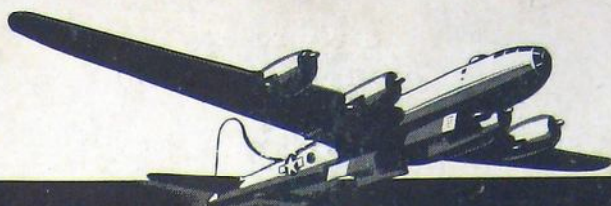


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# *Tactical Mission* **REPORT**

*Lt. General*  
NATHAN F. TWINING  
**RESTRICTED**

By authority of  
C.G., Twentieth Air Force

*18 Mar 49*  
(Date)

*PHB*  
(Initials)



MISSION NO. 251-255  
FLOWN 6 JULY '45  
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**HEADQUARTERS**  
**XXI BOMBER COMMAND**  
**APO 234**

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XXI BOMBER COMMAND  
APO 234

TACTICAL MISSION REPORT

Field Order No. 96

Missions No. 251, 252, 253, 254 & 255

Targets: Chiba, Akashi, Shimizu, and Kofu Urban Areas, and the Maruzen Oil Refinery, Shimotsuma.

6 July 1945

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Prepared by: A-2 Section  
XXI Bomber Command

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HEADQUARTERS  
XXI BOMBER COMMAND  
APO 234

SUBJECT: Report of Attacks Against 4 Urban Areas and 1 Precision Target, 6 July 1945

TO : Commanding General, Twentieth Air Force, Washington 25, D.C.

1. IDENTIFICATION OF MISSIONS:

a. Field Order Number 96, Headquarters XXI Bomber Command, dated 6 July 1945, directed the 58th, 73rd, 313th 314th and 315th Bombardment Wings to participate in low and medium altitude night attacks against 4 urban areas and 1 precision target on Honshu in XXI Bomber Command Missions Numbered 251 through 255.

b. Target Specified:

(1) Primary Visual and Radar Targets:

<u>Mission</u>	<u>Target</u>	<u>Wing</u>	<u>Force Assigned</u>
251	Chiba Urban Area	58th	4 Groups
252	Akashi Urban Area	73rd	4 Groups
253	Shimizu Urban Area	313th	4 Groups
254	Kofu Urban Area	314th	4 Groups
255	Maruzen Oil Refinery, Shimotsu (Target 90.25-1764)	315th	60 Aircraft

(2) No secondary or last resort targets were named.

2. STRATEGY AND PLANS OF OPERATIONS:

a. Strategy: As a result of continuing unfavorable weather over the Japanese mainland another series of cities was selected for night incendiary strikes. Planning was similar to other strikes in which the 4 wings (58th, 73rd, 313th and 314th) were assigned separate cities which were to be attacked at night. The strike against the Empire by the 315th wing was to be its second attack against the Maruzen Oil Refinery at Shimotsu in which a synchronous radar bombing technique would be employed using APQ-7 radar equipment. Because of the wide variation in the velocity and direction of the wind reported on the 315th wing's previous mission, a B-29 flown by one of the best radar crews was to precede the main force into the target area and broadcast the wind to the main striking force at 5-minute intervals. In an attempt to improve bombing accuracy, the altitude on this mission was lowered to 10,000 feet.

b. Importance of Targets:

(1) Mission Number 251: The city of Chiba, located southeast of Tokyo on the eastern shore of Tokyo Bay, is the military center of Chiba peninsula. Its industries include a naval ordnance factory, and a factory of the

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Hitachi Aircraft Company. It is also an important railroad center, with lines radiating northwest to Tokyo, northeast and southeast across Chiba Peninsula, and south to Kisarazu.

(2) Mission Number 252: The city of Akashi, situated 12 miles west of Kobe on the Inland Sea due north of Awaji Island, is the location of the most important of the Kawasaki Aircraft Company plants. This plant produces several fighters, including Tony, Nick and Lily, and is also engaged in the production of inline engines.

(3) Mission Number 253: The city of Shimizu is located in central Honshu on the Tokkaido Mainline Railroad, 8 miles northeast of Shizuoka on the west side of Suruga Bay. This city is an important industrial town and port for central Honshu and possesses the only deep water port for the area in which it is located. In pre-war days, the port also served as the outlet for Shizuoka and was noted as the export center of Japan's tea production. The chief import was bauxite ore, formerly obtained from the Singapore area, for the Shimizu Aluminum plant and the nearby Kambara Aluminum Plant, both of which are the largest of their type in Japan. In view of the current shipping attacks, it may be assumed that railroads are bringing in a fair portion of the bauxite ore. Clustered in a fringe along the waterfront in an area shaped roughly like a fish hook, is a line concentration of industry dominated by the aluminum plants, but including the port facilities, several small boat building and repair yards, oil refinery and storage, lumber basin and storage, railroad yards, station and warehouses, and small machine ships. Located away from the waterfront are a large light metals plant, and an electrical equipment plant.

(4) Mission Number 254: Kofu is located in central Honshu on the Chure Railroad Line, an alternate line west of Tokyo to the Tokkaido Railroad. Kofu is situated approximately 20 miles northwest of Mount Fuji and 35 miles north of Suruga Bay. Kofu is the capitol of Tomanashi Prefecture and has a population of 102,000 (1940 census). It is the largest of 7 somewhat similar mountains basin cities in central Honshu where lack of available land limits agriculture. Kofu, primarily a silk center, was revealed by photo coverage to contain in addition to its silk industry, some light industry of the machine-shope type. The city covers an area of approximately 3 square miles, of which 1 square mile is compact and congested. On the northwest portion of the city is the area of the 49th Infantry Regiment, a replacement unit. It is also the site of many schools, ranging from grade schools to a technical college.

(5) Mission Number 255: The Maruzen Oil Refinery is located near the south entrance to Osaka Bay, 4 1/2 miles southeast of Kainan and 3 miles northeast of Minoshima. An important refinery and oil storage center for the Japanese Navy, this target produces aviation gas, lubrication oil, gasoline, and fuel oil. There are facilities located here for storage of both crude oil and refined products. A unit of the plant may be engaged in the manufacture of steel drums.

#### c. Details of Planning -- Operational:

##### (1) Bombing Plans:

##### (a) Determination of Bomb Load:

1. For use against the Chiba Urban Area the 58th Wing was to load 2 Groups (includes 12 Pathfinder B-29's) with M47 incendiary bombs fuzed instantaneous nose and 2 Groups with clusters of M69 incendiary bombs fuzed to open 5000 feet above the target. Intervalometer settings of 75 feet for the M47 bombs and 50 feet for the M69 clusters were to be employed. The M47 incendiary bomb and aimable clusters of M69 bombs were selected as the best available incendiary weapons for employment against this area which consists primarily of buildings of wood and plaster construction. Intervalometer settings and fuzings specified were selected to insure sufficient functioning of the munitions and to secure a uniform bomb density over the target area. A density of approximately 200 tons per square mile was considered desirable to effect destruction of the area.



2. For use against the Akashi urban area the 73rd Wing was to load 4 Groups (includes 12 Pathfinder B-29's) with clusters of M69 incendiary bombs fuzed to open 2500 feet above the target. An intervalometer setting of 50 feet was to be employed. Since the M47 type incendiary bomb was not available for use by pathfinder aircraft or the first part of the main force, clusters of M69 bombs were selected as the most desirable incendiary weapon available with which to effect destruction. Buildings in the target area were of light construction, requiring only little bomb penetration for maximum damage. The fuzing and intervalometer setting specified were selected to obtain an even density on the target and to insure proper functioning of the bomb.

3. For use against the Shimizu urban area the 313th Wing was to load 2 Groups (includes 12 pathfinder B-29's) with M47 incendiary bombs fuzed instantaneous nose and 2 groups with M17 incendiary clusters (M50 bombs) fuzed to open 3000 feet above the target. Intervalometer settings of 50 feet for the M47 bomb and 35 feet for the M17 clusters were to be employed. This target area, a mixed industrial and residential area with building construction varying from light wooden to steel types was considered susceptible to successful attack by the combination of these 2 weapons. The penetrating and fire-setting qualities of these bombs were considered superior to other available bombs. A density of approximately 8 tons per acre on the target area was expected, and was believed sufficient to effect destruction of the area. Intervalometer settings and fuzings specified were designed to obtain maximum density on the target and to insure proper functioning of bombs and clusters.

4. For use against the Kofu urban area the 314th Wing was to load 1 Group (includes 12 pathfinder B-29's) with M47 incendiary bombs fuzed instantaneous nose and 3 Groups with clusters of M69 bombs fuzed to open 5000 feet above the target. Intervalometer settings of 75 feet for the M47 bombs and 50 feet for the clusters were to be employed. The area to be attacked was believed to be highly inflammable, but contained sufficient fire breaks to cause small fire divisions. It was expected that the M47 bomb dropped by the 1 Group would cause initial appliance fires and the multiple hits obtained by the dropping of clusters of M69 bombs by later formations would insure fires within each fire division. The intervalometer settings and fuzings specified were selected to insure an even density, with maximum concentration on the target area being consistent with the proper functioning of bombs, to obtain penetration of structures in the area.

5. For use against the Maruzen Oil Refinery the 315th Wing was to load its aircraft with 500-pound general-purpose bombs fuzed .025 second delay nose and non-delay tail. The 500-pound bomb was selected since the target installations were of both storage and refinery type, and well dispersed within the target area. The larger number of bomb hits inflicted by the use of this size bomb was expected to result in maximum damage to both manufacturing and storage facilities. The .025-second delay fuze was selected as an alternate fuzing since the .01-second delay fuze was not available. It was believed that the .025-second delay nose fuze would give bomb bursts just above the floor level which would be very effective against the refinery and shop installations in this target. The non-delay tail fuze was selected to give ground level bursts to near miss bombs in order to obtain maximum blast and fragmentation effect against the refinery installations, which constituted the major facilities in the target area. Since the majority of the storage tanks in the target area were small, it was believed that impact initiation of the non-delay tail fuze would result in sufficient crushing force to destroy the tanks receiving direct hits. Therefore, delay fuzing, which would allow penetration into the tanks, was considered unnecessary.

b. Bombing Data: (See Part II, Annex A, for chart on mean points of impact). Axes of attack, bombing altitudes, initial points and other pertinent bombing data were to be as follows:



# S E C R E T

<u>Mission Number</u>	<u>Wing</u>	<u>Axis of Attack (degrees)</u>	<u>Bombing Altitude (feet)</u>	<u>Initial Point</u>	<u>Drift degrees right</u>	<u>Length of Run (Miles)</u>	<u>Time of Run (Min)</u>
251	58th	322	10,000 - 10,800	351830N- 1402500E	7	27	7½
252	73rd	39	7,000 - 7,800	341930N- 1344130E	6	29	7
253	313th	275	7,000- 7,800	345830N- 1390730E	1	35	10½
254	314th	15	13,200- 14,000	3436N - 13814E	8	75	17
255	315th	47	10,000- 10,800	335000N- 1344430E	2	30½	6½

(2) Navigation: Aircraft were to use the following routes:

(a) Mission 251:

<u>Route</u>	<u>Reasons for Selection</u>
Base to Iwo Jima to 351830N-1402500E (IP)	Tactical Doctrine Tata Saki Cape, an easily identified point on the eastern side of peninsula out from Tokyo was selected as the initial point.
Target to 3535N-14031E	Chiba urban area. A 180 degree turn was specified to land's end.
to 3520N-14045E	Land's end.
to Iwo Jima to Base	This dead reckoning point was selected to keep out of bomber stream on the approach to the initial point. Tactical Doctrine

(b) Mission Number 252:

<u>Route</u>	<u>Reasons for Selection</u>
Base to Iwo Jima to 3350N-13445E	Tactical Doctrine.
to 341930N-1344130E (IP)	Landfall was to be the easily identified point just left of I Shima.
to Target	Minot Point on the west side of Awaji Shima which made the best approach to the target was selected as initial point.
to 3452N-13505E	Akashi urban area.
to 3458N-13440E	This point was designated to avoid flak.
to 3333N-13419E	To avoid flak, a left turn was to be made at Himeji.
to Iwo Jima to Base	Land's end. Tactical Doctrine.

(c) Mission Number 253:

<u>Route</u>	<u>Reasons for Selection</u>
Base to Iwo Jima to 3441N-13927E	Tactical Doctrine
to	This point was the lower tip of O Shima and would make an easy turn to the initial point.



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345830N-1390730E (IP) A jutting point just east of the city of Ito and which was easily identified by radar was selected as the initial point.  
 to Shimizu urban area.  
 Target  
 to  
 3501N-13815E This point was designated to avoid flak.  
 to  
 Iwo Jima to Base Tactical Doctrine

(d) Mission Number 254:  
Reasons for Selection

Route  
 Base to Iwo Jima Tactical Doctrine  
 to  
 3436N-13814E (IP) Onai Saki Point, easily identified for the radar approach to the target was selected as the initial point.  
 to Kofu urban area.  
 Target  
 to  
 3514N-13909E Land's end.  
 to  
 Iwo Jima to Base Tactical Doctrine.

(e) Mission Number 255:

Route Reasons for Selection

Base to Iwo Jima Tactical Doctrine  
 to  
 3322N-13403E The landfall point selected was just to left of Muroto Point, making a straight line to the target through the initial point.  
 to  
 335000N-1344430E (IP) The jutting point of land at the entrance to Osaka Bay, making the best approach to the target, was specified as the initial point.  
 to Maruzen Oil Refinery.  
 Target  
 to  
 3335N-13557E Land's end.  
 to  
 Iwo Jima to Base Tactical Doctrine.

(3) Flight Engineering:

(a) For Missions Number 251 through 254:

1. Altitudes and speeds, except for the bombing run and compression of the striking force, were to be in accordance with XXI Bomber Command Tactical Doctrine. No assemblies were to be effected.

2. Fuel reserve data indicated that the 58th, 73rd, 313th, and 314th wing would not require bomb bay tanks, and that a total fuel load of approximately 6700 gallons would be carried.

3. No maximum or minimum bomb loads were specified. Bomb loads were to be as follows:

<u>Wing</u>	<u>Potential Capacity</u> (Pounds)	<u>Expected Average</u> (Pounds)
58th	17,000	15,000
73rd	17,000	15,000
313th	16,000	16,000
314th	14,000	14,000

4. The ammunition load per aircraft was estimated at 300 pounds.



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(b) Mission Number 255:

1. Except for the bombing run and compression of the striking force, all aircraft were to fly at speeds and altitudes which would allow maximum range and safety. Speeds would be approximately 5 miles per hour higher than the speeds recommended in the XXI Bomber Command Tactical Doctrine. No assemblies were to be effected.

2. The expected fuel load was to be carried in full wing and center wing tanks. Estimated bomb load was to 18,000 pounds.

(4) Radar Mission Planning:

(a) Mission Number 251: Chiba is located on the eastern coast of Tokyo Bay, giving an excellent radar return. The approach to the city is governed by the flak defenses and by the difficulty of choosing initial points. A good approach would be from the southwest, utilizing check points along the eastern peninsula in Tokyo Bay. This axis runs the gauntlet of heavy antiaircraft and searchlight defenses. The only other run is from the southeast, using 351830N-1402500E as the initial point and was selected because this point is distinctive and had been used successfully on previous strikes in the Tokyo area. Radar winds could be obtained from the island chain between Iwo Jima and O Shima and the point at 3454N-13951E. Direct synchronous bombing was to be employed. The cross wind run was not expected to cause great cross-trail errors in the incendiary clusters because the estimated altitude winds would not be strong.

(b) Mission Number 252: Akashi is a familiar target area and the plan was to be similar to the one used on the Empire Plan to target 1547 (Kawasaki Aircraft Plant at Akashi). The best axis would be from the southeast, striking the city perpendicular to the longitudinal axis. In this way all azimuth errors would be in the target area. Most of the present bombing errors are in deflection due to poor radar winds or poor refinement of drift. The city is along the coast and can be identified very easily. The initial point, 341930N-1344130E, is a prominent coastal checkpoint on Awaji-Shima. Using an altitude of 7,000 to 7,800 feet, the bombing was to be by direct synchronous method. The many peninsulas prior to the initial point offer excellent points for making radar wind runs.

(c) Mission Number 253: Shimizu is another coastal city which can be easily identified. The route to the initial point has many ideal island checkpoints for establishing a radar wind. The initial point, 345830N-1390730E, is on the peninsula in the Sagami-Nada. The westerly axis was to be perpendicular to the long axis of the city. A distinctive reference point is the curved peninsula in the harbor area. The city is built along the coast and since past errors were greater in deflection, this axis was recommended as the best.

