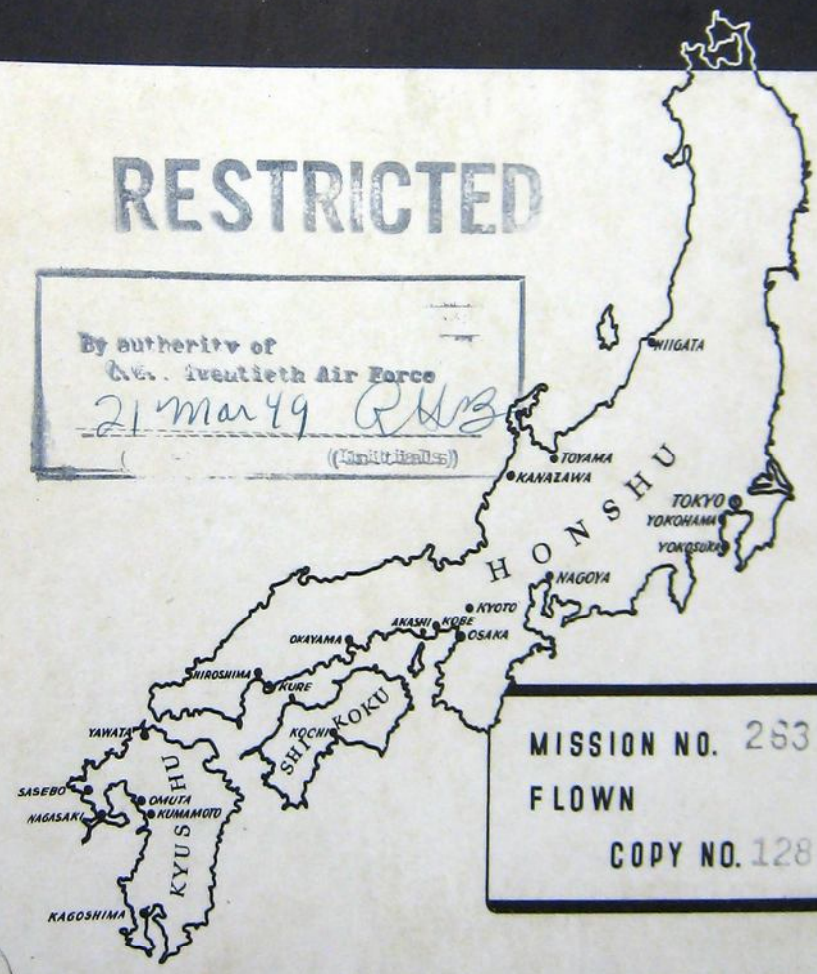
Tactical Mission REPORT



MISSION NO. 263 267
FLOWN
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HEADQUARTERS
XXI BOMBER COMMAND
APO 234

7-55-54

FOREWORD

Mission 262 was a mining operation that will be reported in a separate Tactical Mission Report which receives only limited distribution.

HEADQUARTERS
XXI BOMBER COMMAND
APO 234

TACTICAL MISSION REPORT

Field Order No. 98 — Missions No. 263 thru 267.

Targets: Urban Areas of Utsunomiya, Ichinomiya, Tsuruga and Uwajima; and the Kawasaki Petroleum Center

12/13 July 1945

Table of Contents

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HEADQUARTERS
XXI Bomber Command
APO 234

SUBJECT: Report of Attacks on 4 Cities and 1 Precision Target on Honshu on 12/13 July, 1945.

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

1. IDENTIFICATION OF MISSIONS:

a. Field Order Number 98, Headquarters XXI Bomber Command, dated 12 July 1945, directed the 58th, 73rd, 313th, 314th, and 315th Bombardment Wings to participate in attacks against 4 cities and 1 oil procision target on Honshu in XXI Bomber Command Missions Number 263 through 267.

b. Targets Specified:

(1) Primary Visual and Radar Targets:

Mission Number	Target	Wing	Force Assigned
263	Utsunomiya Urban Area (90.13)	58th	4 Groups
264	Ichinomiya Urban Area (90.20)	73rd	4 Groups
265	Tsuruga Urban Area (90.22)	313th	3 Groups
266	Uwajima Urban Area (90.31)	314th	4 Groups
267	Kawasaki Petroleum Center (90.17-128)	315th	70 Aircraft

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

2. STRATEGY AND PLANS OF OPERATION:

a. Selection of D-Day: These night incendiary missions were a continuation of the plan where the different Wings of the Bomber Command were assigned separate cities for attack by night radar bombing methods which had proven successful on recent missions. (For details see Tactical Missions Reports for Missions 234 through 237, 240 through 243, 247 through 250, 251 through 255 and 257 through 261). Another radar precision attack against an oil target (see Tactical Mission Report for missions number 232, 238 and 245 for details of previous attacks) was to be simultaneously executed with these missions. On the basis of a weather prediction presented on 12 July, firm decision was made to attack.

b. Importance of Targets:

(1) Mission Number 263, Utsunomiya: Located 60 miles north of Tokyo in a northern projection of the Kanto plain, Utsunomiya is the capital of Tochigi Prefecture and is the largest city in the plains outside of the Tokyo-Yokohama area. Its population in 1940 was 87,868. Recent photo reconnaissance had shown substantial increases in houses adjoining the new Nakajima Aircraft Company Plant. The city's importance lies in its being a unit in the arc of defenses around Tokyo and a link in the Nakajima Aircraft complex.

(2) Mission Number 264, Ichinomiya: Important as one of the main "feeder" cities into the Nagoya aircraft center, Ichinomiya is 9 miles northwest of Nagoya on the double track Tokaido main line. Maibara, on the eastern edge of Lake Biwa, is 27 miles west of Ichinomiya, Gifu is 9 miles southeast of it and Kiso Gawa is 4 miles west. Ichinomiya is reported to be a new munitions center and the sub-assembly plants in the city had become more important due to the damage done to Nagoya. It is an old city, with little new housing. The built-up area extends about 1 mile on the east-west axis and 1.2 miles on the north-south extension. The city is built in a spider-like fashion, with roads and railways radiating from a central point. Nikko Gawa encircles the city at the north, but there are no effective fire breaks except for a shrine and the park in the center of the city.

(3) Mission Number 265, Tsuruga: Tsuruga is located 11 miles northwest of the northernmost tip of Biwo Ko, 47 miles northeast of Kyoto on Tsuruga Wan, and has a population of 31,346. It has a built-up area of 1 square mile and the 2 small streams in the city are not considered to be adequate fire breaks. Good landmarks of the city are the breakwaters and Kanoga Saki. Tsuruga is one of the 3 most important of the Korea shuttle ports and is on a cross-island route that ties into the Tokaido main railroad line. The pre-war low capacity traffic has been greatly increased because of shipments which can be made more safely in the Japan Sea. The city is important because in its small compact area it includes a port, warehouses, and railway facilities. A new chemical plant is located to the south.

(4) Mission Number 266, Uwajima: Uwajima is located on Uwajima Bay on the west central coast of Shikoku. It is capable of handling ships up to 1000 tons in good anchorages. The city is also a prominent silk and textile center.

(5) Mission Number 267, Kawasaki Petroleum Center: Located on the Kawasaki waterfront industrial area, the Kawasaki Petroleum Center is on a man-made island of approximately 2300 square feet, located at the approximate center of 14,000 linear feet of industrial water front. This refinery is estimated to be capable of refining up to 2,000,000 barrels of crude oil per year and has storage facilities for over 1,200,000 barrels.

c. Details of Planning--Operational:

(1) Bombing Plans:

(a) Determination of Bomb Load:

1. For Mission 263, the 58th Wing was to load 2 Groups with M-47 incendiary bombs and 2 Groups with 500-pound E-46 aimable clusters containing M-69 incendiary bombs. This load was specified on the basis of efficient utilization of available supplies of incendiary bombs. The bombing accuracy expected indicated that sufficient tonnage would be placed on the target by normal effort of the Wing. The M-47 incendiary bombs were to be placed on the target first in order to saturate the fire defenses and to start appliance fires thoughout the area, thereby increasing the expected damage per cluster of the M-69 bombs to be used in the latter stages of the attack. The target area was highly congested and inflammable and it was estimated that a density of 200 tons per square mile on the target area would cause the desired destruction of the mixed residential and industrial structures. The M-69 bombs to be used in the clusters were selected since the penetration required was slight due to the target's high inflammability and large fires could be expected to start shortly thereafter. An intervalometer setting of 75 feet for the bombs and 50 feet

for the clusters was chosen to get maximum tonnage on the target area and to attain proper density for each aircraft pattern.

2. For Mission Number 264, the 73rd Wing was instructed to direct a normal effort of 4 Groups carrying clusters containing M-69 bombs to the extent of availability or M-47 incendiary bombs. However, the Wing had no flexibility in determining the bomb load for this mission due to the fact that only M-47 bombs were available for use at this particular time. One hundred per cent use of this bomb against a Japanese urban area had never been made and was normally considered impracticable, sincethere were insufficient B-7 shackles in any Wing to permit exclusive use of the T-19 cluster adapter. Exclusive use of this bomb with the B-10 shackle was expected to result in excessive hang-ups and malfunctions. The bomb was considered desirable for use against the mixed residential and industrial area to be attacked, due to the high charge and weight ratio of the bomb. The large number of appliance fires anticipated were expected to exact maximum destruction of the area to be attacked. A 75 foot intervalometer spacing was specified to get a bomb density of 225 tons per square mile in the target, sufficient to achieve the destruction desired.

3. For Mission Number 265, since the target area was small and highly congested, consisting chiefly of industrial and warehouse areas, 3 Groups of the 313th Wing, a normal effort, was to attack. One Group was to carry M-47 bombs and 2 Groups were to carry 500-pound incendiary clusters. This was expected to place an average density of approximately 250 tons per square mile of the target area to obtain the maximum destruction. The munitions selected were on the basis of utilization of available supplies and for the characteristics as set forth for the other missions in this series of strikes. Since the target was small and a high concentration was needed for destruction, an intervalometer setting of 50 feet was specified for the M-47 bombs and 35 feet for the clusters to attain the maximum density as well as to insure uniform coverage.

4. For Mission Number 266, the 4 Groups of the 314th Wing were to participate in this normal effort, with 2 Groups carrying M-47 bombs and 2 Groups carrying E-46 500-pound aimable clusters containing M-69 bombs. The target area was relatively small consisting of typical Japanese residential and industrial area type structures, and having several fire breaks. It was planned to put an average density of 200 to 225 tons per square mile on the target, believed to be sufficient to insure destruction of the area. The reasons for the selections of the bombs were the same as those set forth for the other missions. The intervalometer setting specified, 75 feet for the bombs and 50 feet for the clusters, was expected to insure maximum uniform density from the force assigned, as well as to be sufficient to destroy the target area.

5. For each of these 4 incendiary missions the first 12 aircraft airborne, which were to include the 12 best radar crews, were to carry M-47 incendiary bombs and were to precede the main force as pathfinders to mark the target areas.

6. Fuzings were to be instantaneous nose for the M-47 bombs and the clusters were set to open 5000 feet above the target. The instantaneous nose fuzing was to enable the bombs to burst only a few feet beneath the roofs to give maximum spread to the burning napalm in order to increase the ignition of the inflammable buildings as well as their contents. The cluster fuzings was for maximum functioning of both the cluster and the individual bombs after the cluster had opened.

7. For Mission Number 267, all aircraft of the 315th Wing were to carry 500-pound general purpose bombs, fuzed with a 1/10 second delay nose and 1/40 & 1/100 second delay tails. The 500-pound bomb was selected since the target installations were of both the storage and refinery type, and the large number of bomb hits expected to be attained was expected to cause maximum damage to both manufacturing and storage facilities. The 1/40 and 1/100 second delay tail fuze was selected to permit penetration of the bomb beneath the tank tops to a sufficient depth to assure detonation below the contents level and thus causing maximum damage. This delay was also expected to be most effective against the multi-story buildings included in the target area. The 1/10 second delay nose fuze was selected only as an assurance fuze.

(b) Bombing Data: (For pictures of the targets and location of mean points of impact see Annex A, Part III).

1. For Mission Number 263, a mean point of impact near the center of Utsunomiya was selected since a probable circular error of 4000 feet included the whole city.

2. For Mission Number 264, a mean point of impact was selected near the center of Ichinomiya. A probable circular error of 3000 feet included all of the important part of the city's built-up area.

3. For Mission Number 265, the mean point of impact selected for Tsuruga was near the center of the city and a probable circular error of 3000 feet included the entire city.

4. For Mission Number 266, the mean point of impact selected was south of the hill in the center of Uwajima and a probable circular error of 4000 feet included all of the city, with the exception of the northeast extension of the area.

5. For Mission Number 267, the mean point of impact selected was in the center of the Kawasaki Petroleum Center and a probable circular error of 1500 feet included all installations.

6. The missions were similar to other strikes where 4 Wings were assigned separate cities for incendiary night attack using radar methods of bombing and the 315th Wing was assigned a precision target. Determination of axes and altitudes of attack was dependent on the best radar and antiaircraft considerations, which are discussed by those specialists in this report. It was planned to have approximately 550 B-29's take part in these missions and it was anticipated that 3775 tons of bombs would be placed on all targets. Important bombing planning considerations follow:

Wing	Mission Number	Bombing Altitudes (feet)	Axis of Attack (degrees)	Length of Run (miles)	Time of Run (minutes)	Drift (degrees)
58th	263	13,000 to 13,800	286	43	9½	4 right
73rd	264	10,000 to 10,800	80	42	9½	1 right
313th	265	12,000 to 12,800	3	32	7 3/4	8 right

Wing	Mission Number	Bombing Altitudes (feet)	Axis of Attack (degrees)	Lenght of Run (miles)	Time of Run (minutes)	Drift (degrees)
314th	266	10,000 to 10,800	105	34	7½	3½ left
315th	267	15,000 to 16,000	42	50	11	2½ left

(2) Navigation: The 5 Wings were to use Iwo Jima en route out and on return as per the XXI Bomber Command Tactical Doctrine. From Iwo Jima to the target and return, the route plans were as follows:

(a) Mission Number 263, Utsunomiya:

Route	Reasons for Choice
3545N-14100E	This dead reckoning point east of Chosi Point was selected to keep aircraft out of the Chosi flak area.
to	
3623N-14038E (IP)	Initial point was the easily identified mouth of the Mito River on the eastern shore of Honshu.
to	
Target	A right turn was to be made after the attack.
to	
3643N-14043E	This point was designated to keep aircraft on course to land's end and to avoid the flak areas at Hitachi.
to	
3600N-14119E	Land's end.

(b) Mission Number 264, Ichinomiya:

Route	Reasons for Choice
3353N-13608E	Landfall was this jutting point of easily identified land at Kinomoto.
to	
3458N-13555E	To make the turn onto the target smaller, this point on the lower part of Biwa Ko Bay was designated as a turning point.
to	
351230N-1360700E (IP)	The jutting point of land on the eastern side of Biwa Ko which made a good radar approach to the target was selected as Initial Point.
to	
Target	A right turn was to be made after the attack.
to	
3520N-13710E	This point was designated to avoid the flak at Nagoya.
to	
343830N-1380400E	This was designated as land's end.

(c) Mission Number 265, Tsuruga:

Route	Reasons for Choice
3354N-13608E	Landfall was this easily identified point on the coast.
to	
3512N-13604E (IP)	Okino Shima in Biwa Ko was selected as Initial Point since it was easily identified and provided the best radar approach to the target.
to	
Target	A right turn was designated off the target.
to	
3450N-13636E	After land's end in Nagoya Bay this easily identified point was designated.

(d) Mission Number 266, Uwajima:

Route	Reasons for Choice
3242N-13150E	This point north of Nobeoka was chosen for landfall.
to 331430N-1314700E	This point east of Oita was selected for a smaller turn at the initial point.
to 332030N-1320100E (IP)	The easily identified tip of the peninsula jutting out from Shikoku was selected as the initial point for a good approach to the target.
to Target	A right turn was designated after the attack and then to land's end.

(e) Mission Number 267, Kawasaki Petroleum Center:

Route	Reasons for Choice
343630N-1385100E	Landfall was the easily identified lower point of the peninsula between Tsuruga and Sagami Bay.
to 3457N-13909E (IP)	The easily identified Kawana Misaki point on the western shore of Sagami Bay that provided for a straight run between landfall and target
to Target	was selected as initial point.
to 3524N-14024E	This point was designated as land's end to take the force over the least defended area of the peninsula.

