The Operations of the Navy in the Dutch East Indies and the Bay of Bengal

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Chapter I  
The Circumstances Leading to Japan’s Invasion of the Dutch East Indies

1. The Prewar Operational Policy of the Navy and the Supply and Demand of Oil

Since Japan’s victory in the Russo-Japanese War, the interests of Japan and those of the United States gradually started to clash over policies in the Far East, and they came to consider each other as potential enemies. Consequently, Japan established an Imperial Defense Policy for the first time in 1907, and singled out the United States, Russia and France as its hypothetical enemies. However, in view of the difference in national power between Japan and these countries, the policy was adopted that a war against two or more countries at the same time should be avoided; that by political means Japan should be steered to a war against one country [only]; and that if war should be waged, it should be conducted quickly and decisively. In this plan, the strategy against the United States, where the Navy would play the leading role, was, in view of [the differences in] national power and military strength, to take advantage of the different strategic positions of both countries and intercept the U.S. Fleet at sea close to Japan. The reason [for this strategy] was that, gathering from the operational thinking of the U.S. Navy and American Far Eastern policy, it was considered inevitable that the U.S. Fleet would attack at an early stage after the opening of hostilities. Later on, due to changes in the international situation, France was removed from [the list of] hypothetical enemies and China and Britain were added instead. Further in 1918, the plan to capture the Philippines at the opening of hostilities was added to the operational outline against the United States. Although Britain was added to [the list of] hypothetical enemies in 1936, hardly any concrete operation plans were studied. It goes without saying that no operation plans at all were considered against the Dutch East Indies.

As is generally known, Japan was lacking in natural resources and its industrial technology lagged far behind the United States and Britain, which rendered it dependent on other countries for most resources as well as technology. On top of that, for a large proportion [of its needs] it depended on its hypothetical enemies, the United States and Britain, as well as on other countries that were under their strong influence. Japan’s domestic production of oil, for which demand had sharply increased among others because of the switch of the Navy to heavy oil as fuel, the growing industrialization of Japan, and the rapid increase in the number of cars and aircraft, covered merely about 10 percent of the demand. For the rest, it had to rely on imports. Ironically, 70 percent of the total imports came from the United States, its hypothetical enemy. Moreover, it relied on the United States for its entire oil refinery technology (according to the statistics of 1936). In those years, as the largest consumer of oil, the
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Navy took the lead in improving the oil policy and although it tried hard to solve the problems, it still could not come up with proper solutions.

The annual production of oil in the southern region from 1936 to 1939 was about 7.95 million tons in the Dutch East Indies, about 0.93 million tons in British Borneo, and about 1.27 million tons in Burma, while the annual demand in Japan in this period was between about 4.40 million and about 5.70 million tons. The oil production in the southern region well surpassed the demand in Japan, while the oil fields in these areas were not yet much developed. Therefore, Japan planned to shift from its hypothetical enemy, the United States, to the southern region for its import source of oil. However, the plan was not successful, and it remained dependent on [oil imported from] the United States.

2. Changes in the International Situation and the Import of Essential Materials

In 1933 in the wake of the Manchurian Incident (1931), Japan walked out of the League of Nations (due to the latter’s adoption of a resolution that Manchuria should be made a demilitarized zone under international control). Following that, Japan concluded in November 1936 the Anti-Comintern Pact with Germany, which Italy also joined. After that, relations between Japan and the United States briefly relaxed, but in 1937 the China Incident occurred, and despite the policy of the [Japanese] government to contain it, the incident continued to expand. The United States, leading the countries concerned, resumed and continued its protest against Japan. Moreover, the United States took the proclamation of the “Establishment of a New Order in East Asia,” which Japan had announced in November 1938, as an open challenge to the principles of its foreign policy. Meanwhile in Europe, the radical policies of the Nazi government increased tensions in the international situation surrounding Germany, and the political situation worldwide, in the West as well as in the East, turned turbulent.

In May 1939, the Soviet Union carried out a large operation in Nomonhan, and Japan was exposed to a serious threat from the north, too (the Nomonhan Incident). Meanwhile, the United States took the opportunity of Japan’s blockade of the British concession in Tianjin to give on 28 July 1939 Japan notice of the abrogation of the U.S.-Japan Treaty of Commerce and Navigation (with an advance notice of six months). The aim [of the United States] was to contain Japan’s actions in the Far East by [showing] its readiness to control at any time the export of materials that were essential to Japan. This measure caused much concern in Japan, which was hurriedly building up its military preparedness against interference by third countries, while prosecuting the China Incident at the same time. Particularly from the perspective of the situation in those days, it was considered highly likely that should Japan be involved in another war it would likely be a protracted war. In order to endure such a protracted war, it was absolutely essential for Japan to obtain the raw materials indispensable for maintaining and nurturing its national power. Consequently, Japan had no other choice but to urgently obtain them in areas closer at hand, i.e. the Far East.