(d) Mission Number 254: Kofu is one of the first inland cities to be attacked by incendiaries at night. With Mount Fuji at 12,388 feet and a mountain of 10,000 feet to the west of the city, it was felt that the mission altitude should be high. For this reason, an altitude of 13,200 to 14,000 feet was specified. Most wings were in favor of a higher altitude in order to accomplish good synchronous release. This target would be an excellent city to compare final results because, heretofore, 10,000 - 10,800 feet has been the highest altitude used in night incendiary attacks. The best axis is from 3436N-13814E which is the landfall point and also the initial point. Mount Fuji was considered to be an ideal reference point for locating the city signal. From radar reconnaissance photos, the city stands out as a well defined signal. Kofu has been used as an initial point on most of the missions into the Tokyo area. Direct synchronous release was to be used.

(e) Mission Number 255: This mission to the Maruzen Oil Refinery was planned to give the optimum approach for the APQ-7 equipment. The requirements set up for planning were: low drift factor, good landfall point for the initial wind run, a definite radar initial point, and, if possible, a small



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turn at the initial point. Based on these requirements for radar navigation, a route was chosen which approximated a straight line from landfall through the initial point to the target. Landfall was designated as 3322N-13403E. This point is the promontory on the coast, 10 miles north of the distinctive point of land at Muroto-Saki. Muroto-Saki is on the southeast tip of Shikoku which is ideal for a radar wind run. The initial point is 45 nautical miles from landfall and should be within easy range after making the turn at landfall. The initial point is a distinctive peninsula at 335000N-1344430E. The course to the initial point slides along the eastern coast of Shikoku and will be an aid in establishing course and drift. The initial point turn necessitates a very small correction of only 3 degrees in course. The Maruzen Oil Refinery is on the coast with a river running along the northern side of the target. It shows up on the APC-7 as an excellent return. On the first mission, an altitude of 15,000 feet was specified. The results were negligible, but many close hits were made. Therefore, for the second attack, an altitude of 10,000 feet was planned.

(5) RCM:

(a) For Mission 251 through 254:

1. Four special jamming aircraft were recommended for use on the mission to the Chiba Urban Area because of the searchlight-day fighter combination activity along the approach. Two of the special aircraft were to orbit in a 10-mile radius circle about 3532N-14010E at an altitude of 15,000 feet for one and 15,500 feet for the other. The other 2 aircraft were to orbit in a 10-mile radius around the center at 3536N-14008E at an altitude of 16,000 feet for one, and 16,500 feet for the other. These special jamming aircraft were to barrage jam the 190-210 megacycle and 78 megacycle regions and spot jam any gun-laying or searchlight signals appearing outside the barrage. Additional quantities of rope were to be carried by these aircraft.

2. No special jamming aircraft were recommended for Missions Numbered 252, 253, and 254 because of meager flak and searchlight defenses in these areas. All strike aircraft were to carry jamming equipment. Rope was to be carried and dispensed in accordance with existing regulations.

(b) Mission Number 255:

1. Each aircraft was to carry rope to be dispensed when protection was needed from radar controlled flak and searchlights.

2. Since the 315th Wing was not equipped with RCM equipment, search and jamming could not be conducted.

(6) Air-Sea Rescue: (See part VI, Annex A, for details.) The Navy was furnished with details of the missions and provided the following Air-Sea Rescue facilities: 10 submarines, 10 dumbos, and 4 surface vessels. In addition to these facilities, the Navy assigned crash boats in the vicinity of the Command bases for take-offs and landings. This Command assigned 5 superdumbos to orbit the submarine positions.

d. Details of Planning--Intelligence:

(1) Enemy Fighter Reaction:

<u>Mission</u>	<u>Estimated Number of Enemy Fighters</u>	<u>Probable Amount of Opposition</u>
251	25	Negligible to weak.
252	10 to 15	Nil to weak.
253	15 to 20	Nil to negligible
254	20 to 25	Nil to negligible
255	20 to 25	Negligible to weak



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## (2) Enemy Antiaircraft:

(a) Mission Number 251: The antiaircraft defenses at Chiba were as follows: heavy guns, 10; medium weapons, 44; and searchlights, 16. This was a very meager defense against night attack. Only meager to moderate flak was expected, but the route necessarily crossed a part of the outer searchlight defenses of Tokyo (Chiba Peninsula). At the planned altitude of attack, 10,000 to 10,800 feet, the medium flak would have slight to nil effect on the attacking aircraft. It was planned to approach this target from the southeast, with a 180 degree turn following bombs away. This route would avoid all other flak areas and would not expose the aircraft to the Tokyo defenses.

(b) Mission Number 252: The defenses of Akashi were as follows: heavy guns, 19; medium weapons, 18; and searchlights, 2. This was a very weak defense against night attack and flak was expected to be nil to meager at the planned altitude of attack (7,000 to 7,800 feet). The approach was planned from the southwest, avoiding flak areas on Shikoku. A left breakaway, avoiding the Himeji defenses, was specified.

(c) Mission Number 253: In the Shimizu-Shizuoka area there were the following antiaircraft defenses: heavy guns, 20; medium weapons, 25; and searchlights, 1 (estimated 2 to 6). This area was very sparsely defended against night attack at the planned altitude (7,000 to 7,800 feet). The route was planned to avoid the defenses of Numazu and Kambara on the north shore of Suruga Bay. The breakaway was due west and then southwest to land's end.

(d) Mission Number 254: Meager and inaccurate heavy flak had been encountered over Kofu on daylight missions, however, photographic reconnaissance failed to indicate defenses located there. A 13,200 to 14,000-foot attack altitude was planned in view of the proximity of the course to Mount Fuji. At this altitude, flak was no problem in planning. The route was just barely in range of the Shizuoka defenses, but only meager and inaccurate flak was expected from these defenses.

(e) Mission Number 255: Meager and inaccurate flak had been encountered at Wakayama but there were no adequate photographs of the area to confirm it at the 15,000 to 16,000 foot altitude planned. Flak was of minor importance. The route was planned to avoid all known defenses.

## 3. EXECUTION OF THE MISSIONS:

a. Take Off: Take-offs were accomplished as follows:

<u>Mission</u>	<u>Wing</u>	<u>Pathfinder Aircraft</u>	<u>Strike Aircraft</u>	<u>First Take-Off</u>	<u>Last Take-Off</u>
251	58th	12	117	060939Z	061106Z
252	73rd	12	119	060806Z	060912Z
253	313th	12	124	060849Z	061034Z
254	314th	13	125	060730Z	060912Z
255	315th	—	60	060700Z	060806Z
XXI Bomber Command		49	545*	060700Z	061106Z

\* This total does not include 4 RCM aircraft and 5 Super-Dumbos.

b. Route Out: Long range navigation was accomplished to all targets by individual aircraft. A total of 8 navigators for all 5 wings had course errors at landfall deemed to be excessive. Correct orientation was made, however, and no aircraft failed to bomb the primary target because of navigational error.

c. Over Target:



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(1) Primary Targets: Target area navigation, wind determination, and bombing were accomplished by radar. Winds in the target areas varied from 270 to 300 degrees at 20 to 25 knots respectively. A total of 570 B-29's dropped 4306 tons of incendiary and general purpose bombs on the primary targets from 061419Z to 061905Z at altitudes ranging from 6,900 to 17,100 feet.

(2) Targets of Opportunity: Five B-29's, 2 of which also bombed primary targets, dropped 23.3 tons of incendiary and general purpose bombs on various targets of opportunity.

(3) Remainder of Force: There were 21 non-effective aircraft.

d. Route Back: Returns to bases were as briefed, with the exception of 21 B-29's which landed at Iwo Jima.

e. Landing: Aircraft landed at home bases under good weather conditions as follows:

<u>Mission</u>	<u>Wing</u>	<u>First Landing</u>	<u>Last Landing</u>
251	58th	062251Z	070243Z
252	73rd	062040Z	070001Z
253	313th	062100Z	062334Z
254	314th	062128Z	062352Z
255	315th	<u>062101Z</u>	<u>062257Z</u>
XXI Bomber Command		062040Z	070243Z

f. Losses: One B-29 of the 313th Wing was lost when it ran off the end of the runway because of brake failure. All crewmembers were saved.

## g. Operations Summary:

(1) Navigation (See Part I, Annex A, for Track Chart.) Navigation and time control as a whole were considered satisfactory on these missions. There were, however, more individual discrepancies than on previous missions. These discrepancies were made by approximately 1.3 percent of the aircraft bombing the targets and were not considered excessive.

(2) Bombing: (See Part III, Annex A, for details.) Most of the bombing was accomplished by radar.

(3) Flight Engineering: (See Part IV, Annex A, for Chart, and Consolidated Statistical Summary, Annex E, for details.)

### (a) Narrative of Missions as Flown:

1. Cruise to the Mainland: Individual climbs were made immediately after take-off to altitudes between 4,000 and 8,000 feet where the initial cruise was flown. No assemblies were made. Compression of the forces was effected by varying cruising altitudes and air speeds.

2. Bomb Run: Bombing was conducted by individual aircraft at altitudes between 6,900 and 17,100 feet.

3. Return to Base: Return to bases was conducted by individual aircraft without difficulty. Minimum fuel was used by airplanes cruising at 10,000 to 12,000 feet and descending into the traffic pattern. Maximum range speeds as specified by this headquarters gave the best fuel consumption.

(b) Comments: No airplanes carried bomb bay tanks. All Wings.



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except the 315th, carried full loads of bombs. The 315th Wing, carrying 500-pound General Purpose bombs, carried an average of 74 percent of full load capacity and landed with an average of 1386 gallons of fuel.

(4) Radar: (See Part V, Annex A, for details and Radar Charts.) All bombing was accomplished by radar.

(5) Gunnery: See Part VI, Annex A, for details.

(6) Air-Sea Rescue: (See Part VII, Annex A, for details.) There were not ditchings or bailouts, and all aircraft were accounted for.

h. Weather: (See Annex B, for details.) Weather on these missions was approximately as predicted.

i. Communications:

(1) RCM: (See Part I, Annex C, for details.)

(a) The special jamming aircraft used by the 58th Wing on its mission to Chiba were employed successfully. A total of 15 signals were intercepted and jammed. Cloud cover in the Chiba area aided in preventing effective use of searchlights.

(b) The 315th Wing which was not yet equipped with electronic jammers, employed rope as a countermeasure with excellent results.

(2) Radio: (See Part II, Annex C, for details.) There were no breaches of net discipline or violations of security reported during these missions.

j. Intelligence Summary:

(1) Enemy Air Opposition: (See Part I, Annex D, for details.) Approximately 60 to 70 enemy fighters were sighted on these missions, with only 5 attacks being made against B-29's. No B-29's were lost or damaged as a result of these attacks. B-29 crews made no claims.

(2) Enemy Antiaircraft: (See Part II, Annex D, for details.) Little antiaircraft opposition was encountered on these missions. Two aircraft of the 313th Wing sustained flak damage on Mission Number 253 against Shimizu.

(3) Damage Assessment: (See Part III, Annex D, for details.) Damage to targets as a result of these missions was as follows:

(a) Mission Number 251, Chiba Urban Area: Approximately .86 square miles or 43.4 per cent of the built-up portion of the city.

(b) Mission Number 252, Akashi Urban Area: Approximately .81 square miles or 57 per cent of the city's built-up area.

(c) Mission Number 253, Shimizu Urban Area: Approximately .71 square miles or 50 per cent of the city's built-up area.

(d) Mission Number 254, Kofu Urban Area: Approximately 1.3 square miles or 65 per cent of the city's built-up area.

(e) Mission Number 255, Maruzen Oil Refinery: Approximately 409,975 square feet or approximately 79.1 per cent of the total roof area.

*Curtis E. LeMay*  
CURTIS E. LEMAY  
Major General, U.S.A.  
Commanding



S E C R E T

ANNEX

A

OPERATIONS

- Part I - Navigation Track Chart
- Part II - Mean Points of Impact
- Part III - Bombing
- Part IV - Flight Engineering Chart
- Part V - Radar and Radar Charts
- Part VI - Gunnery
- Part VII - Air-Sea Rescue Chart

Missions No. 251, 252, 253, 254, and 255

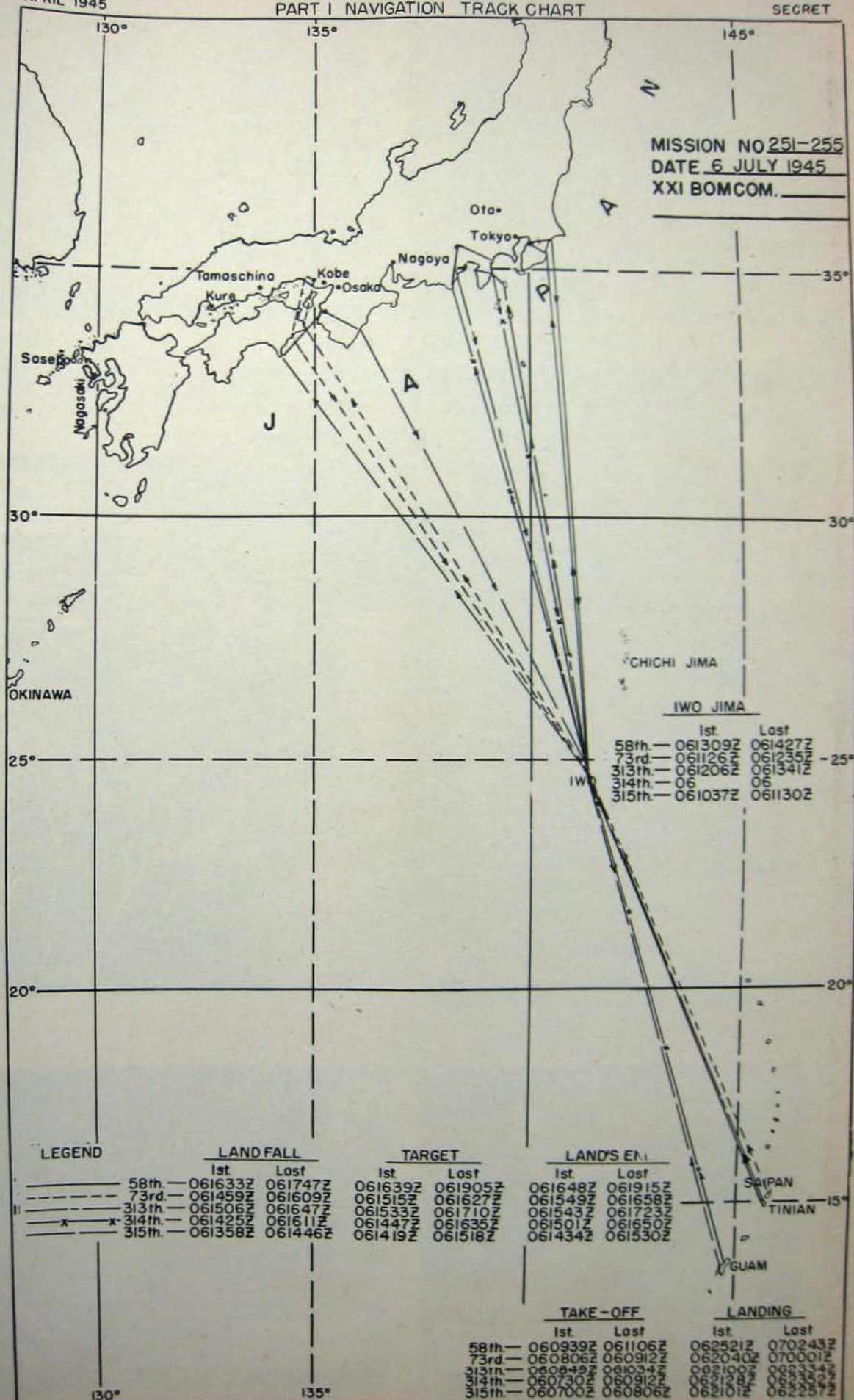
6 July 1945



APRIL 1945

## PART I NAVIGATION TRACK CHART

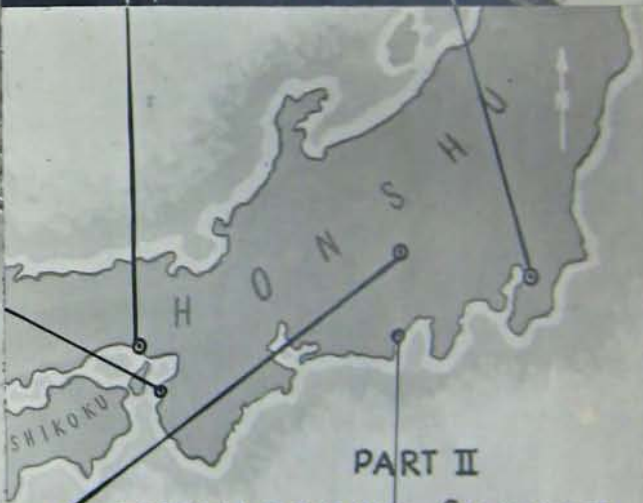
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SECRET



SECRET



SECRET  
PART III - BOMBING

1. Mission No. 251, Chiba Urban Area:

a. The greatest difficulty encountered was a 10/10 undercast in the target area. Aircraft with inoperative radar had difficulty making visual corrections since only a glow on the cloud could be seen. Three aircraft encountered rack malfunctions. One aircraft equipped with A-2 releases was unable to release bombs by salvo or electrically. The bombardiers released the bombs manually over water.

b. The initial point and axis of attack were very satisfactory. The average drift reported was 3° right. Compressibility for this wing was 146 minutes.

