some of the three armoured and 13 infantry identified but unallocated divisions in the Southern Army Group may belong to Army Group A.

Satellite forces in Caucasus comprise:

- 1 Mountain division
- 1 Motorised division
- 2 Infantry divisions
- 5 - 6 cavalry brigades

10. Air

The strength of the G.A.F. at present operating from bases in Caucasus is estimated at 350 aircraft, mainly consisting of close support and reconnaissance units.

In addition, there are believed to be 150 long range bombers operating against this area from the Crimea, while a further 150 long-range bombers could if necessary be diverted from Stalingrad to operate against targets in the Caucasus.

There are therefore approximately 500 aircraft immediately engaged, with a further 150 long range bombers which could be drawn on should the occasion arise.

Owing to the difficulty of supplying and operating air forces in this area, the force operating from bases in Caucasus is unlikely at any time to exceed 400-450 aircraft.

11. Naval

There remains of the Roumanian Navy 2 destroyers, 3 submarines and a small number of torpedo craft. Also in Black Sea ports are about 4 German U-boats and 10 Italian midget submarines, besides at most 50 German and Italian E- and R-boats.
12. Supplies

There is no evidence as to the progress the Germans have made in changing the gauge of the railways from Rostov southwards. There are some indications of traffic congestion at Kharkov and Rostov in connection with supplies for Caucasia; but it would be unsafe to assume that the Germans will be deterred from undertaking operations by difficulties of supply.

13. Equipment

The Germans have made great efforts to remedy last year's disastrous shortage of winter clothing, and have succeeded to some extent. There may, however, still be some deficiency.

14. Protection of Lines of Communication

The Germans will require a considerable number of L. of C. troops though in fact large scale guerilla operations are not very likely.

D. THE SOVIET ARMED FORCES

15. Land

It is estimated that the forces available for the defence of Caucasia amount to some 30 - 35 Infantry Divisions, 8 Cavalry Divisions and 8 - 9 Tank Brigades, distributed as follows:

North Caucasian foothills: 10 Infantry Divisions
5 Cavalry Divisions
3 Tank Brigades

Tuapse area and South Caucasia: 20-25 Infantry Divisions
3 Cavalry Divisions
5-6 Tank Brigades

Reports suggest that additional forces have been brought to South Caucasia, but give no basis for an estimate of their size. In comparing these with the corresponding German figures, it should be borne in mind that the Russian Division is approximately three-quarters the size of the German.
16. Air

There is no reliable information about the strength of the Soviet air forces defending South Caucasus, but it is estimated that there may be from 500 to 600 aircraft of all types, including a proportion of obsolete and obsolescent machines.

17. Naval

(a) Black Sea Fleet

1 Battleship
4 Cruisers
6 or 7 large Destroyers
43 Submarines (at most)

A large number of M.T.B.'s, mino-sweepers, escort vessels and auxiliaries, and 4 old Destroyers.

(b) Caspian Flotilla

About 5 Gun-boats
At least 5 Submarines
30 M.T.B.'s
2 Mine-layers
7 Mino-sweeping Trawlers

And a large number of armed merchant vessels.

18. Supplies

(a) Food

Although South Caucasus is not normally self-sufficient in grain, there is evidence that the food situation at present is satisfactory. All refugees from North Caucasus having been sent on across the Caspian, the civil population remains static at about 6 millions. A food crisis is not expected in the course of this winter, especially in view of the possibility of imports from Central Asia and through Persia.

(b) Munitions

We have insufficient knowledge of the capacity of the war industries in South Caucasus to estimate to what extent the Soviet forces are self-sufficient in equipment.
and ammunition. It is probable that industry has been sufficiently developed for the repair and maintenance of existing equipment (including aircraft) and can supply at least part of their ammunition requirements quite apart from any stocks in hand. It is doubtful if complete weapons are made in any substantial quantities in South Caucasus.

As a considerable oil traffic will be kept flowing from Baku to Central Asia via Krasnovodsk, return tankers should be available to supplement normal shipping in the transport of military supplies.

19. Training and Equipment

The Russians' inferior mobility and skill in manoeuvre will be offset by winter conditions and the nature of the ground.

In many respects the Soviet Air Force is not technically the equal of the G.A.F., but it must be remembered that during last winter it showed a superior ability to operate in extreme cold.

20. Morale

Earlier this year there were indications of a decline in the morale of the Soviet forces in Caucasus; but the evidence of recent fighting shows that it has been fully restored.
MAINTENANCE OF SOVIET FORCES IN SOUTH CAUCASIA

Report by the Joint Intelligence Sub-Committee

1. On the instructions of the Chiefs of Staff Committee and after consultation with the transportation authorities at the War Office, we have prepared the following short report showing how the Soviet Forces in South Caucasus could be maintained. This report, which should be read in conjunction with Copy No. 443(42)W1/6, is based on the same assumptions and covers the same period.

FORCES TO BE MAINTAINED

2. The Soviet forces available for the defence of South Caucasus are believed to comprise 30-35 Infantry Divisions, 6 Cavalry Divisions and 8-9 Tank Brigades plus some 5-600 aircraft and the Black Sea Fleet.

ROUTES

3. Between December and April the Caspian ports North of Makhach Kala including Astrakhan and Chapayev (Ouriev) are icebound. During this period the only routes by which forces in South Caucasus can be maintained from Central Russia are:

(a) Across the Caspian (Krasnovodak to Baku)

The capacity of this route is estimated at 3,000 tons per day, without interfering with the transport of oil from the Caucasus through Krasnovodak. The limiting factor is port capacity, as there is sufficient shipping in the Caspian Sea, even allowing for substantial losses due to enemy action. Bombing of the ports is unlikely to develop on any appreciable scale or cause any great reduction.
(b) Through Persia

Askhabad to Tehran - capacity 500 tons per day.

Tehran to Tiflis - capacity 1,000 tons per day.

The capacity of the sea and land routes is, therefore, about 3,500 tons per day. In so far as any Anglo-American supplies to Russia might be suitable for use in South Caucasus and could be diverted onto the Tiflis road at Tehran, this figure might be increased by another 500 tons per day.

MAINTENANCE REQUIREMENTS

4. Before calculating the daily requirements of the forces in South Caucasus it is necessary to set out which of the more important items can be found locally, namely

(a) Food. It will be seen from the annex and from Copy No. 443(42)W.1/6, that South Caucasus can, during the coming winter, provide sufficient food both for the armed forces and the local population.

(b) Fuel. The local resources would be more than sufficient to cover any requirements.

(c) Clothing. The quantity required is small and can be produced locally.

5. Even if all other supplies had to be imported we calculate that 2,500 tons a day would be the most that would be required for the maintenance of the forces in South Caucasus. This figure allows for two margins of safety in that

(a) during the winter ammunition expenditures in the area will be much less than the operational rates on which our estimates are based;

(b) there is some evidence that the Russians are manufacturing in this area both ammunition and other war material but we have no details.
6. On the other hand, it might be argued that the transport of military stores across the Caspian Sea to South Caucasus might be interfered with by the transport of increased Anglo-American supplies to Central Asia via Krasnovodsk. We feel however that if such a conflict occurred the Russians would ensure that the battle front in South Caucasus, if threatened, did not suffer.

7. From the preceding paragraphs it will be seen that about 1,000 tons a day (it may even be 1,500 tons if Anglo-American supplies can be diverted at Tehran) over and above the requirements of the forces believed to be in South Caucasus can be transported there. This additional tonnage would be sufficient to maintain, during the winter, a further 10-20 divisions according to whether they were in the fighting line or in reserve.

STORED RESERVES

8. Information is again scanty but we think it likely that the Russians hold considerable reserves of war material.

CONCLUSION

9. We conclude that the Russians will be able to maintain forces adequate for the defence of South Caucasus, partly from local resources and partly by sea from Krasnovodsk to Baku. This route could be supplemented by land transport through Tehran carrying supplies either from Anglo-American resources or from Central Asia.

* * * * * * * * * * * * * * * * * * * * *
FOOD SUPPLIES IN SOUTH CAUCASIA

1. South Caucasia produces about a million tons of bread grains a year (exclusive of seed and fodder requirements). A further half-million tons were normally imported but we do not know how much (if any) has been imported since the last harvest nor what stocks were carried over.

2. South Caucasia produces considerable quantities of meat, part of which were normally exported, but could be consumed locally to make good the deficiency of grain. To cover a difficult period, meat supplies could be increased by heavier slaughterings.

3. The fish catch in the Caspian is very considerable. The bulk is normally consumed elsewhere, and could be diverted to South Caucasia.

4. There is a large industry for canning meat and fish and for curing fish. The bulk of the products are normally exported, but are available for local consumption and should be useful for military supplies.

5. The population remains at about the pre-war figure of 8 million. Refugees from North Caucasia and a few local inhabitants have been evacuated. There has been an increase in the armed forces which is at any rate partly offset by the call-up from the local population.

6. Strict and preferential rationing will reduce civilian consumption and ensure that the armed forces and others engaged directly in the war effort will not go short. Increased consumption of meat, fish and other produce should, however, provide the remainder of the population with sufficient food, certainly until April 1943 and probably after.
January 8, 1943

JOINT CHIEFS OF STAFF

OPERATION "BRIMSTONE"

(Reference: C.C.S. 134 (limited distribution))

Note by the Secretaries

1. C.C.S. 134, having been referred by the Combined Chiefs of Staff to the Combined Staff Planners for study and appropriate recommendations, was referred by the latter to a combined Subcommittee. Subsequent to the circulation of the views of the British Chiefs of Staff in C.C.S. 134/1, the British members of the Subcommittee decided that comment on their part was no longer appropriate and therefore did not meet with the Subcommittee.

2. The Joint Staff Planners considered the report of the U. S. members of the combined Subcommittee and agreed that, since the British Planners had no further comments to make on the subject paper in view of the expression of opinion by their Chiefs of Staff, the recommendations of the Combined Staff Planners with respect to C.C.S. 134 could not be submitted as directed by the Combined Chiefs of Staff.

3. The attached comments of the U. S. members of the Combined Staff Planners are presented to the Joint Chiefs of Staff with the recommendation that they be forwarded to General Eisenhower.

Distribution: Copy No.
Gen. Marshall - 1 J. R. DEANE,
Adm. King - 2
Gen. Arnold - 3 F. B. ROYAL,
Gen. Wedemeyer - 4
Exec OpD War Dept - 5 & 6 Joint Secretariat.
Adm. Cooke - 7
Gen. Deane - 8
Capt. Royal - 9
Adm. Leahy - 10
Gen. Embick - 11
Gen. Fairchild - 12
Adm. Willson - 13
Gen. Somervell - 14
Adm. Horne - 15
ENCL

OPERATION "BRIMSTONE"
Reference: (a) C.C.S. 134

Report by the U. S. Members of the Combined Staff Planners

1. The U. S. members of the Combined Staff Planners have studied C.C.S. 134 from an operational point of view and submit thereon the comments set out below.

2. As to paragraph 5 (a): The U. S. Navy is not prepared to commit any naval or naval air forces for operation "BRIMSTONE." The operations now current in the Pacific Theater require the presence of all naval forces that are not actually essential in the Atlantic. The production rate of naval aircraft is barely sufficient to meet the needs for ships commissioning and Fleet Marine Force air wings already commissioned.

3. As to paragraph 5 (c) (2): The plan requires 4 transport groups; there are now 3-1/2 groups assigned to the Twelfth Air Force, the remaining 2 squadrons are not available unless they are taken from another theater or from the presently inadequate number assigned to airborne training in the United States.

4. As to paragraph 5 (c) (3): It is assumed that the 140 high performance fighters and crews will be British, as U. S. Navy fighters are not available and U. S. Army fighters are not suitable for operations from carriers.

5. As to paragraph 5 (d): It will require about 14 APAs and 8 AKAs to embark the U. S. assault units indicated under Force A. As of January 1, 1943, 5 APAs and 2 AKAs are assigned to the Atlantic Amphibious Force.
6. As to paragraph 6 (a): No considerable increase of parachute troops and transport aircraft can be expected from the United States.

7. As to paragraph 6 (b): It is considered essential that one division be held in North Africa to replace units which have suffered heavily in the assault. It is presently planned that landing craft (LST, LCI(L) and LCT(5)) will be available in the theater by April 1, 1943, to embark a division.