In Europe, the Second European War [the Second World War] began with the German invasion of Poland in September 1939. At the end of the year, the United States condemned the Soviet Union’s indiscriminate bombing of Finnish citizens and banned the export of refinery technology and equipment to produce high-grade gasoline [to the Soviet Union]. As this
measure was also applied to Japan, which was prosecuting the China Incident, Japan was no longer able to import the technology and was seriously affected by it.

Although the abrogation of the U.S.-Japan Treaty of Commerce and Navigation came into effect in January 1940, the U.S. government did not immediately start imposing restrictions on exports to Japan. However, the strain on the Japanese economy was not eased at all, and Japan desperately tried every means to meet the situation.

As mentioned previously, Germany had all of a sudden invaded Poland on 1 September 1939, and partitioned the country with the Soviet Union, but it showed little noteworthy activity after that. However, from April 1940 onwards the German Army became active [again], occupied Denmark and Norway at a stroke, drove the allied forces from the European Continent (the so-called “Dunkirk Tragedy”) and finally occupied Paris on 14 June. Belgium, the Netherlands and France were overwhelmed in the German blitzkrieg, and a German landing on the British mainland seemed highly likely. This meant that the British, Dutch and French colonies in the Far East had lost or were about to lose their mother countries. [Meanwhile,] still maintaining its neutrality, the United States stayed focused on supporting the allied countries in Europe, while in the Far East urgently containing the offensive actions of Japan, which was taking advantage of the situation. For that purpose, the United States took the following measures against Japan:

[1940]
May: Announced the permanent stationing of its Pacific Fleet in Hawaii in order to contain Japan’s southward advance.
June: Imposed an embargo on the export of machine tools.
July: Enacted the “Act to Expedite the Strengthening of National Defense,” [i.e. Export Control Act of 1940] with which the United States applied a license system to the export of materials essential to its defense, and granted the President the authority [to decide the licensing]. However, petroleum products and scrap iron were excluded from the items subject to an export license.
[July]: Enacted the “Two-Ocean Navy Act,” (an armaments expansion plan to expand the number of warships by 70 percent as well as the number of aircraft to 15,000).
End [of July]: Added particular petroleum products and scrap iron to the items subject to export licensing.

Note:
1. Japan was rapidly expanding its industrial power and was very much short of machine tools. Moreover, due to its [poor level of] technology, most precision machines were imported.
2. Scrap iron was essential as a material for steelmaking, and most of it was imported from the United States at that time.

However, as the U.S. government permitted the export of petroleum products and scrap iron to Japan even after the enactment of the “Act to Expedite the Strengthening of National Defense,” Japan made every possible effort to import and store them.
3. The International Situation and the Changes in the Policy for Coping with the Current Situation

When Japan was in such a predicament, the war situation in Europe was rapidly developing to the advantage of Japan. It led Japan to decide in July 1940 on an ambitious national policy to set its course to “Establishing a Greater East Asia New Order,” which, with Japan, Manchuria and China as the basis, would include the southern region. In line with this, Japan decided on the Outline of the Main Principles for Coping with the Changing World Situation, in order to solve existing problems at a stroke. The main points of the outline are as follows:

1. Efforts shall be made to promptly settle the China Incident.
2. Political ties with Germany and Italy shall be promptly strengthened.
3. Military forces of one element strong shall be advanced into French Indochina to work out [and take] measures to stop the support for the Chiang Kai-shek [Jiang Jieshi] regime from northern French Indochina as well as to obtain resources.
4. As for the Dutch East Indies, Japan shall seek to obtain resources for the time being by diplomatic means. If the situation permits, the aim shall be accomplished even by resorting to force of arms. Even in such a case, friction with the United States shall be avoided as much as possible, though preparations for a war against the United States shall be duly made.

In accordance with this outline, Japan advanced [its forces] into northern French Indochina and also concluded the Tripartite Pact in September of the same year [1940]. [Previously] on 1 August, the United States had already banned the export of aircraft fuel to areas outside the western hemisphere, and it further added scrap iron and steel to the export embargo except for the western hemisphere and Britain. Also, Britain notified the re-opening of the supply route [to the Chiang regime] via Burma. Around this time, the Japanese Army and Navy started their study of the Dutch East Indies invasion operation for the first time as a contingency plan. Although the Navy had been making war preparations so as to be ready for an intervention by a third power in the wake of the China Incident, it could simply not catch up with the developments in the current situation. The Navy even considered to issue the order to put a preparatory fleet mobilization into motion, which was supposed to be passed down only when an opening of hostilities was expected (a preparatory action required to shift the Naval forces and institutions to their wartime footing). In the meantime in September 1940, the Japanese government dispatched Minister of Commerce and Industry Kobayashi Ichizō to the Dutch East Indies as special envoy to start negotiations for an increase in the imports of oil and other resources. At that time in the United States, President Roosevelt was expected to be reelected for a third term, which, in Japan’s view, would result in a much more uncompromising policy toward Japan.