2. Mission No. 252, Akashi Urban Area:

a. An undercast was encountered until after bombs away. The area immediately over the target was clear, but the clear area was not great enough to permit easy visual corrections for those aircraft with inoperative radar. Six aircraft encountered radar malfunctions and the bombs were dropped by dead reckoning navigation method. Three aircraft reported malfunction of A-2 releases and racks and one malfunction of unknown cause.

b. The axis of attack and Initial Point were considered well selected. The initial point was easily identified on the radar scope and the axis of attack from the initial point to the target proved highly satisfactory. The average drift reported was 5° right. Compressibility for this wing was 72 minutes.

3. Mission No. 253, Shimizu Urban Area:

a. The difficulties encountered were 9 to 10/10 undercast and thermals in the target area. Some aircraft were able to make visual rate corrections when the breaks in the undercast permitted. The aircraft bombing during the latter part of the strike encountered high smoke columns which towered above the bombing altitude. The thermals at the bomb release line caused some aircraft difficulty. Three aircraft reported malfunction of B-10 shackles.

b. The initial point and axis of attack were reported as satisfactory and contributed considerably to the ease of executing the mission. The average drift reported was 2 degrees left. Compressibility for this wing was 97 minutes.

4. Mission No. 254, Kofu Urban Area:

a. The greatest difficulty encountered was thermals at the bomb release line, for aircraft bombing during the latter part of the strike period. Some aircraft were forced to change their axis of attack to avoid flying through high smoke columns, which towered above the bombing altitude. Three aircraft reported malfunction of B-10 shackles and 5 aircraft reported malfunctions of unknown cause.

b. The initial point and axis of attack were reported satisfactory. The average drift reported was 5° right. Compressibility for the wing was 108 minutes.

5. Mission No. 255, Maruzen Oil Refinery:

a. The bombardier and radar operator had some difficulty synchronizing due to the low altitude flown and the short time allowed for synchronization. One aircraft encountered difficulty with bomb bay doors and 8800 pounds of bombs were jettisoned ineffectively over water.

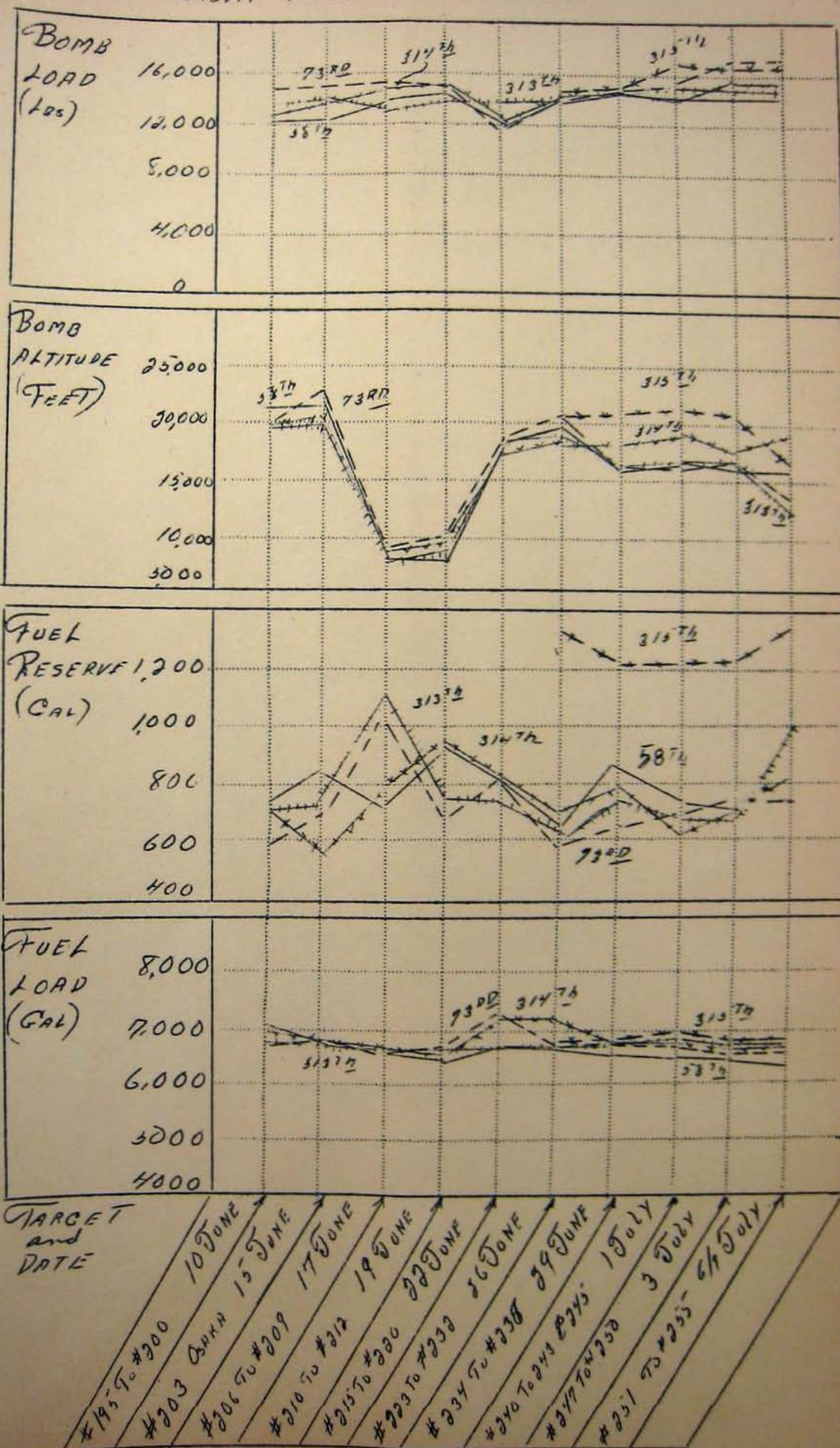


2. The initial point and axis of attack were satisfactory. However, several aircraft failed to make the turn at the initial point good, and the axis of attack varied considerably from the briefed axis. The average drift reported was  $4^{\circ}$  right. Compressibility for the wing was 59 minutes.

\* Based on Wing Bombardiers' Report.



# FLIGHT ENGINEERING CHART





S E C R E T

PART V - RADAR

1. Radar Bombing:

a. AN/APQ-13:

- 494.
- (1) Number of sets operative on take-off: 515.
  - (2) Of A/C bombing - number of sets operative over target:
  - (3) Percentage operative over targets: 96%.
  - (4) Number of sets operative on landing: 487.
  - (5) Total A/C using azimuth stabilization: 379.
  - 76%. (6) Percentage of bombing A/C using azimuth stabilization:
  - (7) Average maximum range in nautical miles of targets:  
5000-10000 feet - 75  
10000-15000 feet - 68
  - (8) Average maximum range in nautical miles of beacons:  
130 at 8,000 feet.  
124 from 5,000 - 10,000 feet.  
141 at 11,130 feet.
  - miles. (9) Average maximum range of Japanese Coast: 55 nautical
  - (10) Three set failures in pathfinder A/C.
  - (11) Interference varied from light to intense. The main difficulty was the heavy cloud cover, thus making landfall difficult.

b. APQ-7:

- (1) 60 sets operative at take-off.
- (2) 59 sets operative over target.
- (3) 58 sets operative on return to base.
- feet. (4) Maximum range of beacons - 100 nautical miles at 9,000
- feet. (5) Maximum range of targets - 45 nautical miles at 11,000
- (6) Interference - weather and static electricity.
- (7) Coast of Empire picked up at 60 nautical miles.
- (8) Equipment failures - 1.
- (9) Comments on recurring troubles - beacons not properly turned, poor range, camera malfunctions.

2. Radar Navigation APN-4; APN-9:

- a. Number of loran fixes reported: 2698.



S E C R E T

b. Antenna used and usable maximum range:

	<u>Fixed</u>	<u>Trailing</u>	<u>Command</u>
(1) Ground Wave:	550	533	435
(2) Sky-Wave:	1133	1250	1220

c. No interference was reported except in electrical storms.

d. Eleven sets were reported as inoperative.

3. IFF - SCR-695:

a. Sets turned on and off as per SOP.

b. Sets checked on average of 35 times per A/C.

c. Only 2 sets were inoperative.

4. Absolute Altimeter - SCR-718:

a. Sets operative on mission - 255.

b. Only 1 malfunction was reported.

Comments:

Direct radar-bombsight bombing was predominant with some groups using fixed angle release.







# S E C R E T

## PART VI - GUNNERY\*

1. No. of A/C firing: 1.

2. Average turret load:

<u>UF</u>	<u>UA</u>	<u>T</u>	<u>LA</u>	<u>IF</u>
466.6	287.5	350	315	200

3. No. of rounds fired in Combat per turret:

<u>UF</u>	<u>UA</u>	<u>T</u>	<u>LA</u>	<u>IF</u>
0	0	150	0	0

4. No. of rounds fired in combat 150.

5. No. of rounds used for test firing 5095.

6. Guns Loaded: 58th Wing 73rd Wing 313th Wing 314th Wing 315 Wing

Hot	Cold	Hot	Hot	Cold
-----	------	-----	-----	------

7. Malfunctions: C.F.C CAL. .50 M.G.

Dynamotor out	ammunition jams - 2
Turret lag in tracking	Guns out of time - 2
stowing circuit out	bolt switch backwards
1 speed system out	

( AFG-15 Malfunctions- sixteen (16)

8. Equipment operation (Total percentage operative).

<u>C.F.C.</u>	<u>CAL. .50 M.G.</u>
99.8%	99.76%

9. Remarks: AFG-15 malfunctions were due to lack of knowledge of set.

\* Based on Wing Gunnery Officer's Reports.



APRIL 1945

## PART VII AIR-SEA RESCUE CHART

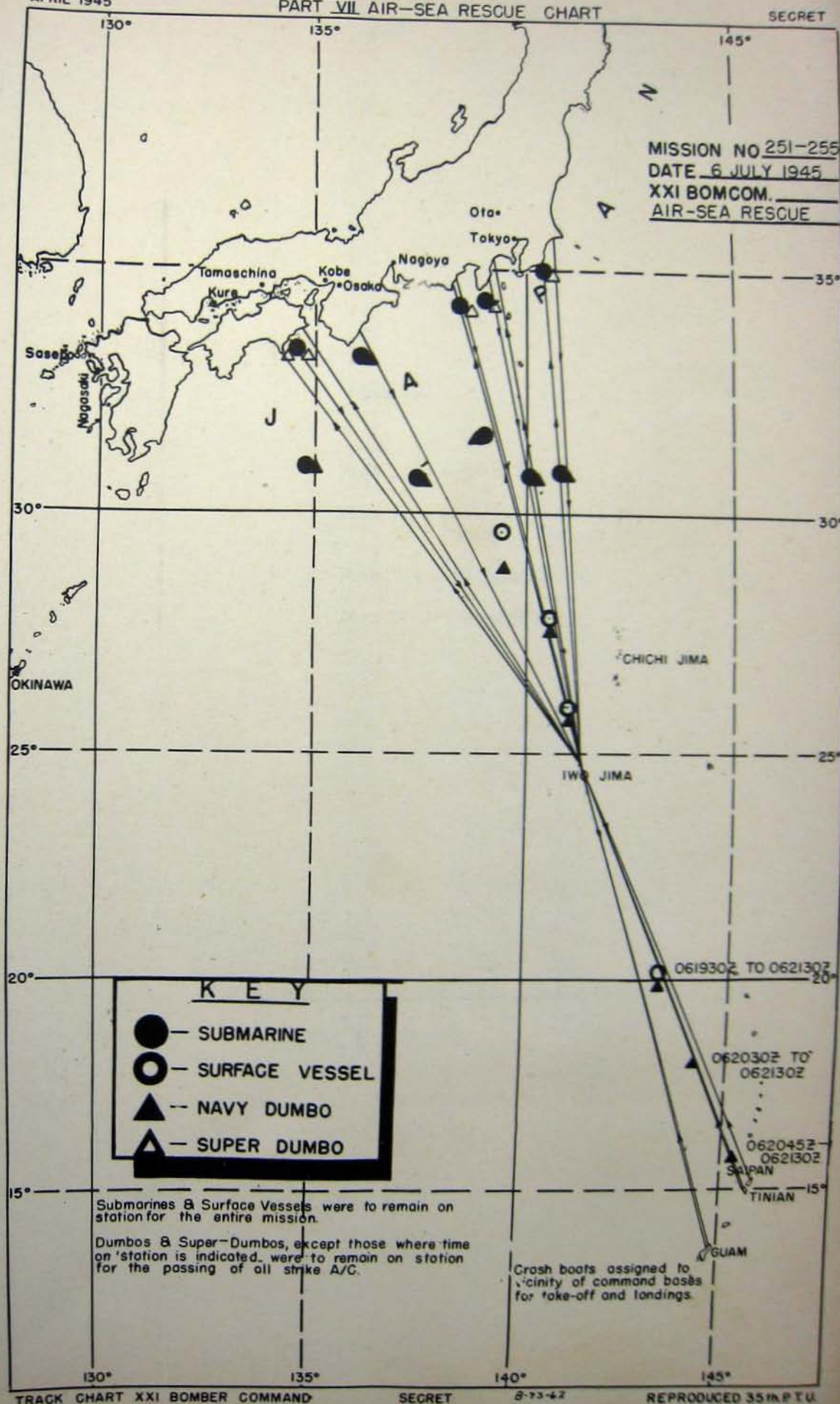
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MISSION NO 251-255

DATE 6 JULY 1945

XXI BOMCOM.

AIR-SEA RESCUE





C O N F I D E N T I A L

ANNEX

B

WEATHER

Part I - Weather Summary

Part II - Chart - Forecast vs -  
Observed Weather

Part III - Prognostic Map

Part IV - Synoptic Map

Missions No. 251, 252, 253, 254 & 255

6 July 1945



C O N F I D E N T I A L

FINAL WEATHER SUMMARY

PLANNING FORECAST

Bases: 5-7/10 low clouds, base 1800 ft, tops 10,000 ft with few to 25,000 ft, and light to moderate showers with 5/10 middle clouds at 13,000 ft in morning. Cloud amount decreasing gradually in afternoon to 4/10, base 2000 ft, tops 6000 ft.

Route: To 18° N; as bases.  
To coast: 4-6/10 low clouds, base 2000 ft, tops 6000 ft with few tops to 18,000 ft and widely scattered showers.

Targets: Tokyo: 8-10/10 low clouds, base 1500 ft, tops 5000 ft with 10/10 middle clouds in broken layers from 10,000 ft to 16,000 ft and 7/10 high clouds at 26,000 ft. Slow clearance in afternoon to broken low and scattered middle clouds.  
Rest: S/ flow with 6-8/10 low clouds on windward slopes and shores and 3-4/10 on lee sides with 5-6/10 patchy middle cloud at 14-16,000.

OPERATIONAL FORECAST

Bases at Scattered low, middle and high clouds with scattered light  
Take-off: showers.

Route: There will be scattered low, middle and high clouds with scattered light showers at southern end of the zone to 23° N. From 23° N to 33° N there will be scattered to broken low clouds and scattered middle and high clouds. From 33° N to target there will be scattered low and high clouds with scattered to broken middle clouds.

Targets: Kofu: 5/10 cumulus, base 1800 ft, top 6-10,000 ft; 5/10 altostratus in layers between 16,000 ft and 18,000 ft; 4/10 cirrus at 30,000 ft. Winds at 14,000 ft will be 290° at 20 knots.  
Chiba: 6/10 cumulus, base 1800 ft, top 6000 ft; 4/10 altostratus, base 15,000 ft, top 17,000 ft; 3/10 cirrus at 30,000 ft. Winds at 10,000 ft will be 300° at 20 knots.  
Shimizu: 6/10 cumulus, base 2000 ft, top 6000 ft; 4/10 altostratus at 15,000 ft; 3/10 cirrus at 30,000 ft. Winds at 8000 ft will be 300° at 20 knots.  
Akashi: 4/10 stratocumulus, base 2000 ft, top 6000 ft; 1/10 cirrus at 30,000 ft. Winds at 8000 ft 300° at 15 knots.  
Yakayama: 4/10 stratocumulus, base 2000 ft, top 6000 ft; 1/10 cirrus at 30,000 ft. Winds at 10,000 ft will be 300° at 15 knots.