8. As to paragraph 4 (c) of Appendix "A": The restricted area in which carriers must operate to accomplish the mission indicated from "D" until "D" plus 3 inclusive will subject them to grave risks and may result in lack of fighter cover for the Attack Force at a critical time unless additional carriers are assigned.

9. As to paragraph 5 of Appendix "A": There are no indications that adequate air ground support has been provided.

10. It is concluded that the forces set up under the conditions envisaged in the plan are inadequate. It is believed the following additional forces are required:

   1 infantry division,
   3 auxiliary carriers.
COMBINED CHIEFS OF STAFF

ASSAULT ON SARDINIA

Note by the Secretary

An outline plan for the capture of Sardinia just received from General Eisenhower and for which he requests consideration and approval of the Combined Chiefs of Staff is enclosed herewith.

V. DYKES,
J. R. DEANE,
Combined Secretariat.

Distribution:

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<td>Gen. Marshall</td>
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<td>British Mission</td>
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SUBJECT: Assault on SARDINIA.

TO: Combined Chiefs of Staff.


1. I have now prepared an Outline Plan for the occupation of SARDINIA, should it be decided that this operation is to be carried out by Allied Forces in North AFRICA.

A summary of this plan is attached as Appendix A. The total naval, military, air forces and shipping required are given in Appendix B.

Particular attention is drawn to the following points, which are dealt with in further detail below:

(a) Timing.
(b) Air situation.
(c) Training.

2. TIMING.

The date upon which the assault can take place is governed by the following main factors:

(a) The present operations in TUNISIA must first be brought to a successful conclusion, and the threat from TRIPOLI removed. Many of the preparations for the SARDINIAN operation can however be undertaken during this phase.

(b) The Allied Forces in North AFRICA must be completed to a minimum of 10 divisions before shipping allocated to this theater can be released for other operations. The operations in TUNISIA, if long drawn out, may indeed necessitate an increase in this figure.

(c) Ample time must be allowed for planning and for complete training of all the forces taking part.
(d) Time is required for the necessary airfield construction and establishment of the air forces.

From these factors I have concluded that the earliest possible date for the assault is 30 March, 1943. I put this forward as the target date to which all preparations should be directed, but I must point out that it may not prove possible to realize it, and that events may necessitate a considerable postponement.

If the Combined Chiefs of Staff accept this target date, it will be necessary for authority to proceed with the project to be given in time to enable the outline plan to be in the hands of Task Force Commanders by 15 December, 1942, and for the shipping to be nominated by 7 January, 1943.

3. AIR SITUATION.

(a) An essential prerequisite for success in this operation is the establishment of a high degree of air supremacy before the assault takes place. In order to achieve this it will be necessary to wear down the enemy's air forces in the MEDITERRANEAN theater as a whole by compelling him to fight hard and continuously in the air over a considerable period. Substantial assistance from MALTA and from Middle East air forces will be required during this phase. A final appreciation must be made on D-7 on the likelihood of obtaining the necessary degree of supremacy by D Day; if this appreciation shows that the requisite conditions are unlikely to be fulfilled, the assault will have to be postponed and convos at sea diverted accordingly.
(b) It may be that the enemy air force will refuse battle until we are committed to the assault. Should there be early indication of this, it may be necessary to stage some subsidiary operation to bring about air fighting on a large scale.

4. TRAINING.

Our operations in North AFRICA have shown the necessity for a higher standard of training of assaulting units if an assault is to succeed against opposition. This will entail:

(a) Intensive training on the part of the assaulting forces. This should begin at once.

(b) Special training in the U.K. for reserve fighter crews required to operate from carriers.

(c) Intensive training for both British and American Fighter pilots in naval fighter direction and control whilst giving cover to the fleet.

5. AVAILABILITY OF FORCES.

(a) The naval forces required represent a reinforcement of those at present planned for the Western Mediterranean. I assume, however, that they can be provided if approval is given to the execution of this operation.

(b) Military Forces

(1) The total requirement is as follows:

3 Infantry Divisions
1 RCT (Infantry Bde)
4 Armored (Tank) Bns
1 Parachute Bde, and one Bn
Part 1 Infantry Bn
6 Commandos
(2) The following are immediately available:

(a) From Northern Task Force -
   1st Inf Div Br. 3 Inf Bdes
   4th Div    Br. 2 Inf Bdes
   3 Tank Bns

The Tank Bde of 4 Div at present consists of 2 Bns Churchill and 1 Bn Valentine. At least one further Bn will require conversion to Valentine.

(b) From Royal Marine Div 1 Inf Bde
    Part 1 Inf Bn

(c) From North African Theater -
    1 Parachute Bde
    (British)
    1 Parachute Bn
    (U.S.)

(d) From U.K. and North Africa
    6 Commandos

The above forces can provide the requirements of two of the three main assaults together with the diversions. In view of the fact that the units from Northern Task Force are already used to working together, I propose that they, together with a Bde of the Royal Marine Division, should be used to provide Forces B and C (Center and Southern Assaults) since these two Forces are required to cooperate closely in the later stages of the operation.

(3) It therefore remains to provide the Northern Assault (Force A) consisting of:

1 Inf Div
1 Armored (Tank) Bn
1 Parachute Bn

The Parachute Bn can be the U.S. Parachute Bn now in North AFRICA.
The Infantry Division and Armored Bn should, I consider, be provided from United States forces earmarked for but not yet ordered to this theater. This proposal is based upon the following reasons:

(a) It is unlikely that any units now employed in TUNISIA can be released in time to undergo the necessary training and be properly prepared for this operation.

(b) Allocation of units of Western Task Force to the SARDINIAN operation would involve a risk in Spanish MOROCCO, which I am not at present prepared to accept.

(c) In order to obtain surprise it is desirable to mount the operation outside the North African theater.

(d) The port capacity which can be made available in North AFRICA will for some time to come be insufficient to allow an expedition of this size to be mounted from the theater.

(e) The only other British unit allocated to this theater (11th Armd Div) is unsuitable.

(c) The Air Forces required after allowing for essential defensive commitments in North AFRICA, can be provided by Eastern Air Command and Twelfth Air Force provided that:

(1) All air units required for the operation are brought up to and maintained at full strength.

(2) Twelfth Air Force is reinforced by 1 Transport Group. Some elements of the Ground Air Support Command of Eighth Air Force will also be employed.
(3) A reserve of 140 high performance fighters and crews trained to operate from carriers is made available.

d) The shipping commitment is a heavy one and will tax considerably the resources of the United Nations. It is unlikely that British assault shipping can be made available to train and embark the division from USA in time for an assault on the target date.

In any case it is desirable for tactical reasons that US combat loaders and craft should be employed for the US assault.

6. FURTHER FORCES REQUIRED

(a) The plan envisages the employment of 4 Parachute Bns only, these being the units now in North AFRICA and therefore immediately available. If, however, additional parachute units on a considerable scale (of the order of one or two Divisions) together with the necessary transport aircraft could be made available, the chances of success would be materially increased.

I wish therefore to press for the allocation to this theater, within the limits which resources will allow, of a considerably increased force of Parachute Troops and transport aircraft.

(b) Forces which it might be considered necessary to hold in North AFRICA ready to move to SARDINIA after the conclusion of the assault have not been included. In order to allow the process of clearing the whole Island to be completed rapidly, I consider that it will be advisable to hold in North AFRICA a force of the order of one Division to be used to replace units which have suffered heavily in the assault. I hope that it will be possible to provide this force from resources which will by then be in North AFRICA and to move them by assault shipping and craft already in the theater.
7. LIKELIHOOD OF SUCCESS

Providing that surprise is attained and that we have been able to achieve a high degree of air supremacy, the chances of success are assessed as follows:

(a) If no material reinforcement takes place before D Day the chances of success are good.

(b) If reinforcement by 2-3 Italian Divs takes place the chances of success are fair.

(c) If 2 German Divs of good category and morale are established on the Island success is unlikely.

This opinion is based upon:

(1) The danger of determined counter-attack by German Divs before our own forces are sufficiently concentrated to meet it.

(2) The higher degree of alertness and morale likely to obtain under German command.

It is appreciated that there are several stages between hypotheses (a) and (c). In particular, the degree and nature of German reinforcement, if available at all, may vary from 2 trained Divs to a merc stiffening of German troops; moreover, air and naval action against supply routes may have an appreciable effect in lowering German morale.

The actual chances of success must therefore be assessed nearer the time in the light of information received as to the nature and scale of any reinforcement which is taking place.

8. COMMAND

(a) The operation as a whole will be under my command.

All ground and air forces to be established in SARDINIA will be under the command of General Officer Commanding British 1st Corps.
(b) Detailed preparations for the assembly and movement of the various assault forces will be made as follows:

1. For forces mounted in U.S. by AFHQ through Service Departments in WASHINGTON.
2. For forces mounted in U.K. by Hq. 1st Corps through Service Ministries in LONDON.
3. For forces mounted in North AFRICA by AFHQ.
SUMMARY OF PLAN

1. Preparatory Period.
   In order to gain air supremacy, air operations on a heavy scale must begin by at least D-14 and mount to a maximum by D Day. The forces which it is estimated will be required are given in Appendix "B", para 3.

2. The Assaults.
   (a) The total military forces and shipping required are given in Appendix "B", paras 2 and 4. Three main assaults will be made approximately one hour before first light in the areas CAPE PECORA, CAPE ALTANO and PALMAS BAY.

   (b) CAPE PECORA Assault - Force A consisting of:
       One Infantry Division
       One Armored (Tank) Bn
       One Commando
       One Parachute Bn (in later stage)
       The primary object of this force will be to secure VILLACIDRO airfield and protect the remainder of the force from interference from the North.

   (c) CAPE ALTANO Assault - Force B consisting of:
       One Infantry Division
       One Armored C T. (Tank Bde) less one Bn
       One Commando
       The object of this force will be to assist in the capture of VILLACIDRO airfield in cooperation with Force A, subsequently operating against CAGLIARI in cooperation with Force C.

   (d) PALMAS BAY Assault - Force C consisting of:
       One Infantry Division
       One ROT (Inf Bde)
       One Armored (Tank) Bn
       One Parachute Bde
       Two Commandos
3. Floating Reserve.

There is neither beach capacity nor shipping available to enable a reserve formation to be held, floating, for use by the Force Commander. Each of the three main landings has, however, its own local reserve in the form of one RCT (Infantry Bde) landing approximately 24 hours after the assault. While the plan as a whole is rigid, some flexibility can be enjoyed by the commanders of the three main assaults.

4. Naval Action During the Assaults.

Naval tasks will be as follows:

(a) To provide A/S escort for our convoys and shipping off the beaches.

(b) To provide a battleship covering force to prevent interference by the Italian Fleet.

(c) To provide carrier-borne fighter cover for our landings and shipping from D Day until D + 3 inclusive.

(d) To provide a cruiser covering force, if required, to prevent interference by Italian light forces from Northward.

(e) To afford close support of our landings by bombardment by cruisers and destroyers.

(f) To attack Axis sea-borne reinforcements to the island by submarine.

Naval forces required are given in Appendix "B", para 1.

5. Air Action During Assaults.

(a) Fighter Support.

Owing to the distance of SARDINIA from airfields in TUNISIA and Eastern ALGERIA, continuous fighter cover cannot be provided by land-based aircraft. Direct fighter cover over the assault beaches will therefore have to be provided by carrier-borne fighters, which will in turn be protected by land-based fighters from North Africa.
(b) Bomber Support.

In order to engage as many fighters as possible and to prevent them from interfering with our assault forces, fighter escorted bomber attacks will be carried out against airfields and other targets in SICILY and SARDINIA during daylight.

6. Diversions.

In order to delay the movement of enemy reserves and to create confusion, the following diversions will be made:

(a) ORISTANO BAY.

Landing by one Commando (Force D) to silence one of the CD batteries at the entrance of the Bay and a naval bombardment of the coast defenses. The object of these diversions will be to delay the movement of enemy forces Southward from the ORISTANO BAY area.

(b) East shore of CAGLIARI BAY.

Landing by one Commando (Force E) to silence the CD battery at CAPE CARBONARA. The object of this landing will be to draw the enemy's attention to the Southeast.

(c) East Coast in the area MURAVERA.

Landing by a part of one Infantry Bn (Force F) without transport. The object of this force will be to give rise to reports of a landing in this area; it will push as far as possible down the road leading from MURAVERA to QUARTU.