On 12 September 1940, while Japan worried about a U.S. oil embargo after the expected third-term reelection of Roosevelt, Special Envoy Kobayashi arrived in Java. Special Envoy Kobayashi negotiated to the best of his ability with the aim of importing 3.15 million tons, or if possible, 3.80 million tons of oil. However, on 17 October, before achieving his aim, he received the order recalling him home. At that time, the Dutch East Indies was heavily dependent on the United States and Britain, and the relations [between them] were so close that a meeting between the United States, Britain and the Netherlands on the defense of the region was held in Singapore in October 1940. Replacing Special Envoy Kobayashi, Ambassador
Yoshizawa Kenkichi arrived in Java on 28 December, and resumed the negotiations. But the negotiations were not substantially different from those with the Americans and the British. On 14 June 1941, with almost no progress made, he was instructed to discontinue the negotiations and received an order recalling him home.

Prior to this, the Army and the Navy had differed in their judgment of the international situation. The difference was whether the United States would immediately stand up for Britain and wage war against Japan should Japan strike Britain (which meant that they should be regarded as inseparable), or not (which meant they could be considered as separable). The Outline of the Main Principles for Coping with the Changing World Situation of July 1940 had been decided upon the assumption that the United States and Britain were separable, in view of the world situation at that time (i.e. [the battle of] Dunkirk in May, Italy’s opening of hostilities against Britain and France in June, and the surrender of France of the same month). However, in the course of a study conform to the Outline of the Main Principles for Coping with the Changing World Situation, the Navy became skeptical about the judgment that the United States and Britain were separable, and returned to its former judgment that they should be considered inseparable. In the meantime, as the likelihood of a German landing on the mainland of Britain and the latter’s collapse, which Japan had expected, diminished, the Army was also becoming cautious about the use of force in the southern region. As a result, in April 1941, the Outline of Policy toward the South was agreed upon between the Army and the Navy Departments of IGHQ. This outline took a step back from the active advance into the south policy of the previous year and contained the following major points:(3, 4)

1. The objective of the present policy toward the south is to promptly expand the overall national defense strength for the sake of the Empire’s self-preservation and self-defense. To this end:
   (1) The military, political and economic ties between the Empire, French Indochina, and Thailand shall be made closer.
   (2) Close economic relations shall be established between the Empire and the Dutch East Indies.
   (3) Normal commercial relations shall be maintained between the Empire and the other southern nations.
2. The above shall be achieved through diplomatic means. In particular, military ties shall be urgently established with French Indochina and Thailand.
3. In case the following situations should occur and no solutions should be found, force of arms shall be employed for the sake of self-preservation and self-defense:
   (1) In case where the self-preservation of the Empire should be threatened by the embargoes imposed by Britain, the United States and the Netherlands.
   (2) In case the encirclement by the United States, Britain, the Netherlands, China, etc. were stepped up to the degree that it is no longer tolerable from the standpoint of national defense.
4. If the collapse of Britain may be taken for certain, the purpose of this policy shall be achieved, particularly by intensifying diplomatic actions toward the Dutch East Indies.

In the meantime, Japan succeeded in mediating the border dispute between Thailand and French Indochina in November 1940, and in March 1941, it also concluded agreements [with French Indochina and Thailand] that neither of them should have political or military cooperative relations with third countries.
In those days, the United States government increased the economic pressure with the following measures:

**December 1940:** Added aviation lubricant manufacturing equipment to the items subject to an export license.

**February 1941:** Added well-drilling rigs, oil tanks, oil drums and others to the items subject to an export license.

**April 1941:**
1. The decision as to the additional inclusion of derivatives and materials transformed from the items subject to an export license into items to be controlled by an export license was entirely entrusted to the Office for Export Control.
2. The leaking of information to other countries on the production and processing of items currently subject to an export license should be controlled.

Furthermore, on 21 June 1941, right after the discontinuation of the negotiations between Japan and the Netherlands, the United States included all petroleum products in the items subject to export licensing.