Bases on

Return: Scattered low, middle and high clouds.

OBSERVED WEATHER

Bases at 4-6/10 low clouds, base 1800 ft, tops 6000 ft with patches of  
Take-off: 6/10 middle cloud estimated 14,000 ft. Visibility unrestricted.  
Route to ed. To 20° N: 4-6/10 low clouds, base 1500 tops 5-7000 ft with targets: few tops to 20,000 ft and occasional lightning visible. One line of cloud near 17° N with tops to 25,000 ft about 10 miles wide.  
To 32° N: 2-4/10 low clouds, base 2000 ft, tops 4000 ft.  
To coast: low cloud increasing rapidly to 6-8/10 with tops 8 to 11,000 ft and half of tops to 17-20,000 ft with 8/10 middle clouds at 13,000 ft, tops unknown, and scattered high clouds.

Targets: Chiba: 10/10 low clouds, base unknown, tops 6-7000 ft. 7/10 thin middle clouds at estimated 17,000 ft. Visibility above cloud unrestricted. Winds at 10,000 ft were 300° at 22 knots.  
Kofu: 8/10 low clouds, with tops 8-11,000 ft and 5/10 middle clouds near 11,000 ft, tops 13,000 ft and second layer of middle clouds at 18,000 ft. Few breaks allowed some visual checks on bombing. Winds at 14,000 ft were 295° at 25 knots.  
Shimizu: 4-10/10 low clouds, tops 7500 ft with 6/10 thin middle cloud in scattered layers 11-20,000 ft. Visibility 10 miles. Winds at 8000 ft were 290° at 20 knots.  
Akashi: 4-8/10 low clouds, tops 7000 ft and 8/10 middle cloud



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in thin broken layers between 7 and 20,000 ft. Winds at 8000 ft were 305° at 20 knots.

Remarks: 10/20 low clouds, base unknown, tops 6-7000 ft. 7/20 thin middle clouds at estimated 17,000 ft. Visibility above cloud unrestricted. Winds at 10,000 ft were 300° at 22 knots.

Route on: AS route to targets except aircraft returned at 20,000 ft and  
Return: encountered icing, moderate turbulence and occasional hail and rain in section just off enemy coast.

Waves on: 2-5/20 low clouds, base 1800 ft, tops 5000 ft with scattered  
Return: upper clouds. Visibility unrestricted.



MISSIONS 251, 252, 253, 254 & 255

# FORECAST WEATHER

6-7 JULY 1945

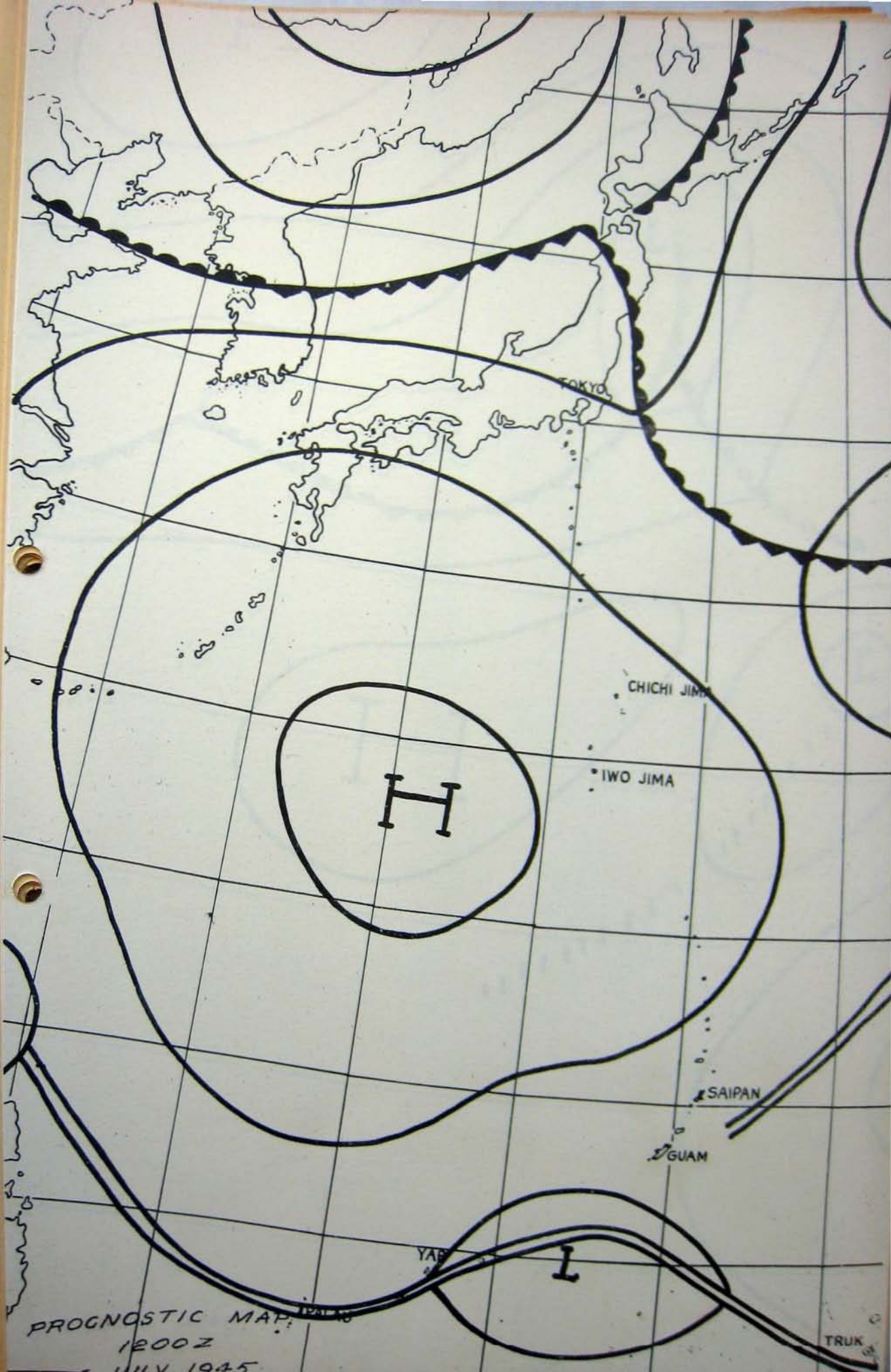
	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	TARGET
30,000									
25,000									
20,000									
15,000									
10,000									
5,000									
SURFACE									

# OBSERVED WEATHER

	20°N	25°N	30°N	TARGET
30,000				
25,000				
20,000				
15,000				
10,000				
5,000				
SURFACE				

8-56-62





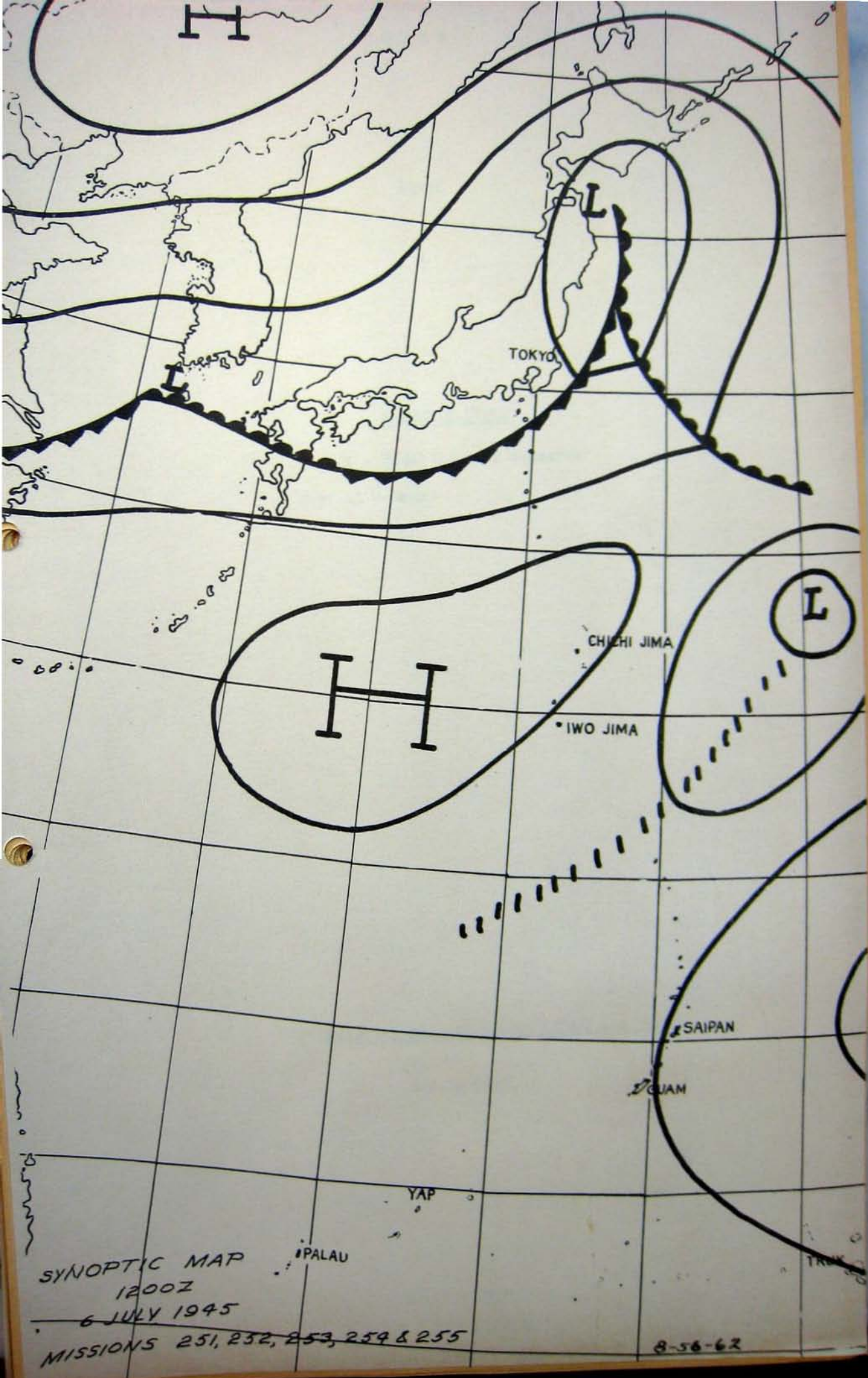
PROGNOSTIC MAP  
1200Z

6 JULY 1945

MISSIONS 251, 252, 253, 254 & 255

8-56-62





SYNOPTIC MAP

1200Z

6 JULY 1945

MISSIONS 251, 232, 253, 254 & 255

8-56-62



S E C R E T

ANNEX

C

COMMUNICATIONS

Part I - Radar Counter Measures

Part II - Radio

Missions No. 251, 252, 253, 254, and 255

6 July 1945.

S E C R E T



S E C R E T

PART I - RCM

1. Purpose:

- a. To D/F early warning, gunlaying and searchlight radars.
- b. To conduct a general search in the 20-3000 mc region.
- c. To barrage jam the enemy gunlaying and searchlight radars in the 72-84 mc and 190-210 mc bands and to spot jam any gunlaying or searchlight signals appearing outside the barrage.
- d. To confuse enemy searchlight and gunlaying radars by the use of rope.

2. Method:

a. Twenty-four RCM observers participated and used the following equipment to accomplish the search and jamming: 359 - APT-1, 192 - AFQ-2, 12 - ARQ-8, 23 - APT-3 (Modified), 24 - AFR-4, 18 - APA-11, 2 - AFR-7, 4 - AFR-5, 6 APA-24 and 1 - APA-6.

b. Rope was dispensed at the rate of 3 bundles per 10 seconds when protection was needed from searchlights.

c. Four special jamming airplanes were employed by the 56th Wing, target Chiba, to circle the target area during the strike. These special jamming airplanes were equipped to barrage the 72-84 mc and 190-210 mc regions and to spot jam any gunlaying or radar signals that appeared outside the barrage band. In addition, each strike airplane carried from 1 to 2 jammers tuned to a frequency within the barrage band.

3. Results:

a. The special jamming airplanes appeared to be successful. A total of 15 signals with gunlaying and searchlight characteristics were intercepted and jammed. Cloud cover in the Chiba area prevented effective use of searchlights.

b. Seventy intercepts were recorded and are listed at the end of this section.

c. The 315th Wing, target Maruzen Oil Refinery, was not yet equipped with electronic jammers and rope was the only countermeasure employed.

4. Remarks:

a. Rope was dispensed as a defensive measure against night fighters. On 2 occasions, the fighters were level at 6 o'clock and at 400 yds and when rope was dispensed, they were seen to dive down and away from the airplane. On 2 other occasions the fighters made several quick changes and then dropped the attacks. Observations were made by the tail gunner either visually or with the AN/APG-15.

b. A signal with the characteristics 3060/7/4.5 was intercepted over Shikoku.

c. The following unusual signals in the 150 mc region were intercepted: 165/1500/05, 150/1775/04, 158/1850/07.



S E C R E T

00060	2000	10	2930N	14000E	070645	2310	21	121	S	EW	CHI
00070	2000	12	3530N	13930E	070745	0142	21	121	S	GL	OTA03
00072	0485	36	3325N	13825E	070745	0125	21	121	S	EW	001010202
00075	0495	20	3425N	13822E	070745	0115	21	121	S	EW	CHI
00076	1500	06	3530N	13930E	070745	0141	21	121	S	GL	OTA03
00078	2700	40	3000N	13930E	070645	2315	21	121	S		
00080	0480	35	3250N	13832E	070745	0120	21	121	S	EW	001010202
00081	0980	30	3305N	13950E	070745	0400	21	122	P	EW	CHI
00081	0480	36	3035N	13945E	070745	0247	21	122	P	EW	CHI
00088	0500	30	3130N	13930E	070645	2320	21	121	S	EW	001010202
00090	0372	34	2638N	14210E	070645	1154	21	122	P	EW	001010202
00090	1190	16	3500N	14030E	070745	0231	21	122	P	EW	001010002
00090	0365	35	2635N	14055E	070645	2307	21	122	P	EW	001010202
00090	0365	33	2950N	13840E	070645	2345	21	122	P	EW	001010202
00092	2000	25	3500N	13830E	070745	0039	21	121	S	EW	
00095	1000	35	3435N	13845E	070745	0210	21	122	P	EW	001010202
00096	1500	30	3500N	13830E	070745	0041	21	121	S	EW	
00096	0363	24	3300N	13830E	070745	0122	21	121	S	EW	001010202
00097	0790	25	3500N	13830E	070745	0030	21	121	S	EW	001010002
00098	1090	30	3248N	14015E	070745	0337	21	122	P	EW	001010002
00098	0450	24	3230N	13910E	070745	0250	21	121	S	EW	001010202
00100	1200	10	3530N	13900E	070745	0130	21	121	S	EW	001010002
00102	1000	25	3430N	13830E	070745	0012	21	121	S	EW	001010002
00102	0500	40	3500N	13900E	070745	0140	21	121	S	EW	001010202
00102	0650	28	3505N	13840E	070745	0211	21	121	S	EW	001010202
00103	0490	24	3322N	13828E	070745	0124	21	121	S	EW	001010202
00104	1035	13	3306N	13948E	070745	0142	21	122	P	EW	001010002
00104	0980	15	3305N	13950E	070745	0058	21	122	P	EW	001010002
00105	1090	30	3542N	14052E	070745	0325	21	122	P	EW	001010002
00105	0575	24	3135N	13930E	070745	0305	21	121	S	EW	001030003
00108	0700	20	3500N	13900E	070745	0139	21	121	S	EW	CHI
00109	0750	17	3330N	13755E	070745	0200	21	122	P	EW	CHI
00110	1000	30	3530N	13930E	070745	0150	21	121	S	EW	001010002
00111	0000	15	2917N	13942E	070645	2359	21	122	P	EW	001010202
00113	1805	88	3445N	13920E	070745	0140	21	121	S	EW	
00120	0485	22	3400N	13818E	070745	0144	21	121	S	EW	001010202
00142	0500	10	3500N	13900E	070745	0137	21	121	S	EW	001030003
00149	0485	08	3040N	14015E	070745	0015	21	122	P	EW	001036003
00150	1000	07	3200N	14200E	070745	0243	21	122	P	EW	00604
00150	1000	05	3145N	14210E	070745	0245	21	122	P	EW	00604
00150	0500	06	3530N	13900E	070745	0136	21	121	S	EW	001030003
00150	0600	05	3235N	13915E	070745	0110	21	122	P	EW	001030003
00150	1775	04	3152N	13858E	070745	0150	21	122	P		
00154	0990	04	3312N	13900E	070745	0338	21	122	P	EW	00604
00154	0490	12	3333N	13820E	070745	0134	21	121	S	EW	001030003
00156	0490	06	3030N	14005E	070745	0025	21	122	P	EW	001030003
00157	1000	04	3350N	13948E	070745	0115	21	122	P	EW	00604
00158	0990	04	3400N	14135E	070745	0251	21	122	P	EW	00604
00158	0990	05	3435N	13845E	070745	0127	21	122	P	EW	00604
00158	1850	07	3150N	13920E	070745	0300	21	121	S		
00160	0970	07	3520N	14315E	070745	0326	21	122	P	EW	00604
00165	0980	05	3440N	13950E	070745	0226	21	122	P	EW	00604
00165	1500	05	3457N	13909E	070745	0200	21	122	P		
00188	1500	10	3530N	13900E	070745	0132	21	121	S	GL	00403
00190	0740	28	3534N	13817E	070745	0200	21	121	S	EW	001020002
00198	0000	03	3500N	13910E	070745	0205	21	121	S	GL	00401
00199	0975	07	3550N	13845E	070745	0135	21	121	S	GL	00401
00201	2000	06	3530N	13900E	070745	0130	21	121	S	GL	00403
00290	3079	30	3434N	13804E	070745	0156	21	121	S		
00295	0515	10	3530N	13920E	070745	0205	21	121	S		
00300	0490	20	3430N	13802E	070745	0155	21	121	S		
00309	0500	20	3505N	13930E	070745	0210	21	121	S		
00386	0370	27	3435N	13815E	070745	0127	21	121	S		
00400	0475	04	3430N	13920E	070745	0224	21	121	S		
00407	0460	14	3450N	13925E	070745	0219	21	121	S		
00408	0352	36	3500N	13925E	070745	0215	21	121	S		
00710	0608	03	3232N	13859E	070745	0035	21	121	S		
01000	0564	01	3338N	13830E	070745	0105	21	121	S		
1615	0740	02	3555N	13945E	070745	0205	21	121	S		
3060	0000	05	3350N	13410E	070745	0200	21	121	S		