7. The Capture of CAGLIARI.

The plan for the assaults given in subpara (b) above aims at the capture of VILLACIDRO airfield by Force A assisted by an armored force from Force B by the evening of D + 1. Thereafter Force A will be responsible for getting astride the road and rail communications between ORISTANO and CAGLIARI in the
areas SAN GAVINO and SANLURI, thus preventing the movement southwards of enemy reinforcements from the North of the Island. During D + 2 a striking force from Forces B and C will be built up in the area SILIQUA. By the morning of D + 3 this force should have reached a strength of

3 RCT (Inf Bde Gps - 2 reinforced)

1 Armored CT (Tank Bde)

This force will attack on D + 3 in order to secure DECIMOMANNU airfield. The main battle for CAGLIARI should therefore develop on D + 4.

8. Follow-up

Two follow-up convoys will be required as follows:

(a) First follow-up into PORTO PONTE ROMANO about D + 4 (depending upon the establishment of land-based fighter aircraft in SARDINIA). This convoy will carry principally AA, Air Force and other units urgently required.

(b) Second follow-up into CAGLIARI about D + 12. This convoy will carry the necessary administrative units, replacements and additional transport to enable the subsequent phase to be undertaken. The shipping required for the follow-up convoys is given in Appendix "B", para 4.

9. Subsequent Phase.

As soon as the necessary reorganization and build up has been completed the process of clearing the remainder of the Island should begin, the areas to be occupied in order of priority being:

CRISTANO
ALGHERO - PORTO TORRES
MADDALENA - TERRANOVA PAUSANIA
APPENDIX "B"
TOTAL FORCES AND SHIPPING REQUIRED

1. NAVAL

3 Battleships
3 Aircraft Carriers
3 Auxiliary Carriers} with trained reserve of 140 fighter aircraft and crews.
10 cruisers
4 AA Ships
20 Fleet Destroyers
24 Hunt Destroyers (A proportion of older types may be accepted)
8 Fleet Minesweepers
50 A/S Escorts (includes first follow-up)
   About 15 submarines
3 H.Q. Ships
18 A/S M/S Trawlers
20 M.Ls

2. MILITARY

3 Inf Divs
1 Armd Regt (Tank Bde)
1 Armd Bn (Tank Bn)
1 R.C.T. (Inf Bde)
1 Parachute Bde and 1 Bn
6 Commandos
Part 1 Inf Bn

3. AIR FORCE

12 SE Fighter Sqs (320 aircraft)
9 TE Fighter Sqs (240 aircraft)
2 Fighter/Reconnaissance Sqs (36 aircraft)
4 Light Bomber Sqs (72 aircraft)
12 Medium Bomber Sqs (171 aircraft)
8 Heavy Bomber Sqs (70 aircraft)
3 G.R. Sqs (58 aircraft)
2 T.B. Sqs (36 aircraft)
4 Transport Groups (208 aircraft)
1 P.R.U. Sqn (18 aircraft)

4. SHIPPING

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<tr>
<th>Type</th>
<th>Follow-up</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PORTO</td>
<td>CAGLIARI</td>
</tr>
<tr>
<td>L.S.I. (L)</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>L.S.I. (M)</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Personnel Ships</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>M.T. Ships</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>L.S.T.</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>L.S.G.</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Coasters (13' Draught)</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>L.C.I. (L)</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>L.C.A.</td>
<td>170</td>
<td>-</td>
</tr>
<tr>
<td>L.C.M.</td>
<td>179</td>
<td>-</td>
</tr>
<tr>
<td>Hospital Ships</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Cased Petrol Carriers</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>
We understand that General Eisenhower’s plan for "Brimstone" was considered by the Combined Planning Staff at last Thursday’s Meeting and was remitted by them to a Sub-committee for examination and report. Since then, the comments of the British Chiefs of Staff on the plan have been received in Washington. We note from paragraph 2 of the plan that General Eisenhower attaches great importance to early authority being given to him to proceed with the project. We realize and accept the fact that no authority to proceed with the project can be given prior to agreement on basic strategy. The U. S. Chiefs of Staff will, however, doubtless agree that detailed planning should proceed as expeditiously as possible.

We therefore attach the comments of the British Chiefs of Staff and hope that the U. S. Chiefs of Staff will agree that the Combined Chiefs of Staff should instruct General Eisenhower:

(a) To re-examine the outline plan in the light of these comments or such additions and/or modifications of them as may be agreed.

(b) To press on as far as he can go with the preparation of the detailed plan, and with the establishment of air fields and the lay-out of communications on the mainland.
ENCLOSURE
COMMENTS BY BRITISH CHIEFS OF STAFF

General Observations

1. The plan confines itself to the capture of the south western corner of the island including the port of Cagliari, and does not say how it is proposed to complete the capture of the island. To enable complete examination of the plan to be made, more information is required on the general intentions after the capture of Cagliari and in particular on such points as:

(a) The rate of Axis reinforcements.
(b) The rate of Allied build up by convoys.
(c) The ultimate commitment for garrisoning the island.
(d) The possible scale of enemy air interference.
(e) The influence of the fact that Corsica is now in Axis hands.

2. If our agreed strategy is to undertake this operation, the United Nations must make available sufficient resources to capture the Oristano airfields even against a reinforced garrison.

3. To ensure the success of the operation certain conditions must be fulfilled:

(a) The establishment of a high degree of air supremacy throughout the Mediterranean before the assault takes place.

The necessary degree of air supremacy will only be obtained by developing and coordinating the present air offensive over the whole Mediterranean area from now
on. This will involve the deployment of some 1200 aircraft, the organization of from 30 to 40 airfields and the establishment of an adequate and effective system of communications.

As at the time of the operation the threat from the Italian fleet may be such that the covering force with its fleet aircraft carriers are not available for use in support of the landing, alternative plans must be made to provide adequate air support from auxiliary aircraft carriers and shore-based aircraft.

The British Chiefs of Staff do not agree that the carrying out of the assault should hang in the balance up to D-7 owing to doubt as to the attainment of air supremacy. The scale of the enemy's air effort should be assessed well in advance and all reasonable provision made to overcome it.

(b) The capture of Sardinian airfields and the establishment thereon of the necessary AA defenses to enable us to use them in the initial stages of the operation.

The immediate capture of the airfields at Oristano is in the opinion of British Chiefs of Staff an essential preliminary to an advance on Cagliari. General Eisenhower rejected this course for various reasons, one of which was inadequate resources. But the British Chiefs of Staff consider that the necessary additional resources must be made available. In their view it is far too risky to rely on the capture of a single airfield - Villacidro - 25 miles inland.

(c) The establishment ashore as early as possible of a striking force strong enough to make the reduction of Cagliari reasonably assured.

- 2 -
The British Chiefs of Staff think the striking force available by D + 4 under General Eisenhower's plan might suffice to capture Cagliari against the existing scale of opposition but not if the island has been materially reinforced.

They consider it essential that the force commander should be provided with a floating reserve.

(d) The greatest possible simplification of arrangements for command and planning.

The British Chiefs of Staff regard the planning within the time available and mounting of the operation from three continents as impossible. They think it might be possible to plan this operation with forces drawn from the United States and Africa only, or from the United Kingdom and Africa only, but certainly not from all three.

4. A prerequisite before fleet units can operate in waters adjacent to the beaches is to make those waters untenable to U-boats prior to the operation. This requires a steady build-up of anti-submarine naval and air forces operating from North Africa from now on.

Detailed Observations

5. If there are any guns on San Pietro Island which will bear on the anchorage between the Island and the mainland, it will be necessary to land and capture them before landing at B.3 takes place and also to enable shipping to lie between San Pietro and the mainland.

6. No provision is made for the capture of the eastern shore of the Gulf of Palmas, particularly as guns on the shore would make the anchorage untenable for shipping.
7. Beach reconnaissance. The plan envisages the use of L.S.T. and some L.C.I.(L). Beach slopes may be unsuitable for these craft. Detailed beach reconnaissance including taking of soundings must therefore be undertaken before practicability of plan can be confirmed. The British Chiefs of Staff have arranged to send out a naval beach reconnaissance party by submarine on 3rd January and are in communication with A.F.H.Q. about P.R.U.

8. Naval forces. It is difficult to assess in detail which tasks U.S. naval forces would be required to meet. On the assumption that at least the naval forces with force 'A' should be provided by the U.S. the requirements from them will be at a minimum - one cruiser, one H.Q. ship, one A.A. ship, three escorting carriers and about thirty A/S escorts, a portion of which should be destroyers.

9. In addition to the above, the naval forces for the landing at Oristano which have not been assessed will have to be provided by the U.S., whether the military forces for this landing are British or American as the British Chiefs of Staff will be unable to provide any extra naval forces.

10. Army forces. British Army forces required by the plan can be provided. General Eisenhower presses for the allocation of a considerably increased force of parachute troops. The British Chiefs of Staff can make available one parachute brigade from the U.K. and probably one battalion from the Middle East. Additional parachute troops and all transport aircraft would have to be found from America.

11. Air forces. The British Chiefs of Staff are arranging to train pilots for the 140 high performance fighters
required to operate from carriers and for fitting of the necessary arrester hooks to those aircraft.

12. Assault craft. The British Chiefs of Staff suggest that General Eisenhower be asked to consider the use of an increased number of L.C.I.(L) to reduce the number of L.S.I.(L) in the assault.

Washington, D.C.
26th December, 1942
SHIPPING IMPLICATIONS OF CERTAIN PROPOSED OPERATIONS

1. The capacity of shipping to move and maintain U.S. Army forces overseas in 1943 under various basic assumptions, as stated in the notes below, is shown in the following tables.

**TABLE I - DRY CARGO SHIP CAPABILITIES TO MOVE AND MAINTAIN TROOPS OVERSEAS IN 1943 WITH NAVY USE OF SHIPPING HELD TO CURRENT LEVELS WITH INCREASE OF 300,000 DWT PER QUARTER**

(Tonnages expressed in millions of DWT)

<table>
<thead>
<tr>
<th></th>
<th>1st Q</th>
<th>2nd Q</th>
<th>3rd Q</th>
<th>4th Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. ARMY USE OF DRY CARGO SHIPPING</td>
<td>3.945</td>
<td>4.740</td>
<td>5.574</td>
<td>6.310</td>
</tr>
<tr>
<td>U.S. NAVY USE OF DRY CARGO SHIPPING</td>
<td>1.460</td>
<td>1.760</td>
<td>2.060</td>
<td>2.360</td>
</tr>
<tr>
<td>SHIPPING FOR WAR ECONOMY &amp; DEFENSE AID</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
</tr>
<tr>
<td>AVERAGE TONNAGE AVAILABLE TO U.S.</td>
<td>9.405</td>
<td>10.500</td>
<td>11.634</td>
<td>12.670</td>
</tr>
</tbody>
</table>

**NOTES:**

(1) Loss rate assumed at 2.6% per month except in Mediterranean.
(2) Loss rate assumed at 20% per month for shipping employed in Mediterranean on offensive moves.
(3) U.S. controlled dry cargo shipping taken as 9,185,000 DWT on October 1, 1942.
(4) British controlled dry cargo shipping taken as 19.7 million DWT on October 1, 1942.
(5) U.S. Construction Program as reported by U.S. Maritime Commission as of November 15, 1942.
(6) British and Canadian construction programs as furnished by Munitions Assignments Board.
(7) Excess of British losses over construction in U.K. and Canada replaced from U.S. construction.
(8) 10 EC2's per month converted to transports throughout 1943.
(9) 5 cargo ships converted to combat loaders by Navy each month, November to April, inclusive.
(10) Shipping employed on an average turnaround of 2 1/2 months.
(11) Repair rate taken at 12 1/2% of total dry cargo fleet.
(12) Initial movement based on 8 ship tons per man.
(13) Maintenance based on 1.3 ship tons per man per month.
(14) Navy employment of dry cargo tonnage in 4th Quarter of 1942 averages 1,160,000 DWT and is increased by 300,000 DWT each quarter of 1943, as assumed in JFS 57/3.
TABLE III - PRESENT U. S. ARMY COMMITMENTS TO MOVE TROOPS
IN 1943

(All figures in thousands of troops)

<table>
<thead>
<tr>
<th>Theater</th>
<th>PRESENT 1 Jan 43</th>
<th>1st Q</th>
<th>2d Q</th>
<th>3d Q</th>
<th>4th Q</th>
<th>1 Jan 44</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. &amp; S.W. PACIFIC</td>
<td>222</td>
<td>51</td>
<td>46</td>
<td>35</td>
<td>30</td>
<td>162</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>124</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>132</td>
</tr>
<tr>
<td>ALL OTHER BASES EXCEPT TORCH</td>
<td>484</td>
<td>44</td>
<td>28</td>
<td>18</td>
<td>18</td>
<td>108</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>830</td>
<td>128</td>
<td>107</td>
<td>86</td>
<td>81</td>
<td>402</td>
</tr>
<tr>
<td>TORCH</td>
<td>242</td>
<td>86</td>
<td>56</td>
<td>54</td>
<td>30</td>
<td>226</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,072</td>
<td>214</td>
<td>163</td>
<td>140</td>
<td>111</td>
<td>628</td>
</tr>
</tbody>
</table>

NOTES: (1) Present commitments for 1943 are based on augmentation of TORCH as restricted by present size and frequency of cargo convoys; on providing all units with 100% organizational equipment; and on a 45 day level of supply, including 10 units of fire.