The next day, 22 June 1941, the German army all of a sudden invaded the Soviet Union, and the German-Soviet War started. After that, the support for Chongqing [government] by the United States and Britain was strengthened more than ever. [Also], the so-called ABCD encirclement ([by] America, Britain, China, and the Dutch) was formed, and machinations in French Indochina and Thailand to alienate them from Japan were intensified, which made it difficult for Japan to obtain rice, rubber, and tin. The Dutch East Indies was also getting tougher in its attitude. On 25 June 1941, the *Measures for Advancing the Southern Policy*, which included [the idea to] advance into southern French Indochina, was decided upon; it was aimed to cut off the connections between the United States, Britain and the Chongqing government, to confront the United States, Britain, and the Netherlands, which had placed political, economic and military pressure [on Japan] in the southern region, and also to contain the machinations [of these countries] in French Indochina and Thailand to alienate them from Japan. Furthermore, on 2 July, the *Outline of National Policies in View of the Changing Situation* was decided upon, in which three policies were laid down: that [Japan] should firmly hold the course to establish the Greater East Asia Co-prosperity Sphere, that it should accelerate the preparations for a southward advance, and that it should solve the northern problems depending on the situation.\(^{(2)}\)

Note: In order to solve the northern problems [mentioned] here, the Army mobilized an unprecedented number of troops and reinforced the Kwangtung Army and the Korean Army (the Special Grand Maneuvers of the Kwantung Army, a.k.a. “KANTOKUEN”). However, due to subsequent changes in the situation, the lull in tension at the border between Manchuria and the Soviet Union lasted until right before the end of the war.

On 28 July 1941, in accordance with these policies, the Japanese Army advanced into southern French Indochina in a peaceful way. Prior to this, on 25 July, the [Japanese] government had Nomura Kichisaburō, Japanese ambassador to the United States, directly explain to President Roosevelt the intentions and the reasons of the advance [of the Army] into southern French Indochina. In the wake of this, on 26 July, the U.S. government announced a freeze on Japanese assets, which was followed by Britain and the Netherlands. Then on 1 August 1941, the United States put a total embargo on the export of oil [to Japan]. Until that time the U.S. gov-
ernment had not put an embargo on oil because it judged that Japan would certainly start its southward advance to seek oil by force of arms if the oil supply [to Japan] was stopped. Therefore, Roosevelt’s intention to totally stop the oil supply to Japan was of extremely great significance.

4. The Supply and Demand of Essential Materials and the Appropriate Moment to Open Hostilities

It was obvious that Japan, having been prohibited from importing oil, would not be able to survive an anticipated, protracted war against two or more countries with its current stock and [small] domestic production [of oil]. Cornered into such a situation, [Japan] had no other way but to make large concessions in an attempt to break the deadlock in the Japan-U.S. negotiations, or to swiftly obtain oil in the Dutch East Indies even by force of arms.

As of 1 August 1941, an investigation by the Naval Affairs Bureau of the Navy Ministry of the supply and demand of oil in case of war yielded the following results. In this study, it was assumed that the key areas in the south including the Dutch East Indies were captured and the oil produced in those areas could be sent back [to Japan].

1. Estimated Supply and Demand (kilo tons)

<table>
<thead>
<tr>
<th>War</th>
<th>1st year</th>
<th>2d year</th>
<th>3d year</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Amount of Stock at the Beginning of the Year</td>
<td>9,400</td>
<td>4,800</td>
<td>2,740</td>
</tr>
<tr>
<td>B. Acquirable Amount per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Production</td>
<td>200</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Synthetic Oil</td>
<td>300</td>
<td>700</td>
<td>1,500</td>
</tr>
<tr>
<td>Oil Sent from the South</td>
<td>300</td>
<td>2,440</td>
<td>4,770</td>
</tr>
<tr>
<td>C. Total (A+B)</td>
<td>10,200</td>
<td>8,140</td>
<td>9,410</td>
</tr>
<tr>
<td>D. Annual Consumption</td>
<td>5,400</td>
<td>5,400</td>
<td>5,400</td>
</tr>
<tr>
<td>E. Amount of Stock at the End of the Year (C-D)</td>
<td>4,800</td>
<td>2,740</td>
<td>4,010</td>
</tr>
<tr>
<td>F. Minimum Reserve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed reserve in tanks</td>
<td>800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve mainland Japan</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve for decisive battles</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount usable by the End of the Year (E-F)</td>
<td>2,500</td>
<td>440</td>
<td>1,710</td>
</tr>
</tbody>
</table>

2. Presuppositions of this study
(1) All oil facilities [in the areas to be occupied] are destroyed by the time of occupation.
(2) Drilling rigs
The current number of rigs: 200. Under construction: 40 rigs ([ordered by] the Navy; to be completed in December 1941), and 40 rigs ([ordered by] civilians, to be completed in March
1942); the number of rigs [under control of or ordered by] the Army is unknown. Estimated annual turnout of rigs: 100 (amount of steel necessary [for constructing] one unit: 200 tons).