(3) Flight Engineering:

(a) For Missions Number 263, 264, 265 and 266 the planning was as follows:

1. Altitudes and speeds were planned for maximum fuel economy and safety, as well as for compression of the striking forces.

2. Fuel reserve data indicated that none of the Wings would require bomb bay tanks and that a total fuel load of approximately 6600 gallons would be carried, unless inclement weather would require larger fuel reserves.

3. No maximum or minimum bomb loads were specified. It was anticipated that of the potential capacity of 18,000 pounds per palne for each Wing (with the exception of the 58th Wing whose potential capacity was 16,000 per aircraft) that loads would average approximately 15,000 pounds. The ammunition load was estimated at 300 pounds.

(b) For Mission Number 267 the planning was as follows:

1. Except for the bombing run and the compression of the force, all aircraft were to fly at speeds and altitudes which would allow maximum range and safety. Speeds to be used were to be 5 miles per hour faster than recommended speeds by XXI Bomber Command regulations. No assemblies were planned.

2. It was expected to load full wing and center section tanks and to carry 18,000 pounds of bombs.

(4) Radar:

(a) For Mission Number 263, the planning was as follows:

1. The Radar check points en route to landfall were to be Iwo Jima and its radar beacon and the chain of islands between Iwo Jima and Chosi Point.

2. A reference turn 10 miles east of Chosi Point was selected to avoid antiaircraft defenses in the area and the coast line was expected to be within easy radar range. Landfall and the initial point, the mouth of the Mito River, was a prominent projection along the smooth coast line north of Chosi.

3. Utsunomiya was considered a difficult inland radar target, but the radar return showed up well above 12,000 feet and for that reason the bombing altitude of 13,000 to 13,800 feet was specified. The only good radar approach was upwind and it was directed that direct radar synchronous bombing be used.

(b) For Mission Number 264, the planning was as follow

1. The only radar check point en route to landfall was Iwo Jima.

2. Landfall was the easily identified point on the peninsula projection at Kinomoto, south of which the coast is smooth and regular.

3. The initial point was the point on the eastern shore of Biwa Ko which had been used successfully on all missions to the Nagoya area.

4. Ichinomiya was considered a difficult inland radar target although there were numerous radar reference points. The only good radar approach was from west to east, whereby the target could be identified from the initial point. The 3 main radar check points formed a triangle, one of which was Gifu and Ogaki, another was a straight line of 3 signals from northwest Nagoya to the target which included industrial areas along the railway line and the last was the return from the wide river west of the target. By utilizing these references the target could be found and bombing could be accomplished by fixed-angle or synchronous radar release.

(c) For Mission Number 265, the planning was as follows

1. Iwo Jima was the only radar check point between base and landfall.

2. Landfall point was the same as that for Mission Number 264 and the initial point was located on the easily identified distinctive shore of Biwa Ko. By setting up a straight course from landfall to target, good results were anticipated. This was expected to enable aircraft to set up a good course and have bombing data checked prior to synchronization.

3. Tsuruga is located on the coast and has numerous radar reference points to aid bombing. By utilizing the straight approach it was anticipated that there would be more radar releases on the briefed axis and that drift and course could be checked throughout the approach. The coast line northeast of the target and the large chemical plant south of the target were expected to be good radar aids to identify Tsuruga. The target radar return was considered good, although it was expected that there might be some difficulty experienced from the hilly returns between the initial point and the target.

(d) For Mission Number 266, the planning was as follows:

1. Iwo Jima was to be the only radar check point en route to landfall.

2. Landfall was to be made on the distinctive coastal point north of Nobeoka. Radar navigation to the initial point was expected to be good, with the peninsula coast line expected to give good check points for radar fixes and wind runs. The initial point was on the most prominent point in the area, the peninsula on the western coast of Shikoku, and was easily identified by radar.

3. Uwajima was considered to be a difficult radar target. Although reconnaissance routes had been run from the north, south and west, it was decided that a run from the northwest would be best. The hilly terrain and the numerous islands were expected to give a confusing radar picture. Use of an axis from the peninsula tip was to avoid these confusing islands, and Ku-Shima was to be used as a reference point for course determination. The city gives a fair radar return at low ranges, while Ku-Shima could be picked up at the initial point. Direct synchronous release was to be used for bombing.

(e) For Mission Number 267, the planning was as follows

1. Iwo Jima was to be the first radar check point on which to use the beacon for position determination. The island chain was not expected to be of any assistance since the APQ-7 can only see targets within 30 degrees of heading. The only possible islands that could be utilized for checking would be the Nishino Shima islands.

2. Landfall was expected to be easily identified because it was on the southern tip of the arrowhead-shaped peninsula south of Fuji San. Course for landfall to the target was to be straight, using the prominent coastal point on the above-mentioned peninsula as the initial point.

3. It was planned to use 2 aircraft on this mission to act as radar wind ships to transmit their average wind to all other aircraft. This procedure was expected to set up accurate bombing data prior to landfall. By using a straight course from landfall, all operators were expected to be able to check ground speed and refine the drift. Since the target was built on a series of square jetties of reclaimed land on the coast in Tokyo Bay, the APQ-7 resolves these jetties as separate targets and this was expected to make it easy to pick the exact target location. Direct radar synchronous bombing was to be used for release.

(5) RCM:

(a) For Missions Number 263 through 266, special jamming airplanes were not recommended since the flak was expected to be meager at these 4 urban targets. Electronic jammers were to be installed in each strike aircraft to barrage the 72-84 megacycle and 190-210 megacycle regions. Spot jammers were to be employed to jam any searchlight or gun-laying radars outside the barrage. Rope was to be carried and dispensed in accordance with existing regulations. Search of enemy radar from 20-3000 megacycle was to be continued and enemy communications were to be recorded.

(b) For Mission Number 267, because of the intense flak expected in the target area, it was planned that the 314th Wing would furnish 2 jamming aircraft to cover the 315th Wing strike due to the fact the latter Wing was not yet equipped with jamming equipment.

The special jamming aircraft were to orbit the position of 3530N-13942E with a radius of 10 miles, 1 at an altitude of 17,000 feet and 17,500 feet for the other. The special jamming aircraft were to be equipped to barrage the 72-84 megacycle and 190-210 megacycle regions and to spot jam any gun-laying or searchlight radars appearing outside the barrage. Rope was to be carried by all strike aircraft to be dispensed when protection was needed from radar-controlled antiaircraft guns and searchlights.

(6) Air-Sea Rescue: The Navy was furnished with details of these missions and provided the air-sea rescue facilities shown on the chart in Annex A, Part VIII, which also includes facilities provided by the XXI Bomber Command.

d. Details of Planning--Intelligence:

(1) Enemy Air Opposition:

(a) For Mission Number 263, it was anticipated that 10 to 15 fighters might oppose the mission to Utsunomiya with negligible effect.

(b) For Mission Number 264, it was estimated that 15 to 20 interceptors might offer negligible to nil opposition at Ichinomiya.

(c) For Mission Number 265, it was estimated that 10 to 15 fighters might offer nil to negligible opposition at Tsuruga.

(d) For Mission Number 266, it was estimated that 5 to 10 fighters might present nil to negligible opposition at Uwajima.

(e) For Mission Number 267, it was estimated that 40 to 50 fighters might intercept the strike at the Kawasaki Petroleum Center, with 10 to 12 of the planes being twin-engine night fighters. Opposition was expected to be negligible to weak.

(f) The anticipated continued weak showing of the Japanese air force was based on the fact that the enemy had committed a large proportion of its fighters to an anticipated invasion. Another controlling factor was the apparent shortage of aviation gasoline. Although the Japanese have night fighters, they are few and their equipment is far below Allied standards. For that reason night-fighter interception, as well as night fighter day fighter combinations remained weak. Most of the interception was expected to occur in the target area where the B-29's were expected to be silhouetted by fires or searchlights. There was nothing to indicate that the Japanese would employ new tactics. It was assumed that the enemy would be able to warn his defenses 3 to 5 hours prior to landfall by the bombers and that interceptors would meet the B-29's approximately 50 miles out at sea. The diversity of the targets and the anticipated poor operational weather was expected to reduce the opposition listed above.

(2) Enemy Antiaircraft:

(a) For Mission Number 263, it was determined that the Utsunomiya defenses included 20 heavy guns, 86 medium weapons and an estimated 2 to 6 searchlights. This was a moderate, but poor defense against night attack because no searchlights had been noted in the area. The specified attack altitude of 13,000 feet was to avoid other flak areas.

(b) For Mission Number 264, there were no defenses apparent in the immediate vicinity of Ichinomiya, but the airplanes were expected to be within range of the following Nagoya defenses: 12 heavy guns, 23 medium weapons and an estimated 2 to 15 searchlights. The route avoided flak areas, with the exception of the southern tip of Biwa Ko, where only meager and inaccurate flak had been encountered on previous missions. At the planned altitude of attack, 10,000 feet, only meager and generally inaccurate antiaircraft fire was anticipated. A breakway to the northeast was planned to avoid other defenses in the Nagoya area. The route to land's end was planned to avoid defended areas.

(c) For Mission Number 265, the Tsuruga defenses included 6 and possibly 12 heavy guns, 2 medium weapons and 1 searchlight. This meager defense presented no planning problem. The route avoided heavily defended areas and meager and inaccurate flak was expected on the approach through the Biwa Ko area, at Tsu and at Yokkaichi en route to land's end.

(d) For Mission Number 266, photographs of the Uwajima area had pinpointed 6 medium weapons and very meager and inaccurate heavy flak had been encountered on previous missions. The route to the target area was planned to avoid the Oita and Saeki defenses. Flak considerations did not enter into the planning.

(e) For Mission Number 267, in the immediate vicinity of the Kawasaki Petroleum Center the planes would be in range of 128 heavy guns and in addition there were about 30 guns in the Yokosuka area which would be within range. On the approach the planes would pass over the guns of the Hiratsuka defenses. Approximately 50 to 70 searchlights would be effective on the planned approach. It was planned to use rope, desynchronize engines and utilize cloud undercast to decrease searchlight effectiveness. The routes had been determined chiefly on the basis of the best radar approach. To penetrate the Kawasaki dock area, it was difficult to plan a route to avoid flak. The axis of attack was planned as closely as possible to the downwind approach, which was expected to reduce the flak risk. Only fairly accurate flak was expected at the planned altitude of attack, 15,000 to 16,000 feet. On leaving the target area, a breakaway to the right across Tokyo Bay was specified. This would bring the planes within range of 10 heavy guns north of Kisarazu, but this breakaway was necessary to avoid the large flak concentrations in Tokyo.

3. EXECUTION OF THE MISSIONS:

a. Take-Off: Take-off was accomplished in few scattered showers as follows:

Mission	Wing	Pathfinders	Main Force	First Take-off	Last Take-off
263	58th	11	119	120705Z	120840Z
264	73rd	12	118	120905Z	121016Z
265	313th	11	87	120751Z	120915Z
266	314th	12	118	120700Z	120812Z
267	315th	60	60	120830Z	120909Z
	XXI B.C. Totals	46	502*	120700Z	121016Z

* This total does not include 2 weather, 2 RCM, 4 wind-run and 4 Super Dumbo aircraft.

b. Route Out: Long range navigation was accomplished by aircraft proceeding individually to the target areas. A frontal system over the coast line made radar navigation difficult and caused overruning of the initial point in several instances and hindered compressibility. Only 3 aircraft had excessive navigation errors at landfall.

c. Over Targets: (See Consolidated Statistical Summary, Annex E, for details).

(1) Primary Targets: Target area navigation, wind determination and bombing were accomplished by radar due to the poor weather conditions encountered. Time control showed an improvement over other previous missions. The 73rd Wing accomplished a superior job, putting 99 per cent of its 124 aircraft over its primary target in 70 minutes. The 508 aircraft (including 1 weather and 1 wind-run aircraft) that bombed the primary targets between 1400Z and 1745Z at altitudes ranging from 6000 to 16,700 feet dropped a total of 3578.5 tons of bombs.

(2) Targets of Opportunity: Fourteen aircraft (including 3 that also bombed primary targets) bombed various targets of opportunity with 89 tons of bombs between 1429Z and 1735Z from altitudes between 9900 and 16,000 feet.

(3) Thirty-one aircraft were non-effective on these missions.

d. Route Back: Returns to base were accomplished as briefed, with the exception of 38 aircraft that landed at Iwo Jima.

e. Landing: Aircraft landed in light showers as follows:

Mission	Wing	First Landing	Last Landing
263	58th	122136Z	130055Z
264	73rd	122147Z	130104Z
265	313th	122020Z	122324Z
266	314th	122054Z	130030Z
267	315th	122221Z	130005Z
XXI B. C. Total		122020Z	130104Z

f. Losses: A total of 3 aircraft was lost, 2 to mechanical and accidental factors and 1 to unknown reasons.

g. Operational Summary:

(1) Navigation: See Annex A, Part I, for track charts of all missions.

(2) Bombing: (See Annex A, Part IV, for detailed reports). Bombing results on these missions were considered satisfactory.

(3) Flight Engineering: (See Annex A, Part V, for chart, and Annex E, Consolidated Statistical Summary, for fuel consumption and weight data).

(a) Narrative of Missions as Flown:

1. Cruise to Mainland: Individual climbs were made immediately after take-off to altitudes between 4000 to 8000 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 6,000 and 16,700 feet.

3. Return to Base: Return to base was conducted by individual airplanes without difficulty. Minimum fuel was used by airplanes cruising at 14,000 to 16,000 feet and descending into the traffic pattern. Specified maximum range speeds gave the best fuel consumption.

(b) Comments: No airplanes carried bomb bay tanks. All Wings, except the 315th Wing, carried full loads of bombs. The 315th Wing, carrying general purpose bombs, carried an average of 84 per cent of full load capacity and landed with an average of 1175 gallons of fuel. Twenty per cent of the aircraft airborne by the 58th Wing landed at Iwo Jima due to excessive fuel consumption because of the cold fronts encountered.

(4) Radar: (See Annex A, Part VI, for report on equipment performance). Only 12 aircraft made visual target sightings on these missions.

(5) Gunnery: (See Annex A, Part VII, for report). There was no important gunnery activity during these missions.

(6) Air-Sea Rescue: (See Annex A, Part IX for details). Two aircraft ditched, 1 en route to target and 1 en route to base. Of the 21 crew members, 12 were rescued, 2 were killed and 7 were missing. Another aircraft is missing to unknown reasons, 10 crew members aboard.

h. Weather: (See Annex B, for details). The weather encountered on these missions was approximately as forecast and did not interfere with their performance.

i. Communications:

(1) RCM: (See Annex C, Part I, for details). Twenty-nine RCM Observers took part in these missions.

(2) Radio: (See Annex C, Part II, for details). Thirty-nine strike reports were transmitted and received during these missions.

j. Intelligence Summary:

(1) Enemy Air Opposition: (See Annex D, Part I, for details). Air opposition was negligible on these missions, only 2 attacks being made by the 67 enemy aircraft sighted.

(2) Enemy Antiaircraft: (See Annex D, Part II, for details). Flak was heavy, meager and inaccurate, with no bombers sustaining damage.

(3) Damage Assessment: (See Annex D, Part III, for details).

(a) Mission Number 263, Utsunomiya: A total of .94 square miles (34.2 per cent of the built-up area) was destroyed. Four unnumbered targets were damaged.

(b) Mission Number 264, Ichinomiya: Damage to this target was .01 square mile (.8 per cent of the built-up area). One unnumbered target was damaged.

(c) Mission Number 265, Tsuruga: A total of .77 square mile (68 per cent of the built-up area) was destroyed. Two numbered targets and 1 unnumbered target were damaged.

(d) Mission Number 266, Uwajima: No photo reconnaissance was available on the damage to this target by this strike. Damage assessment to Uwajima will be included in the Tactical Mission Report for Missions 297 through 302, to be issued in the near future.

(e) Mission Number 267, Kawasaki Petroleum Center: Damage was scattered, with 6 per cent of the storage capacity being damaged. Thirty-seven specific units were damaged, including 7 adjacent numbered targets.