(2) Present commitments for 1943 for other than TORCH are based on estimated buildup to projected or assumed strengths as stated by Operations Division, WDGS.

TABLE IV - TROOPSHIP CAPACITY TO MOVE TROOPS OVERSEAS

(All figures in thousands of troops)

<table>
<thead>
<tr>
<th>Item</th>
<th>1st Q</th>
<th>2d Q</th>
<th>3d Q</th>
<th>4th Q</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - NAVY USE OF CARGO SHIPS AT CURRENT LEVEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRY CARGO SHIPPING CAPACITY</td>
<td>210</td>
<td>240</td>
<td>264</td>
<td>265</td>
<td>979</td>
</tr>
<tr>
<td>REPLACEMENTS AT 5% PER QUARTER</td>
<td>53</td>
<td>64</td>
<td>76</td>
<td>89</td>
<td>282</td>
</tr>
<tr>
<td>TOTAL TROOPS TO BE MOVED</td>
<td>263</td>
<td>304</td>
<td>340</td>
<td>354</td>
<td>1,261</td>
</tr>
<tr>
<td>B - TROOPSHIP CAPACITY TO MEET ABOVE SCHEDULES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. TROOPSHIP CAPACITY</td>
<td>232</td>
<td>247</td>
<td>275</td>
<td>312</td>
<td>1,069</td>
</tr>
<tr>
<td>10 EC2's CONVERTED PER MONTH</td>
<td>20</td>
<td>58</td>
<td>94</td>
<td>128</td>
<td>300</td>
</tr>
<tr>
<td>TOTAL U.S. TROOPSHIP CAPACITY</td>
<td>252</td>
<td>305</td>
<td>372</td>
<td>440</td>
<td>1,369</td>
</tr>
<tr>
<td>CAPACITY OF QUEENS TO U.K.</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>132</td>
</tr>
<tr>
<td>TOTAL CAPACITY DIRECTLY AVAILABLE</td>
<td>285</td>
<td>338</td>
<td>405</td>
<td>473</td>
<td>1,501</td>
</tr>
<tr>
<td>CAPABILITY OF BRITISH AID</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>350</td>
</tr>
<tr>
<td>TOTAL TRANSPORT CAPACITY</td>
<td>335</td>
<td>438</td>
<td>505</td>
<td>573</td>
<td>1,851</td>
</tr>
</tbody>
</table>

NOTES: (1) Not included in above troopship capacities are 89,000 spaces in Navy Combat Loaded Transports.

(2) British troopship capacity to aid movement of U.S. troops is based on capacity of all but monsters, reduced by 10% for repair, and by use of 30,000 spaces per month by British on a 4 month turnaround, except for first quarter which is further reduced due to delay in starting new convoy schedule. This represents a maximum effort by the British to aid in movement of U.S. troops.

(3) Loss rate for troopships assumed at 0.5% per month.

(4) British troopship capacity to aid movement of U.S. troops is based on capacity of all but monsters, reduced by 10% for repair, and by use of 30,000 spaces per month by British on a 4 month turnaround, except for first quarter which is further reduced due to delay in starting new convoy schedule. This represents a maximum effort by the British to aid in movement of U.S. troops.

(5) Troopships employed on average turnaround of 2.2 months.

(6) Construction program as reported by U.S. Maritime Commission as of November 15, 1942, for transports.

(7) 10 EC2's per month converted to transports throughout 1943.

DECLASSIFIED
JCS memo, 1-4-74
By RHP, M.H., Date APR 24 1974
2. The estimated rates at which the proposed operations could be accomplished are shown in the following tables. The basic assumptions are as stated in the headings. Detailed discussion of the ports involved in each operation is given in paragraph 3.

**TABLE V - RATE OF BUILD-UP DUE TO SHIPPING LIMITATIONS SHOWN IN TABLE I ADJUSTED NOT TO EXCEED PORT LIMITATIONS**

<table>
<thead>
<tr>
<th>Area</th>
<th>Projected Troops</th>
<th>1st Q</th>
<th>2nd Q</th>
<th>3rd Q</th>
<th>4th Q</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunisia and Libya</td>
<td>690,000</td>
<td>0</td>
<td>58</td>
<td>105</td>
<td>140</td>
<td>303</td>
</tr>
<tr>
<td>Iberian Peninsula, Large</td>
<td>1,540,000</td>
<td>0</td>
<td>58</td>
<td>105</td>
<td>140</td>
<td>303</td>
</tr>
<tr>
<td>Iberian Peninsula, Small</td>
<td>660,000</td>
<td>0</td>
<td>58</td>
<td>105</td>
<td>140</td>
<td>303</td>
</tr>
<tr>
<td>Sardinia</td>
<td>164,000</td>
<td>0</td>
<td>58</td>
<td>60</td>
<td>46</td>
<td>164</td>
</tr>
<tr>
<td>Sicily</td>
<td>253,000</td>
<td>0</td>
<td>58</td>
<td>105</td>
<td>40</td>
<td>243</td>
</tr>
<tr>
<td>Turkey, defensive</td>
<td>331,000</td>
<td>0</td>
<td>58</td>
<td>90</td>
<td>65</td>
<td>213</td>
</tr>
<tr>
<td>Turkey, offensive</td>
<td>180,000</td>
<td>0</td>
<td>55</td>
<td>45</td>
<td>45</td>
<td>145</td>
</tr>
<tr>
<td>Crete</td>
<td>260,000</td>
<td>0</td>
<td>58</td>
<td>105</td>
<td>97</td>
<td>260</td>
</tr>
<tr>
<td>Greece</td>
<td>24,000</td>
<td>0</td>
<td>24</td>
<td>-</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Iran</td>
<td>30,000</td>
<td>0</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>30</td>
</tr>
</tbody>
</table>

**TABLE VI - RATE OF BUILD-UP DUE TO PORT LIMITATIONS IF SHIPPING OTHER THAN SHOWN IN TABLE I IS MADE AVAILABLE FOR ARMY USE**

<table>
<thead>
<tr>
<th>Area</th>
<th>Projected Operations</th>
<th>1st 3 mos.</th>
<th>2d 3</th>
<th>3d 3</th>
<th>4th 3</th>
<th>Build-up in thousands of troops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunisia and Libya</td>
<td>690,000</td>
<td>275</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>690,000</td>
</tr>
<tr>
<td>Iberian Pen. (Large)</td>
<td>1,540,000</td>
<td>390</td>
<td>270</td>
<td>270</td>
<td>270</td>
<td>1,540,000</td>
</tr>
<tr>
<td>Iberian Pen. (Small)</td>
<td>660,000</td>
<td>260</td>
<td>180</td>
<td>180</td>
<td>40</td>
<td>660,000</td>
</tr>
<tr>
<td>Sardinia</td>
<td>168,000</td>
<td>80</td>
<td>60</td>
<td>24</td>
<td></td>
<td>168,000</td>
</tr>
<tr>
<td>Sicily</td>
<td>253,000</td>
<td>110</td>
<td>90</td>
<td>53</td>
<td></td>
<td>253,000</td>
</tr>
<tr>
<td>Turkey (Defensive)</td>
<td>52,000</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td>52,000</td>
</tr>
<tr>
<td>Turkey (Offensive)</td>
<td>331,000</td>
<td>105</td>
<td>75</td>
<td>60</td>
<td>40</td>
<td>331,000</td>
</tr>
<tr>
<td>Crete</td>
<td>180,000</td>
<td>55</td>
<td>45</td>
<td>45</td>
<td>35</td>
<td>180,000</td>
</tr>
<tr>
<td>Greece</td>
<td>260,000</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td>260,000</td>
</tr>
<tr>
<td>Iran</td>
<td>24,000</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td>24,000</td>
</tr>
<tr>
<td>Burma</td>
<td>30,000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td>30,000</td>
</tr>
</tbody>
</table>

3. The capacities of the ports involved in the various proposed operations and the maximum rate at which the operations could be mounted are indicated below:

(a) Operations in TUNIS - LIBYA.

The capacity of the ports to be used is estimated to be 15,000 DWT per day.

While the port facilities are sufficient to handle 100,000 men each of the first two months, 75,000 the third
month, and a 50,000 men build-up each succeeding month, the shipping shortage is such that this build-up could only be accomplished by reducing lend-lease and civilian shipments and by receiving substantial cargo and troop-ship aid from the British.

The limited highway and railroad facilities south of Tunis will preclude the deployment of a force of more than 150,000 men below the railroad at GABES unless a sufficient number of trucks are provided and extensive road improvements made.

(b) Operations in IBERIAN PENINSULA.

(1) Capacity of ports to be used for the small force is about 20,000 DWT per day and is sufficient to handle 100,000 men per month for the first two months and a continuous build-up of 60,000 men per month thereafter, which would be possible only if sufficient cargo shipping is made available by reduction of lend-lease and civilian shipping in addition to cargo and troop-ship aid from the British. Otherwise, the movement will have to follow the program of shipping limitations outlined in tables above.

(2) Capacity of the ports for the large force is about 30,000 DWT per day, which is sufficient to handle 150,000 men per month for the first two months, and thereafter a continuous build-up of 90,000 men per month. Shipping to handle such a large force would have to be made available as outlined in above paragraph.

(c) Operations in SARDINIA.

The capacity of the ports of about 5,300 DWT per day would permit the handling of 30,000 men per month for the first two months and a build-up of 20,000 men per month thereafter.
(d) Operations in SICILY.

The capacity of the ports (excluding MESSINA, SYRACUSE, and other eastern ports) is about 7,000 DWT per day and is sufficient to handle 40,000 men the first two months and a build-up at the rate of 30,000 men a month thereafter.

(e) Operations in TURKEY. (Defensive)

The capacity of the ports is approximately 3,500 DWT per day and is sufficient to handle 20,000 men the first two months and a build-up of 15,000 men per month thereafter.

(f) Operations in TURKEY. (Offensive)

Unless the port of IZMIR can be seized and utilized the same limitations as indicated in paragraph (e) above exist. The capacity of IZMIR is 2,500 DWT per day, which added to the other ports makes a combined capacity of 6,000 DWT per day, which would permit the handling of 35,000 men each month for the first three months, 25,000 men each month for the second three months, and progressively less each month thereafter, unless additional port facilities to the north become available.

(g) Operations in CRETE.

The capacity of the various ports is approximately 3,000 DWT per day which would permit handling 20,000 men each month for two months, 15,000 men for each of the next three months, and a build-up thereafter of not more than 10,000 men per month unless port facilities could be greatly improved.

(h) Operations in GREECE.

Assuming the PORT OF PIRAEUS, whose capacity is estimated at 7,500 DWT per day, is made available, and that the capacity of the ports of the PELOPONNESIAN PENINSULA will be 2,500 DWT per day, a force of 60,000 men could be moved into the theater each month for three months, and an
additional 40,000 men each of the succeeding two months, thus bringing the total up to the projected strength of 260,000, providing, of course, that shipping is made available as outlined in paragraphs (a) and (b).

(i) Operations in IRAN.

This operation involves only Air Force troops and provision for their shipment by way of the PERSIAN GULF is feasible but imposes an additional load on the crowded ports in that area.