3. Workers

4. Steel pipes stored or in production at home shall be used when they are ready. (The domestic annual production capacity: 250,000 tons, which allows the construction of 2,000 wells of 700 meters deep).

5. The drillings shall be primarily wartime makeshift drillings.

6. The rate of loss of crude oil by enemy attacks shall be set at 10%.

7. Transport capacity
   The current number of tankers is 47 with a [total] capacity of 440,000 tons, and the amount [of oil] to be transported from the Dutch East Indies to the mainland is about 5 million tons. The number of tankers to be built in the next three years (as of 1 August [1941]) is 10 tankers of the 10,000-ton class and about 20 of the 5,000-ton class, with [a capacity of] 200,000 tons in total. (This plan works [only] when the rate of wartime transport loss is calculated at 10%. The shipbuilding costs have to be increased if necessary in the light of actual performance.)

3. Negative factors in this study
   1) Loss of domestic oil reserve by possible enemy air strikes is not included in the calculation.
   2) Although loss [of oil] on site by possible enemy air strikes is, combined with transport loss, calculated at 10% of the production, the loss rate may be larger.
   3) No drilling mishaps were taken into consideration.
   4) In the light of considerable difficulties to transport the oil produced in Seria and Sumatra [to ports], six months was allotted for fixing the pipelines from Seria and seven months for those from Palembang. However, it may take many more days to fix them depending on the degree of damage.

4. Positive factors in this study
   1) The production from the northern Sakhalin oil field is not included in the calculation. (The amount could be 50,000, 200,000, and 1,200,000 tons respectively for the first, the second and the third year, if all of its production will be available.)
   2) [The production from] the oil field in western New Guinea is not taken into consideration. According to fairly reliable information, the quantity of oil in that area is no less than that in Borneo. After the test drillings, deadlight-lids were reportedly put over the wellheads. If this is true, it will be quite easy to obtain the oil after occupation.
   3) [The production of] the domestic oil fields for the first and the second year is calculated at half the amount produced in peacetime. If production work is concentrated on the main oil fields as a stopgap measure, it is possible to obtain the same production amount as in peacetime from the first year on ([which means] an increase in the domestic oil production for both the first and the second year by 200,000 tons.)
   4) As for the [average] monthly production of oil per well, Engineer Ômura of Nippon Oil estimates that the current average production can be [increased] by [at least] three times for sure by drilling new wells as a wartime stopgap measure, while abandoning the wells, whose production has sharply dropped. However, to make this study more reliable, [the average monthly production per well] was calculated at two times or less [the current average production]. If the estimate by Engineer Ômura is correct, the production can be further increased by fifty percent.
   5) The oil fields in central and northern Sumatra are not included in [this] calculation. It is possible to double the amount of oil production in southern Sumatra if drilling rigs are ordered
simultaneously with the opening of hostilities (oil drilling rigs ordered by the Army are excluded from the calculation).

(6) [The situation will be] all the more favorable if fires of gushing oil wells are extinguished or current facilities [assumed to be destroyed] are fixed and used, and extremely favorable, particularly if the fires are successfully extinguished because such wells will be available as they are.

(7) Some further increase in the production of synthetic oil is likely.

5. Conclusions of this study

(1) Due to the oil embargo imposed by the United States, Britain and the Netherlands, the stock of oil [in Japan] will decrease from August onwards by 400,000 tons every month. Unless war is waged by the end of October [1941], fuel [shortage] is feared at the end of the second year of the war.

(2) It is necessary to make as much effort as possible to increase the production of synthetic oil, but not much can be expected unless drastic measures would be taken.

(3) When conducting the Dutch East Indies invasion, it is necessary to come up with good ideas when planning and carrying out the operation in order to minimize damage to the oil fields.

(4) It is necessary to give oil field workers to be dispatched to the occupied areas a training to extinguish fires set at [naturally] flowing oil wells. (Note: For this purpose, a system of defense details was employed later, and two defense details were formed.)

As seen in this study, it was feared that the war potential [of Japan] would sharply drop and finally be lost if the embargo on the import of oil should continue and the moment to wage war should be delayed. Meanwhile, the Cabinet Planning Board made the following estimates at the end of October [1941].