S E C R E T



S E C R E T

PART II - RADIO

1. Strike Reports: There were 41 Strike Reports transmitted by aircraft over the target. Only 39 were received. Two 313th Wing bombs away messages were not received by the ground station. Following are the number of Strike Reports received by each Wing: 314th, 11; 73rd, 9; 313th, 7; 58th, 7; and 315th, 5.

2. Fox Transmissions: The 73rd Wing reported 98.4 per cent on 124 radio operators copied a "Dummy" Fox message from the ground station. Two operators did not receive the message because of (1) guarding distress frequency and (2) navigator was using fixed antenna for Loran trailing wire antenna was inoperative. The 58th Wing station transmitted (3) Fox messages. The first message was received by 93.5 per cent of the operators; the second by 35.5 per cent and the third by 34.7 per cent, for an average percentage of 54.5 per cent. Two of the messages from the 58th ground station were "Dummy" messages and 1 was transmitted to the effect that the Iwo Jima homer was inoperative. The 314th Wing reports that out of 130 radio operators interrogated, 95 radio operators received all 3 messages; 23 received 2 messages and 9 received only 1 message. For all 3 messages, the average percentage was 33 percent. Reasons given by the 58th, 313th and 314th wings were fundamentally the same. These reasons included monitoring distress frequencies, repairing radio equipment, work-on bomb bay doors, interference, atmospherics and enemy, inoperative equipment and off watch due to other duties over the target.

3. Frequencies: Bad weather during these missions caused heavy atmospheric interference on strike frequencies. All wings reported that Signal strengths and readabilities were lower than previous missions. Following is a percentage breakdown of traffic per frequency: 11 per cent on 3 megacycles, 64 per cent on 7 megacycles, and 25 per cent on 11 megacycles.

4. Navigational Aids: Eight HF/DF bearings were requested and received. Two were received from the Iwo Jima AACS station. Excellent results were reported on the bearings. Four VHF/DF bearings were requested and all were obtained. Ranges, homers and broadcast stations were used with excellent results. The 58th Wing reported 55 per cent of their aircraft used the OWI station, Saipan, reporting excellent results up to 1200 miles.

5. Net Discipline and Security: There were no breaches of net discipline or violations of security reported during these missions.

6. Enemy Transmissions: The following incidents of jamming, enemy transmissions and interference were recorded during these missions

a. 3020 Kcs:

(1) Unidentified CW, V's and numbers at 1432Z were partially effective.

(2) Steady CW Signal at 1445Z was effective.

(3) Several stations on frequencies between 1445Z and 1715Z were partially effective to effective.

(4) Buzzsaw jamming from 1700Z to 1730Z was effective.

b. 6615 Kcs:

(1) CW numbers and letters, "J5Z, VVV, QRU, REI5Z, from 1120Z to 1223Z were partially effective.

(2) CW code groups and V's with call sign 9DT between 1340Z and 1700Z and 1400Z and 2200Z were partially effective.



(3) Unintelligible CW at 1830Z was effective.

c. 10305 Kcs: Negligible.

d. 3145 Kcs: (This frequency has been replaced with 3160 Kcs)

(1) Jap stations, operating from 0900Z to 2000Z were ineffective to effective.

(2) Enemy CW from Target to Iwo was partially effective.

(3) Jap voice at 0945Z was partially effective.

e. 6055 Kcs:

(1) Scratchy noise between Iwo and Target was partially effective.

(2) Unidentified CW at 1530Z was effective.

(3) CW from (3) stations at 1245Z was effective..

(4) Jap voice at 1545Z was partially effective.

(5) Unknown station sending date time groups and number, no authentication, at 1549Z was effective.

(6) Steady note from Saipan to Iwo was partially effective

f. 10880 Kcs:

(1) CW from 2 or 3 stations between 1610Z and 1704Z was partially effective.

(2) Steady tone and CW transmissions between 1600Z and 1630Z were partially effective.

g. 3410, 7310 Kcs: Negligible.

h. 11160 Kcs: (This has been replaced with 10125 Kcs).

(1) Keyed CW signals between 0945Z and 1200Z were ineffective to very effective.

(2) CW between 1305Z and 1500Z was ineffective.

(3) A varying tone signal between 1700Z and 1830Z was effective.

i. 3990 Kcs: CW code and dashes at 1804Z were very effective.

j. 7415Kcs: CW code and dashes at 1726Z were very effective

k. 10820 Kcs: Negligible.

l. 3810 Kcs: CW signal at 1200Z was effective.

m. 6640 Kcs: Intermittent CW from 1200Z was partially effective.

n. 10965 Kcs: Jap CW transmissions from 0945Z to 1147Z was ineffective.

7. Distress: Only distress traffic recorded by the Wing ground stations was from (2) aircraft of the 58th Wing. 31V668 reported his own ship on fire and gave his position at 1110Z. 26V669 transmitted two messages saying he had two engines out, position and that he was expecting to ditch.



8. Equipment Malfunctions: AUC-13, 2 inoperative, 1 no side tone  
 No. 2 channel inoperative; MC-48, 12 inoperative; MCA-502, 2 inoperative  
 1 speaker burned out, 1 "A" channel inoperative; 1 inoperative on  
 channels "A" and "B"; AUC-7, 3 inoperative; Interphone, 1 inoperative,  
 2 jackbox leakage, 1 foot microphone switch inoperative, 4 microphone  
 lead switches inoperative, 1 gunlight switch inoperative, 2 microphone  
 buttons inoperative, 3 microphone cords shorted out; RL-12, 12  
 inoperative, 4 lost weights.



S E C R E T

ANNEX

D

INTELLIGENCE

Part I - Enemy Air Opposition

Part II - Enemy Antiaircraft

Missions No. 251, 252, 253, 254, and 255

6 July 1945

- 38 -

S E C R E T



S E C R E T

PART I - ENEMY AIR OPPOSITION

1. The Japanese Air Force dispatched 60 - 70 aircraft against the night strikes on 6 July 1945. Only 5 attacks resulted with no damage or loss to B-29's. B-29 crews made no claims.

2. Mission No. 251, 58th Wing, Chiba:

a. A total of 18 aircraft were seen but there was only 1 attack from a probable Tony.

b. It is believed that jammer B-29s have a decided effect on enemy night fighters as well as on enemy ground defenses.

3. Mission No. 252, 73rd Wing, Akashi: There were no attacks and only 3 enemy aircraft (with wing tip lights) were seen. Heavy undercast may have restricted enemy activity.

4. Mission No. 253, 313th Wing, Shimizu:

a. A maximum of 12 enemy aircraft were sighted on this mission and 4 attacks were reported.

b. Just after land's end an enemy aircraft was seen to release a spherical glowing object which descended gradually for about 3000 feet before it was lost from sight. Five minutes later 2 more of these objects were seen, presumably supported by balloons or parachutes. The crew was under the impression that all 3 were released by the same enemy aircraft. None of these objects was closer than 600 yards to our aircraft and gave no indication of pursuit.

5. Mission No. 254, 314th Wing, Kofu: An estimated 20 - 22 aircraft were seen but no attacks were reported.

6. Mission No. 255, 315th Wing, Maruzen:

a. One of the crews reported being picked up by 5 enemy aircraft 150 nautical miles from landfall, the enemy aircraft staying with the B-29 until it was 50 miles from land's end, for a period of one hour and 20 minutes.

b. The B-29 was picked up by 5 enemy aircraft which stayed with the B-29 until the initial point was reached. During this period, some 15 to 20 passes were made at the B-29. All of the enemy aircraft had running lights and landing lights on. Two of the enemy aircraft were roughly abreast of the B-29 and criss-crossed from starboard to port and from port to starboard, weaving under the B-29. One of the enemy aircraft was stationed at 4 - 5 o'clock high, and made a pass at the B-29, which took evasive action and lost the aircraft. On pulling out of the evasive action, another enemy aircraft was noted on the opposite side at 7 o'clock and still another enemy aircraft came in from below, turned right and broke away downward at approximately 300 yards.

c. On the target run, the crew saw green lights, one on the right and one on the left, at the same altitude as the B-29, 10,800 feet. They were ahead and coming towards the B-29. One came in low across the B-29 about 1,000 to 1,500 feet below. The other enemy aircraft at 10 o'clock, turned in towards the B-29 but at 9 o'clock, at about 800 yards, broke away to the right.



S E C R E T

d. Shortly after bombs away, the crew reports that 2 enemy aircraft with landing lights or navigation lights on in front of the B-29 and high, 1 at 1 o'clock, and 1 at 11 o'clock, started pursuit curves. Within a matter of a minute "fighters were coming all over". The crew reports that 12 to 15 definite passes were made with 3 closing in to less than 100 yards. Two planes were reported making pursuit curves closing in to less than 300 yards with 1 enemy aircraft at 4 o'clock cutting off its landing lights. One of the crew members stated that 12 enemy aircraft were sighted from bombs away to past land's end for a period of 35 minutes.

e. Several possible intended ramblings were reported. A B-29 crew reported a single-engine radial fighter that came in from 9 o'clock level with its guns bearing 90° to the tail. Evasive action taken was a violent turn and dive to the right. The enemy aircraft was reported as closing in to within 25 yards. A twin-engine enemy aircraft came in from 12 o'clock. The B-29 pulled up in a climbing turn to the left and the aircraft went under the wing. It was reported as close as 100 feet from the tail and below the B-29.

f. Several crews reported the possibility of airborne radar in the enemy aircraft. One enemy aircraft followed the B-29 through clouds and was lost when window was dropped. The crew believed that the enemy aircraft could not have followed the B-29 visually. After land's end 2 enemy aircraft appeared on the scope for 7 or 8 minutes. Rope was dispensed and the planes disappeared.

g. One enemy aircraft was described as having an elliptical wing, somewhat similar to the wing of a Spitfire. One plane was reported as having a diamond-shaped wing, thicker than the usual single-engine aircraft wing, but no positive identification was made. One enemy aircraft was reported as having its landing lights apparently built into the wing in such a manner that the landing lights pointed directly ahead. One crew identified an enemy aircraft which it believed to be a Sally, having 6 formation lights (possibly a Dinah). Some of the enemy aircraft had a green light on the port side, and red on the starboard side, while others were reported as having their lights disposed just oppositely.

\* \* \* \* \*

PART II - ENEMY ANTIAIRCRAFT

1. Mission No. 251. Chiba Urban Area (Night)

a. The primary target was bombed by 124 A/C of the 58th Wing between 1639Z - 1905Z from 9900 - 11,500 feet. Axis of attack varied from 302° - 340°. Weather over the target was reported as 10/10 under-cast.

b. Enroute to the target flak was encountered as tabulated below:

LOCATION  
Naruto

COORDINATES  
3536N - 14024E

REMARKS  
Very meager and inaccurate, heavy and/or medium.

S E C R E T



# SECRET

d. Shortly after bombs away, the crew reports that 2 enemy aircraft with landing lights or navigation lights on in front of the B-29 and high, 1 at 1 o'clock, and 1 at 11 o'clock, started pursuit curves. Within a matter of a minute "fighters were coming all over". The crew reports that 12 to 15 definite passes were made with 3 closing in to less than 100 yards. Two planes were reported making pursuit curves closing in to less than 300 yards with 1 enemy aircraft at 4 o'clock cutting off its landing lights. One of the crew members stated that 12 enemy aircraft were sighted from bombs away to past land's end for a period of 35 minutes.

e. Several possible intended ramblings were reported. A B-29 crew reported a single-engine radial fighter that came in from 9 o'clock level with its guns bearing 90° to the tail. Evasive action taken was a violent turn and dive to the right. The enemy aircraft was reported as closing in to within 25 yards. A twin-engine enemy aircraft came in from 12 o'clock. The B-29 pulled up in a climbing turn to the left and the aircraft went under the wing. It was reported as close as 100 feet from the tail and below the B-29.

f. Several crews reported the possibility of airborne radar in the enemy aircraft. One enemy aircraft followed the B-29 through clouds and was lost when window was dropped. The crew believed that the enemy aircraft could not have followed the B-29 visually. After land's end 2 enemy aircraft appeared on the scope for 7 or 8 minutes. Rope was dispensed and the planes disappeared.

g. One enemy aircraft was described as having an elliptical wing, somewhat similar to the wing of a Spitfire. One plane was reported as having a diamond-shaped wing, thicker than the usual single-engine aircraft wing, but no positive identification was made. One enemy aircraft was reported as having its landing lights apparently built into the wing in such a manner that the landing lights pointed directly ahead. One crew identified an enemy aircraft which it believed to be a Sally, having 6 formation lights (possibly a Dinah). Some of the enemy aircraft had a green light on the port side, and red on the starboard side, while others were reported as having their lights disposed just oppositely.

\* \* \* \* \*

## PART II - ENEMY ANTI-AIRCRAFT

### 1. Mission No. 251. Chiba Urban Area (Night)

a. The primary target was bombed by 124 A/C of the 58th Wing between 1639Z - 1905Z from 9900 - 11,500 feet. Axis of attack varied from 302° - 340°. Weather over the target was reported as 10/10 undercast.

b. Enroute to the target flak was encountered as tabulated below:

<u>LOCATION</u>	<u>COORDINATES</u>	<u>REMARKS</u>
Naruto	3536N - 14024E	Very meager and inaccurate, heavy and/or medium.



# SECRET

<u>LOCATION</u>	<u>COORDINATES</u>	<u>REMARKS</u>
Mohara		Meager and inaccurate, medium.
Haha Jima		Predicted concentration of 8 heavy bursts, accurate.
Oami	3532N - 14020E	Meager and inaccurate, medium.

c. Over the target area flak was described as nil to meager, inaccurate, heavy and medium. Four RCM A/C orbited the target area jamming the GLR and SLGR frequency bands during the entire attack. RCM operators reported GLR and SLGR signals, despite the intensive jamming activity, during the entire attack. From 1 to 4 searchlights (ineffective) were reported in the target area.

d. On withdrawal flak was encountered at Kashima A/F (3558N - 14036E). Intensity, accuracy and type of weapon was not specified.

e. No A/C were lost or damaged as a result of flak on this mission.