(j) Operations in BURMA.

This force could be unloaded satisfactorily at available ports.

4. The enforced delay until at least the second quarter of 1943, before any troops in addition to those moved to meet present commitments can be moved overseas, will allow advance planning and training for any overseas movement that may be initiated during the second quarter, including that for any necessary amphibious operations.

F. O'C. FLETCHER, JR.,
Secretary, J.M.T.
MEMORANDUM FOR THE CHIEF OF STAFF:

January 8, 1943.

Subject: Limiting Dates for Decision to Initiate Operations Against either Sardinia or Sicily.

I. Purpose:

To determine, under various assumptions, the dates by which a decision must be made to implement offensive operations against either Sardinia or Sicily.

II. Discussion:

1. General. Operations against either Sardinia or Sicily cannot be launched until firm Axis resistance in Tunisia is ended. Since a decisive offensive operation against Tunisia, in all probability, cannot be initiated prior to March 1, 1943, a successful conclusion of the campaign cannot be reasonably expected before mid-April at the earliest.

The target date will be the same, regardless of whether Sardinia or Sicily be invaded, because, first, the initial assault forces are approximately the same, and second, because the build-up forces must follow in increments based on maximum single convoy capacities.

If presently scheduled shipments of troops and equipment for TORCH (including the 4th motorized division in UOF 7 and the back-log of equipment in UOF 7, 8, and 9) are completed, June 15, 1943 is the earliest target date that can be set for the invasion of either Sardinia or Sicily.

If the Commanding General, ETO, will accept a reduction in cargo and equipment for troops now in North Africa after UOF 7 (4th motorized division), and only British troops are used in the assault, the target date for either operation can be advanced approximately one month to mid-May.

Based on TORCH experience, it is firmly believed that not less than 3 months time should be allowed between the date that a decision is made and the sailing date of large troop-carrying convoys. Therefore, if current TORCH troop and equipment commitments are completed, March 1, 1943 is the latest reasonable date for making a decision. Similarly, if TORCH equipment shipments cease after UOF 7, February 1, 1943 is the latest reasonable date for making a decision.
2. **Availability of Troops.** Whether the initial assault forces are furnished from the United States or the United Kingdom, the maximum number of trained U.S. divisions required for an invasion, either of Sardinia or Sicily, will be available on the dates required. However, if the initial assault force for either operation is to come from the United States, the required two divisions must have undergone amphibious training. (One is now receiving such training. Directive for the amphibious training of the other assault division must be issued by February 1, 1943.)

Critical supporting troops for these operations are engineer combat regiments and 105mm Howitzer field artillery battalions.

A. There will be available in the United States only 3 combat engineer regiments. These regiments are in Defense Commands and have not had amphibious training. If these regiments are withdrawn from Defense Commands and amphibiously trained, the remainder required for the Sardinian operation (1 regiment) or for the Sicilian operation (6 regiments) would have to be furnished by the British.

B. The required number of 105mm Howitzer field artillery battalions can be made available as required only if some of those units now on duty at schools and in Defense Commands are utilized.

3. **Availability of Shipping.** Shipping limitations will present no serious difficulty for the target dates under consideration, provided United States forces are not used in the initial assault. However, if the assault force is to be furnished from the United States, Navy combat leaders must be returned to the Atlantic from the South Pacific or British combat leaders must be obtained. Orders for Navy combat leaders to return should be issued at least three months prior to the earliest required sailing date from the Atlantic Coast.

In order to prevent these vessels becoming committed to an operation in the Pacific, however, it is believed that decision as to their possible use in Mediterranean operations should be made by February 1, 1943.

III. **Conclusions:**

1. Based on the completion of current TORCH troop and equipment
commitments and the earliest possible invasion target date of June 15, 1943, the decision to invade either Sardinia or Sicily must be made not later than:

a. March 1, 1943, if the initial assault force consists of British troops only.

b. February 1, 1943, if the initial assault force contains amphibiously trained American divisions.

2. Based on the cessation of TORCH shipments after UGF 7, the utilization of British units in the initial assault forces, and the earliest possible target date of May 15, 1943, the decision to invade either Sardinia or Sicily must be made not later than February 1, 1943.

3. It is doubtful whether either invasion can be conducted with American troops in the assault force, by target date of May 15, 1943, because of the time required for the assault divisions to be given amphibious training, and because combat loaders will have to be diverted from the Pacific.

THOS. T. HANDEY,
Major General,
Assistant Chief of Staff.

DECLASSIFIED
40S memo, 1-6-74
By RHP, MRA, Date APR 24 1974

- 3 -
COMBINED CHIEFS OF STAFF

PLANS AND OPERATIONS IN THE MEDITERRANEAN, MIDDLE EAST AND NEAR EAST

Interim Report by Combined Staff Planners

1. After careful consideration, the Combined Staff Planners have been unable to reach agreement as regards operations in the Mediterranean Area to follow the successful completion of "TORCH".

2. The basic reason for their inability to reach agreement is the lack of an accepted global strategy for the conduct of the war. Since a paper on the latter subject is now under consideration by the Combined Chiefs of Staff, the Combined Staff Planners have deferred action on the subject paper pending final decision on global strategy by the Combined Chiefs of Staff.
C.C.S. 124 - PLANS AND OPERATIONS IN THE MEDITERRANEAN, MIDDLE EAST AND NEAR EAST

The Prime Minister, in a message to the President on November 18 (see Enclosure A), submits a detailed discussion of the problems now confronting the United Nations, the solution of which will determine the military operations subsequent to TORCH. Mr. Churchill points out that the paramount task now is to conquer the African shores of the Mediterranean and, secondly, to strike at the under-belly of the Axis. The two general phases are consolidation and exploitation. In consolidation it can be assumed that we will control French North Africa, including Tunis. After consolidation, the first objective is Tripoli; the second objective is either Sardinia or Sicily. Time estimates for these undertakings should be made.

An examination should be made concerning follow-up TORCH convoys to determine whether or not they can be reduced or revised. Gen. Eisenhower's wishes should be determined concerning the force to attack Sardinia or Sicily, what troops should be used, the route to be taken, the shipping to be used, how quickly an attack could be launched. Examination should be given to the relief and resupplying of Malta. Decisions on these questions are needed within the next week.

The President expresses the hope that a survey will be made of the possibilities, including a forward movement directed against Sardinia, Sicily, Italy, Greece, and other Balkan Areas, as well as the possibility of obtaining Turkish support for an attack through the Black Sea against Germany's flank. The first part of the President's wishes are being studied by the Combined Chiefs of Staff in Washington. Concerning Turkey, a supreme and prolonged effort must be made to bring her into the war in the spring. The Prime Minister enumerates in detail the order of procedure, both political and military, which should be followed in connection with the Turkish question.

Enclosure B of the paper is a directive issued to the Combined Staff Planners by the Combined Chiefs of Staff for the purpose of examining the situation in the Mediterranean and recommending a policy for future action in that area. Certain assumptions have been furnished the Staff Planners to use as a basis for their study. Pending a report by the Combined Staff Planners on all of the above material, this paper is submitted for consideration by the Combined Chiefs of Staff.

11/19/42
TWH:meo
C.C.S. 124
November 19, 1942

COMBINED CHIEFS OF STAFF

PLANS AND OPERATIONS IN THE MEDITERRANEAN, MIDDLE EAST
AND NEAR EAST

Note by the Secretaries

Enclosure A, a despatch from the Prime Minister to the President, has been referred to the Combined Staff Planners for consideration in connection with

Enclosure B, a directive issued the Combined Staff Planners by the Combined Chiefs of Staff in accordance with informal agreement.

Pending report by the Combined Staff Planners, both enclosures are circulated for consideration by the Combined Chiefs of Staff.

V. DYKES,
J. R. DEANE,
Combined Secretariat.
From: Prime
To: The President of The United States.

No. 195, November 18th, 1942.
President Roosevelt from Former Naval Person most secret and personal.

Following is text referred to in my immediately preceding telegram. Note by the Minister of Defence to the Chiefs of Staff on plans and operations in the Mediterranean, Middle East, and near East.

1. In settling what to do in a vast war situation like this, it may sometimes be found better to take a particular major operation to which one is committed and follow that through vigorously to the end, making other things subordinate to it, rather than to assemble all the data from the whole world scene in a baffling array. After the needs of the major operation have been satisfied so far as possible, other aspects of the war will fall into their proper places. Moreover, it is by the continued stressing of the major operation that our will may be imposed upon the enemy and the initiative regained.

2. The paramount task before us is, first, to conquer the African shores of the Mediterranean and set up there the Naval and Air installations which are necessary to open an effective passage through it for Military Traffic: and secondly, using the bases on the African shore, to strike at the under-belly of the Axis in effective strength and in the shortest time.
3. There are therefore two phases—consolidation and exploitation. Dealing with consolidation first we may hope that General Alexander will become master of the whole of Cyrenaica during the present month, and that he will be pressing the enemy in the Agheila position or even at Sirte. We may also assume that in the same period or not long after the American and British Forces will become masters of the whole of French North Africa including Tunis, provided they press forward with their present energy and violence.

4. It will be necessary to set up Air Stations at suitable intervals along all the African shore in our power, but particularly and urgently in the Tunis tip. The largest installations for American bombers ought to be set up here so that long range bombers sent by the United States to North Africa, together with American bombers already based on the Middle East can operate against Italian targets. The United States form of daylight attack would have its best chance in the better weather of the Mediterranean.

5. The bombing weight of the British night attack should be brought to bear on Italy whenever the weather is more favourable than for bombing Germany. Every endeavour should be made to make Italy feel the weight of the war. All the industrial centres should be attacked in an intense fashion, every effort being made to render them uninhabitable and to terrorize and paralyze the population. I have asked for a scheme of desirable targets in Italy.

6. It will no doubt be necessary also to act against the Catania and Cagliari Airfields so as to keep down the attack on Tunis during the period of consolidation.
7. As soon as we are sure of ourselves, and consolidated, in French North Africa, including especially Tunis, two successive operations present themselves. The first is the advance to Tripoli. It is possible that General Alexander may be able to take this important prize from the East, and I have asked him how he feels about it, and how long he thinks it would require; but we must also be prepared for a rapid advance from the West. Would General Anderson's two British Divisions be sufficient, assuming that Tunis itself can be held by American and French Allied Troops? I should like the best possible estimate of the time that this will take.

8. The second immediate objective is obviously either Sardinia or Sicily. The possession of either of these Islands and of the Airfields in the South would create an air triangle, in which we should fight for and secure air mastery. Moreover, from either of them continuous intensified short range attacks on Naples, Rome, and the Italian Fleet Bases would raise the war against Italy to an intense degree. Let an immediate report be prepared in order that a decision can be taken. Whichever it may be, the fight for air control in the Central Mediterranean should be undertaken as a great air battle with extreme priority, the fullest advantage being taken of the Axis shortage of aircraft.

9. The swift success in French Africa has completely changed the character of the problem which we had been bound to face in that region. We need no longer contemplate a protracted campaign against French in Algeria, nor immediate trouble with the Spaniards in Morocco. On the contrary, all is well in Algeria, and a French Army will be coming into existence, fed by Allied munitions at our discretion. An examination should be made as to how the follow-up Torch convoys can be drastically reduced and revised. Will the four British Divisions now in North Africa or under
orders to go there be required for Torch? It should be possible sensibly to reduce the "Tail" of these Divisions, thus saving escorts for other purposes, including, in the following order: (A) Sardinia or Sicily, (B) restoration of the British trans-Atlantic convoys up to standard strength, (C) resumption of the PQ convoys in the latter part of December. To facilitate these vital needs, and to provide the large Naval, particularly anti-submarine, forces which will be required, together with the necessary air forces, to secure a safe passage through the Mediterranean, United States Naval help will be urgently needed. Cannot the American Naval authorities reduce the strength of their follow-up trans-Atlantic convoys and can the American "Tail" be reduced in the same way as I hope the British "Tail" will be combed?

10. What are General Eisenhower's wishes about the force to attack Sardinia or Sicily? There are two British Divisions of the First Army, as well as the two others which are standing by. Is there any need to put the first two into North Africa? Can they not be combat loaded here? Are the losses among our combat loaders crippling? How serious are they? There are great advantages and saving of time in going straight from the United Kingdom to the landings in Sardinia or Sicily. We must expect a steady reinforcement of both Islands by the enemy, and speed will make our task definitely lighter. Now that the preparations to attack Sardinia may take as long as those to attack Sicily, and that Sicily is by far the greater prize. Decisions on all the above are needed within the next week.