<table>
<thead>
<tr>
<th>War</th>
<th>1st year</th>
<th>2d year</th>
<th>3d year</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Amount of Stock at the Beginning of the Year</td>
<td>8,400</td>
<td>4,660</td>
<td>1,560</td>
</tr>
<tr>
<td>B. Annual Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Production</td>
<td>360</td>
<td>400</td>
<td>440</td>
</tr>
<tr>
<td>Synthetic Oil</td>
<td>300</td>
<td>500</td>
<td>700</td>
</tr>
<tr>
<td>C. Total (A+B)</td>
<td>9,060</td>
<td>5,560</td>
<td>2,700</td>
</tr>
<tr>
<td>D. Annual Consumption</td>
<td>4,400</td>
<td>4,000</td>
<td>3,950</td>
</tr>
<tr>
<td>E. Amount of Stock at the End of the Year (C-D)</td>
<td>4,660</td>
<td>1,560</td>
<td>-1,250</td>
</tr>
<tr>
<td>F. Minimum Reserve</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Amount usable by the End of the Year (E-F)</td>
<td>3,160</td>
<td>60</td>
<td>-2,750</td>
</tr>
</tbody>
</table>

[kilo tons]

Therefore, if Japan had no choice but to wage war, it needed to decide as soon as possible in view of the oil [stocks].

Furthermore, apart from oil, Japan’s stockpiles of other materials for which it depended on imports were also extremely small. The stockpiles of materials kept by the Navy as of August 1940 were as follows. The stockpiles were at such a [low] level that they would barely last for about one year if imports of the materials should stop.

<table>
<thead>
<tr>
<th>Items</th>
<th>Period (months) [the item will last]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>10.5</td>
</tr>
<tr>
<td>Copper</td>
<td>11.0</td>
</tr>
<tr>
<td>Asbestos</td>
<td>13.0</td>
</tr>
</tbody>
</table>
According to the study of the Cabinet Planning Board as of the end of October 1941, the procurement of tungsten ore, tin ore, crude rubber, rice, corn, rock phosphate, pine resin, raw lacquer, cowhide, vegetable fats and oils and the like had already become difficult, while in the southern region, large amounts of crude rubber, sugar, timber, Manila hemp, cinchona, iron, copper, chromium, tin, zinc, nickel, bauxite, and coal for iron-manufacturing were produced. Consequently, from the standpoint of Japan it was desirable to try to get hold of the region as soon as possible.

Also from a military point of view, it was preferable that if worst came to worst and there was no choice but to wage war, it should be done the sooner the better in view of the fact that with the passage of time the ratio in military strength between Japan and the United States would worsen [for Japan] and the encirclement by the ABCD countries could be expected to become stronger; furthermore, that it was necessary to finish the southern operation before a northern operation became feasible because of a thaw in the weather in the north in order to avoid simultaneous operations in both the north and the south, and that it was also necessary to launch the operation before the northeastern monsoon started in the South China Sea which would make the landing operations on the east coast of the Malay Peninsula difficult.

So, the Army and the Navy pressed the government to not lose the right moment in deciding to wage war should the emergency arise. At the same time, the Navy started full-scale war preparations as a precaution and, on 1 September 1941, announced the all-out wartime formation. At that time, the Japan-U.S. negotiations were hardly making any progress. On 6 September, the Main Points for the Implementation of Imperial National Policy was decided at the request of the Army and the Navy. The gist was that Japan should complete the preparations for war by the end of October, while taking all possible diplomatic steps to break the deadlock in the Japan-U.S. negotiations and try to attain its minimum demands, but that it would nevertheless decide to wage war in the beginning of October if it had no prospect of attaining its demands.

5. Changes in the Measures to Cope with the Fuel [Problem]

As seen above, Japan was heavily dependent on its hypothetical enemy, the United States, for the supply of oil as the energy source of all of Japan’s activities, so the [U.S.] export con-
trols against Japan posed a great threat to the latter. To put it forcibly, it may even be said that [the controls] forced the latter into war. In view of the importance of oil, let us try to summarize the changes in the policy adopted by the Navy, which had a leading role in [Japanese] oil policy, as well as the changes in the national oil policy.

1. The Navy’s countermeasures [against oil shortage]

At the end of the Meiji Period when heavy oil came into use as fuel for naval vessels, it was expected that [the demand] could be covered by domestic production. However, heavy oil became the only fuel for the engines of naval vessels; then it was also adopted as fuel for civilian factories and the like, and the relation between supply and demand became, contrary to expectations, rather precarious. The Navy, considering it urgent to quickly stockpile oil, purchased 3,700 tons by the end of 1909. Afterwards, the Navy aggressively purchased and stored oil, and by the end of 1926, the [oil storage] tank capacity reached 1.59 million tons, and the heavy oil storage 1.54 million tons.\(^7\)

In 1920, the Imperial Diet approved the “Eight-Eight Fleet Plan” ([aiming to build] a large fleet of eight battleships and eight [armored] battle cruisers as the core), which were within the first period of a warship’s life, i.e. eight years from the start of construction, which made the current level of stored oil totally inadequate. On the completion of this plan, the annual amount of heavy oil required in the first year of a war would jump to about 3.6 million tons, and that in the second year and onwards to about 2.6 million tons.\(^7\) Accordingly, the Navy had to urgently push forward comprehensive countermeasures against a fuel [shortage]. The principal measures taken were the following:\(^7, 8, 9\)