## 2. Mission No. 252, Akashi Urban Area:

a. The primary target was bombed by 123 A/C of the 73rd Wing between 1515Z - 1627Z from 6900 to 8200 feet. Axis of attack was 35°. Weather was reported as 7/10-10/10 undercast with winds of 20 knots from 300°.

b. En route to the target flak was encountered as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
Kushimoto	3330N - 13547E	Meager and inaccurate to accurate, heavy, 10/10 clouds.
Tomioka	3349N - 13444E	Meager and inaccurate, heavy and medium.
Tokushima	3405N - 13432E	Meager and inaccurate barrages, heavy and medium.
Hiketa	3415N - 13425E	Meager and inaccurate, heavy.

c. Over the target area flak was described as sporadic, meager, inaccurate and medium. Only a few heavy bursts were reported. Three ineffective searchlights were reported in the target area.

d. On withdrawal 1 A/C reported a meager, inaccurate, heavy barrage at Himeji. (3450N - 13440E).

e. No A/C were lost or damaged as a result of flak on this mission.

f. During the initial phase of the raid street lights in northern Akashi were on, however they were turned off in quick order.



S E C R E T

3. Mission No. 253, Shimizu Urban Area:

a. The primary target was bombed by 133 A/C of the 313th Wing between 1533Z - 1710Z from 7100 to 8300 feet. Axis of attack varied from 265° to 287°. Weather was reported as 8/10 to 10/10 undercast with winds of 20 knots from 290°.

b. En route to the target flak was encountered as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
O Shima	3442N - 13924E	Meager and inaccurate, heavy.
I.P.	3455N - 13909E	Meager and inaccurate, medium.
Tori Shima	3030N - 14015E	Meager to intense and inaccurate, heavy.
Smith Island (Sumisu Jima)	3307N - 14002E	Meager and inaccurate, heavy.
Hachioji Shima	3126N - 13948E	Meager and inaccurate, heavy.
Miyake Shima	3405N - 13931E	Meager and inaccurate, heavy.

c. Over the target area flak was described as meager and inaccurate, medium and heavy. RCM operators reported 2 GLR signals.

d. On withdrawal meager and inaccurate medium flak was reported at land's end (Onasaki).

e. No A/C were lost to flak on this mission and of 133 A/C bombing only 2 or 1.50% sustained flak damage.

f. Searchlights were reported as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Number</u>
Tateyama	3500N - 13952E	3
Vicinity of Ito	3458N - 13907E	2-4
Target (Shimizu)	3500N - 13829E	3-4
Yokosuka	3411N - 13800E	2
Ajiro	3502N - 13906E	2
Kambara	3506N - 13836E	3
Numazu	3507N - 13851E	1
Odawara	3514N - 13910E	2
Ose-Saki	3502N - 13848E	1

All searchlights were rendered quite ineffective by the cloud cover.



S E C R E T

g. One A/C reported ground to air rockets over the targets. There seemed to be 2 batteries launching 5-6 rockets each simultaneously. It was further reported that after reaching the altitude of the A/C (7800 feet) the rocket trajectories would level off for a time period approximately twice the time period of ascent.

4. Mission No. 254, Kofu Urban Area (Night):

a. The primary target was bombed by 131 A/C of the 314th Wing between 1447Z to 1635Z from 11,200 to 17,000 feet. Axis of attack varied from 0° to 49°. Weather was reported as 8/10 to 10/10 undercast with winds of 30 knots from 300°.

b. En route to the target flak was encountered as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
Shizuoka	3458N - 13823E	Meager and inaccurate, heavy and medium.
Omazaki (I.P.)	3436N - 13812E	Meager and inaccurate, medium.
Shimizu	3501N - 13830E	Meager and inaccurate, heavy and medium.
Mouth of Fuji Gawa	3508N - 13838E	Meager and inaccurate, medium.

c. Over the target area flak was described as meager, inaccurate and heavy by only 7 A/C. 36 A/C reported medium flak as meager and inaccurate. The remaining A/C found flak to be nil.

d. On withdrawal flak was observed as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
Odawara	3514N - 13910E	Meager and accurate, heavy, Moderate and inaccurate, medium.
O Shima	3442N - 13924E	Meager and inaccurate, medium.
Nii Shima	3423N - 13916E	Meager and inaccurate, heavy and medium.

e. No A/C were lost or damaged as a result of flak on this mission.

f. Searchlights were observed as tabulated below:

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
Target Area	3540N - 13835E	A few ineffective beams
Odawara	3514N - 13910E	2-5
Hirasuka	3519N - 13920E	3-5
Numazu	3507N - 13851E	4



S E C R E T

<u>Location</u>	<u>Coordinates</u>	<u>Remarks</u>
Mouth of Fuji Gawa	3508N - 13838E	2-4
O Shima	3442N - 13924E	2

5. Mission No. 255, Maruzen Oil Refinery at Shiotsu (Night):

a. The primary target was bombed by 59 A/C of the 315th Wing between 1419Z to 1518Z from 10,200 to 11,500 feet. Axis of attack averaged 45°. Weather was reported as 5/10 to 10/10 undercast.

b. En route to the target flak was nil.

c. Over the target flak was described as meager, inaccurate, heavy, and medium. One searchlight was observed in the target area.

d. On withdrawal meager and inaccurate heavy flak was encountered at Tanabe, Kushimoto, Ukui (3340N - 13600E) and Aso (3420N - 13625E). An inaccurate predicted concentration of 15 to 17 heavy bursts was also reported at 3343N - 13548E.

e. No A/C were lost or damaged as a result of flak on this mission.

f. One searchlight was reported at landfall (3322N - 13403E) and one near I.P. (3349N - 13442E).

g. One free balloon (25 feet in diameter) was observed in the target area at 11,600 feet. The balloon was dragging a 100 foot cable to which was attached a basket shaped object.



C O N F I D E N T I A L

PART III - SECTION A - CHIBA CITY - DAMAGE ASSESSMENT\*

1. Summary:

a. Chiba City damage resulting from XXI Bomber Command Mission No. 251 of 6/7 July 1945 is .86 sq. mi. or about 43.4 per cent of the built-up portion of the city (1.98 sq. mi. as determined from photos).

b. Damage is concentrated in the central part of the city; from the west shoreline extending east to the end of the main part of the built-up area.

c. Little or no damage is in the north portion of the built-up area along the west coast and inland about 1500', and in the south portion along the shoreline and inland about 3200'. No numbered targets or important industrial areas are in these areas.

2. Itemization of Area Damage:

	Sq. Mi. of Area	Sq. Mi. Damage	Per cent of Damage
The built up urban area (residential and commercial concentration) runs along the coastline for about two miles and extends inland NE about 6200'.	1.98	.86	43.4

3. Special Supplement of Damage Assessment Report 135

XXI Bom Com Mission 251, Chiba - 90.14-Urban, 6/7 July 1945

a. Targets Within Built-up Area: Damage

Numbered targets: None

Other targets:

RR Junction, Station, Yards, Roundhouse	Minor damage
Military Depot Area (ordnance)	40% destroyed
RR Regiment Warehouses	Minor damage, 2 buildings destroyed
Infantry School	25% destroyed
Powder Magazine	None visible
RR Regiment Warehouses	55% destroyed
Harbor Installations	5% destroyed
Gas Plant	None visible

b. Targets Outside Built-up Area: (within 5 mile radius of center of city).

Numbered Targets:

90.14-2145	Hitachi A/C Co., Chiba Plant	None visible
90.14-1470	Shimoshizu Airfield	None visible

Other Targets:

Tokyo Central Telegraph Co.	None visible
Military Camp	None visible

Inclosure: Semi-controlled mosaic showing damage.

\* Based on XXI B.C. CIU D.A. Report No. 135.



CONFIDENTIAL

Target\* Chiba

90:14 - Urban

XXI B. C. - Mission 251

6-7 July 1945

Damage Assessment Report 135

C. I. U. XXI Bom. Com.





C O N F I D E N T I A L

PART III - SECTION B - AKASHI - DAMAGE ASSESSMENT\*

1. Summary of Damage:

- a. Built-up area: Sq. Mi. total - 1.42; Sq. Mi. destroyed: 0.81  
Per cent destroyed - 57.
- b. Planned target area: 0.8 sq. mi. Per cent destroyed: 101
- c. Total damage to date: 0.9 sq. mi. Per cent of built-up  
area: 63.5.
- d. Targets damaged by current strike: 0 Numbered; 3 other.

Note: Previous damage to the city resulted from strikes against Target 1547 (by bombs falling outside that target area).

2. Damage within limits of built-up area:

a. <u>Area damage from current strike:</u>	<u>Sq. Mi.</u>	<u>Destroyed</u>	
		<u>Sq. Mi.</u>	<u>Per cent</u>
Built-up area (Urban)	1.26	0.69	55
Built-up area (Industrial)	0.16	0.12	75
Built-up area (Total)	1.42	0.81	57

b. Area damage from all strikes:

Built-up area (Urban)	1.26	0.745	59
Built-up area (Industrial)	0.16	0.155	97
Built-up area (Total)	1.42	0.90	63.5

c. Damage to Targets:

<u>Number</u>	<u>Name</u>	<u>New Damage</u>	<u>Total Damage</u>
Unidentified Industrial Areas (3)		1.2 sq. mi.	97%

3. Damage outside built-up area: (within 5 mile radius of center of city)

90.25-1547	Kawasaki A/C Co.	None	74%
90.25-1724	Kawasaki A/C Co.	None	None

Inclosure: Mosaic annotated to show damage.

\* Based on XXI B.C. CIU D.A. Report No. 153.



CONFIDENTIAL

Damage Assessment Rpt 153  
Akashi - 90.25  
XXI B.C.-Mission 252  
6-7 July 1945  
C.I.U.-XXI Bom. Com.  
2655 C 35PTU 1 AUG 45

LEGEND

- Built-Up Area - Urban
- Built-Up Area - Industrial
- ▨ Sparsely Built Up
- ▧ New Damage
- ▩ Old Damage

ONE MILE

AKASHI AREA

APPROX SCALE  
2000 0 2000 4000 6000 FEET

destroyed. The six small storage tanks are undamaged.  
Inclosure: Annotated map (C.I.U. 2-2-4) showing damage



C O N F I D E N T I A L

PART III - SECTION C - SHIMIZU - DAMAGE ASSESSMENT\*

1. Summary:

a. Shimizu City damage resulting from XXI Bomber Command Mission 253 of 6/7 July 1945 totals .71 sq. mi. or about 50 per cent of the city's built-up area.

b. New and old damage cover .74 square mile or 52 per cent of the built-up area.

c. Shimizu City's total built-up area (as determined from photos) covers 1.41 square miles. It has two distinct divisions:

(1) The built-up industrial area along Shimizu Harbor to the east; about .53 square mile.

(2) The built-up commercial-residential area; about .88 square mile.

d. An earlier XXI Bomber Command mission left .03 square mile of damage in both areas.

e. Mission 253 completely destroyed .58 square mile or about 65 per cent of the commercial-residential area and left undamaged only small portions in the extreme north and south sections of the city.

f. Damage in the built-up industrial area totals .13 square mile or about 25 per cent of the waterfront immediately adjacent to the city and north of the mouth of the river.

g. In addition to the damage in the built-up area, about .20 square mile of damage is visible in outlying residential and minor industrial sections not included in the target area.

h. The following numbered targets in the built-up industrial area were affected by Mission 253 (see overlay showing numbered targets):

(1) Target 1178, Shimizu Docks: These docks are north and south of the river mouth. All new damage is confined to the north area, where 51 of 81 buildings and warehouses are destroyed, and represent destruction of about 60 per cent of the north area, or about 40 per cent of all dock buildings in the two areas.

(2) Target XXI 6000, Shimizu Plant of Fuji Engineering Company: Five of 10 medium sized buildings and three of seven small buildings, or 40 per cent of target, destroyed.

(3) Target XXI 6002, Shimizu Railroad Station and Trans-Shipmont Depot: Six of the eight buildings north and east of the main depot, but not including the main railroad depot nor the two large freight warehouses, have been destroyed. Target 30 per cent destroyed.

(4) Target XXI 6080, Honan Vegetable Oil Plant: Nine of 17 larger buildings and 10 of 18 smaller buildings are destroyed. Target 55 per cent destroyed. The six small storage tanks are undamaged.

Inclosure: Annotated mosaic (3PR4M 2-3: 3, 4) showing damage.

\* Based on XXI B.C. CIU D.A. Report No. 132.



C O N F I D E N T I A L

2. SPECIAL SUPPLEMENT

a. Within Urban Area:

(1) Numbered Targets

Damage

90.18-2150 Toa Oil Refinery	None visible
90.18-XXI 6000 Fuji Engineering Company, Shimizu Plant	40% destroyed
90.18-XXI 6001 Machine Shop and Woodworking Plant Area	Minor damage
90.18-XXI 6002 Railroad Station and Trans- shipment Docks	30% destroyed
90.18-XXI 6076 Tokai Boatyard	None visible
90.18-XXI 6030 Honan Vegetable Oil Plant	55% damaged

(2) Unnumbered Targets

Small Seaplane Hanger and Ramp	None visible
Military Camp	None visible
Two barracks Areas	None visible
Three Light Industries	None visible
Two Light Industries	100% destroyed
Oriental Can Company	100% destroyed
Small Canneries Area	Minor damage

b. Outside Urban Area:

(Within 5 miles of center of city)

(1) Numbered Targets

90.18-1173 Dock Area	40% destroyed
90.18-1176 Japan Light Metals Alumina Plant	None visible
90.18-1185 Kawasaki Boatbuilding and Repair Yard	None visible
90.18-2023 Sumitomo Light Metals, Shimizu Plant	None visible
90.18-XXI 6003 Koito Engineering Works	None visible
90.18-XXI 6004 Log Pond, Sawmill and Lumber Storage	None visible
90.18-XXI 6005 Boatbuilding Yard	None visible
90.18-XXI 6006 Ito Seisakusho (Iron Works)	None visible
90.18-XXI 6007 Steam Power Plant	None visible
90.18-XXI 6008 Boatbuilding Yard	None visible
90.18-XXI 6077 Boatbuilding Yard	None visible
90.18-XXI 6032 Boatbuilding Yard	None visible
90.18-XXI 6078 Small Shipyard	None visible

(2) Unnumbered Targets

Revetted Storage Area	None visible
Reported Infantry Workshops	None visible
Barracks Area	None visible





**SHIMIZU CITY**

Damage Assessment Report 132

XXI B.C. Mission No. 253

6-7 July 1945

C.I.U. XXI Bom. Com.

**LEGEND**

-  Damaged Area
-  Industrial Area
-  Built-up Area

2462 GC 35PTU 19 JUL 45







C O N F I D E N T I A L

PART III - SECTION D - KOFU - DAMAGE ASSESSMENT\*

1. Summary:

a. Damage to the city of Kofu resulting from XXI Bomber Command Mission 254, 6/7 July 1945, totals 1.3 sq. mi., which represents about 65% of the built-up portion of the city (2.0 sq. mi.).

b. There were no numbered targets in the areas damaged.

c. The major portion of the damage inflicted was in the residential and commercial areas, with the southern half of the city being almost completely destroyed, and the northern section showing damage scattered throughout.

d. The principal marshalling yards, in the center of the city, were not damaged, but about 50% of the buildings in the marshalling yard just south of the city were destroyed.

2. Special Supplement:

a. The installations covered by this supplement had not been damaged prior to XXI Bomber Command Mission 254.

(1) Within City Area:

<u>All unnumbered targets</u>	<u>Damage</u>
49th Infantry Regimental Area	None visible
Maruma Silk Mill	Minor damage
Gas Department	50% destroyed
Kofu Railroad Station	30% of buildings destroyed
Six Warehouses	100% destroyed
Rice Market	100% destroyed
Silk Mill	100% destroyed
Electric Sub-station	100% destroyed
Kanebo Silk Mill	100% destroyed
Weather Station	100% destroyed
Kofu-Minamiguchi Railroad Station	25% of buildings destroyed
Kyosai Electric Railroad Bridge	None visible
Minobu Electric Railroad Line	None visible

(2) Outside Urban Area: (within 5 mile radius of center of city), None.

\* Based on XXI B.C. CIU D.A. Report No. 134

Inclosure: Pre-strike mosaic





Damage To Kofu  
90.16 Urban  
Damage Assessment  
Report 134  
XXI Bom. Com. Mission 254  
6-7 July 1945  
C.I.U. XXI Bom. Com.