Curtis E. LeMay

CURTIS E. LeMAY
Major General, U.S.A.
Commanding

ANNEX

A

OPERATIONS

Part I - Navigation Track Chart

Part II - Radar Approach Charts

Part III - Mean Points of Impact

Part IV - Bombing

Part V - Flight Engineering Chart

Part VI - Radar

Part VII - Gunnery

Part VIII - Air-Sea Rescue Chart

Part IX - Air-Sea Rescue Reports

Section A - 58th Wing Report No. 5

Section B - 315th Wing Report No. 1

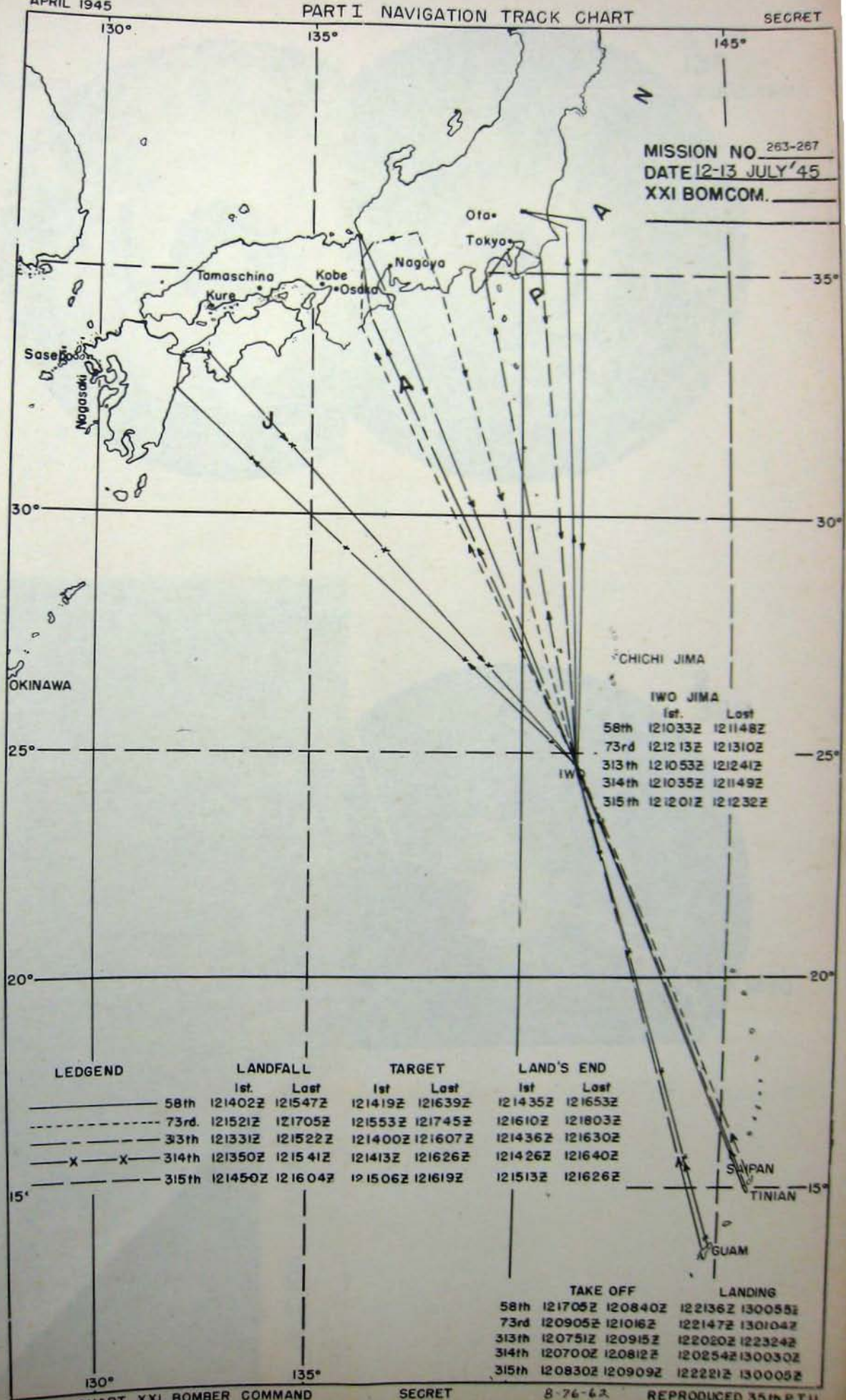
Missions No. 263, 264, 265, 266 and 267

12/13 July 1945

APRIL 1945

PART I NAVIGATION TRACK CHART

SECRET



TRACK CHART XXI BOMBER COMMAND SECRET 8-76-62 REPRODUCED 35th P.T.U.

PART IV - BOMBING

1. Mission No. 263, Utsunomiya Urban Area:

a. The greatest difficulty encountered was a ten-tenths undercast in the target area. Almost all bombing was accomplished by radar and DR navigation. In all cases where radar was operative, the radar-bombsight coordination synchronization procedure was used.

b. The wing dispatched a weather plane ahead of the main force to obtain and transmit wind direction and velocity to the main force. The practice of dispatching a weather ship ahead of the main force is considered highly satisfactory and a great aid to bombing aircraft.

c. Malfunction of bombing equipment occurred in 5 aircraft. One aircraft reported malfunction of bomb bay doors, 2 aircraft reported malfunction of B-10 shackles and 2 aircraft encountered malfunction of unknown cause.

d. The mission was well planned from a bombing standpoint and no difficulty was encountered in executing the plan, except for weather in the target area. The IP and axis of attack were highly satisfactory.

e. Compressibility of this wing was 140 minutes. The average drift reported was 7 degrees right.

2. Mission No. 264, Ichinomiya Urban Area:

a. The target area was ten-tenths undercast which permitted only 8 visual sightings. Some difficulty was encountered in identifying the target with radar, because the target was small. The wind obtained by the weather aircraft was accurate and considered a great aid to the aircraft of the main force. Several aircraft reported malfunction of bombing equipment as follows: bomb doors, 1; B-10 shackles, 1; unknown, 2; A-4 release, 2; and T-19 adapter, 3. The bombing was accomplished with radar performing the principal sighting operation.

b. Three aircraft bombed targets of opportunity (1 of which also bombed the primary target) within the empire. The 2 aircraft that bombed only targets of opportunity did so due to engine failures.

c. The mission was considered well planned from the bombing standpoint. The average drift reported was 1 degree left. The compressibility was very poor and was attributed to adverse weather conditions on route to the target. Compressibility was 112 minutes.

3. Mission No. 265, Tsuruga Urban Area:

a. Bombing was accomplished by radar and dead reckoning navigation, as weather in the target area was ten-tenths undercast.

b. The greatest difficulty encountered was a weather front in the target area and a wind shift during the latter part of the striking period, contrary to the wind obtained by the weather ship. Two aircraft bombed targets of opportunity when mechanical difficulties were encountered which prevented them from reaching the primary target. Five aircraft reported malfunction of bombing equipment as follows: B-10 shackles, 3; A-4 release, 1, and intervalometer, 1.

c. The mission was considered well planned from a bombing standpoint. The average drift reported was 8 degrees right. Compressibility for the wing was 127 minutes.

4. Mission No. 266, Uwajima Urban Area:

a. All bombing was accomplished by radar as the target area was ten-tenths undercast. Severe weather was encountered at the target and many aircraft bombed under instrument conditions.

b. The greatest difficulty encountered was a weather front lying over the target area which made it very difficult to obtain accurate winds. The aircraft dispatched to obtain wind direction and velocity proved to be very beneficial.

c. Nine aircraft reported malfunction of bombing equipment as follows: B-10 shackles, 4; A-4 release, 2, and bomb racks, 3.

d. The mission was considered well planned from a bombing standpoint. The average drift reported was 3 degrees left. Compressibility for the wing was 133 minutes.

5. Mission No. 267, Kawasaki Petroleum Center:

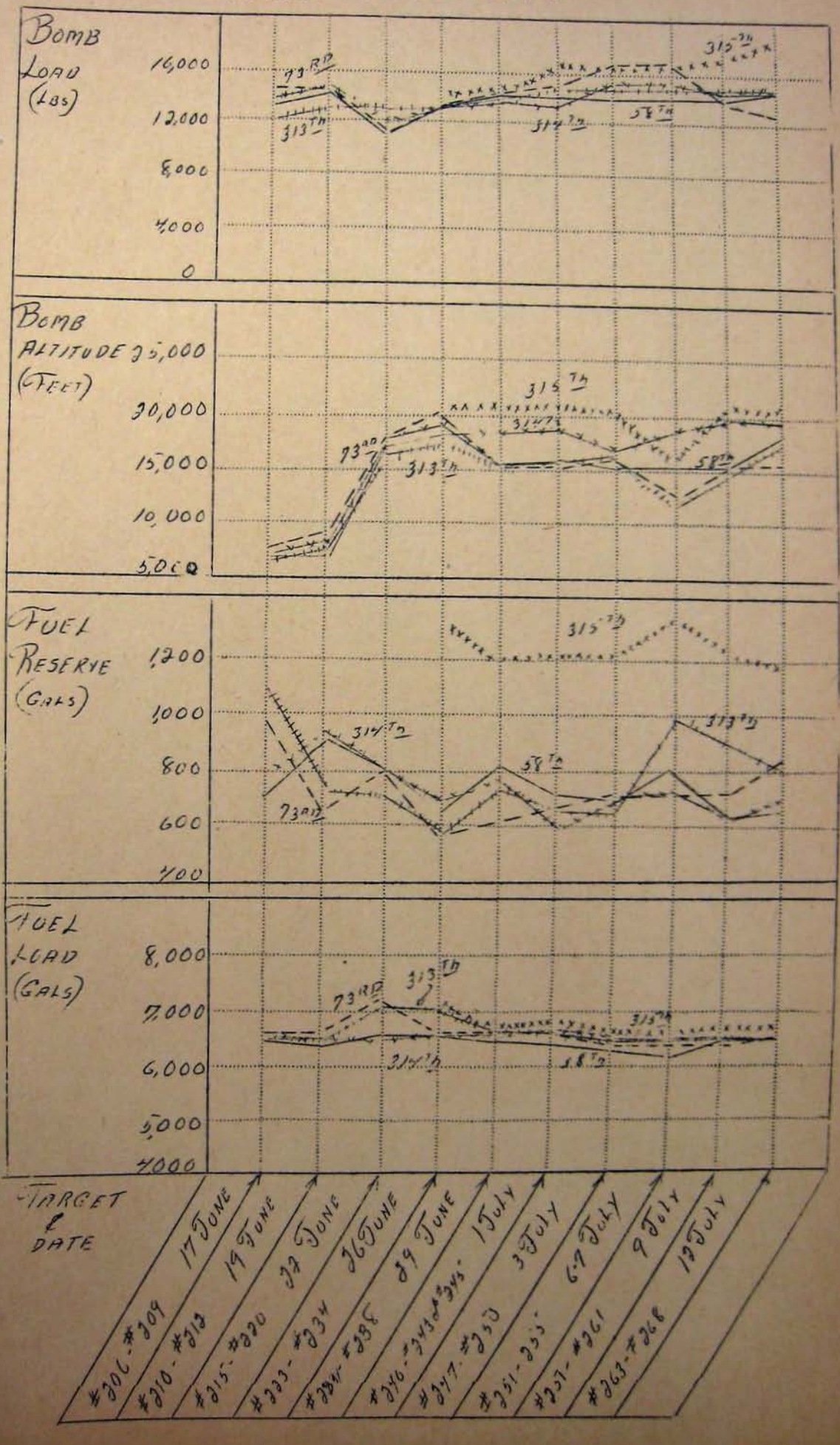
a. Bombing was accomplished by radar, except for 3 aircraft that bombed visually when their radar sets became inoperative.

b. One aircraft reported malfunction of bomb doors.

c. The greatest difficulty encountered was the inoperative radar reported by the aircraft.

d. The average drift reported was 2° right. Compressibility for the wing was 73 minutes.

Flight Engineering



PART VI - RADAR

1. Equipment Performance - AFQ-13:

a. Number of sets operative at take-off: 466 (86½%).

b. Number of sets operative over target: 437

c. Number of sets operative on landing: 431

d. Number of planes using azimuth stabilization: 337 (77.1%)

e. Number of set failures: 2

f. Interference was encountered at target area, IP and landfall. This was due to the weather at these points.

g. Average maximum range (in nautical miles) of targets:

70 at 5000 to 10,000 ft
66 at 10,000 to 15,000 ft

h. Average maximum range (in nautical miles) of beacon:

120 at 5000 to 10,000 ft
132 at 10,000 to 15,000 ft

i. Average maximum range of Japanese Coast - 45 nautical miles.

j. Remarks:

(1) Briefing material was good with the exception that the 73rd Wing stated the radar strip was of little value and was supplemented by 2 additional short range pictures from their files.

(2) Methods of release:

(a) Radar direct non-synchronous

(b) Radar direct synchronous.

2. Radar Bombing - AN/APQ-7:

a. Number of sets operative at take-off: 54

b. Number of sets operative over target: 54

c. Number of sets operative on return: 52

d. Average Maximum range (in nautical miles):

50 at 15,000 ft
100 at 10,000 ft

e. Interference: Weather and other APQ-7 sets.

f. Coast of Japan was picked up at 50 nautical miles.

g. Equipment failures: 2

h. Remarks:

(1) 50 individual synchronous radar releases; 2 visual releases.

(2) Landfall was easily identified but some operators had difficulty with the IP.

(3) Briefing was satisfactory.

(4) Aiming points were difficult to pick-up until at close range.

3. Loran - APN-4 and APN-9:

a. Number of fixes reported: 3478

b. Antenna used and usable maximum range:

	Fixed	Trailing	Command
(1) Ground-Wave	475	618	410
(2) Sky-Wave	1200	1345	1330

c. Inoperative sets: 16

4. IFF - SCR-695:

a. Sets turned on and off as per SOP.

b. Number of time checked: 32 times.

c. 1 Malfunction, due to burned out transmitter, no signal given out.

5. Absolute Altimeter - SCR 718:

a. Number of operative sets: 216.

b. Number of inoperative sets: 2.

* * * * * *

PART VII - GUNNERY

1. No. of A/C firing: None.

2. Average turret load:

UF	UA	T	LA	LF
400	388.3	400	325	300

3. Average no. of rounds fired in combat per turret:

UF	UA	T	LA	LF
0	0	0	0	0

4. No. of rounds fired in combat: 0

5. No. of rounds used for test firing: 3670. Average per gun: 3.3.

6. Guns Loaded:

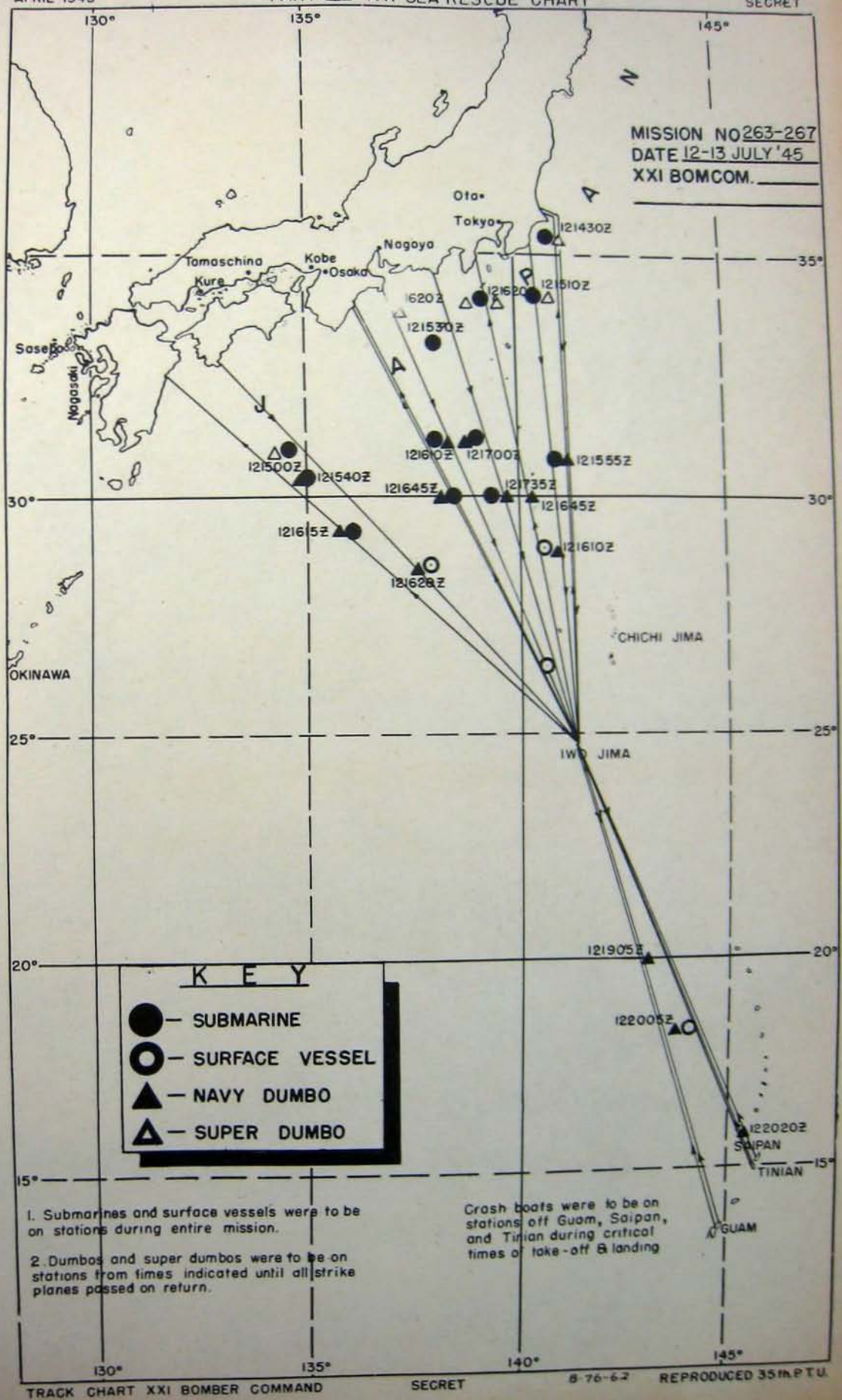
58th Wing	73rd Wing	313th Wing	314th Wing	315th Wing
Hot	Cold	Hot	Hot	Cold

7. Malfunctions: C.F.C.
1 Rheostat out

8. Total percentage of equipment operative:

C.F.C.	CAL. .50 M.G.
99.9%	100% (none used)

9. Remarks: There was no gunnery activity on these missions.



TRACK CHART XXI BOMBER COMMAND SECRET 8-76-62 REPRODUCED 35th P.T.U.