1. Promotion of import of overseas oil: The first contract was made in 1917, and imports from Borneo, the United States and others got on track.
2. Development Assistance to the north Sakhalin oil fields: Owing to this measure, the annual production [of the oil fields] reached about 200,000 tons around 1932 and 1933.
3. Development Promotion of oil field(s) in Taiwan: Although the field(s) did not yield satisfactory amount(s), this measure greatly raised awareness regarding oil [shortage] issues in Taiwan, and had a great effect [on promoting alternative fuel plans such as] the use of natural gas.
4. Research on low-temperature carbonization: Although it did not reach [the level of] practical use, the research formed a basis for the coal liquefaction industry.
5. Stimulation of the shale oil industry: Shale oil, when blended with oil from Tarakan at a ratio of three or less to seven, was fit for use by the Navy as heavy oil. It was said that shale oil from the Fushun Mines in Manchuria would reach 5 billion tons, and that that amount was located above the coal bed alone. Shale oil had much potential as alternative liquid fuel and the annual production of unrefined oil reached 370,000 tons from 1939 to 1940.
6. Promotion of the coal liquefaction industry: Although coal liquefaction was by and large successful as an experiment in 1935, due to the high temperature and the high pressure required, there were technical difficulties in its industrial production. [As the industrialization] was also hampered by the difficulty in obtaining materials from 1937 and onwards, the actual production only reached about 10% of the plan.
7. [Increase in] oil storage: Although the target amount of the crude oil storage of the year 1936 was 10 million tons, [only] half of the target was actually stored.
8. Subsidizing the building of tankers.
9. Promotion of countermeasures against [shortage of] aviation fuel: Research on a practical application of tetraethyl lead (an antiknock substance to prevent early ignition and improve power output) as well as research on a method to produce high-octane cracked gasoline by hydrogenation was conducted.
10. Introduction of [foreign] technologies to produce isoctane and aviation lubricant.
(11) Promotion of an industry to synthesize isooctane.

(12) Development of the domestic production of high-grade aviation lubricant: The production succeeded at last in 1943 and 1944.

(13) Construction of oil storage tanks: The [total] capacity reached 6,914,000 tons in 1942.

(14) Facilitating the supply and demand of fuel by streamlining the departments managing it.

2. The transition of the national oil policy

Until about 1930 – 1931, fuel policy was [mainly a subject of] research and discussion. However, in the wake of the Manchurian Incident in 1931, [the Japanese government] shifted to the implementation of a fuel policy, and with the Petroleum Industry Law, which became effective in July 1934, oil came under strict control of the government. The main measures of the national oil policy were as follows.[10] First of all, with the Petroleum Industry Law:

(1) A license system was introduced to control the oil business.

(2) The duty of storing oil was imposed on oil companies: Each company was required to store at all times half the amount of its total imports of crude oil, heavy oil and gasoline of the previous year.

(3) According to the policy [to promote] domestic refining, protection was given to domestic companies by giving an advantage to domestic products over the imported products in the allotment of sales.

Soon after that, due to the outbreak of the China Incident in July 1937, oil consumption had to be brought under control.

(1) The First [Oil] Consumption Controls (November 1937)

[1] Ban on cruising taxis.

[2] Ten percent reduction in gasoline consumption of buses and gasoline-fueled cars in both public and private use.


[5] Creating substitute fuel for official cars by blending 5% alcohol with the gasoline.

[6] Propagating equipment for gasoline-substitute fuel such as charcoal and firewood, and promptly employ wood gas generators for buses, trucks and gasoline-fueled cars in governmental use.

[7] Ten percent reduction in the consumption of heavy oil in the mining and manufacturing industries by increasing the efficiency of its use and by improving facilities.

(2) The Second [Oil] Consumption Controls (May 1938)

About the same time as the enactment of the National Mobilization Law, the regulations for the control of gasoline and heavy oil sales were promulgated, and a coupon sales system was adopted.

(3) The Third [Oil] Consumption Controls (September 1941)

All private vehicles were completely prohibited from using gasoline, and made to run on substitute fuel (wood gas).

