



# HEADQUARTERS U.S. STRATEGIC BOMBING SURVEY (PACIFIC)

27 October 1945

### MILITARY ANALYSIS DIVISION P.O.L. QUESTIONNAIRE

Note: All information submitted should conform to instructions governing original questionnaire unless otherwise noted.

## I: QUANTITY OF STOCKS FOR MILITARY USE:

- 1. List military receipts, by product for 1941 and monthly thereafter through August 1945.
- 2. List military requirements by products, by months, from December 1941 through August 1945. Specify modifications.
- 3. Describe in detail, inspection procedures for petroleum supplies.
  - a. State whether standards of inspection were high.
  - b. State whether such standards were lowered as the war progressed.
  - c. State whether quality consideration limited available supplies.

#### II. STORAGE CAPACITY --- MILITARY:

- 1. List all 1500 kilolitres military tankage capacity and over as of December 1941, by product.
  - a. Underground.
  - b. Above-ground.
- 2. List tankage capacity (1500 kilolitres and over), by product, by month, from December 1941 through August 1945 for the Japanese Empire, including controlled territories and for the Japanese Home Islands.
  - a. Underground.
  - b. Above-ground.
- 3. State amount of tankage capacity dismantled December 1941 through August 1945 specifying locations.
- 4. State percentage of dismantled tankage re-erected.
- 5. State disposition of dismantled tankage.
  - a. Percentage used as steel scrap.
  - b. Percentage used to expand underground storage.
- 6. List percentage of tankage in use having stocks by months from December 1941 through August 1945 (1500 kilolitres and over).
  - a. For the Japanese Empire, including controlled territories.
  - b. For the Japanese Home Islands.

Military Analysis Division P.O.L. Questionnaire (cont'd)

#### III. TYPES OF MILITARY STORAGE:

- 1. State percentage of stocks, by product, in underground storage as of December 1941.
- 2. List percentage of stocks, by product, by months in underground storage for the period from December 1941 through August 1945.
- 3. Describe physical construction of underground storage.
  - a. Steel.
  - b. Reinforced concrete.
- 4. State the average depth of earth cover used in the construction of underground storage.
- 5. State the extent to which "blast" walls were used on the tank farms.
- 6. State the average diameter of above-ground storage tanks.
- 7. State the extent to which above-ground storage tanks were camouflaged.

#### IV. DISTRIBUTION OF STOCKS:

1. List locations of all important stocks showing quantities on hand, by product, by months, for the period December 1941 through August 1945.

#### V. TRANSPORTATION OF STOCKS:

- 1. Discuss, in detail, methods used to transport stocks from refinery to usage point.
  - a. Tank car.
  - b. Tanker.
  - c. Pipe line (refined products).
  - d. Tank-wagon.
  - e. Barrels and cases.
  - f. Animal conveyance.
- 2. List volume of shipments by methods of shipment by months for the period from December 1941 through August 1945.
  - a. For Japanese Empire including controlled territories.
  - b. For Japanese Home Islands.
- 3. Discuss any attempts to transport petroleum products by air. If such attempts were made state whether they proved efficient or inefficient, explaining reasons given in either case.
- 4. List volume of stocks in transit by product, by months from December 1941 through August 1945.
  - a. For Japanese Empire, including controlled territories.
  - b. For Japanese home islands.

Military Aanalysis Division P.O.L. Questionnaire (cont'd)

#### VI. VULNERABILITY OF STORAGE AND STOCKS:

- 1. List percentages of underground and above-ground storage capacity destroyed by months from December 1941 through August 1945, for the Japanese Empire, including controlled territories and for the Japanese Home Islands.
  - a. By air attacks.
  - b. By ground attack.
  - c, Other (Specify).
- 2. List volume of stocks destroyed by months, by types of storage, from December 1941 through August 1945 for the Japanese Empire, including controlled territories and for the Japanese Islands.
  - a. By air attack.
  - b. By ground attack.
  - c. Other (Specify).
- 3. State the percentage of tankage by type needed to be destroyed to destroy, effectively, a significant volume of stocks.
- 4. If tankage was camouflaged discuss its effectiveness.
- 5. If it was necessary to handle petroleum stocks at night state to what extent this contingency became a significant factor detracting from efficiency.
- 6. Compare the losses in destruction of petroleum supplies while in transit with supplies destroyed in tank farms and other storage installations.

#### VII. WEAPON EFFECTIVENESS:

- l. List and discuss the most effective weapons used to destroy above-ground and underground storage.
  - a. HE bombs.
  - b. Fire bombs.
  - c. Delay fuzing.
  - d. Low level attacks by HE rockets,
- 2. List and discuss the most effective weapons used on petroleum supplies in transit,
- 3. List and discuss in detail, giving exact location, of any errors made by the U.S. in attacking dummy or evacuated sites.

# VIII. THE OVER-ALL EFFECT OF THE LIMITATION OF PETROLEUM SUPPLIES ON JAPANESE MILITARY CAPABILITIES:

- 1. Discuss in specific detail the effect destruction of petroleum supplies had on Japanese logistics.
- 2. Discuss in specific detail the extent to which destruction of petroleum supplies resulted in changed ground operations.
- 3. State if the production of aviation gasoline limited the

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available supplies of motor gasolines and other petroleum products to the Army.

- a. Effect on Japanese logistics.
- b. Effect on ground operations.
- 4. List other important factors, if any, limiting petroleum supplies other than the production of aviation gasoline and bombing in order of their importance describing in detail each factors effect on Japanese logistics and ground operations.
- 5. If it was found necessary to abandon or destroy supplies through inability to move such items because sufficient fuel was lacking, describe the kind of supplies and/or equipment and list the amount of each giving locations and dates.
- 6. Discuss the effect of fuel shortages on the evacuation of casualties.
- 7. Discuss in detail the extent to which the destruction of petroleum supplies hastened the conclusion of the war, authenticating by citing specific dates and locations whenever possible.