PART IX - SECTION A - DITCHING REPORT*

1. Mission No. 263, 12-13 July 45. Date of Report: 19 July 45.

2. Wing: 58th Group: 468th Squadron: 792nd Plane No: 42-24855.

3. Cause of Ditching: Fuel transfer system out preventing transfer of fuel from No. 1 which was feathered.

4. Time of Ditching: 2155Z, 13 July 1945. Location: 1837N-14412E

5. Crew:

Position	Name	Rank	Last Seen
P	IRWIN A. STAVIN	1st Lt	Rescued
CP	EDWARD M. MARANTETTE	2nd Lt	Rescued
N	RICHARD B. LACROSSE	2nd Lt	Rescued
B	DONALD J. PASQUARIELLO	2nd Lt	Rescued
FE	Robert M. Watehouse	Sgt	Rescued
V	WALTER J. BIELSKI	2nd Lt	Rescued
R	Frank V. Ortiz, Jr.	Sgt	Rescued
SG	Robert E. Silcox	Sgt	Rescued
LG	William H. Pearce	Cpl	Drowned
RG	Bruce S. Galbraith	Cpl	Rescued
TG	William A. Teague	Cpl	Drowned

6. Narrative Report:

a. Prior to Ditching: Over Iwo at 0528 aircraft had 1549 gallons of fuel on board with contact conditions at Tinian. About 2½ hours out of Iwo the engineer noted that #1 was low on fuel and 300 gallons were transferred from #1, 2 and 3 tanks into #1. It was then noticed that #1 was using excessive fuel and shortly thereafter #1 started backfiring and smoking. #1 was feathered, then the fuel transfer system failed when the engineer was attempting to transfer the fuel from #1 into the remaining good engines. 450 gallons of fuel remained available for the three good engines. It was determined that aircraft had insufficient available fuel to reach base and when a convoy was sighted pilot decided to ditch near convoy.

b. Preparation for ditching:

(1) Pilot established contact with dumbo on VHF and dumbo was on scene at the time of ditching. Radio operator did not attempt to contact ASR facilities or Wing Ground Station.

(2) No equipment was jettisoned due to faulty bomb bay doors. Loose equipment was thrown into bomb bay. Ditching braces were installed with some difficulty owing to poor condition of the securing bolts. Astrodome and all escape hatches were opened prior to ditching.

c. Ditching - Personnel:

(1) The pilot and co-pilot were in their seats with safety belts and shoulder harnesses fastened.

(2) The navigator assumed ditching position under his table facing aft and using parachute for padding.

* Based on 58th Wing Air-Sea Rescue Report No. 5.

had a C-1 raft but when difficulty was experienced in getting the raft out of the packet it was abandoned. All crew members except the left gunner and tail gunner got into the large rafts. The left gunner and tail gunner were panicky and were seen struggling in the water with Mae West inflated but making no progress toward rafts. It is believed by the surviving crew members that the left gunner and tail gunner were pulled under by debris as the plane sank or slipped out of their Mae Wests which were improperly fitted as per instructions received at Topeka, Kansas.

f. Survival:

No rationing was instituted due to the immediate presence of the convoy. Survivors were in the water only about 30 minutes before being picked up by the PC 1551 and LSM 345.

g. Weather:

Wind 8 knots from 120°. Ceiling 2000' scattered cumulus. Visibility unrestricted. Swells about 6' deep and 20' between crests. Sea was moderately choppy.

h. Rescue:

A dumbo was circling at the time of ditching. All survivors were picked up in 30 minutes by a sub chaser and LSM from the convoy.

7. Suggestions of the Crew:

a. CFC Gunner believes that tunnel is better ditching position than against turret because he was tossed around when aircraft slewed around. Also suggests that bombardier take position beside him in tunnel.

b. Bombardier's position unsatisfactory. He devised a belt to hold himself in position but this failed to help and he was thrown forward.

c. Proper instruction in tight fitting of the Mae West and wet dinghy drill should be given at Topeka and other training stations in the Continental United States. (Note this was a new crew very recently reported in from the States. Most of the crew had had no wet dinghy drill prior to this mission.)

8. Action taken by Wing:

a. B-15 Emergency Belts previously ordered have not arrived. Groups have been instructed to manufacture belts locally.

b. Wet dinghy drill for all new crews will be mandatory within the Wing prior to new crews going on their first mission.

9. Comments: This crew did a good job of ditching the aircraft as evidenced by the fact that all 11 crew members were alive after landing had been effected. Loss of the left gunner and tail gunner appears due to lack of familiarity with equipment and insufficient wet dinghy training.

PART IX - SECTION B - DITCHING REPORT*

1. Wing: 315th Group: 16th Squadron: 16th B-29 Aircraft No. 42-63603.

2. Mission Number: 267, 12 July 1945.

3. Cause of Bailout: Three runaway propellers, engines #1, 3 and 4.

4. Time and Position of Bailout: 1934K, 12 July 1945, approximately 80 miles North of western tip of Orote Peninsula, Guam. Coordinates: 1436N - 14425E.

5. Rescue: 13 July 1945. Two crew members by LCI 947 at 0205K and 0430K; one by LCI 603 at 0746K.

6. Crew:

Position	Name	Rank	ASN	Last Seen
AC	MILFORD A. BERRY	1st Lt	0531337	In Airplane
P	JAMES TRIVETTE, SR	2nd Lt	02069867	Rescued
N	K. WARREN ROLLINS	1st Lt	0738889	Bailing Out
B	REX E. WERRING, JR.	1st Lt	0732474	Rescued
VO	IRVING W. AMERINGER	2nd Lt	02068825	Bailing Out
FE	Morton Finkelstein	Sgt	32977132	Bailing Out
RO	Robert E. Lynch	Sgt	16135884	Bailing Out
RS	Harold I. Schaeffer	S/Sgt	15068491	In Airplane
LS	Clarence N. Nelson	Sgt	13186055	Rescued
TG	Philip G. Tripp	Sgt	31426856	Killed

7. Narrative Report:

a. History of Trouble: The aircraft acted properly during take-off (1904K) and climb. After leveling off at 6200 ft., RPM was reduced but No. 1 remained at 2400. The Airplane Commander reduced the RPM of No. 1 to 2000 with the feathering button. Almost immediately, however, it increased and went wild. The Airplane Commander hit the feathering button but it had no effect, so he pulled the throttle back, told the Bombardier to salvo the bombs and headed for Guam. On the turn, No. 3 started building up and again the feathering button was ineffective. The Airplane Commander gave the order to prepare to ditch. Almost immediately, No. 4 ran away and the order to bail out was given. The altitude was about 4500 feet, and the aircraft was dropping at about 1000 ft per minute. The Pilot took over the plane while the Airplane Commander fastened his parachute and one man life raft. The Pilot rang the alarm bell and called the left scanner and tail gunner on interphone.

b. Preparation for Bailout: The bombs had been salvoed and the doors closed. Each man fastened his parachute and hooked on his C-2 raft. The Bombardier opened the bomb bay doors. The pressure bulkhead was opened by the Radar Operator or Navigator.

c. Radio Procedure: The Airplane Commander attempted to transmit on VHF, channel C, but it appeared to be dead. He then switched to channel A. Bombardier reported that Pilot was not getting out on this channel. Also, no word has been received of receipt of any message by any aircraft or ground station.

* Based on 315th Wing Air-Sea Rescue Report No. 1.

d. Bail Out:

(1) Exit through Forward Bomb Bay.

The Navigator and Radar Operator went out first (order unknown), and their chutes were seen to open by the Bombardier who was third out. The Radio Operator hesitated but left sometime between the time the Bombardier and Pilot bailed out. The Pilot was next out and saw one chute open just before he left the airplane. With the exception of the Airplane Commander, the front of the airplane was clear when he left, and the altimeter indicated 500 feet. No difficulty was experienced in leaving the hatch. The Bombardier and Pilot put their hands along the edge of the bulkhead door and dove out in one motion.

(2) Exit through Rear Bomb Bay.

The Right Scanner had been briefed to bail out first and was fully geared and ready to go. The Left Scanner motioned him out but he (Right Scanner) "looked blank". The Left Scanner then asked him to step aside so he(Left Scanner) could go out, thinking that so doing the Right Scanner might gain confidence. The Right Scanner stepped aside, still mute, and the Left Scanner dove out the pressure bulkhead door. The Right Scanner was never seen to leave the airplane.

(3) Altitude and time for Bailout: Between 1500 ft and 500 ft. Time interval approximately 1½ minutes between first and last man.

e. Survival:

(1) Lt. Trivette:

(a) There was no shock felt on opening of the chute. He hit the water almost immediately after pulling the rip cord, hit the quick release button and escaped easily from the parachute. The harness and dinghy started to float away (the parachute had not collapsed and apparently the snap lanyard had not been hooked to the life vest). He kicked off his shoes and swam after the parachute.

(b) During this interval he saw a flash on the horizon when the airplane blew up. After a while two planes circled over him and he felt for the flares normally carried in the pocket of the summer flying suit. They were missing. (Lt. Trivette stated they were placed in the pocket, but he was not sure the pocket was buttoned.) Three individual 2 star flares were fired in a triangle around him.

(c) The sea became rougher and began to break over his head, so he went after the dinghy which was still attached to the parachute and was submerged. He gathered the shroud lines in his hand and went down, hand under hand after the raft, retrieving it on the third attempt. Lt. Trivette looked for a wheel to turn to inflate the raft and, not finding any, was somewhat confused, finally pulling on a loose string. This turned out to be the rip cord of the lever type valve and the raft inflated. No difficulty was experienced entering the raft. He attempted to bail out the raft but after working some time gave it up as water splashed in as rapidly as it could be removed.

(d) Soon, an airplane started to circle and he looked for the flares in the raft. The airplane passed before he found the flare but he was ready and shot a flare the next time it came over. He removed the cap and had some difficulty firing the flare due to lack of familiarity with it. Finally he felt the ring, pulled it and the flare functioned normally. He saw a search light with a green filter on the horizon

and fired another flare. Soon he saw a ship outlined on the horizon and fired a flare just as it was about to run him down. The ship stood by and picked him up.

(2) Lt. Werring:

(a) Lt. Werring did not experience any opening shock. Upon hitting the water he inflated his Mae West (no recollection of getting out of the harness) and retrieved his dinghy. About that time he saw the airplane explode about 50-200 feet above the water in a wing down attitude. He heard the Navigator call for help and could hear him coughing. Lt. Werring tried to swim in that direction and drag his dinghy with him but had little success. He then went about inflating the dinghy and like Lt. Trivette looked for a wheel valve. He finally "grabbed a handful of string", and inflated the raft. He saw one flare (2 star-red) go off in what seemed to be the opposite direction from where the airplane went down but was not certain of the direction.

(b) While attempting to get in the raft an airplane circled overhead but he couldn't get flares to signal it. He took some flares from his pocket and shot one off just as the airplane passed on a return run. The plane turned and Lt. Werring shot another flare and a couple of tracers. The plane dropped a surface flare about 15 yards from the raft and blinked his recognition lights. All in all the plane dropped 3 surface flares. It circled once more and then took off. (The airplane orbiting above the raft had engine trouble and had to return to base.)

(c) Lt. Werring became ill, dozed off, and sometime later was awakened by a plane overhead. After two misfires he got one tracer off. There were quite a few planes searching with landing lights on. A small ship came by, running without lights except one small one on the bow. He yelled but was not heard. He then started looking for signal equipment on the dinghy but was under the impression the rafts did not contain any, so after only a short search he gave up. (Each C-2 raft contains two Mark 1, Mod 0 and two M-75 distress signals or four M-75 signals if the M-1, Mod 0 is not available.) He attempted to bail out the raft but found the bailing bucket ineffective.

(d) Some time later an LCI started turning in his direction with search lights on. Lt. Werring paddled toward the ship, finally got in the beam and was picked up.

(3) Sgt Nelson:

(a) The parachute opening shock was negligible and almost immediately afterwards Sgt. Nelson hit the water. Escape from the parachute was accomplished without difficulty but the snap lanyard of the one-man life raft was not hooked and the raft was irretrievably lost. His flares were lost from his pocket and the only night signal available was tracer ammunition.

(b) During the night Sgt. Nelson saw several aircraft circle nearby and fired tracer ammunition to no apparent avail. Surface vessels were searching nearby with search lights playing but he was unable to attract their attention or get in the beam. At one time he saw four flares (2 star-red) in as many distinct locations.

(c) In the morning an airplane returning from the raid passed overhead and Sgt. Nelson broke out his sea marker dye. Another B-29 was seen to pass and then a Dumbo spotted him. The Dumbo dropped a "sea marker bomb" and led the LCI to Sgt. Nelson.

(4) The body of the tail gunner was recovered with unopened parachute attached. It is not known whether he bailed out, but it is considered unlikely since he was burned about the face and hands.

8. Suggestions by the crew:

a. ASR vessels should have better search light facilities and use them continuously in the search area when the chances of enemy activity are slight.

b. Corner reflectors on the one-man life rafts might have been effective in leading the surface vessels to the raft.

c. The flares should be judiciously used and not fired at aircraft without saving some to signal surface vessels. More than two flares should be carried.

d. It should be SOP for planes to blink their lights to show that survivors have been sighted.

e. ASR vessels should have radio aids to navigation, such as Loran Equipment and Radio Compasses.

9. Comments of Interrogation Board:

a. The need for more intensive training is plainly indicated, training that will emphasize raft inflation and the use of various items of equipment. Lecture work is not sufficient.

b. The importance of securing the emergency equipment on the person more effectively should be stressed. A pouch or some similar device to be carried on the person would be preferable to carrying the items in the pockets of the summer flying suit.

c. Combat crew personnel should be impressed with the value of the Mae West flashlight. The shortage which now exists is in large part due to the practice of using the light in the quarters. This practice must cease.

d. Since more flares cannot be carried without replacing other badly needed items, the value of conserving flares should be stressed.

e. All strike aircraft should carry more float lights to mark crew members in the water.

f. All ASR vessels should be equipped with the maximum possible number of searchlights which should be used constantly in the search area, unless enemy activity prevents such use.

g. An alternative CW and/or voice frequency should be assigned by CTF 94 for use by LCI's operating off Northwest and North Field and the Wing Ground Station. This frequency would be used in the event the vessels are required to go beyond voice range on 6970 Kcs.

h. It should be provided in SOP 2B that at night all aircraft observing survivors or planes or lights in the water blink their landing and recognition lights to indicate to the survivors that they have been seen.

i. A mature officer experienced in ASR work should be stationed aboard surface vessel investigating each ASR incident to take command at the scene of all planes and vessels searching for survivors.