Apart from the above, such measures as the implementation of an overall fuel administration by a newly established Fuel Agency, the stockpiling of fuel and the promotion of the substitute fuel industry were taken, but the outlook for the supply and demand of fuel remained bleak.
In conformity with the consumption controls imposed on civilians, the Navy, too, placed a rigid limit on the fuel used in fleet training, the bulk consumer. From 1935 onwards, the Navy earnestly made efforts to conserve oil by only allowing its fleet training an annual allotment of fuel that would merely cover thirty to forty-five around the clock sailings at cruising speed (about twelve knots), with a separate amount set aside for eight around the clock tactical exercises. As for naval vessels not included in the fleet, it further reduced the allotment of fuel, limiting the allotment to an amount that would cover twenty-five around the clock sailings.

6. The Breakdown in the Japan-U.S. Negotiations

As mentioned previously, Japan decided on the Main Points for the Implementation of Imperial National Policy on 6 September 1941, and in the negotiations with the United States tried to attain its minimum demands, but even in mid-October nothing concrete had materialized. The Konoe Cabinet, however, could not make up its mind about war or peace, and finally resigned en bloc. On 18 October the Tōjō Cabinet was formed and, in accordance with the personal instruction of the Emperor, started all over again with the decision of 6 September, and reexamined the whole situation from scratch. Nonetheless, on 5 November, as a result of the reexamination, it was decided “to suspend the initiation of military action should the negotiations with the United States prove successful by 0000 on 1 December.” Pending that, it was decided “to remain resolved to wage war against the United States, Britain and the Netherlands, to set the time for the launch of military action at the beginning of December and to have the Army and the Navy complete their operational preparations, while at the same time making efforts to come to an agreement in the negotiations with the United States.”(2) Following this, the high command set the tentative date for the opening of hostilities on 8 December. Judging from the situation of that time, the outlook for an agreement in the Japan-U.S. negotiations was bleak.

Prior to this, the Navy launched a full-scale war preparation from August 1941 onwards, and on 15 August, the Combined Fleet issued an order to complete the war preparations by the beginning of October (anticipating the opening of hostilities in mid-November). However, partly due to the massive personnel shifts, which followed the announcement of the all-out wartime formation, the war potential [of the Navy] sharply dropped and it had to postpone the tentative date for the opening of hostilities previously fixed on the middle of November. The Army could not complete its preparations in time either, and consequently the [new tentative] date for the opening of hostilities was fixed on 8 December. In the meantime, the work to draw up an operation plan went on, and the plan was for the most part completed by the end of October. Although there were complicated developments in the course of the planning, the surprise attack on Hawaii right at the outset of the war with a unit consisting of the full strength of the main carriers (six carriers) as its core, was adopted in the operational policy of the Navy Department of IGHQ at the strong request of Commander in Chief of the Combined Fleet Admiral Yamamoto Isoroku.

The Navy Department of IGHQ put forth the “Operational policy to be carried out by the Combined Fleet” as of 5 November, and the latter issued its operation orders in conformity to this policy. The Combined Fleet shifted its forces to the dispositions at the time of the opening of hostilities ([by] disposing its forces so as to suit the planned operations), and each unit
started its deployment to the standby positions before the opening of hostilities. Then on 21
November, the Navy Department of IGHQ told the Combined Fleet to advance its units to
the operational waters, and all units started to advance to their respective stations for the
time of launching operations.

Meanwhile, concerning the rough going Japan-U.S. negotiations, the government furthermore
urgently dispatched Ambassador Kurusu Saburō [to the United States] to present a
new proposal and to seek progress in the negotiations. However, the reply from the U.S. Gov-
ernment, the so-called “Hull Note,” was unbending. It plainly demanded the following
points:

1. Withdrawal of all military, naval, air and police forces from China and from Indochina.
2. Repudiation of any government or regime in China other than the regime [of Chiang Kai-shek]
   with its capital at Chongqing.
3. Renunciation of special close relations between Japan and China.

On 28 November 1941, having received the full text of the “Hull Note,” the [Japanese] gov-
ernment and the high command examined the contents in a liaison conference and came to
the unanimous conclusion that this could not be regarded as anything but an ultimatum [to
Japan], and that no way was left now for Japan other than to wage war for its self-preserva-
tion and self-defense. As a consequence, at 1610, 1st December, 1941, the following decision
was given by the Emperor:

The negotiations with the United States in accordance with the Main Points for the Implementation
of Imperial National Policy decided on 5 November were unsuccessful. The Empire [of Japan]
shall wage war against the United States, Britain and the Netherlands.

On the next day, the 2d, both chiefs of the Army and the Navy General Staffs reported to the
Emperor side by side and asked for the approval of the Emperor to exercise military force
against the United States, Britain and the Netherlands from 0000, 8 December, 1941 onwards.
As a result, at 1730 on that day, the Combined Fleet transmitted the secret code telegram “Ni-
itaka-yama Nobore 1208” [Climb Mount Niitaka on 1208] (Fix 8 December as Day X), and
plunged headlong into the Greater East Asia War.