11. The relief and resupplying of Malta should follow naturally from the operations now in progress or in prospect in the central Mediterranean, and the immediate needs of the Island are being dealt with on an effective scale. It would be well, when circumstances and shipping permit, to exchange the units who have long been in the fortress for some of those who have been in the desert, and vice versa.
12. I have received a telegram from the President containing the following paragraph: "It is hoped that you with your Chiefs of Staff in London and I with the Combined Staff here may make a survey of the possibilities including forward movement directed against Sardinia, Sicily, Italy, Greece and other Balkan Areas and including the possibility of obtaining Turkish support for an attack through the Black Sea against Germany's flank." I endorse the above conception by the President. The first part of the President's wishes are being studied by the Combined Staffs in Washington, and are the subject of the foregoing paragraphs for our discussions.

13. The second part relating to Turkey is also of vital importance, though it is a slower process. A supreme and prolonged effort must be made to bring Turkey into the war in the spring. We must expect that our Naval Forces and shipping, landing craft, etcetera, will be fully engaged in the Central Mediterranean, and that only minor amphibious facilities will be available in the Levant. Access can however be had to Turkey by the railways through Syria as well as by coastal shipping, and by a gradual build up of air protection not only Adalia but the Dardanelles itself might become open to supplies for Turkey. Troops can move by rail and road from Syria. I wish to record my opinion that Turkey may be won if the proper measures are taken. Turkey is an Ally. She will wish to have a seat among the victors at the peace conference. She has a great desire to be well armed. Her army is in good order except for the specialized modern weapons, in which the Bulgarians have been given so great an advantage by the Germans. The Turkish Army has been mobilized for nearly three years, and is warlike. Hitherto Turkey has been restrained by fear from fulfilling her obligations, and we have taken an indulgent view of
her policy on account of our own inability to help. The situation has now changed. By the destruction of Rommel's Army, large forces may presently become available in Egypt and Cyrenaic. By a strengthened Russian resistance and a possible counterstroke in the Caucasus, which we should urge upon the Russians with all emphasis, great easement will be secured in Persia and the Tenth Army may be drawn upon. There is also the Ninth Army in Syria. From all these sources it should be possible, on the assumption of the Russians maintaining themselves in the Caucasus north of the mountain line and holding the Caspian, to build up a powerful British land and air force to assist the Turks. A target date for the concentration should be April or May. Let me have proposals.

14. The following is the order of procedure, political and military: (A) Turkey should be offered a Russian-American-British guarantee of territorial integrity and status quo. The Russians have already agreed with us upon this. The addition of the United States would probably be a decisive reassurance. This should be followed by the dispatch to Turkey of a strong Anglo-American Military Mission. (B) All through the winter and from now on, Turkey must be equipped from Egypt and from the United States with tanks, A/T and AA guns, and active construction of airfields must be undertaken. We have been working upon airfield construction in Turkey for two years. What progress has been made so far? Now that Rommel has been beaten, there is evidently a surplus of material in Egypt. We had over two thousand five hundred tanks at the disposal of the Middle East Army. Much enemy material has been captured, both German and Italian. This is also true of A/T and AA guns. Experts must be provided to assist the Turks in learning to use and maintain this material. A ceaseless flow of weapons
and equipment must go into Turkey. We have already promised a consignment, but the moment Turkey agrees secretly with the plan above, far greater quantities must be sent. What is the capacity of the railways from Syria to the Bosphorus and the Dardanelles? It would seem a great mistake to attack Rhodes and other islands in enemy hands in the Eastern Mediterranean until we have got Turkey on our side. Any attacks can then be supported by heavy shore based air power. We have to creep round this coast both by land and sea, building up our air as we go. (C) In conjunction with the above, we should urge the Russians to develop their strength on their southern flank, to try to clear the Caucasus, to regain Novorossisk and, above all, to resume at the earliest date their intentions explained to me by Premier Stalin, of striking southwest from the region north of Stalingrad towards Rostov on the Don. An ultimate result of these operations, if successful, would be the opening of the Dardanelles under heavy air protection to the passage of supplies to Russian Black Sea ports, and to any Naval assistance the Russians might require in the Black Sea. (D) Lastly, all being well, we should assemble in Syria the British and Imperial forces mentioned in preceding paragraphs.
MEMORANDUM FOR THE SECRETARIAT, COMBINED STAFF PLANNERS:

Subject: Planning for operations subsequent to "TORCH."

1. The Combined Chiefs of Staff have directed the Combined Staff Planners to examine the situation in the Mediterranean and recommend a policy for future action in that area for the consideration of the Combined Chiefs of Staff.

2. The Combined Staff Planners, in their examination of the Mediterranean situation, should submit a study based on both favorable and unfavorable assumptions and/or a combination of both. The favorable assumptions that will be made are:

   (a) That Tunisia has been cleared of Axis troops.
   
   (b) That the British 8th Army has reached Bengasi, but that remnants of Rommel's forces are still in being to the west of that place.
   
   (c) That the Spanish reactions to "TORCH" remain satisfactory.
   
   (d) That lines of communication are secure.

The unfavorable assumptions will be the converse of the favorable assumptions stated above.

V. DYKES,
J. R. DEANE,
Combined Secretariat.
December 5, 1942

MEMORANDUM FOR ALL HOLDERS OF C.P.S. 49/2:

1. Because of the nature of its contents, it is requested that special precautions be taken to insure the secrecy of the attached paper.

2. Please keep this memorandum attached to your copy of C.P.S. 49/2.

A.J. McFARLAND,
P.O.A. DAVISON,
Combined Secretariat,
Combined Staff Planners.
COMBINED STAFF PLANNERS

PLANNING FOR OPERATIONS SUBSEQUENT TO "TORCH"

References: (a) C.P.S. 49/1.  
(b) C.P.S. 39th Mtg., Item 1.  
(c) C.P.S. 40th Mtg., Item 4.  
(d) C.P.S. 41st Mtg., Item 1.

Note by the Secretaries

1. The following informal memorandums, prepared by the indicated members of the Combined Staff Planners, are circulated for the information of the Combined Staff Planners in connection with the above subject:

   Enclosure "A", prepared by the British members.
   Enclosure "B", prepared by some U.S. Army members.
   Enclosure "C", prepared by the U.S. Army Air Force members.
   Enclosure "D", prepared by the U.S. Navy Air member.

A.J. McFarland,  
P.O.A. Davison,  
Combined Secretariat.
ENCLOSURE "A"

Informal Memorandum Prepared by the British Members of the Combined Staff Planners

Reference: (a) Enclosure "A" of C.P.S. 49/1.

15. Comparison of Advantages

Since an estimate indicates that our resources will not permit us to capture both places at once, our immediate offensive possibilities are reduced to the question of which place to attack first. The relative advantages of capturing the two Islands appear to be as follows:

Sicily.

1. In addition to its greater political value Sicily is a much greater prize from the point of view of opening up the Mediterranean.

2. Sicily is a more favorable area over which to bring about an air battle.

3. Sicily is at present more strongly held than Sardinia.

4. The Axis have a far quicker reinforcement route, e.g. the Messina train ferries, and can maintain larger forces in Sicily than in Sardinia.

5. Troops otherwise necessary for garrisoning Tunisia could be used in Sicily, which would then replace Tunisia as our bastion against Italy. Thus an economy of forces would be achieved, whereas forces employed in Sardinia would be unemployable elsewhere; and once we are committed to the attack on Sardinia, the operation against Sicily must be postponed.

Sardinia.

6. Sardinia opens up a wider threat of attack to the Italian coastline. It is a better base from which to interrupt Italy's coastal shipping and to trouble the mainland with seaborne raids and harassing air attacks.
7. Axis reinforcement of Sardinia must be largely confined to Port of Cagliari and should be capable of considerable interruption.

8. Our communications to Sardinia would be more secure than to Sicily.

9. With the exception of Naval Forces, the resources required to take Sardinia or Sicily will be in approximate ratio of 3 to 5. The operation against Sardinia could therefore be mounted earlier.

10. Sardinia is desirable for re-opening of the Mediterranean for military traffic but only necessary if overland transport of personnel across Eastern Algeria and Tunisia proves to be impracticable. Nevertheless the capture of Sardinia will greatly facilitate the passage of convoys not only by denying air bases to the enemy but by providing air bases for counter measures against Axis Naval and Air attack, and for throwing the enemy on the defensive over a wide arc.

Deduction.

In short, the relative advantages and disadvantages are finely balanced. Decision, therefore, must turn on the time factor. The German Air Force must not be given a respite in which to recover from the disorganization which present operations have forced upon it. Nor must Italian morale be given a chance to steady itself. Finally, and perhaps most important of all, we should aim to stretch Germany to the limit this winter for the benefit of Russia next spring. It seems unlikely that an attempt to capture Sicily can be made before July, but there is a possibility, if things go well in Tunisia, that an attack on Sardinia could be made at the end of February.
16. **Action Subsequent to the Capture of Sicily or Sardinia.**

At this stage, Allied action subsequent to the elimination of Axis forces from Africa and the capture of Sicily or Sardinia can only be speculative. Broadly the possibilities are:

(a) **In the West**

(1) To extend the offensive by naval and air action, and limited land operations, to the mainland of Italy.

(2) To raid the coast of southern France, possibly in conjunction with a cross-Channel operation against such an objective as a U-boat base.

(b) **In the East** (assuming that there are no signs of a German break through into Persia).

(1) To support Turkey with a view to persuading her to join the Allies, and possibly,

(2) To capture Crete and the Dodecanese.

**Recommendations.**

17. The following is recommended as a policy for future action in the Mediterranean area:

(a) We should proceed with our offensive against the Axis forces in all North Africa with the object of destroying these forces, and securing the entire North African littoral. If this task can be left to the British 8th Army attacks against Sicily or Sardinia can be expedited.

(b) We must retain appropriate and adequate forces strategically situated to insure our control of French Morocco, Algeria, and -- if need be -- Spanish Morocco.

(c) We must protect our lines of communication to the west coast of Africa, through the Straits of Gibraltar, and in the Mediterranean.
(d) The two basic requirements in (b) and (c) involve:

(1) An intensive anti-submarine campaign.

(2) Retention of a mobile force in readiness to insure the immediate occupation of Spanish Morocco if the Germans enter Spain, or the latter turns hostile.

(e) The above conditions having been satisfied, the main weight of our effort in the Mediterranean should be directed against Italy, and, as an initial step, an operation against Sicily or Sardinia should be launched at the earliest possible date.

18. The time element is therefore the main factor in deciding which Island to attack. A final decision must, however, await the outcome of the present operations, a detailed review of forces and shipping then available and the development of the general situation in the meantime. Planning for both operations should therefore proceed.
ENCLOSURE "8"

Informal
Memorandum Prepared by Some of the U.S.
Army Members of the Combined Staff Planners

Reference: (a) Enclosure "A" of C.P.S. 49/1

1. The Combined Staff Planners were in general agreement
with the report of the Special Subcommittee on C.P.S. 49/1, ex-
cept as to the action necessary to provide security for the
Strait of Gibraltar. The following changes in the basic paper
are submitted for consideration:

15. **Comparison of Advantages**

Since an estimate indicates that our resources will
not permit us to capture both places at once, our immediate of-
ensive possibilities are reduced to the question of which place
to attack first. The relative advantages of capturing the two
islands appear to be as follows:

**Sicily**

1. In addition to its greater political value, Sicily is
a much greater prize from the point of view of opening up the
Mediterranean.

2. Its loss would have a much greater effect on the
morale of the Italian people.

3. Sicily is at present more strongly held than Sardinia.

4. It provides much better air base facilities and is a
more favorable area over which to bring about an air battle.

5. The Axis have a far quicker reinforcement route and
can maintain larger forces in Sicily than in Sardinia.

6. Troops otherwise necessary for garrisoning Tunisia
could be used in Sicily, which would then replace Tunisia as our
bastion against Italy. Thus an economy of forces would be
achieved, whereas forces employed in Sardinia would be unemploy-
able elsewhere; and once we are committee to the attack on Sar-
dinia, the operation against Sicily must be postponed.
Sardinia

7. Sardinia opens up a wider threat of attack to the Italian coastline. It is a better base from which to interrupt Italian western coastal shipping; to trouble the mainland with seaborne raids; and for harassing air attacks against northern and central Italy.