10. Action Taken by this Headquarters:

a. All one-man life rafts will carry only the lever type valve as soon as the change over can be completed.

b. The proper means of carrying flares and emergency equipment in the summer flying suit to prevent loss on bailout has been stressed. A pouch to hang from the belt in which the equipment might be carried is under development.

c. Wing memorandum 55-7, which lists the minimum training required of all crews in emergency procedures, has been reemphasized. Wet dinghy drill is being conducted and action has been taken to provide training in escape from parachute harness.

d. The personal use of items of emergency equipment has been forbidden.

e. Permission has been secured from CTF 94 for the Wing Ground Station to use 4475 Kcs. to communicate with ASR vessels searching for survivors of 315th Bomb Wing planes.

f. A request for additional searchlights on LCI's operating off Northwest Field runway has been sent to CTU 94.7.1.

g. All aircraft now carry six (6) Mark 5, Mod 1, drift signals.

ANNEX

B

WEATHER

Part I - Weather Summary

Part II - Chart - Forecast vs - Observed Weather

Part III - Prognostic Map

Part IV - Synoptic Map

Missions No. 263, 264, 265, 266 & 267

12/13 July 1945

PART I - WEATHER SUMMARY

PLANNING FORECAST

Bases: 4-6/10 low clouds, base 1500 feet, tops 6-8000 ft, with few to 20,000 ft. and 4-6/10 middle and high clouds. Occasional moderate showers during day.

Route: To 31°N: Base conditions slowly improving to average of 5/10 low clouds, base 2000 ft, tops 6000 ft.
To coast: 6-8/10 low clouds, 6-8/10 middle and high clouds in warm front oriented NW-SE over western Honshu.

Targets: Tokyo: 6-8/10 low clouds, base 1500 ft, tops 4-5000 ft. and 5/10 middle and high clouds, increasing to overcast layers in afternnon and evening.
Rest: Broken to overcast multiple layers of low, middle and high clouds except Shikoku and south Kyushu which will be in warm sector and have 8/10 low clouds, base 1500 ft, tops 7000 ft. with scattered upper clouds.

OPERATIONAL FORECAST

Base at Take-Off: Broken low, middle and high clouds with scattered showers.

Route: There will be broken low, middle and high clouds with scattered light showers to 25°N. From 25°N to 30°N there will be scattered low, middle and high clouds. A frontal zone between 30°N and 33°N will give overcast low, middle and high clouds with moderate rain and moderate rime icing. From 33°N to target there will be broken low clouds and scattered middle clouds.

Targets: Tsuruga: 8/10 cumulus, base 2000 ft, top 6000 ft; 4/10 altostratus at 15,000 ft. Winds at 12,000 ft. will be 280° at 35 knots.
Uwa Jima: 5/10 cumulus, base 2000 ft, top 5000 ft; 3/10 altostratus at 14,000 ft; 8/10 cirrus at 27,000 ft. Winds at 15,000 ft. will be 300° at 35 knots.
Utsunomiya: 4/10 cumulus, base 2000 ft, top 5000 ft; 3/10 altostratus base 14,000 ft, top 16,000 ft. Winds at 16,000 ft. will be 270° at 40 knots.
Kawasaki: 5/10 cumulus, base 2000 ft, top 5000 ft; 4/10 altostratus at 14,000 ft. Winds at 16,000 ft. will be 280° at 40 knots.
Ichinomiya: 6/10 stratocumulus, base 2000 ft, top 5000 ft; 3/10 middle clouds, base 14,000 ft, top 16,000 ft. Winds at 10,000 ft. will be 280° at 35 knots.

Base on Return: Scattered low, middle and high clouds with scattered light showers.

OBSERVED WEATHER

Bases on Take-Off: 4-5/10 low clouds, base 2000 ft, tops 6000 ft. with few scattered showers in area and patches of middle clouds at 11,000 ft. and scattered high clouds. Visibility unlimited except 2 miles in showers.

Route: To 20°N: as bases.
to 24°N: 3-4/10 low clouds, with tops 6000 ft; and occasional tops to 15,000 ft. with scattered showers, scattered middle and high clouds.
to 31°N: 2/10 low clouds, tops 4000 ft.

To Empire: Overcast low clouds with tops 10-15,000 ft. and unknown amounts of upper cloud. Moderate turbulence. Cloud tops decreased and some breaks appeared near Empire coast.

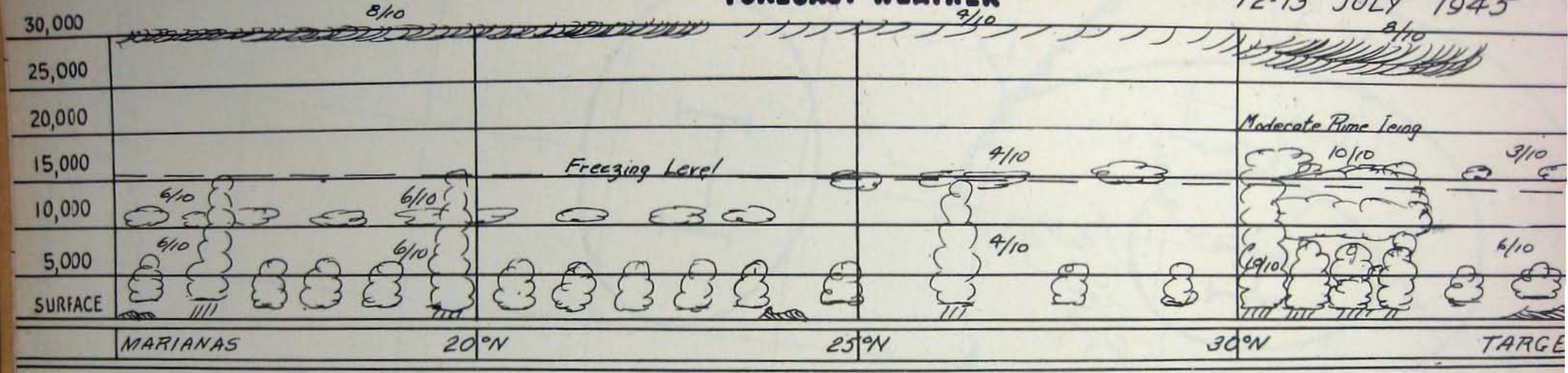
Targets: Tsuruga: 10/10 low clouds, tops 8-10,000 ft. with few to 12,000 ft. and overcast of thin middle cloud in layers near 10,000 ft. Winds at 12,000 ft. were 260° at 40 knots.
Uwa Jima: 10/10 middle clouds above and below flight altitude of 15,000 ft. Other clouds unobserved. Winds at 15,000 ft. were 280° at 40 knots.
Kawasaki: 5-10/10 variable low clouds with tops 8000 ft. and 7-9/10 thin middle clouds in layers between 14-20,000 ft. Winds at 16,000 ft were 260° at 40 knots.
Utsunomiya: 10/10 low clouds, tops 10,000 ft. with thin layers of middle clouds based at 15,000 ft. Winds at 17,000 ft. were 250° at 32 knots.
Ichinomiya: 10/10 low and middle clouds. Winds at 10,000 ft. were 260° at 42 knots.

Bases on Return: 3-4/10 low clouds with scattered light showers and scattered middle and high clouds. Base of low clouds 2000 ft. Visibility unrestricted except to 4 miles in light showers.

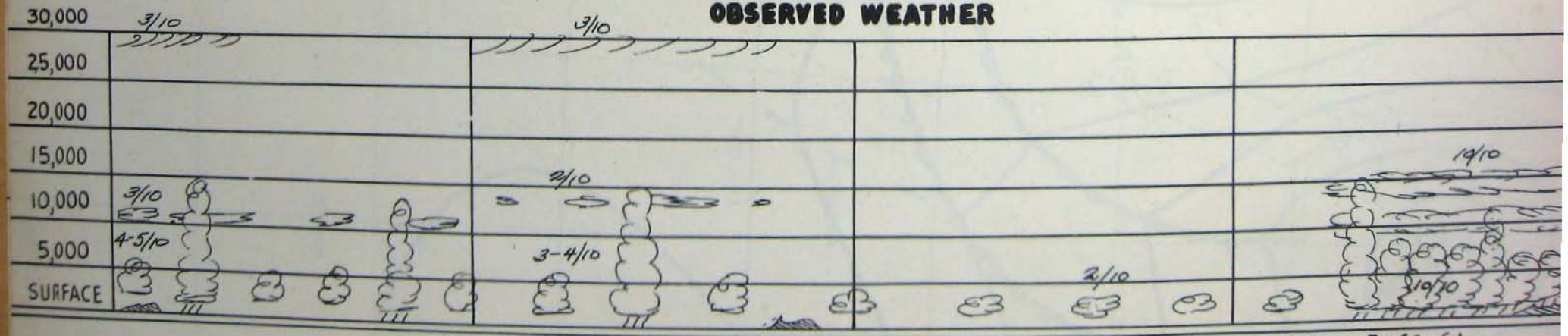
MISSIONS 263, 264, 265, 266 & 267

FORECAST WEATHER

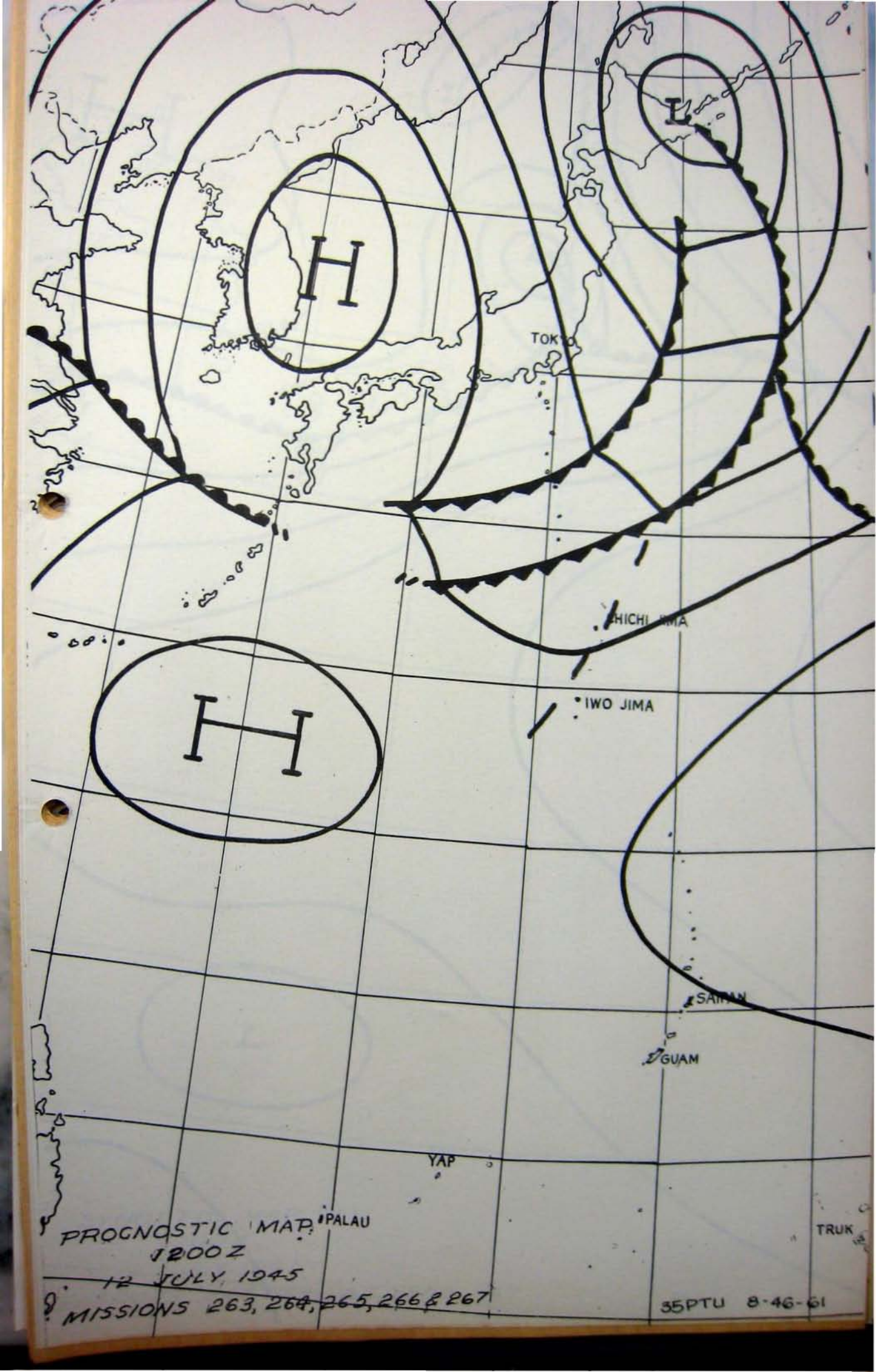
12-13 JULY 1945



OBSERVED WEATHER

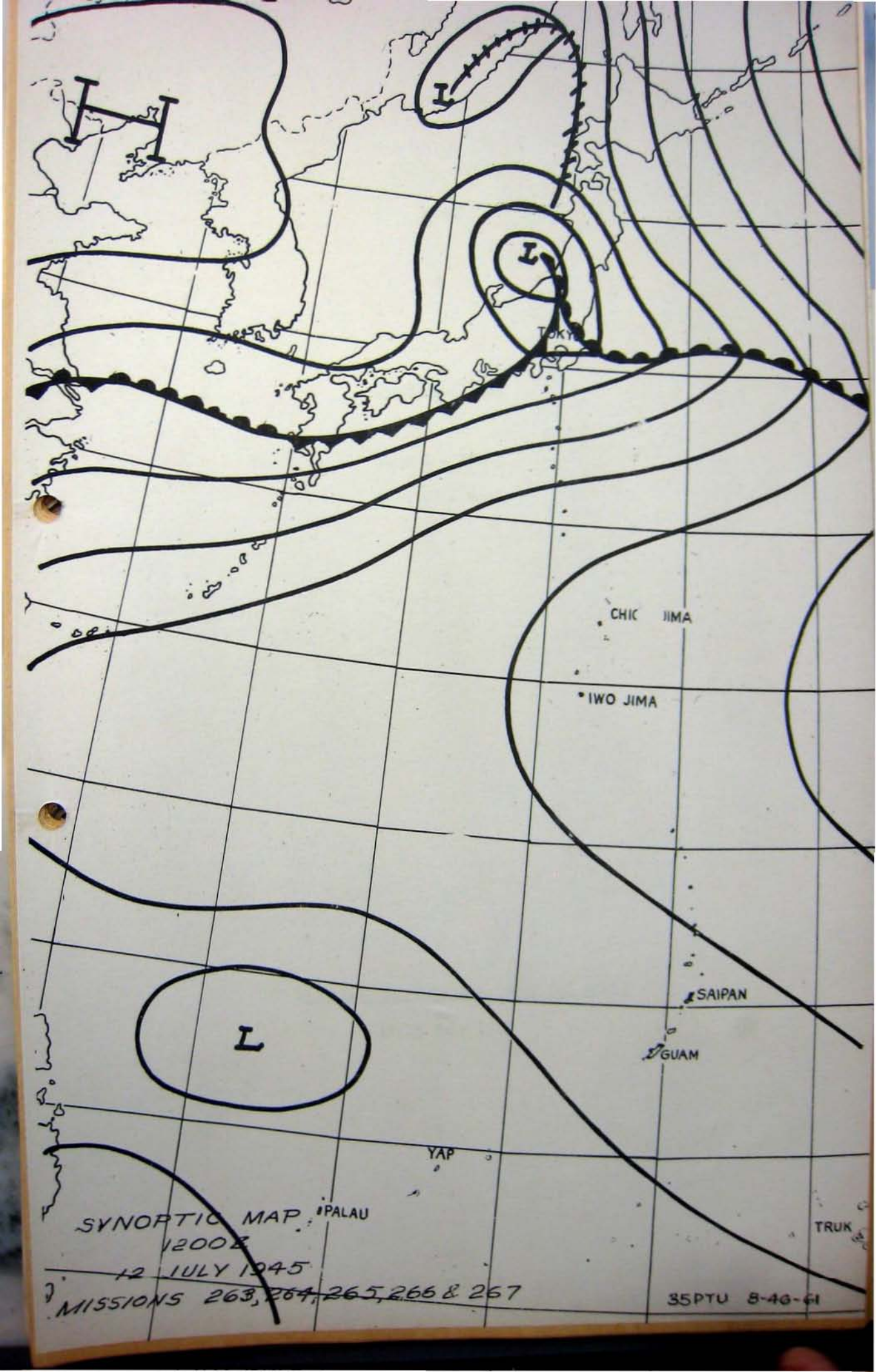


35PTU 8-46-61



PROGNOSTIC MAP
1200Z
12 JULY 1945
MISSIONS 263, 264, ~~265~~, 266 & 267

35PTU 8-46-61



SYNOPTIC MAP
2000Z
12 JULY 1945
MISSIONS 263, 264, ~~265~~, 266 & 267

35PTU 8-46-61

ANNEX

C

COMMUNICATIONS

Part I - RCM

Part II - Radio

Missions No. 263, 264, 265, 266 & 267

12/13 July 1945

Part I - RCM

1. Purpose:

a. To D/F enemy radars.

b. To Conduct a general search in the 20-3000 megacycle regions.

c. To barrage jam enemy gun-laying and searchlight radars in the 72-84 megacycle and 190-210 megacycle regions and to spot jam any GL or SL radar signals appearing outside the barrage.

d. To confuse enemy radar defenses by the use of rope.

e. To record enemy communications.