# KEY

- BUILT UP AREA URBAN
- BUILT UP AREA INDUSTRIAL
- SPARSELY BUILT UP
- DESTROYED

1 MILE



C O N F I D E N T I A L

PART III - SECTION E - MARUZEN OIL REFINERY - DAMAGE ASSESSMENT\*

1. Summary:

a. Roof damage from Mission Number 245 is 54,225 square feet or 10.35 per cent of the total roof area. Two small tanks were destroyed and the large storage tanks in the south section of the plant were smoke covered, indicating damage in the area. Damage in the south section is not assessed because of the smoke.

b. Roof damage from Mission Number 255 is 409,975 square feet or 97.1 per cent of the total roof area. Tank capacity destroyed totals 525,000 barrels; tank capacity damaged totals 375,000 barrels. Capacity destroyed/damaged totals 900,000 barrels, or 88.5 per cent of the total plant capacity.

c. Total roof damage in the refinery is 472,050 square feet or 87.1 per cent of the refinery's original roof area.

d. Five of six refinery units are severely damaged or destroyed. The sixth unit is apparently undamaged. All other installations, including the two bridges connecting the two sections of the plant, are either damaged or destroyed. The open stores area in the north section of the plant received 27 scattered hits and much of the material stored in this area is destroyed.

Building and tank measurements are based on CIU data.

3. Statistical Summary of Damage:

a. Roof damage from Mission Number 255:

	Square feet of roof	**Per cent of orig- inal roof area
Destroyed	409,355	79
Structural damage		
Superficial		
Gutted	620	.1
Minor roof damage		
Total damage	409,975	79.1

\*\* Total roof area: 519,848 sq. ft.

\* Based on XXI B.C. CIU D.A. Report No. 142

Inclosure: Enlargement from 3PR5M258-4L: 155, annotated showing damage.



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D/A Report 142, Cont'd.

Roof damage from Missi on 245:	Square feet of roof	Percent of original roof area
Destroyed	21,700	4.1
Structural damage	2,375	3.9
Superficial:		
1. Guttred	7,150	1.4
2. Minor roof damage	5,000	.95
Total damage	54,225	10.35

Total roof damage to date:

Destroyed	431,055	83.1
Structural damage	20,375	3.9
Superficial:		
1. Guttred	620	.1
2. Minor roof damage		
**Total damage	452,050	87.1

\*\*This figure does not represent the sum of damage from the two strike missions in that two buildings superficially damaged by mission 245 were completely destroyed by mission 255.

Total tank damage to date:

	Volume in Cubic feet	Percent of total refinery tank capacity
Destroyed	525,000 (approx)	51.5
Damaged	375,000 (approx)	37
TOTAL:	900,000	88.5

Total tank capacity: 1,022,900 bbls., (approx)

ITEMIZATION OF DAMAGE - Mission 255

DAMAGE IN SQUARE FEET

Number (Ref. #)	Roof area	Destroyed	Guttred	Total	Percent of Roof	comment
10	1,400	1,400		1,400	100	
13	1,720	1,720		1,720	100	
14	1,720	1,720		1,720	100	
15	1,720	1,720		1,720	100	
16	1,720	1,720		1,720	100	
17	625	625		625	100	
18	4,950	4,950		4,950	100	
19	11,500	11,500		11,500	100	
20	6,300	6,300		6,300	100	
21	12,400	12,400		12,400	100	
22	10,400	10,400		10,400	100	
23	10,200	10,200		10,200	100	
24	2,250	2,250		2,250	100	
25	7,100	7,100		7,100	100	
26	20,000	20,000		20,000	100	
27	12,050	12,050		12,050	100	
28	3,150	3,150		3,150	100	
29	16,100	16,100		16,100	100	
30	10,000	10,000		10,000	100	
31	11,200	11,200		11,200	100	
32	3,440	3,440		3,440	100	
33	54,200	54,200		54,200	100	
34	14,600	14,600		14,600	100	
35	7,150	7,150		7,150	100	
36	6,000	6,000		6,000	100	
37	5,000	5,000		5,000	100	
38	12,500	12,500		12,500	100	
39	1,350	1,350		1,350	100	
40						

\*Annotated print.

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D/A Report 142, Cont'd.

ITEMIZATION OF DAMAGE - Mission 255 (Cont'd.)

Number (Ref.*)	DAMAGE IN SQUARE FEET				Percent of roof	comment
	Roof area	Destroyed	Gutted	Total		
41	7,900	7,900		7,900	100	
42	6,000	6,000		6,000	100	
44	2,620		620	620	25	
45	8,400	1,200		1,200	25	3 bomb holes in roof
46	15,000	15,000		15,000	100	
48	1,440	1,440		1,440	100	
49	5,200	5,200		5,200	100	
56	10,000	10,000		10,000	100	
57	13,450	13,450		13,450	100	
58	5,950	5,950		5,950	100	
59	4,100	4,100		4,100	100	
60	3,450	3,450		3,450	100	
69	1,200	1,200		1,200	100	
71	11,500	11,500		11,500	100	
76	4,000	2,000		2,000	50	
77	1,400	1,400		1,400	100	
79	4,200	4,200		4,200	100	
80	12,000	12,000		12,000	100	
82	2,000	2,000		2,000	100	
83	2,100	2,100		2,100	100	
86	24,400	24,400		24,400	100	
99	2,720	2,720		2,720	100	
100	2,720	2,720		2,720	100	
101	2,200	2,200		2,200	100	
102	2,600	2,600		2,600	100	
103	1,050	1,050		1,050	100	
104	2,270	2,270		2,270	100	
TOTAL:		409,355	620	409,975		

\*Annotated print.

ITEMIZATION OF DAMAGE - Mission 245

Number (Ref.*)	DAMAGE IN SQUARE FEET				Percent Total of roof	comment
	Roof area	Destroyed	Structural	Gutted Minor		
33	54,200			5,000	5,000	110 Destroyed by Mission 255
35	7,150			7,150	7,150	100 Destroyed by Mission 255
54	5,400	5,400			5,400	100
62	8,750		8,750		8,750	100
63	5,200		2,600		2,600	50
64	5,400		5,400		5,400	100
66	3,625		3,625		3,625	100
66	13,500	13,500			13,500	100
68a	1,600	1,600			1,600	100
68b	1,200	1,200			1,200	100
TOTAL:		21,700	20,375	7,150	5,000	54,225

\*Annotated print



S E C R E T

ANNEX

E

CONSOLIDATED STATISTICAL SUMMARY

Missions No. 251, 252, 253, 254 & 255

6 July 1945

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XXI BOMBER COMMAND

CONSOLIDATED STATISTICAL SUMMARY OF COMBAT OPERATIONS

FORM 34  
251 - 255

MISSION NO.  
8 July 1945

Mission #251 - 58th Wing - Chiba Urban Area  
Mission #252 - 73rd Wing - Akashi Urban Area  
Mission #253 - 313th Wing - Shimizu Urban Area  
Mission #254 - 314th Wing - Kofu Urban Area  
Mission #255 - 315th Wing - Maruzen Oil Refinery

EFFECTIVENESS OF MISSIONS

Aircraft Airborne . . . . . 603  
Percent Of Aircraft On Hand . . . . . 74.5%

Aircraft Bombing Primary Target . . . 570  
Percent Of Bombing Aircraft Airborne. . . . 96.0%

Bombs Dropped On Primary Target . . . . . 4306 Tons

Bombs Dropped On Other Targets. . . . . 23 Tons

Bombing Results - Preliminary information indicates the following damage:

Mission #251 - .86 sq miles or 43.4% of heavily populated area.  
Mission #252 - .42 sq miles or 24% of built up area.  
Mission #253 - .67 sq miles or 47% of built up area.  
Mission #254 - 1.3 sq miles or 64% of built up area.  
Mission #255 - 95% destroyed.

COST OF MISSIONS

Aircraft Lost . . . . . 1  
Percent Of Aircraft Airborne. . . . . 0.2%

Aircraft Damaged. . . . . 3  
Percent Of Aircraft Airborne. . . . . 0.5%

Crew Member Casualties. . . . . 3  
Percent Of Total Participating. . . . . 0.1%

Aircraft Landing At Iwo Jima . . . . . 21

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33RD STATISTICAL CONTROL UNIT



S E C R E T

A I R C R A F T   P A R T I C I P A T I N G

MISSION 251 - 255

DATE 6 July 1945

AIRCRAFT PARTICIPATIONS																	6 July 1945	
UNIT	A/C CN HAND	A/C SCHED- ULED	A/C FAILING TO TAKE OFF	A/C ALC- TARGE	TIME OF TAKE OFF			TIME OF RETURN			A/C BOMBING PRIMARY TARGET	A/C BOMBING SECONDARY TARGET	A/C BOMBING OTHER TARGETS	A/C COMPLETING OTHER TYPE MISSIONS	TOTAL A/C EFFECTIVE	TOTAL A/C NON- EFFECTIVE		
					DATE	FIRST	LAST	DATE	FIRST	LAST								
58WG	185	120	3	117	6 July	0939 Z	1106 Z	Mission #251			112	-	1	-	113	4		
		12 <u>a</u>	-	12				6-7 July	2251 Z	0243 Z								
		1 <u>b</u>	-	1														
		4 <u>f</u>	-	4														
73WG	186	120	1	119	"	0806 Z	0912 Z	"	Mission #252		113	-	1	-	114	5		
		12 <u>a</u>	-	12					2040 Z	0001 Z								
		2 <u>b</u>	-	2														
313WG	136	123	-	124 <u>c</u>	"	0849 Z	1034 Z	6 July	Mission #253		122	-	-	-	122	2		
		12 <u>a</u>	-	12					2100 Z	2334 Z								
		1 <u>b</u>	-	1														
314WG	188	124	3	125 <u>d</u>	"	0730 Z	0912 Z	"	Mission #254		118	-	-	-	118	7		
		13 <u>a</u>	-	13					2128 Z	2352 Z								
		1 <u>b</u>	-	1														
315WG	114	60	5	60 <u>e</u>	"	0700 Z	0806 Z	"	Mission #255		59	-	1	-	60	-		
TOTAL	809	547	12	545	6 July	0700 Z	1106 Z	6-7 July	2101 Z	2257 Z	524	-	3	-	527	18		
		49 <u>a</u>	-	49					2040 Z	0243 Z	46	-	-	-	46	3		
		5 <u>b</u>	-	5							-	-	-	5	5	-		
		4 <u>f</u>	-	4							-	-	-	4	4	-		

- a Pathfinder aircraft.  
b Super dumba aircraft.  
c Includes 1 spare aircraft.  
d Includes 4 spare aircraft.  
e Includes 5 spare aircraft.  
f Radar counter measure aircraft.

NOTE: XXI BC Field Order #96 called for normal effort on Missions 251, 252, 254; 3 groups on Mission 253; and 60 aircraft on Mission 255.

Aircraft Landing At Iwo Jima:

Mission 251 - 58 Wing - 14 aircraft.  
Mission 252 - 73 Wing - 2 aircraft.  
Mission 253 - 313 Wing - 2 aircraft.  
Mission 254 - 314 Wing - 3 aircraft.

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MISSION 251 - 255

DATE 6 July 1945

BREAKDOWN OF ALL AIRCRAFT FAILING TO BOMB PRIMARY TARGET

UNIT	MECHANICAL FAILURE			PERSONNEL ERROR			FLIGHT CONDITIONS			ENEMY ACTION			OTHER		
	Non-Effective	Bombed Secondary	Bombed Other	Non-Effective	Bombed Secondary	Bombed Other	Non-Effective	Bombed Secondary	Bombed Other	Non-Effective	Bombed Secondary	Bombed Other	Non-Effective	Bombed Secondary	Bombed Other
							<u>Mission #251</u>								
58WG	3	-	1	1 <u>a</u>	-	-	-	-	-	-	-	-	-	-	-
							<u>Mission #252</u>								
73WG	5	-	1	2 <u>a</u>	-	-	-	-	-	-	-	-	-	-	-
							<u>Mission #253</u>								
313WG	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							<u>Mission #254</u>								
314WG	5	-	-	2 <u>a</u>	-	-	-	-	-	-	-	-	-	-	-
							<u>Mission #255</u>								
315WG	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
									1	-	-	-	-	-	-
TOTAL	16	-	2	5	-	-	-	-	1	-	-	-	-	-	-

a Maintenance personnel error.

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MISSIONS 251 - 255

B O M B I N G    R U N

DATE 6 July 1945

UNIT	TARGET BOMBED		AIRCRAFT DROPPING BOMBS	TIME OF RELEASE		ALT. OF RELEASE		TARGET VISIBLE			TARGET NOT VISIBLE			
	NAME OF TARGET	TYPE		EARLIEST	LATEST	LOWEST	HIGHEST	VISUAL SIGHTING ONLY	RADAR RUN WITH VISUAL CORRECTIONS	DROPPING ON LEADER	VIS. SIGHTING ON REFERENCE OR OFFSET PT.	RADAR RUN	DEAD RECK- ONING	DROPPING ON LEADER
58WG	Chiba Urban Area	P	112	1650 Z	1905 Z	9900	11500	5	-	-	-	107	-	-
	Chiba Urban Area	P	12 <u>a</u>	1639 Z	1711 Z	10200	10600	-	-	-	-	12	-	-
	Unknown	TO	1	Unknown		Unknown		-	-	-	-	1	-	-
73WG	Akashi Urban Area	P	113	1519 Z	1627 Z	6900	8200	6	-	-	-	105	2	-
	Akashi Urban Area	P	10 <u>a</u>	1515 Z	1539 Z	7550	8050	1	-	-	-	9	-	-
	Osaka	TO	1	1544 Z	-	8180	-	-	-	-	-	-	1	-
313WG	Shimizu Urban Area	P	122	1533 Z	1710 Z	7200	8300	7	16	-	-	98	1	-
	Shimizu Urban Area	P	11 <u>a</u>	1533 Z	1554 Z	7100	7900	-	2	-	-	9	-	-
				Mission #253										
314WG	Kofu Urban Area	P	118	1455 Z	1635 Z	11200	17100	14	5	-	-	99	-	-
	Kofu Urban Area	P	13 <u>a</u>	1447 Z	1530 Z	11200	14600	-	-	-	-	13	-	-
	Odawara	TO	1 <u>b</u>	Unknown		Unknown		1	-	-	-	-	-	-
	Hachijo Jima	TO	1 <u>b</u>	Unknown		Unknown		1	-	-	-	-	-	-
315WG	Maruzen Oil Refinery, Minoshima	P	59	1419 Z	1518 Z	10200	11500	-	1	-	-	57	1	-
	Unknown	TO	1	1443 Z	-	10190	-	-	-	-	-	1	-	-
				Mission #255										
TOTAL	Primary Targets	P	524	1419 Z	1905 Z	6900	17100	32	22	-	-	466	4	-
	Primary Targets	P	46 <u>a</u>	1447 Z	1711 Z	7100	14600	1	2	-	-	43	-	-
<u>a</u> Pathfinder aircraft. <u>b</u> Aircraft also bombed primary target.														

S E C R E T



MISSION 251 - 255

DATE 6 July 1945

## DISPOSITION OF BOMBS

S E C R E T



S E C R E T

MISSION 251-255  
DATE 6 July 1945

## AIRCRAFT LOST AND DAMAGED

## PERSONNEL CASUALTIES

UNIT	AIRCRAFT LOST							AIRCRAFT DAMAGED								PERSONNEL CASUALTIES					
	ENEMY A/C	ENEMY A/A	ENEMY A/C & A/A	ACC. & MECH.	OTHER	UN- KNOWN	TOTAL	ENEMY A/C	ENEMY A/A	ENEMY A/C & A/A	ACC. & MECH.	OWN GUNS	OTHER	UN- KNOWN	TOTAL		TOTAL PARTICI- PATING	KILLED	MISS- ING	WOUNDED & INJURED	TOTAL CASUALTIES
															MAJOR	MINOR					
58WG							None			Mission #251						None	1548				None
73WG							None			Mission #252						None	1520				None
913WG	-	-	-	1 g	-	-	1	-	2	-	-	-	1	-	2	1	1525	-	-	3	3
914WG							None			Mission #254						None	1572				None
915WG							None			Mission #255						None	614				None
TOTAL	-	-	-	1	-	-	1	-	2	-	-	-	1	-	2	1	6779	-	-	3	3

g Ran off end of runway because of brake failure.