8. Axis reinforcement of Sardinia must be largely confined to Port of Cagliari and should be capable of considerable interruption.

9. With the exception of Naval Forces, the resources required to take Sardinia or Sicily will be in approximate ratio of 5 to 8. The operation against Sardinia could, therefore, be mounted earlier.

10. Sardinia is desirable for facilitating the reopening of the Mediterranean for military traffic. Its occupation will make less difficult the passage of convoys not only by denying air bases to the enemy, but by providing air bases for counter measures against Axis Naval and Air attack.

Deduction

It must be borne in mind that any operations in the Mediterranean area should be considered in the light of their global implications and the influence they will exert upon operations in other theaters.

It is essential that the present operations be continued until the North African littoral is cleared of Axis forces. Minimum forces must then be disposed to secure the Straits of Gibraltar, defend the North African littoral, and interpose in the Levant area to counter a possible Axis breakthrough in the Caucasus or an advance through Turkey.

Provided future operations contemplate the invasion and occupation of southern Italy, the relative advantages strongly favor the occupation of Sicily. If, on the other hand, no major invasion of the mainland is contemplated, then the decision rests
on the time factor and the availability of troops. It seems unlikely that an attempt to capture Sicily can be made before mid-April, but there is a possibility, if things go well in Tunisia, that an attack on Sardinia could be made early in March.

The German Air Force should not be given a respite in which to recover from the dislocation which Allied operations have forced upon it. Nor should Italian morale be given a chance to steady itself. Italy must constantly be faced with air bombardment, the interruption of coastal shipping, seaborne raids, and the threat of a large-scale invasion.

Finally, and perhaps most important of all, we should aim to stretch Germany to the limit this winter for the benefit of Russia next spring.

16. Action Subsequent to the Capture of Sicily or Sardinia

At this stage, Allied action subsequent to the elimination of Axis forces from Africa and the capture of Sicily or Sardinia can only be speculative. Broadly the possibilities are:

(a) In the West
   (1) To extend the offensive by naval and air action, and limited land operations, to the mainland of Italy.
   (2) To raid the coast of southern France, possibly in conjunction with a cross-Channel operation.
(b) In the East (Assuming that there are no signs of a German breakthrough into Persia.
   (1) To support Turkey with a view to persuading her to join the Allies, and possibly,
   (2) To capture Crete and the Dodecanese.

17. Recommendations

The following is recommended as a policy for future action in the Mediterranean area:

(a) North Africa
   (1) We must retain appropriate and adequate forces strategically situated to insure our control of French Morocco, Algeria, and--if need be--Spanish Morocco.
(2) While it is possible, and may even be desirable, to assume calculated risks in tactical operations, we cannot afford to gamble on the logistical support of such operations. We must protect our lines of communication to the west coast of Africa, through the Straits of Gibraltar, and in the Mediterranean.

(3) These two basic requirements involve:
   a. An intensive anti-submarine campaign.
   b. Retention of a mobile force in readiness to insure the immediate occupation of Spanish Morocco if the Germans enter Spain, or the latter turns hostile.

(4) Having secured our lines of communication, we should proceed with our offensive against the Axis forces in all North Africa with the object of destroying these forces and securing the entire North African littoral. The security of the North African littoral must include the retention of a force in the Levant area to counter a possible Axis breakthrough in the Caucasus or an advance through Turkey.

(5) In addition to the forces required for subparagraph 3 b. supra, we must immediately start the rapid building up of a mobile force of a minimum of ten (10) divisions for the seizure of southern Spain if the Axis moves south of the Pyrenees. This force will also be available for offensive operations in the Central Mediterranean, but the disposition of this force and the time of its employment must be determined by the development of the strategic situation.
(b) Elsewhere in the Mediterranean Area.

No further offensive action can be taken in the Mediterranean prior to the liquidation of Axis forces in North Africa, and thereafter only if our lines of communication have been made secure. Once these conditions are satisfied, the main weight of our effort in the Mediterranean should be directed against Italy.

18. It is also recommended that combined operational plans for operations against Italy, to include the possible capture and occupation of Sardinia and/or Sicily be forthwith initiated under the direction of the theater commander.
ENCLOSURE "C"

December 4, 1942.

Informal Memorandum Prepared by the U.S. Army Air Force Members of the Combined Staff Planners

From: The Combined Staff Planners.
To: The Combined Chiefs of Staff.
Subject: Planning for Operations Subsequent to "TORCH".

Enclosures: (A) Report of Special Subcommittee on Planning for Operations Subsequent to "TORCH" (C.F.S. 49/1).
(B) Minority Report by a Member of U.S. Army Air Corps, submitted as enclosure "B" (C.F.S. 49/1).

1. The Combined Staff Planners are in general accord with the relative advantages the occupation of Sardinia or Sicily would make available to the United Nations, as expressed in the report of the Combined subcommittee report "Planning for Operations Subsequent to "TORCH". However, concurrence cannot be given to the over-all desirability of attacking either of these islands. In this regard the Combined Staff Planners concur in the view expressed by the minority report of the U.S. Army Air Force member of the subcommittee, with the modifications outlined in the following conclusions and recommendations.

Conclusions:

1. That the best way to win the war is by an all out air offensive from bases in the United Kingdom against Germany's capacity to wage war, followed by a land invasion against the continent across the English Channel.

2. That continued land offensive operations in the Mediterranean area after the completion of Axis destruction in North Africa would be inconclusive in themselves, and would result in an undesirable diversion detracting from the strength of the main effort from the United Kingdom, perhaps to the extent of rendering inconclusive the air offensive and indefinitely postponing the main land offensive.
3. That success of the TORCH operation can best be offensively exploited from North Africa by the exercise of air power against Italian objectives and Axis Mediterranean and Balkan shipping.

4. That the presence of Allied troops in North Africa itself constitutes a threat which diverts Axis forces to the protection of Italy and Southern France.

5. That the exercise of air cover from Tunisia and Algeria can facilitate the passage of Allied Mediterranean shipping past Axis threats from Sardinia and Sicily even more readily than Allied air operations from Spanish Morocco can neutralize possible Spanish-German action against shipping in the Gibraltar area.

6. That adequate protection of Mediterranean and North African lines of communication must be provided as rapidly as possible.

7. That the maximum aid to Russia will result from the destruction by air of Axis strength followed by the cross Channel invasion.

Recommendations:

1. That the global strategic concept defining the air offensive from the United Kingdom followed by invasion across the English Channel as the major British-American effort be reaffirmed.

2. That this strategic plan be reevaluated without delay with a view to determination of a target date for the initiation of the land invasion.

3. That the Axis be destroyed or expelled in the entire North African littoral.
4. That as rapidly as feasible:

(a) Adequate provision be made for the security of the Straits of Gibraltar and the lines of communication to the TORCH forces. Such provision will include sufficient forces properly disposed to seize and occupy Spanish Morocco in the event of Spanish hostility or of German action through Spain.

(b) North Africa be developed as an air operating area integral with the United Kingdom, from which the Theater Commander may utilize the flexibility of the air arm to secure maximum effect in the destruction of Axis strength.

5. A comprehensive study be conducted immediately to ascertain the full extent of the implications of the entry of Turkey into the war on the Allied side, to determine the cost of such entry, the effect on other operations, the gain thereby, and the extent to which we should commit forces and resources to the defense of Turkey.

6. That, since political conditions or the virtual collapse of Italian resistance might subsequently render profitable the occupation of Italian territory, plans be prepared for the attacks on Sardinia and Sicily.

7. That subsequent to TORCH the United Kingdom-North African Theater Commander be given a directive to prepare for the land invasion across the English Channel on the target date selected, with the view to:

(a) His dispatching to the United Kingdom to implement such invasion ground troops in excess of those needed in North Africa for security or profitably employed as a threat containing Axis strength in the Mediterranean.

(b) His conducting with all possible vigor and available air forces the air offensive from the United Kingdom against vital German establishments.
MEMORANDUM FOR THE COMBINED STAFF PLANNERS:

Subject: Effect of operations subsequent to Torch.

1. Aside from other merits or demerits of such operations, the capture of Sicily or Sardinia will have the effect of shifting the "center of gravity" in the European theater. Our forces available are limited. No operation can be undertaken except at the expense of another. The mounting of Torch resulted in a delay in the mounting of cross-channel operations. Each subsequent diversion to the Mediterranean will result in further delay. There may now exist some difference of opinion as to whether a cross-channel invasion can be undertaken in 1943. But certainly we will all agree that it can not be executed before the spring of 1944 if Sicily or Sardinia are invaded. The Sicilian (or Sardinian) operation will surely not be undertaken unless we expect it to be completed long before then. Our present compelling necessity of keeping the Axis under pressure will still exist. With Roundup impossible for some time the Mediterranean will offer further inviting targets. Each, in its turn, will create further delays in mounting Roundup and offer equally compelling reasons for subsequent operations in what must by then be fast becoming the major theater of operations.
2. I desire to emphasize that I do not advance this thought as necessarily an argument against the proposed operations. Further evaluation may show the desirability of this shift in "center of gravity". But I do hold that it is a self evident fact which must be considered by all who weigh the problem.

/s/ C. R. BROWN
Captain, U.S.N.
COMBINED CHIEFS OF STAFF

MEMORANDUM FOR INFORMATION NO. 26

GERMAN - SPANISH INTENTIONS IN NORTHWEST AFRICA

Note by the Secretaries

The enclosure was prepared by the Combined Intelligence Committee on its own initiative. The study, as finally approved by the Combined Intelligence Committee, is circulated for information of the Combined Chiefs of Staff.

V. DYKES,
J. R. DEANE,
Combined Secretariat.
CONCLUSIONS

1. The Spaniards have territorial claims on the French in Northwest Africa.

2. They have been strengthening their military position in Northwest Africa, in order to be in a good position to press their claims against the French if and when they judge the time to be ripe and in order to guard against possible Allied action in the area. There is, however, no evidence of this strengthening policy being intensified.

3. They will press their claims against the French only if and when the Axis lend them military assistance or put pressure on the French to give way.

4. The Axis will not assist the Spaniards to make good their claims unless and until they can profit to the full from the use of Spanish Morocco as a base of military operations, a concession which they may be expected to demand as a quid pro quo. It is unlikely that the Axis, despite its considerable strategic stake in the area, would force the situation in Northwest Africa to this degree until its present extensive commitments have been appreciably reduced or unless it appeared to be necessary to forestall Allied action in the area. Existing German military cooperation and political activities in the area are a part of long-term planning for the time when they are able or obliged to act in the Western Mediterranean.

5. In view of the fluid internal situation in Spain and the lack of any evidence of predominant intentions, it appears to be unreasonable to make any attempt to forecast the action which Spain might take in the event of Allied operations in French Morocco.
ARGUMENT

1. **Spanish Aspirations.** Spanish authorities have long desired to annex considerable territories which now form parts of French North Africa. The area which has been most coveted by Spain is the basin of the Sebou River (immediately south of Spanish Morocco), including Rabat, Meknes, Fes, and Taza. Particular areas of secondary interest are western Oranie Province (Algeria), including Oran; territory south of the Atlas Mountains, including Agadir, Taroudant, and Tiznit; and French territory lying between Ifni and Rio de Oro. There seems no doubt that the Spanish authorities will press their claims to these areas as and when opportunity offers.

2. **Comparative Strengths.** The following is an estimate of the strength of the Spanish and French forces in the respective areas:

   (a) Spanish. In Morocco there are known to be approximately 130,000 troops of which 14,000 are contained in labor units. The number of tanks is believed to be 200-250, of which more than half are light and all are over five years old. There are about 60 aircraft in Spanish Morocco at present, of which about 30 are serviceable, but reinforcements to a total of 50 long-range bombers and 60 single-engine fighters might be made available from the Peninsula for operations in North Africa.

   (b) French. In Morocco itself there are 60,000 troops which include one battalion of tanks (probably considerably under strength in tanks). In Algeria the forces amount to 45,000, of which 16,000 are in the Oran department and could reasonably be considered as available for its defense. These figures include native levies. There are about 160 aircraft in French Morocco, more than 200 in Algeria, and over 90 in Tunisia. In addition, there are over 300 aircraft in unoccupied France.
The present dispositions of the French and Spanish Air Forces are set out in Appendix "A."