2. Method:

a. Twenty-nine RCM Observers participated and used the following equipment to accomplish the search and jamming: 220 - APT-1, 176 - APQ-2, 16 - ARQ-8, 22 - APT-3 (Modified), 29 - APR-4, 13 - APA-11, 7 - APA-24, 1 - ARR-7, 2 - APR-5 and 3 - APA-6.

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

c. Two special jamming aircraft were employed by the 58th Wing, to circle the target area during the strike. Two special jamming airplanes were furnished by the 314th Wing to cover the strike of the 315th Wing. These special jamming airplanes were equipped to barrage the enemy GL and SL radar frequency bands and to spot jam any signals that appeared outside the barrage. Additional quantities of rope were carried and dispensed to infest the area. All strike aircraft except those of the 315th Wing were equipped with one or more jammers and all carried rope.

3. Results:

a. On target Utsunomiya, 1 special jamming airplane was ineffective since it did not arrive at the target area until most of the strike aircraft had bombed. Because of the cloud cover in this area, searchlights were not effective.

b. Enemy voice communications were interceptéd and recorded in part on the following frequencies: 4190Kc, 4420 Kc, 4640 Kc and 9612 Kc.

c. Seventy-eight intercepts of enemy radar were recorded and are listed at the end of this section.

4. Results: Two sine wave modulated signals on frequencies of 42 and 46 megacycle were intercepted and were believed to be early warning radars. They were believed to be located in the Choshi point area.

LIST OF INTERCEPTS

00040	0000	00	3050N	13515E	071345	0125	21	121	S	
00046	0700	10	3025N	13530E	071345	0130	21	121	S	
00068	0485	30	3225N	13950E	071245	2346	21	122	P	ST CHI
00068	0465	32	3235N	14228E	071345	2337	21	122	P	ST CHI
00068	0490	20	3030N	13530E	071345	0135	21	121	S	ST CHI
00072	0475	28	3413N	14130E	071345	0001	21	122	P	ST CHI
00072	0490	20	3100N	13500E	071345	0120	21	121	S	ST CHI
00072	0500	30	3250N	13710E	071345	0001	21	121	S	ST CHI

00074	0500	35	3150N	13150E	071345	0033	21	121	S	E"	CHI
00074	0400	30	3250N	13710E	071345	0002	21	121	S	E"	CHI
00076	0495	30	3210N	13354E	071345	0105	21	122	P	E"	CHI
00076	0480	20	3200N	13245E	071345	0005	21	121	S	E"	CHI
00076	0700	05	3520N	13620E	071345	0110	21	121	S		
00078	2000	08	3415N	13615E	071345	0040	21	121	S	GL	OTA03
00078	0750	08	3410N	13605E	071345	0035	21	121	S	GL	OTA03
00078	1000	07	3450N	13605E	071345	0045	21	121	S	GL	OTA03
00078	0500	50	3145N	13230E	071245	2353	21	121	S	E"	CHI
00079	0473	34	3430N	13920E	071345	0343	21	122	P	E"	CHI
00079	0400	40	3250N	13710E	071345	0004	21	121	S	E"	CHI
00080	0480	40	3407N	14043E	071245	2357	21	122	P	E"	CHI
00080	0750	08	3250N	13750E	071345	0203	21	121	S	E"	001010202
00081	0485	24	3145N	13423E	071345	0112	21	122	P	E"	CHI
00082	0465	34	3220N	14125E	071245	2320	21	122	P	E"	CHI
00084	1000	00	3525N	13928E	071345	0108	21	121	S	E"	001010202
00084	0400	40	3255N	13705E	071345	0010	21	121	S	E"	CHI
00086	2470	00	3200N	13300E	071345	0142	21	121	S	E"	001010202
00090	0410	20	3420N	14038E	071345	0013	21	122	P	E"	001010202
00090	0360	28	2750N	14120E	071245	2211	21	122	P	E"	001010202
00090	0500	00	3510N	13900E	071345	1258	21	121	S	E"	001010202
00091	1770	00	3230N	13330E	071345	0050	21	121	S		
00093	0350	00	3235N	13202E	071345	0022	21	122	P	E"	001010202
00094	1930	00	3315N	13320E	071345	0010	21	121	S		
00096	0171	06	3607N	14022E	071345	0455	21	122	P	E"	001010202
00096	0600	40	3330N	13640E	071345	0021	21	121	S	E"	001010202
00080	1000	08	3550N	13600E	071345	0100	21	121	S	E"	OTA03
00097	0495	10	3145N	13230E	071245	2356	21	121	S	E"	001010202
00098	0700	00	3100N	13315E	071245	2350	21	121	S	E"	CHI
00099	0770	00	3200N	13530E	071345	0005	21	122	P	E"	CHI
00099	0500	20	3330N	13640E	071345	0020	21	121	S	E"	001010202
00100	0465	10	3230N	13450E	071345	0139	21	121	S	E"	001010202
00103	0965	14	3458N	14000E	071345	0335	21	122	P	E"	001010202
00106	0500	20	3317N	13222E	071245	0033	21	122	P	E"	001010202
00106	0350	60	3305N	13700E	071345	0012	21	121	S	E"	001010202
00108	0750	20	3305N	13700E	071345	0014	21	121	S	E"	CHI
00110	0000	10	3300N	13300E	071345	0125	21	121	S	E"	
00112	0000	10	3300N	13300E	071345	0127	21	121	S	E"	
00112	0348	80	3629N	14040E	071345	0407	21	122	P	E"	001010202
00112	0348	60	3428N	14012E	071345	0448	21	122	P	E"	001010202
00115	0357	28	3322N	14312E	071345	0017	21	122	P	E"	001010202
00134	0500	40	3410N	13620E	071345	0037	21	121	S	E"	001010202
00135	0490	15	3250N	13300E	071345	0045	21	122	P	E"	001030003
00140	0600	00	3505N	13900E	071345	1257	21	121	S	E"	001030003
00142	0660	00	3200N	13400E	071345	0105	21	121	S	E"	001030003
00143	0750	04	3535N	13600E	071345	0057	21	121	S	E"	001030003
00147	0750	08	3350N	13715E	071345	0147	21	121	S	E"	001030003
00147	0750	08	3230N	13800E	071345	0208	21	121	S	E"	001030003
00148	0600	12	3305N	13700E	071345	0015	21	121	S	E"	001030003
00149	0600	40	3310N	13650E	071345	0016	21	121	S	E"	001030003
00150	0475	04	3310N	13950E	071345	0346	21	122	P	E"	001030003
00150	0500	05	3530N	13600E	071345	0054	21	121	S	E"	001030003
00150	0700	08	3450N	13640E	071345	0120	21	121	S	E"	001030003
00152	0500	05	3220N	13300E	071345	0010	21	122	P	E"	001030003
00152	0505	05	3705N	14100E	071345	0143	21	122	P	E"	001030003
00153	0495	04	3705N	14100E	071345	0433	21	122	P	E"	001030003
00155	0465	05	3230N	13830E	071345	0137	21	122	P	E"	001030003
00155	0480	04	3225N	13950E	071345	0305	21	122	P	E"	001030003
00155	0483	08	3130N	13945E	071345	0605	21	122	P	E"	001030003
00156	0750	06	3350N	13715E	071345	0148	21	121	S	E"	001030003
00157	0750	08	3310N	13650E	071345	0017	21	121	S	E"	001030003
00158	0750	05	3200N	13810E	071345	0213	21	121	S	E"	001030003
00186	0535	00	3230N	13335E	071345	0055	21	121	S		
00195	0370	00	3247N	13108E	071245	2356	21	121	S		
00195	0600	12	3455N	13655E	071348	0136	21	121	S	E"	001020002
00200	0700	00	3530N	13935E	071345	0105	21	121	S		
00210	0500	40	3405N	13710E	071348	0146	21	121	S	E"	001020002
00215	0500	30	3405N	13710E	071348	0147	21	121	S	E"	001020002
00250	0000	00	3520N	13915E	071345	0109	21	121	S		
00282	0490	08	3246N	13316E	071345	0048	21	122	P		

PART II - RADIO

1. Strike Reports: Thirty-nine Strike Reports, were received by the Wing Ground Stations. Following is a tabulation by wing of the strike reports received: 58th, 8; 73rd, 8; 313th, 4; 314th, 12 and 315th, 7.

2. Fox Transmissions: In addition to the usual weather and time signals transmitted from the Ground Station, each Wing transmitted 2 and 3 "Dummy" messages to aircraft. The 58th Wing reported 85.8 per cent of aircraft received both of their transmissions. The 73rd Wing averaged 92.3 per cent of operators logging 2 messages. The 313th Wing reported 75 per cent of their aircraft receipted for 3 "F" type messages. The 314th Wing reported 88 per cent of their operators copied 2 messages from the Ground Station. Included in reasons for not copying messages were inoperative equipment, sleeping, landing at Iwo Jima, air sick, helping navigator on Loran fixes, relieved engineer, atmospheric interference, and guarding Air-Sea Rescue frequency at the time of transmissions. There were very few operators with no reason for not copying these messages.

3. Frequencies: Signal strengths on all frequencies remained at a high level during these missions. The 73rd Wing reported its 3145kc as useless. It has been replaced with 3160 kc. Atmospheric interference was reported as moderate to intense. Following is a percentage breakdown of traffic per frequency; 13.5 per cent on 3 megacycles, 58.4 per cent on 7 megacycles, and 28.1 per cent on 11 megacycles.

4. Navigational Aids: The 314th Wing reported a number of aircraft tested the WVTX broadcast station at Iwo Jima as a homer. At a distance of 100 miles the transmission was hardly audible. The compass indicator gave a course to steer, although the indicator was not too steady. There were 7 requests for HF/DF bearings and all were obtained. Class B bearings were furnished by the AACS facilities. Other ranges, homers and broadcast stations were used with excellent results. There were no requests for VHF/DF bearings. Flight Control facilities were used during these missions and excellent results reported.

5. Net Discipline and Security: No breaches of net discipline or violations of security were reported on the strike frequencies during these missions. However, it is reported by many aerial operators that the Iwo Jima Air-Sea Rescue frequencies are jammed most of the time because of poor net discipline.

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

a. 3020 Kcs:

(1) Steady signal, series of "P's" and numbers at 1507Z were very effective.

(2) Hand keyed signals, no identification from 1400Z to 1600Z, were effective.

(3) CW at different intervals was ineffective.

b. 6615 Kcs:

(1) CW between 0940Z and 1130Z was ineffective.

(2) CW and MCW always came in when air ground station started sending and was partially effective.

(3) CW with no identification between 1206Z and 1209Z was very effective.

(4) CW with call signs 9DT and 7LK between 1230Z and 1400Z was partially effective.

(5) V's from 1400Z to 1445Z was very effective.

(6) Unintelligible code, keying with no identification between 1540Z and 1645Z was partially effective to very effective.

(7) A CW zero beating signal from 2100Z to 2305Z was ineffective.

c. 10305 Kcs: Negligible.

d. 3145 Kcs: This frequency was replaced by 3160 Kcs.

e. 6055 Kcs:

(1) Jap voice at 121105Z was effective.

(2) Pulsating tone between 1500Z and 1530Z was partially effective.

(3) Unknown station sending unintelligible code at 0915Z was ineffective.

f. 10880 Kcs:

(1) Unidentified CW between 121435Z and 121450Z was effective.

(2) CW jamming and scratch note, over target were effective.

(3) Enemy CW between 121500Z and 121700Z was partially effective.

(4) Jap CW, beginning when weather aircraft transmitted special weather message to ground station (1430Z); lasted approximately 2 hours was effective.

(5) Radio teletype signals, beginning at 1445Z and lasting until 1945Z were partially effective.

g. 3410 Kcs: Jap CW at 1753Z was ineffective.

h. 7310 Kcs: Negligible.

i. 11160 Kcs: CW calls at different intervals were ineffective.

j. 3990 Kcs:

(1) High pitch tone at 1035Z was partially effective.

(2) Buzz saw effect at 1235Z was partially effective.

k. 7415 Kcs:

(1) Keyed CW at 1420Z and 1130Z was partially effective.

(2) Tone, motor boat effect at 2010Z was partially effective.

l. 10820 Kcs: Negligible.

m. 3810 Kcs:

(1) CW Jap transmissions from 1450Z to 1530Z were effective.

(2) High speed station sending a series of dots intermittently was effective.

n. 6640 Kcs and 10165 Kcs: Negligible.

7. Distress: There were no distress messages intercepted during these missions on the wing strike frequencies. There were some reports of warning messages to the Iwo Jima Air-Sea Rescue Station.

8. Equipment Malfunctions: AN/ART-3: 1 no side tone; 1 channel 2 inoperative; 1 inoperative on voice; 1 antenna current meter inoperative; 1 oscillator put out steady tone; 1 antenna switching relay inoperative. BC-348: 5 inoperative; AN/ARN-7: 1 control box shorted out; 1 needle hunted excessively ; 3 sense antenna broken; 1 antenna lead in broken; SCR-522: 1 channel "A" inoperative; 1 receiver inoperative; 3 antenna broken; 3 complete sets inoperative. Interphone: 2 amplifiers inoperative. RL-42; 4 inoperative; 2 weight loss; 1 sticking; 1 wire broken.

ANNEX

D

INTELLIGENCE

Part I - Enemy Air Opposition

Part II - Enemy Antiaircraft

Part III - Damage Assessment

Section A - Utsunomiya, Mission No. 263

Section B - Ichinomiya, Mission No. 264

Section C - Tsuruga, Mission No. 265

Section D - Kawasaki Petroleum Center, Mission No. 267

Missions No. 263, 264, 265, 266 and 267

12/13 July 1945

PART I - ENEMY AIR OPPOSITION

1. On this series of night strikes enemy air opposition was negligible. Only 2 attacks were made by approximately 67 enemy aircraft encountered. No loss or damage was attributed to enemy aircraft; however, 1 B-29 was lost to unknown causes. No claims were made.

2. Mission No. 263, 58th Wing, Utsunomiya: There were no attacks reported, and only 9 enemy aircraft were seen. None of these showed any traces of aggressiveness.

3. Mission No 264, 73rd Wing, Ichinomiya: The B-29's flew through a layer of broken clouds with 10/10 undercast and overcast. Although 12 enemy aircraft were reported, all sightings of enemy aircraft were based solely on the observation of red or green lights and, in 1 instance, an amber light. These may have been B-29 running lights and, in the exception mentioned, a B-29 amber colored recognition light. Many crews had their lights on over the mainland to avoid collision with friendly aircraft. There were no attacks.

4. Mission No. 265, 313th Wing, Tsuruga: Two unidentified enemy aircraft were sighted, 1 after bombs away, the other over Nagoya Bay, but there were no attacks.