S E C R E T



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MISSION 251 - 255

DATE 6 July 1945

ENEMY OPPOSITION AND AMMUNITION EXPENDITURE

UNIT	ENEMY A/C SIGHTED	ATTACKS BY E/A	ENEMY A/C DESTROYED & DAMAGED			50 CALIBER AMMUNITION EXPENDITURE				
			DESTROYED	PROBABLY DESTROYED	DAMAGED	FIRE IN COMBAT	TEST FIRED	JETTISONED	ON LOST A/C	TOTAL
					Mission #251					
58 WG	18	1			None	-	-	1600	-	1600
					Mission #252					
73 WG	3	-			None	274	800	-	-	1074
					Mission #253					
313 WG	12	4			None	250	-	-	-	250
					Mission #254					
314 WG	22	-			None					None
					Mission #255					
315 WG	17	-			None	-	4295	-	-	4295
TOTAL	60-70	5			None	524	5095	1600	-	7219

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MISSIONS 251 - 255

DATE 6 July 1945

FLIGHT DATA & FUEL CONSUMPTION

MISSION NUMBER	#251	#252	#253	#254	#255
UNIT	58TH WING	73RD WING	313TH WING	314TH WING	315TH WING
AIRCRAFT CONSIDERED	112	122	131	128	59
AVERAGE FLYING TIME	14:25	13:45	12:56	14:20	14:21
FUEL CONSUMED					
Average	5542	5823	5589	5859	5394
Maximum	6200	6396	6250	6315	5965
Minimum	4910	5255	5127	5424	5122
FUEL REMAINING					
Average	842	778	1103	783	1386
Maximum	1490	1264	1593	1231	1663
Minimum	400	254	470	285	820
AVG. GALS. USED PER HOUR	384.3	423.5	432.3	408.9	375.9
TOTAL USED ON AIRBORNE A/C	732138	748122	754244	796106	324725

WEIGHT DATA

NO. AIRCRAFT AIRBORNE	129	131	136	138	60
AVG. BASIC WT. OF AIRCRAFT	74879	75015	74959	75614	71559
AVERAGE USEFUL LOAD	58626	61514	60275	60658	61801
AVG. NO. OF BOMBS LOADED	Mixed Load	Mixed Load	Mixed Load	Mixed Load	28 M64(Ti 2 M64 (Comp B) 16071
AVG. WT. OF BOMBS LOADED	14974	16959	15053	15757	16071
AVERAGE FUEL LOADED	6381	6598	6691	6639	6785
AVG. WT. OF FUEL LOADED	38286	39588	40146	39834	40710
AVG. MISC. WEIGHT	5366	4967	5076	5067	5020
AVG. GROSS WT. AT TAKE OFF	133505	136529	135234	136272	133360

Bomb Weights: AN-M47A2 - 70 lbs.  
E-46 - 425 lbs.  
T4E4 - 425 lbs.  
AN-M17A1 - 465 lbs.  
AN-M64 (TNT) - 535 lbs.  
AN-M64 (Comp B) - 550 lbs.  
M-46 Photoflash - 52 lbs.

S E C R E T



S E C R E T

ANNEX

F

XXI BOMBER COMMAND FIELD ORDER

Missions No. 251, 252, 253, 254 & 255

6 July 1945

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S E C R E T



SECRET

SECRET

Auth: CG XXI B2

Initials: WRC

Date: 6 July 1945

FIELD ORDERS )

NUMBER 96 )

XXI BOMBER COMMAND

GUAM

6 July 1945 - 0300K

Maps: Japan Aviation Chart 1:218,830.

1. Omitted.

2. XXI Bomber Command attacks CHIBA, AKASHI, SHIMIZU and KOFU URBAN AREAS and target 90-25 - 1764 on 6/7 July 1945.

3. a. 58th Wing:

(1) Primary visual and radar target: CHIBA URBAN AREA

MPI

FORCE REQUIRED

086094

Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic CHIBA AREA, No. 90.14 - 2145.

(2) Route:

Base

Iwo Jima

351830N - 14025E (IP)

Target

180 degree right turn to landsend

3535N - 14031E

3520N - 14045E

Iwo Jima

Base.

(3) Altitudes:

(a) Enroute to target: 4,000 - 4,800 ft., 7,000 - 7,800 ft.

(b) Of attack: 10,000 - 10,800 ft.

(c) Withdrawal from target: Above 12,000 ft.

(4) Bombing Airspeed: CIAS 215 MPH.

(5) Bomb Load: 2 Groups: M-47 IBs fused instantaneous nose, intervalometer setting - 75 ft.,  
2 Groups: clusters containing M-69 bombs fused to open 5,000 ft. above target, intervalometer setting - 50 ft.

(6) Takeoff: 061930K.

b. 73rd Wing:

(1) Primary visual and radar target: AKASHI URBAN AREA

MPI

FORCE REQUIRED

106053

Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic AKASHI AREA, KAWASAKI A/C CO., No. 90.25 - 1547.

SECRET

487/5



SECRET

F.O. #96

(2) Route:

Base  
Iwo Jima  
3350N - 13445E  
341930N - 1344130E (IP)  
Target  
3452N - 13505E  
3458N - 13440E  
Left turn to landsend  
3333N - 13419E  
Iwo Jima  
Base.

(3) Altitudes:

- (a) Enroute to target: 4,000 - 4,800 ft., 7,000 - 7,800 ft.
- (b) Of attack: 7,000 - 7,800 ft.
- (c) Withdrawal from target: Minimum of 10,000 ft.

(4) Bombing Airspeed: CIAS 195 MPH.

(5) Bomb Load: Clusters containing M-69 bombs fused to open 2,500 ft. above target, intervalometer setting - 50 ft.

(6) RCM - 4 special jamming aircraft will orbit the target area and the approach to the target area. Two airplanes will orbit an area in a ten mile radius circle with the center at 3532N - 14010E at altitudes of 15,000 and 15,500 ft. Two additional airplanes will orbit an area in a ten mile radius circle with the center at 3536N - 14008E at altitudes of 16,000 and 16,500 ft.

(7) Takeoff: 061800K.

c. 313th Wing:

(1) Primary visual and radar target: SHIMIZU URBAN AREA

<u>MPI</u>	<u>OAP</u>	<u>FORCE REQUIRED</u>
061097	144090	3 Groups

MPI and OAP Reference: XXI BomCom Litho-Mosaic SHIMIZU AREA, No. 90.18 - Urban.

(2) Route:

Base  
Iwo Jima  
3441N - 13927E  
345830N - 1390730E (IP)  
Target  
3501N - 13815E  
Left turn  
Iwo Jima  
Base.

(3) Altitudes:

- (a) Enroute to target: 3,000 - 3,800 ft., 6,000 - 6,800 ft.

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(b) Of attack: 7,000 - 7,800 ft.

(c) Withdrawal from target: Minimum 10,000 ft.,  
maximum 15,000 ft.

(4) Bombing Airspeed: CIAS 205 MPH.

(5) Bomb Load: 2 Groups: M-47 IBs fused instantaneous nose,  
intervalometer setting - 50 ft.  
1 Group: M-17 IBs fused to open at 3,000 ft.  
above target, intervalometer setting -  
35 ft.

(6) Takeoff: 061900K.

## d. 314th Wing:

(1) Primary visual and radar target: KOFU URBAN AREA

MPIFORCE REQUIRED

062085

Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic KOFU AREA 90.16 - Urban.

(2) Route:

Base  
Iwo Jima  
3436N - 13814E (IP)  
Target  
Right turn  
3514N - 13909E  
Iwo Jima  
Base.

(3) Altitudes:

(a) Enroute to target: 5,000 - 5,800 ft., 9,000 - 9,800 ft.

(b) Of attack: 13,200 - 14,000 ft.

(c) Withdrawal from target: Minimum 15,000 ft.

(4) Bombing Airspeed: CIAS 205 MPH.

(5) Bomb Load: 1 Group: M-47IBs fused instantaneous nose,  
intervalometer setting - 75 ft.  
3 Groups: Clusters containing M-69 bombs  
fused to open 5,000 ft. above the  
target, intervalometer setting - 50 ft.

(6) Takeoff: 061800K.

## e. 315th Wing:

(1) Primary visual and radar target: 90.25 - 1764, MARUZEN OIL  
REFINERYMPIFORCE REQUIRED

126093

60 A/C

MPI Reference: XXI BomCom Litho-Mosaic WAKAYAMA AREA,  
MARUZEN OIL REFINERY, 90.25 - 1764.SECRET



(2) Route:

Base  
Iwo Jima  
3322N - 13443E  
3350N - 1344430E (IP)  
Target  
3335N - 13557E  
Iwo Jima  
Base.

(3) Altitudes:

- (a) Enroute to target: 5,000 - 5,800 ft., 7,000 - 7,800 ft.  
(b) Of attack: 15,000 - 16,000 ft.

(4) Bomb Load: 500 lb GPs fused 1/40 nose and non-delay tail.  
18,000 lbs per A/C, minimum load.

(5) Takeoff: 061700K.

x. (1) Method of Attack: by individual A/C with main force preceded by 12 pathfinder A/C.

(2) First 12 A/C will be designated pathfinders flown by best radar bombing crews.

4. Tactical Mission Numbers:

CHIBA No. 251  
AKASHI No. 252  
SHIMIZU No. 253  
KOFU No. 254  
90.25 - 1764 - No. 255

5. a. (1) The special jamming aircraft for the 73rd Wing will be equipped to barrage jam the regions 190-210 and 72-84 megacycles. Spot jamming will be conducted over the frequency ranges 180-190 and 210-220 megacycles as desired by the Wing Commander and as governed by the capacity of each wing. In addition, all strike aircraft will be equipped with one jammer within the barrage band listed above providing sufficient equipment is available.

(2) All wings, except the 73rd Wing, will be equipped to barrage jam the region 190-210 megacycles. Spot jamming will be conducted over the frequency ranges 180-190, 210-220, and 72-84 megacycles as desired by the Wing Commander and as governed by the equipment available.

(3) Observations of the extent and reliability of the barrage will be made while over the target.

(4) Jammers will be kept in operation at all times when closer than 50 miles to the mainland, and will be turned off at all other times, except for preflight and postflight frequency checks, which are to be made on the ground while the jammers are installed in the airplanes.

b. Command Post: Hq., XXI BomCom, GUAM.

BY COMMAND OF MAJOR GENERAL LEMAY:

A W KISSNER  
Brigadier General, USA  
Chief of Staff

OFFICIAL:

*John B. Montgomery*  
JOHN B. MONTGOMERY  
Colonel, G. S. C.  
D C/S, Operations

SECRET



S E C R E T

XXI BOMBER COMMAND  
GUAM  
6 July 1945 - 0400K

FIELD ORDERS )  
NUMBER 96 )

AMENDMENT NUMBER 1.

Change so much of paragraph 3. c. (1) that reads: "Force required 3 Groups" to read: "Force required 4 Groups".

Change so much of paragraph 3. c. (5) that reads: "1 Group M-17 ICs" to read: "2 Groups M-17 ICs".

BY COMMAND OF MAJOR GENERAL LEMMY:

A W KISSNER  
Brigadier General, USA  
Chief of Staff

OFFICIAL:

*J. B. Montgomery*  
J. B. MONTGOMERY  
Colonel, G.S.C.  
D C/S, Operations

S E C R E T



SECRET

SECRET

Auth: CG, XXI Bomber Command

Initials: RPB

Date: 6 July 1945

FIELD ORDERS )  
NUMBER 96 )

XXI BOMBER COMMAND  
GUAM  
6 July 1945 - 0300K

AMENDMENT NUMBER 2

Change paragraph 3. c. (5) to read as follows:

(5) Bomb Load: 2 Groups: M-47 IBs fused instantaneous nose,  
intervalometer setting - 50 ft.

2 Groups: M-17 ICs fused to open 2,500 ft.  
above target, intervalometer  
setting - 35 ft.

Change paragraph 3. e. (3) (b) to read:

(b) Of Attack: 10,000 ft.

BY COMMAND OF MAJOR GENERAL LEMAY:

A W KISSNER  
Brigadier General, USA  
Chief of Staff

OFFICIAL:

*J. B. Montgomery*  
J. B. MONTGOMERY  
Colonel, G.S.C.  
D C/S, Operations

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- 1 - CO, 3rd Photo Recon Squadron
- 6 - A-3 Tactics, XXI Bomber Command
- 2 - 33rd SCU, XXI Bomber Command
- 1 - Communications, XXI Bomber Command
- 1 - OAS, XXI Bomber Command
- 2 - CIU, XXI Bomber Command
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ANNEX

G

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Missions No. 251, 252, 253, 254 & 255

6 July 1945

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TACTICAL MISSION REPORT

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1 Commanding General, Army Air Forces  
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4 - 5 Chief of Staff, U.S. Army Strategic Air Forces (Guam)  
6 Commanding General, Twentieth Air Force  
7 Commanding General, Eighth Air Force (Okinawa)  
8 Commander in Chief, U.S. Army forces, Pacific  
9 Chief of Naval Operations, OP-16-V  
10 Commander in Chief, Pacific Fleet (Adv Hq)  
11 Commander in Chief, Pacific Fleet (Rear Hq)  
12 Commander Air Force, Pacific Fleet  
13 Commander, Third Fleet  
14 Commander, Fifth Fleet  
15 Commander, First Carrier Task Force  
16 Commander, Marianas  
17 Commanding General, U.S. Army Forces, Middle Pacific  
18 Commanding General, Allied Air Forces, SWPA  
19 Commanding General, Far East Air Forces  
20 Commanding General, U.S. Strategic Air Forces in Europe  
21 Commanding General, Mediterranean Allied Air Forces  
22 Commanding General, Fifteenth Air Force  
23 - 24 Commanding General, Seventh Air Force  
25 Commanding General, VII Bomber Command  
26 - 27 Commanding General, VII Fighter Command  
28 Commanding General, Eleventh Air Force  
29 - 33 Commanding General, 301st Fighter Wing  
34 Command Hq, Allied Air Forces, SWPA  
ATTN: Senior Intelligence Officer, R.A.A.F.  
35 Commander in Chief, U.S. Army Forces, Pacific  
ATTN: G-2 (For Section 22, RCM)  
36 Officer in Charge, Joint Intelligence Center  
Pacific Ocean Areas  
37 Commanding General, Army Air Forces  
ATTN: AC/AS Intelligence  
38 - 67 Commanding General, Army Air Forces  
ATTN: AC/AS, Intelligence, Collection Division  
68 - 69 Commanding General, U.S. Army Strategic Air Forces (Guam)  
ATTN: Intelligence  
70 Commanding General, U.S. Army Strategic Air Forces (Guam)  
ATTN: Communications  
FOR: Counter Measures Air Analysis Center  
71 Commanding Officer, Twentieth Air Force Lead Crew School  
72 Brigadier General, H.S. Hansell, Jr.  
73 Chief of Staff, Twentieth Air Force  
74 Deputy C/S, Opns, Twentieth Air Force  
75 AC of S, A-2, Twentieth Air Force  
76 Chemical Warfare Officer, Twentieth Air Force  
77 Ordnance Officer, Twentieth Air Force  
78 Director of Tactics, A-3, Twentieth Air Force  
79 - 80 Historical Officer, Twentieth Air Force

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81	Commanding General; 58th Bombardment Wing
82	Commanding General; 73rd Bombardment Wing
83	Commanding General; 313th Bombardment Wing
84	Commanding General; 314th Bombardment Wing
85	Commanding General; 315th Bombardment Wing
86	Commanding Officer; 3rd Photo Reconnaissance Sq
87	Commanding Officer; 41st Photo Reconnaissance Sq
88	Commanding Officer; 55th Reconnaissance Sq, Long Range Weather
89	Commanding Officer, Twentieth Air Force Combat Staging Center (Provisional)
90	Commanding Officer; 33rd Statistical Control Unit
91	Commanding Officer; 6th Bomb Group (VH)
92	Commanding Officer; 9th Bomb Group (VH)
93	Commanding Officer; 16th Bomb Group (VH)
94	Commanding Officer; 19th Bomb Group (VH)
95	Commanding Officer; 29th Bomb Group (VH)
96	Commanding Officer; 39th Bomb Group (VH)
97	Commanding Officer; 40th Bomb Group (VH)
98	Commanding Officer; 330th Bomb Group (VH)
99	Commanding Officer; 331st Bomb Group (VH)
100	Commanding Officer; 444th Bomb Group (VH)
101	Commanding Officer; 462nd Bomb Group (VH)
102	Commanding Officer; 468th Bomb Group (VH)
103	Commanding Officer; 497th Bomb Group (VH)
104	Commanding Officer; 498th Bomb Group (VH)
105	Commanding Officer; 499th Bomb Group (VH)
106	Commanding Officer; 500th Bomb Group (VH)
107	Commanding Officer; 501st Bomb Group (VH)
108	Commanding Officer; 502nd Bomb Group (VH)
109	Commanding Officer; 504th Bomb Group (VH)
110	Commanding Officer; 505th Bomb Group (VH)
111	Commanding Officer; 509th Composite Group
112	Commanding Officer; 15th Fighter Group (VLR)
113	Commanding Officer; 21st Fighter Group (VLR)
114	Commanding Officer; 414th Fighter Group (VLR)
115	Commanding Officer; 506th Fighter Group (VLR)
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