Though the operational capacity of French Air Force units in Morocco and Algeria is restricted by certain limiting factors, the French Air Force remains considerably stronger than the Spanish Air Force in respect of both its supply position and the relative modernity of its equipment. This disparity is at present so considerable that French Air strength in the areas in question should alone prove a deterrent to independent Spanish action against French North Africa.

3. General considerations. The Spaniards do not enjoy a sufficient preponderance of force to make it safe for them to attack the French Zone unless they are assured of substantial military assistance from the Axis either by Germany in Spanish Morocco or by Germany and/or Italy in Tunisia and Algeria. Spain might also realize its ambitions by diplomatic means through Axis pressure on France, which would probably be linked with Italian demands for Tunisia. The Spanish High Commissioner, General Orgaz, enjoys a quasi-independent status not unlike that formerly held by Weygand. His prestige is great in both Morocco and Madrid. He is bent on furthering his personal ambitions, but would be most unlikely to embark on any adventure the outcome of which seemed dubious.

4. Spanish preparations. There is no evidence that the Spaniards are preparing for hostile action against the French in the immediate future. Work on fortifications in the Larache area and extensive coastal defense work in the Western Zone have been going on for some time, but these do not appear to have been intensified recently. At most the Spaniards are simply continuing their policy of strengthening Tangier and Spanish Morocco as a military base by increasing troop garrisons, building up supply dumps, and expanding air fields, with a view to being in as strong a position as possible to press their claims against the French if and when the opportunity offers.
5. **Axis Interest in the Area.** The question of when the Spaniards will bring their claims to the fore, either by military action or by negotiations backed by force is therefore likely to be determined by the general course of the war and by the degree of encouragement and assistance furnished to them by the Axis. In their policy regarding Spanish and French Morocco, Germans are in the same predicament as we are. They cannot encourage Spanish aspirations without alienating French and vice versa. Hitherto the Germans have refrained from taking sides officially, although they have shown at times such a deep interest in Spanish Morocco as to indicate a possible backing of Spanish aspirations. If the Germans wished to use Morocco as a base for their military and air activities, either in order to shut the Straits of Gibraltar or in order to counter a possible Allied landing in Northwest Africa, they might urge the Spaniards to go forward with their claims, if direct negotiations between Germany and France for military bases would break down. The German interest in this territory at present is to make long-term preparations for the occupation of strategic points should the course of the war dictate such a step.

6. **Axis Military Cooperation.** German-Spanish military and air cooperation in Spanish Morocco is and has been confined to the following:

(a) German assistance in the improvement and expansion of Spanish installations (e.g., in the erection of an R.D.F. station west of Ceuta);

(b) Visits of German officers to the various fortifications and airfields;

(c) The importation through Spain of a certain amount of German war material;

(d) Facilities afforded to Germans for travelling throughout the Zone.
Reports indicating that German or Italian planes, tanks, and combat troops are secretly located in Spanish Morocco come largely from French African sources and remain unconfirmed.

7. Axis Political Interference. The Germans find natural allies among some of the younger army officers and the right wing Falangist officials. Should their policy definitely favor Spanish aspirations, they could readily enlist more substantial Spanish support. Meanwhile they have also approached the Moors, subsidizing Si Abdulhak Torres, leader of the Nationalist Reform Party, one of the two Moorish Nationalist parties in the Spanish Zone, and making specious promises regarding Moorish independence to be received at the hands of a victorious Germany at the end of the war. The soil is fairly fertile for such propaganda because the Moors are in a bad temper owing to shortages of food and clothing and because the generous promises made to them by Franco during the civil war have remained unfulfilled. German propaganda among the Moors in Spanish Morocco, like all foreign propaganda among the Moors, is strongly resented by the Spanish authorities. The Moors may be expected to go along with the side which proves stronger and their attitude is therefore relatively unimportant at the moment.

8. Spanish Reaction to Allied Intervention. In view of the fluid internal situation in Spain and the lack of any evidence of predominant intentions, it appears to be unreasonable to make any attempt to forecast the action which Spain might take in the event of Allied operations in French Morocco.
APPENDIX "A"

THE SPANISH AIR FORCE

<table>
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<tr>
<th>Region</th>
<th>Bomber</th>
<th>Fighter</th>
<th>Reconnaissance</th>
<th>Seaplanes</th>
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<tr>
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<td>7</td>
<td>19</td>
<td>--</td>
<td>3</td>
<td>29</td>
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<tr>
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<td>--</td>
<td>18</td>
<td>39</td>
<td>7</td>
<td>64</td>
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<tr>
<td>Rio de Oro and Canary Islands</td>
<td>11</td>
<td>28</td>
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<td><strong>Totals</strong></td>
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THE FRENCH AIR FORCE

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<th>Reconnaissance</th>
<th>Seaplanes</th>
<th>Total</th>
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<td>314</td>
<td>114</td>
<td>82</td>
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</table>

NOTES:
1. Strength figures shown in the second and third columns of this table include land aircraft attached to the French Naval Air Service.
2. Figures given for land aircraft in French West Africa (where a number of units are equipped with obsolete types) refer to modern material only.
DINNER, NOVEMBER 26, 1943

The President
Mr. Hopkins
Ambassador Harriman
Mr. Bohlen

Mr. Churchill
Mr. Eden
Sir Archibald Clark Kerr
Colonel Birse

Marshal Stalin
Mr. Molotov
Mr. Pavlov
MEMORANDUM OF CONVERSATION, EVENING NOVEMBER 30, 1943

During the first part of the dinner the conversation between the President and Marshal Stalin was general in character and dealt for the most part with a suitable place for the next meeting. Fairbanks seemed to be considered by both the most suitable spot.

MARSHAL STALIN then raised the question of the future of France. He described in considerable length the reasons why, in his opinion, France deserved no considerate treatment from the Allies and, above all, had no right to retain her former empire. He said that the entire French ruling class was rotten to the core and had delivered over France to the Germans and that, in fact, France was now actively helping our enemies. He therefore felt that it would be not only unjust but dangerous to leave in French hands any important strategic points after the war.

THE PRESIDENT replied that he in part agreed with Marshal Stalin. That was why this afternoon he had said to Marshal Stalin that it was necessary to eliminate in the future government of France anybody over forty years old and particularly anybody who had formed part of the French Government. He mentioned specifically the question of New Caledonia and Dakar, the first of which he said represented a threat to Australia and New Zealand and, therefore, should be placed under the trusteeship of the United Nations. In regard to Dakar, the President said he was speaking for twenty-one American nations when he said that Dakar in unsure hands was a direct threat to the Americas.

MR. CHURCHILL at this point intervened to say that Great Britain did not desire and did not expect to acquire any additional territory out of this war, but since before great victorious nations - the United States, the Soviet Union, Great Britain and China - will be responsible for the future peace of the world, it was obviously necessary that certain strategic points throughout the world should be under the joint control.

MARSHAL STALIN again repeated and emphasized his view that France could not be trusted with any strategic possessions outside her own border in the post-war period. He described the ideology of the Vichy Ambassador to Moscow, Bergey, which he felt was characteristic of the majority of French politicians. This ideology definitely preferred an agreement with France's former enemy, Germany, than with her former allies, Great Britain and the United States.

The conversation then turned to the question of the treatment to be accorded Nazi Germany.

THE PRESIDENT said that, in his opinion, it was very important not to leave in the German mind the concept of the Reich and that the very word should be stricken from the language.

MARSHAL STALIN replied that it was not enough to eliminate the word, but the very Reich itself must be rendered impotent ever again to plunge the world into war. He said that unless the victorious Allies retained in their hands the strategic positions necessary to prevent any recrudescence of German militarism, they would have failed in their duty.

In the detailed discussion between the President, Marshal Stalin and Churchill that followed Marshal Stalin took the lead, constantly
emphasizing that the measures for the control of Germany and her disarmament were insufficient to prevent the rebirth of German militarism and appeared to favor even stronger measures. He, however, did not specify what he actually had in mind except that he appeared to favor the dismemberment of Germany.

MARSHAL STALIN particularly mentioned that Poland should extend to the Oder and stated definitely that the Russians would help the Poles to obtain a frontier on the Oder.

THE PRESIDENT then said he would be interested in the question of assuring the approaches to the Baltic Sea and had in mind some form of trusteeship with perhaps an international state in the vicinity of the Kiel Canal to insure free navigation in both directions through the approaches. Due to some error of the Soviet translator Marshal Stalin apparently thought that the President was referring to the question of the Baltic States. On the basis of this understanding, he replied categorically that the Baltic States had by an expression of the will of the people voted to join the Soviet Union and that this question was not therefore one for discussion. Following the clearing up of the misapprehension, he, however, expressed himself favorably in regard to the question of insuring free navigation to and from the Baltic Sea.

THE PRESIDENT, returning to the question of certain outlying possessions, said he was interested in the possibility of a sovereignty fashioned in a collective body such as the United Nations; a concept which had never been developed in past history.

After dinner when the President had retired, the conversation continued between Marshal Stalin and Mr. Churchill. The subject was still the treatment to be accorded to Germany, and even more than during dinner Marshal Stalin appeared to favor the strongest possible measures against Germany.

MR. CHURCHILL said that he advocated that Germany be permitted no aviation of any character—neither military or civilian—and in addition that the German general staff system should be completely abolished. He proposed a number of other measures of control such as constant supervision over such industries as might be left to Germany and territorial dismemberment of the Reich.

MARSHAL STALIN to all of these considerations expressed doubt as to whether they would be effective. He said that any furniture factories could be transformed into airplane factories and any watch factories could make fuses for shells. He said, in his opinion, the Germans were very able and talented people and could easily revive within fifteen or twenty years and again become a threat to the world. He said that he had personally questioned German prisoners in the Soviet Union as to why they had burst into Russians homes, killed Russian women, etc., and that the only reply he had received was that they had been ordered to do so.

MR. CHURCHILL said that he could not look more than fifty years ahead and that he felt that upon the three nations represented here at Teheran rested the grave responsibility of future measures of assuring in some manner or other that Germany would not again rise to plague the world during the period. He said that he felt it was largely the fault of the German leaders and that, while during war time no distinction could be made between the leaders and the people particularly in regard to Germany, nevertheless, with a generation of self-sacrificing, toil and education, something might be done with the German people.
MARSHAL STALIN expressed dissent with this and did not appear satisfied as to the efficacy of any of the measures proposed by Mr. Churchill.

MR. CHURCHILL then inquired whether it would be possible this evening to discuss the question of Poland. He said that Great Britain had gone to war with Germany because of the latter's invasion of Poland in 1939 and that the British Government was committed to the reestablishment of a strong and independent Poland but not to any specific Polish frontiers. He added that if Marshal Stalin felt any desire to discuss the question of Poland, that he was prepared to do so and he was sure that the President was similarly disposed.

MARSHAL STALIN said that he had not yet felt the necessity nor the desirability of discussing the Polish question (After an exchange of remarks on this subject from which it developed that the Marshal had in mind that nothing that the Prime Minister had said on the subject of Poland up to the present stimulated him to discuss the question. The conversation returned to the substance of the Polish question).

MR. CHURCHILL said that he personally had no attachment to any specific frontier between Poland and the Soviet Union; that he felt that the consideration of Soviet security on their western frontiers was a governing factor. He repeated, however, that the British Government considered themselves committed to the reestablishment of an independent and strong Poland which he felt a necessary instrument in the European orchestra.

MR. EDEN then inquired if he had understood the Marshal correctly at dinner when the latter said that the Soviet Union favored the Polish western frontier on the Oder.

MARSHAL STALIN replied emphatically that he did favor such a frontier for Poland and repeated that the Russians were prepared to help the Poles achieve it.

MR. CHURCHILL then remarked that it would be very valuable if here in Teheran the representatives of the three governments could work out some agreed understanding on the question of the Polish frontiers which could then be taken up with the Polish Government in London. He said that, as far as he was concerned, he would like to see Poland moved westward in the same manner as soldiers at drill execute the drill "left close" and illustrated his point with three matches representing the Soviet Union, Poland and Germany.

MARSHAL STALIN agreed that it would be a good idea to reach an understanding on this question but said it was necessary to look into the matter further.

The conversation broke up on this note.