5. Mission No. 266, 314th Wing, Uwajima: Six enemy aircraft were encountered, but no attacks were made.

6. Mission No. 267, 315th Wing, Kawasaki:

a. Poor operational weather conditions, 8/10 to 10/10 undercast, served to minimize fighter reaction.

b. An estimated 38 enemy aircraft were observed including 9 T/E, 1 S/E and 28 unidentified aircraft. The majority of the aircraft observed were noted after land's end. Eight fighters picked up the B-29's before landfall. The enemy aircraft observed were airborne over a period of 2 1/2 hours and practically all had their lights on.

c. Two attacks were made by enemy aircraft against the B-29's. One of those was a coordinated attack in which the attacking aircraft followed the B-29 through evasive action, and possibly was equipped with airborne radar. Both attacks were from tail positions.

d. Passes were made both at the nose and tail. Weather conditions operated to cut down the past trend of passes.

e. The first reported instance of a light phenomenon, a large orange light, was observed by 1 B-29.

f. A coordinated attack was carried out by 2 unidentified fighters. The enemy aircraft were in trail with lights on and came in from 6 o'clock level at 12,000 feet, breaking away at 200 yards. When the interceptors were first sighted evasive action was taken but the enemy aircraft followed the B-29 through this evasive action. Rope was dropped but was ineffective. The B-29 cork screwed and lost the fighters in the clouds. The crew believes that the 2 enemy aircraft were equipped with airborne radar for they were with the B-29 for 20 minutes after land's end, following the aircraft through evasive tactics and cloud cover.

g. An attack was carried out by a single twin-engine enemy aircraft between bombs away and land's end. The B-29 was at 14,000

feet and the attack was made from 7 o'clock level. The enemy aircraft, with running lights on, closed in to 300 yards and broke away after firing 2 bursts. The tail gunner did not fire as his guns were inoperative due to a jammed charger. The enemy aircraft had a red light on each wing.

7. Passes:

a. One single plane made a pass, between landfall and IP. The unidentified enemy aircraft came in from 10 o'clock at 15,400 feet, level, headed for the nose of the B-29, closing in to within 100 yards, continuing on to 3 o'clock where it went into a climb.

b. Another pass was made between target to land's end. A single unidentified enemy aircraft came in from 11 o'clock high, dove for the nose of the B-29, closed in to less than 100 yards and broke away sharply to the left. Using a climbing turn the enemy aircraft took a reciprocal heading from the B-29 at about 1,000 yards, then dove and climbed to a parallel heading with the B-29 at about 1,000 yards, still on the right side.

c. Fifty miles out from land's end an unidentified enemy aircraft came in from 7 o'clock level, closed in to about 100 yards, broke away to the right at 5 o'clock.

d. A series of passes by twin-engine aircraft were carried out against one of the B-29's over a period of 28 minutes. The enemy aircraft started its pass at 7 o'clock, flew over towards the B-29 and turned in, closing in to about 600 yards where it followed the B-29 for a period of 5 minutes when it cut across past the tail of the B-29, turned in again and remained at the 5 o'clock position for about 1 minute, breaking away to the right. There is a possibility that the enemy aircraft was trying to draw fire to determine the cone of fire of the tail gunner. The enemy aircraft then followed the B-29 for 75 miles.

e. An unidentified enemy aircraft came in from 3 o'clock high and came within 200 yards of the B-29, passing in front of the nose at 12 o'clock high, crossed over to the right side and flew along for 20 minutes from 100 to 150 miles from land's end, paralleling the B-29, doing acrobatics.

f. All of the above enemy aircraft had their lights on.

8. Light Phenomenon: One enemy aircraft sighted at 16,000 feet and observed at 3 o'clock appeared to have a large orange light traveling at the same speed as the enemy aircraft. It was not determined whether the orange light was on the aircraft or was parallel to it.

PART II - ENEMY ANTIAIRCRAFT

1. Mission No. 263 - Utsunomiya Urban Area:

a. The primary target was bombed by 115 aircraft of the 58th Wing between 1419Z-1639Z from 13,300-14,600 feet. Axes of attack varied from 258° - 310°. Weather was 10/10 undercast.

b. En route to the target meager, inaccurate and heavy flak was encountered at Mito (3622N 14022E) and at 3639N 14030E.

c. Over the target heavy flak was described as meager and inaccurate and was encountered by only 31 aircraft of a total of 115. Medium flak was described as meager and inaccurate by 25 aircraft. One

RCM aircraft orbited the target area for 80 minutes jamming the 75 mc and 200 mc radar bands. It encountered, during this period, only 15 bursts of inaccurate and heavy flak. One aircraft bombed Sendai as a T.O. and encountered intense, inaccurate, medium flak for ½ minute. Clouds were 10/10. One aircraft bombed Taira (3704N 14054E) as a T.O. Flak was nil. Clouds were 10/10.

d. On withdrawal very meager and inaccurate, heavy flak was encountered at Onhama (3657N 14055E).

e. No aircraft were lost or damaged as a result of flak on this mission.

f. From 1 to 5 ineffective searchlights were observed in the target area, and 1 beam was observed at Mito.

2. Mission No. 264 - Ichinomiya Urban Area:

a. The primary target was bombed by 124 aircraft (including 1 weather plane) of the 73rd Wing between 1553Z-1745Z from 6000-12,200 feet. Axes of attack varied from 78°-84°. Weather was reported as 10/10 undercast with winds of 37 knots from 260°.

b. Flak was nil en route to target.

c. Over the target flak was described as meager, inaccurate, heavy and medium. An estimated 3 to 5 searchlights were observed in the target area. They were completely ineffective due to solid undercast.

d. Flak was nil on withdrawal.

e. No aircraft were lost or damaged as a result of flak on this mission.

3. Mission No. 265 - Tsuruga Urban Area:

a. The primary target was bombed by 92 aircraft of the 313th Wing between 1400Z-1607Z from 12,200-13,400 feet. Axes of attack varied from 355°-1°. Weather consisted of 10/10 cloud cover.

b. En route to the target very meager (1 to 9 bursts) and inaccurate flak was encountered at Nagoya, Hikone and Yokkaichi. Very meager and inaccurate flak was encountered at Yokkaichi and Ueno. One aircraft received moderate, inaccurate, heavy flak from Uji Yamada.

c. Over the target flak was described as nil to very meager, inaccurate, heavy and medium. No searchlights were observed through the solid undercast. One aircraft bombed Shingu as a T.O. and reported flak as nil. One aircraft bombed Uji Yamada as a T.O. and encountered meager, inaccurate, medium and heavy flak.

d. On withdrawal flak was nil.

e. No aircraft were lost or damaged as a result of flak on this mission.

4. Mission No. 266 - Uwajima Urban Area:

a. The primary target was bombed by 124 aircraft (including 1 wind run aircraft) of the 314th Wing between 1413Z-1626Z from 10,400-16,400 feet. Axes of attack varied from 103°-132°. Weather consisted of 10/10 cloud cover.

b. En route to target flak was nil.

c. Over the target flak was described as meager, inaccurate, heavy and medium by 30 aircraft; the remainder reported it as nil. From 1 to 2 ineffective searchlights were observed trying to pierce the solid undercast in the target area.

d. On withdrawal one aircraft was "rocked" by moderate, accurate and heavy flak just after leaving the target area. Another aircraft encountered meager, inaccurate and heavy flak at 3205N 13400E.

e. No aircraft were lost or damaged as a result of flak on this mission.

5. Mission No. 267 - Kawasaki Petroleum Center:

a. The primary target was bombed by 53 aircraft of the 315th Wing between 1506Z-1619Z from 15,300-16,700 feet. Axes of attack varied from 38°-52° (average - 44°). Weather was reported as 8/10-10/10 undercast.

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

Location	Coordinates	Remarks
Fuji Sawa	3521N 13923E	Meager to moderate and inaccurate, heavy.
Inatori	3445N 13903E	Meager and inaccurate, heavy.
	3445N 13855E	Meager and inaccurate, heavy.
Hirasuka	3521N 13921E	Meager and inaccurate, heavy.
Zama	3531N 13925E	Intense and accurate, heavy.
Naval Vessel	3502N 13928E	Meager and inaccurate to accurate, heavy.
Naval Vessel	3522N 13947E	Meager and inaccurate to accurate, heavy.

c. Over the target area flak was described as meager to moderate, inaccurate to accurate, and heavy. Seven ineffective searchlights were observed in the general target area.

d. On withdrawal flak was encountered as tabulated below:

Location	Coordinates	Remarks
Hitosumatsu	3523N 14025E	Meager to moderate and inaccurate, heavy.
Eichi	3525N 14005E	Meager and inaccurate, heavy.
Hobara	3510N 14020E	Meager and inaccurate, heavy.

e. No aircraft were lost or damaged as a result of flak on this mission, although 1 aircraft was lost to unknown causes.

PART III - SECTION A - UTSUNOMIYA - DAMAGE ASSESSMENT*

1. Summary of Damage:

Built-up area: Sq. Mi. total - 2.75; Sq. Mi. destroyed - .94
Percent destroyed - 34.2

Planed target area: 1.4 sq. mi. Percent destroyed: 67.1

Total damage to date: .94 sq mi. Percent of built-up area: 34.2

Targets damaged by current strike: 0 numbered; 4 other

Note: No previous damage.

2. Damage within limits of built-up area:

Area damaged from current strike:	Sq.Mi.	Destroyed Sq.Mi.	Destroyed Per cent
Built-up area (Urban)	2.75	.94	34.2
Built-up area (Industrial)	None	None	None
Built-up area (Total)	2.75	.94	34.2

Damage to targets:

Utsunomiya RR Station	40% destroyed
Tobu-Utsunomiya RR Station	No apparent damage
RR Yards & Freight Depot	20% destroyed
Shimozuki Paper Mill	100% destroyed
Monopoly Bureau	100% destroyed
Gov't Tobacco Warehouses	No apparent damage

At least 23 small unidentified industries are within the built-up area - 12 of these are destroyed.

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

Area damage from current strike:

Small barracks area east of the town

Damage to targets:

90.13-1643	Utsunomiya Air Training School (no coverage current mission)	15% destroyed or removed (old damage)
90.13-1645	Kakuwa Mfg. Co.	No apparent damage
90.13-2131	Nakajima Utsunomiya Plant	No apparent damage - about 20% removal
90.13-2801	Utsunomiya Airfield (no coverage)	20% removed or destroyed (old damage)
90.13-2803	Utsunomiya South Airfield	No apparent damag.
	14th Division Hqs.	No apparent damag

Seven small unidentified industries - 1 of these is destroyed

Reference: A. AAF Air Objective Folder 90.13 24 July 1944
B. Target Chart No. 57A, XXI bomber Command, A-2

Inclosure: Annotated mosaic showing damage follows.

* Based on XXI B.C. CIU D.A. Report No. 163

CONFIDENTIAL

PART III - SECTION B - ICHINOMIYA - DAMAGE ASSESSMENT*

1. Summary:

a. Damage to the city of Ichinomiya resulting from XXI Bomber Command Mission 264, 12/13 July 1945 totals .01 sq. mi., which represents about .8% of the built-up portion of the city (1.28 sq. mi. as determined from reconnaissance photographs). Damage is scattered in the north and northwest sections of the city.

b. The textiles mills (reported munitions) in the north and northwest parts of the city received some damage, with one building, about 114,700 sq. ft., being 100% gutted. Nine small buildings were destroyed.

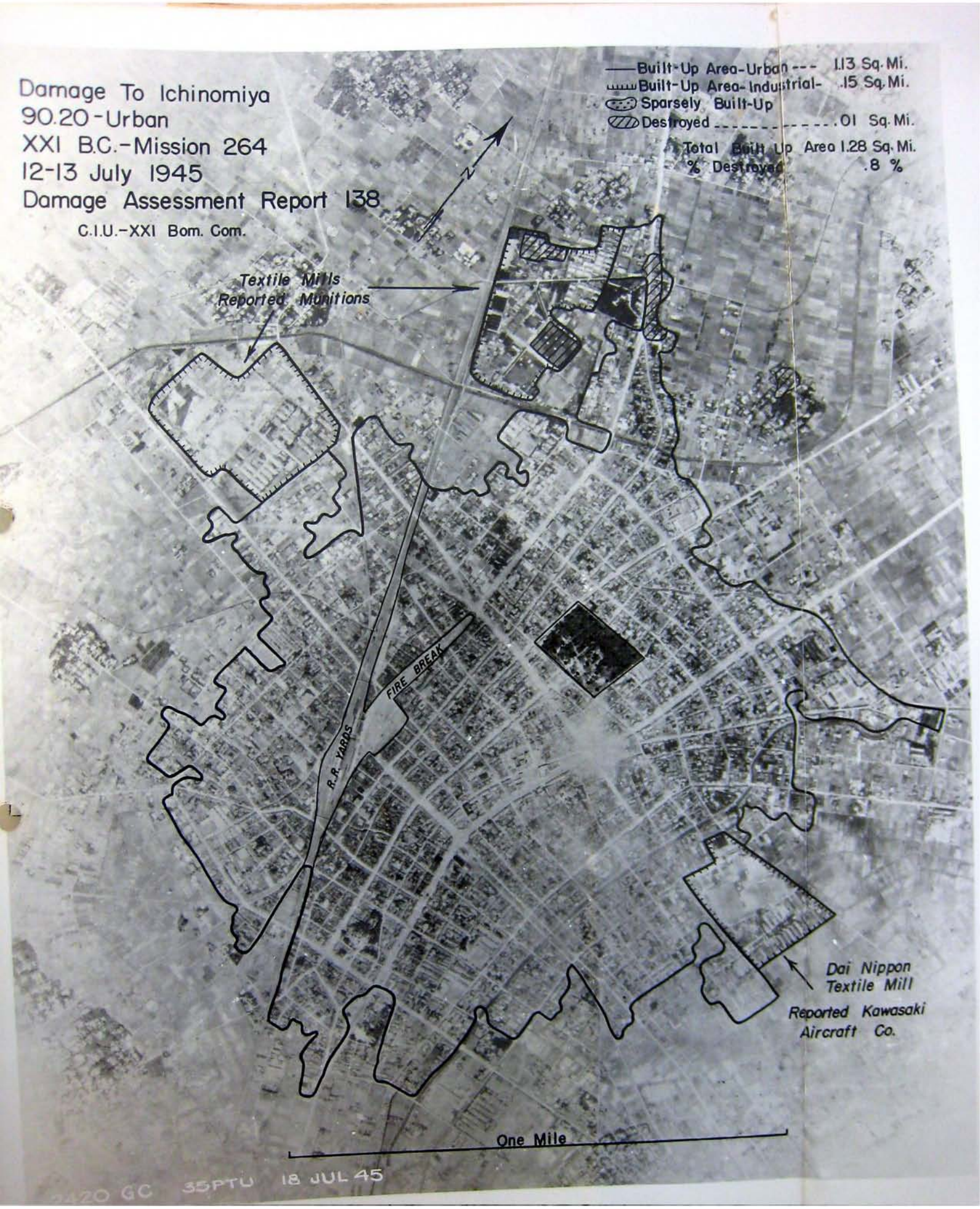
c. Damage outside the limits of the built-up portion of the city totaled about .001 sq. mi.

References: A. Target Information Sheet - Ichinomiya - Target Section, A-2, XXI Bomber Command.

B. AAF Air Objective Folder 90.20 M-11 July 1944

Inclosure: Blow-up annotated to show damage follows.

* Based on XXI B,C. CIU D. A. Report No. 138


Damage To Ichinomiya
90.20-Urban
XXI B.C.-Mission 264
12-13 July 1945
Damage Assessment Report 138
C.I.U.-XXI Bom. Com.
Built-Up Area-Urban --- 1.13 Sq. Mi.
Built-Up Area-Industrial- .15 Sq. Mi.
Sparsely Built-Up
Destroyed .01 Sq. Mi.
Total Built Up Area 1.28 Sq. Mi.
% Destroyed .8 %
Textile Mills
Reported Munitions
FIRE BREAK
R.R. YARDS
Dai Nippon
Textile Mill
Reported Kawasaki
Aircraft Co.
One Mile
20 GC 35PTU 18 JUL 45

PART III - SECTION C - TSURUGA - DAMAGE ASSESSMENT*

1. Summary of Damage:

Built-up area: Sq. Mi. total - 1.13; Sq. Mi. destroyed - .77

Percent destroyed - 68

Planned target area: .8 sq. mi. Per cent destroyed: 96

Total damage to date: .77 sq. mi. Per cent of built-up area: 68

Targets damaged by current strike: 2 numbered; 1 other

a. Damage within limits of built-up area: (no previous damage)

Area Damage:	Sq. Mi.	Destroyed Sq. Mi.	Per cent
Built-up area (Urban)	1.13	.77	68
Built-up area (Total)	1.13	.77	68

Damage to targets:

1950	Tsuruga Harbor Facilities	30% destroyed
	Electric Sub-station (no number)	100% destroyed

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

Area Damage:

One small area just south of the city and 3 small areas in the vicinity of Target 1676 destroyed - total of .062 sq. mi.

Damage to targets:

1676	Tsuruga RR Yards, Shops, Roundhouse	9 warehouses destroyed
6126	Chemical or Metallurgical Plant	No damage
	Cement Plant (no number)	No damage
	Army Brigade and Regimental Hq.	No damage

Inclosure: Mosaic annotated to show damage follows.

* Based on XXI B.C. CIU D.A. Report No. 162

CONFIDENTIAL

PART III - SECTION D - PETROLEUM CENTER, KAWASAKI - DAMAGE ASSESSMENT*

1. Summary:

a. Damage resulting from the above strike is widely scattered over the target area and adjoining targets. Most of the damage is in the warehouse areas of the Standard Vacuum Oil Co. (128 A) and the Rising Sun Oil Co. (128 B)

b. At the Nippon Oil Co. (128 C), the only area containing refining units, the fractionating area, compressor building, and cracking building all appear to have been damaged.

c. Of a total oil storage capacity of 1,334,000 barrels (42USG), only 9% (117,800 barrels) has been damaged. Of this total 84,400 barrels (capacity) is new damage - 33,400 barrels (capacity) had been previously damaged (unknown mission).

d. The RR spur through the Standard Vacuum Oil Co., connecting the mainland with the oil bunker, has been badly torn up in two or three places.

e. Damage to adjacent targets is as follows:

90.17-51 Asano Steel Co. (Ref. B) - large building, probable rooling mill, gutted. Additional damage to other minor buildings.
90.16-133 Shibaura Engineering Works (Ref. B) - 7 minor buildings destroyed.
90.17-1343 Ishikawajima Motor Co. (Ref. B) - minor building destroyed.
90.17-2038 Army Oil Storage (Ref. B) - 1 large storage tank damaged.
90.17-2038I Tokunaga Glass Co. - 2 minor buildings destroyed.
90.17-2038J Mitsubishi Chemical Equipment Co. (Ref. B) - large building gutted, large hole in roof of second large building.
90.17-2038K Nisshin Flour Mill (Ref. B) - 2 large buildings completely destroyed.

2. Summary of Damage to Tankage:

		Total
Original Capacity - bbls.	-	1,334,000
New Damage - bbls	-	84,400
Per cent	-	6%
Old Damage - bbls.	-	33,400
Per cent	-	3%
Total Damage and Removal - bbls.	-	117,800
Per cent	-	9%

3. Itemization of Damage:

ANNOT. NO.	IDENTIFICATION	DESCRIPTION OF DAMAGE
1	Office or Dump House - 20,300 Sq. Ft.	Approx. 3,000 Sq. Ft. destroyed Approx. 7,000 Sq. Ft. Shows minor roof damage.
2	Warehouse 26,500 Sq. Ft.	Destroyed

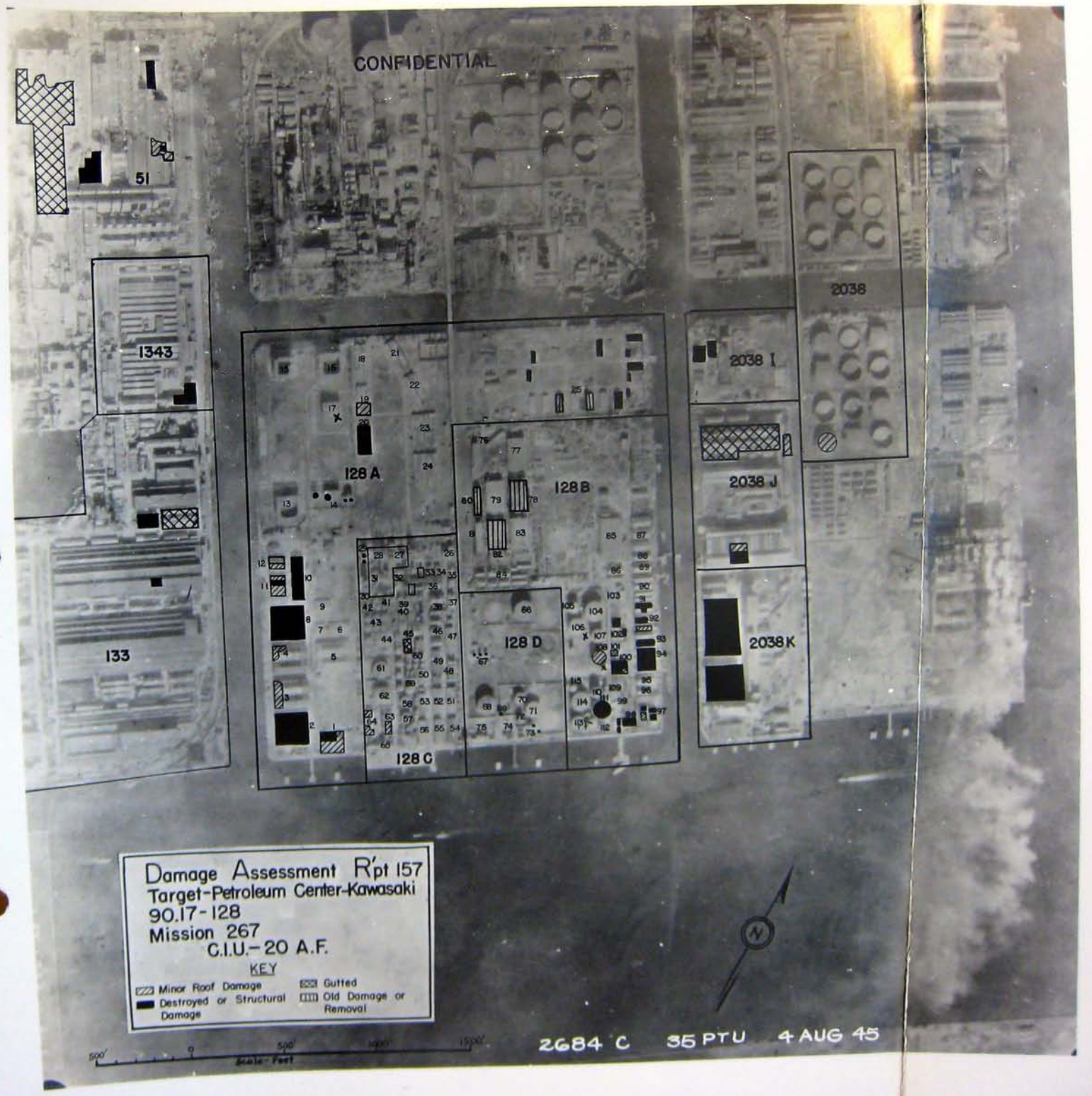
* Based on XXI B.C. CIU D.A. Report No. 157

-oo-

ANNOT. NO.	IDENTIFICATION	DESCRIPTION OF DAMAGE
3.	Warehouse 29,200 Sq. Ft.	Approx. 7,000 Sq. Ft. Minor Roof Damage.
4.	" "	Approx. 3,000 Sq. Ft. Minor Roof Damage.
8.	" "	Destroyed.
10.	" 14,500 Sq. Ft.	"
11.	" 10,700 Sq. Ft.	Approx. 2,500 Sq. Ft. Destroyed. " 8,200 Sq. Ft. Minor Roof Damage.
12.	" 4,750 Sq. Ft.	Approx. 2,500 Sq. Ft. Minor Roof Damage.
14.	4 Oil Storage Tanks, total cap. approx. 35,000 bbls.	3 Tanks, cap. 27,000 bbls. Dest.
19.	Warehouse 9,850 Sq. Ft.	Approx. 3,300 Sq. Ft. Minor Roof Damage.
20.	" " "	Destroyed.
25.	7 Warehouses 25,760 Sq. Ft.	1 Destroyed. 2 removed prior to Mission. (11,040 Sq. Ft.)
27.	Pipe Still	50% of area appears badly damaged.
28.	Pipe Still	Entire area " " "
29.	2 Oil Storage Tanks, Cap. 6,000 bbls.	Destroyed.
31.	Still & Furnace	Destroyed.
32.	" "	Approx. 25% destroyed or badly damaged.
45.	Treating Plant 2,580 Sq. Ft.	Apparently Destroyed.
63.	Primary Distillation	60% shows minor roof damage.
64.	Associated with 63.	60% " " " "
67.	Pump House & 2 small tanks	2 small tanks destroyed.
69.	Storage Tank, Cap. 1040 bbls.	Destroyed.
73.	2 Storage Tanks," 3900 "	"
78.	Warehouse 34,000 Sq. Ft.	Removed or destroyed prior to mission.
80.	Warehouse 34,000 Sq. Ft.	Removed or destroyed prior to mission.
82.	Warehouse 34,000 Sq. Ft.	Removed or destroyed prior to mission.
91.	Warehouse 15,000 Sq. Ft.	Approx. 7,000 Sq. Ft. Destroyed.
92.	" 8,850 Sq. Ft.	" 4,400 " " "
94.	" 12,500 Sq. Ft.	Destroyed.
97.	Probable Offices.	Approx. 75 Destroyed, 25% Minor Roof Damage.
98.	Probable Pump House.	Destroyed.
100.	" Canning or Packing 12,500 Sq. Ft.	Approx. 10,000 Sq. Ft. Destroyed, " 2,500 Sq. Ft. Minor Roof Damage.
101.	Probable Canning or Packing 4,300 Sq. Ft.	Approx. 800 Sq. Ft. Minor Roof Dam.
102.	Probable Canning or Packing 9,800 Sq. Ft.	Approx. 4,000 Sq. Ft. Destroyed.
108.	Oil Storage Tank Cap. 33,000 bbls.	Shows holes in roof, previous dam.
111.	Oil Storage Tank Cap. 42,500 bbls.	Destroyed.
112.	2 horizontal Fuel Storage Tanks, Cap. Approx. 4,000 bbls.	Destroyed.

Reference: A. AC/AS Intelligence, Report No. F/A-33, 17 January 1945.
B. JTG 90.17-3605P4

Inclosure: 1. Annotated enlargement showing damage follows.


CONFIDENTIAL
51
1343
133
128 A
128 B
128 C
128 D
2038
2038 I
2038 J
2038K
Damage Assessment R'pt 157
Target-Petroleum Center-Kawasaki
90.17-128
Mission 267
C.I.U.-20 A.F.
KEY
Minor Roof Damage
Destroyed or Structural Damage
Gutted
Old Damage or Removal
Scale-Feet
2684 C 35 PTU 4 AUG 45

ANNEX

E

CONSOLIDATED STATISTICAL SUMMARY

Missions No. 263, 264, 265, 266 & 267

12/13 July 1945

SECRET

XXI BOMBER COMMAND

CONSOLIDATED STATISTICAL SUMMARY OF COMBAT OPERATIONS

FORM 34 263 - 267

MISSION NO. 12 July 1945

Mission 263 - 58th Wing - Utsonomiya Urban Area
Mission 264 - 73rd Wing - Ichinomiya Urban Area
Mission 265 - 313th Wing - Tsuruga Urban Area
Mission 266 - 314th Wing - Uwajima Urban Area
Mission 267 - 315th Wing - Kawasaki Petroleum Center

EFFECTIVENESS OF MISSIONS

Aircraft Airborne 560
Percent Of Aircraft On Hand 68.8%

Aircraft Bombing Primary Target . . . 506
Percent Of Bombing Aircraft Airborne. . . . 92.3%

Bombs Dropped On Primary Targets. . . . . 3578 Tons

Bombs Dropped On Other Targets. . . . . 89 Tons

Bombing Results - No damage assessment available to date.

COST OF MISSIONS

Aircraft Lost 3
Percent Of Aircraft Airborne. 0.5%

Aircraft Damaged. 1
Percent Of Aircraft Airborne. 0.2%

Crew Member Casualties. 19
Percent Of Total Participating. 0.3%

Aircraft Landing At Iwo Jima. 38

Issued 20 July 1945.

SECRET

33RD STATISTICAL CONTROL UNIT

SECRET

MISSION 263 - 267

AIRCRAFT PARTICIPATING

DATE 12 July 1945

UNIT	A/C ON HAND	A/C SCHED-ULED	A/C FAILING TO TAKE OFF	A/C AIR-BORNE	TIME OF TAKE OFF			TIME OF RETURN			A/C BOMBING PRIMARY TARGET	A/C BOMBING SECONDARY TARGET	A/C BOMBING OTHER TARGETS	AIRCRAFT COMPLETING OTHER TYPE MISSIONS	TOTAL A/C EFFECTIVE	TOTAL A/C NON-EFFECTIVE
					DATE	FIRST	LAST	DATE	FIRST	LAST						
									Mission #263							
58WG	187	120	1	119	12 July	0705 Z	0840 Z	12-13 July	2136 Z	0055 Z	104	-	5	-	109	10
		12 a	1	11							11	-	-	-	11	-
		3 b	-	3							-	-	-	3	3	-
									Mission #264							
73WG	191	119	1	118	"	0905 Z	1016 Z	"	2147 Z	0104 Z	111	-	2	-	113	5
		12 a	-	12							12	-	-	-	12	-
		3 c	-	3							-	-	-	3	3	-
									Mission #265							
313WG	140	88	1	87	"	0751 Z	0915 Z	12 July	2020 Z	2324 Z	81	-	2	-	83	4
		11 a	-	11							11	-	-	-	11	-
		2 d	-	2							-	-	-	2	2	-
									Mission #266							
314WG	187	119	3	118 g	"	0700 Z	0812 Z	12-13 July	2054 Z	0030 Z	111	-	1	-	112	6
		12 a	-	12							12	-	-	-	12	-
		2 e	-	2							-	-	-	2	2	-
									Mission #267							
315WG	109	69	10	60 h	"	0830 Z	0909 Z	"	2221 Z	0005 Z	53	-	1	-	54	6
		2 f	-	2							-	-	-	2	2	-
TOTAL	814	515	16	502	12 July	0700 Z	1016 Z	12-13 July	2020 Z	0104 Z	460	-	11	-	471	31
		47 a	1	46							46	-	-	-	46	
		12	-	12							-	-	-	12	12	-

a Pathfinder aircraft.
b 1 weather A/C, 2 RCM aircraft.
c 1 weather A/C, 2 super dumbo aircraft.
d 1 wind run aircraft, 1 super dumbo aircraft.
e 1 wind run aircraft, 1 super dumbo aircraft.
f 2 wind run aircraft.
g Includes 2 spare aircraft.
h Includes 1 spare aircraft.

NOTE: XXI BC Field Order #98 called for the following efforts:
#263 - Normal effort.
#264 - Normal effort.
#265 - Three groups.
#266 - Normal effort.
#267 - 70 aircraft.

Aircraft Landing At Iwo Jima:
#263 - 58th Wing - 27 aircraft.
#264 - 73rd Wing - 3 aircraft.
#265 - 313th Wing - 2 aircraft.
#266 - 314th Wing - 6 aircraft.

SECRET

SECRET

MISSION ~~263 - 267~~
DATE ~~12 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
							Mission #263								
58WG	8	-	2	2 a	-	2 b	-	-	-	-	-	-	-	-	1
							Mission #264								
73WG	4	-	1	1 c	-	1 c	-	-	-	-	-	-	-	-	-
							Mission #265								
313WG	4	-	2	-	-	-	-	-	-	-	-	-	-	-	-
							Mission #266								
314WG	5	-	1	1 b	-	-	-	-	-	-	-	-	-	-	-
							Mission #267								
315WG	4	-	1	1 c	-	-	-	-	-	-	-	-	1	-	-
TOTAL	26	-	7	4	-	3	-	-	-	-	-	-	1	-	1

a 1 maintenance personnel error and 1 air crew personnel error.
b Air crew personnel error.
c Maintenance personnel error.

SECRET

MISSION 263 - 267

DATE 12 July 1945

DISPOSITION OF BOMBS

UNIT	TYPE OF BOMB	FUZE SETTING		LOADED ON AIR-BORNE AIRCRAFT		RELEASED ON TARGETS						JETTISONED		RETURNED		OTHER	
						PRIMARY TARGETS				TARGETS OF OPP.							
		Nose	Tail	No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons
							Mission #263										
58WG	AN-M47A2 100# I.B.	Inst.	-	11880	409.7	10500	362.1			-	-	1380	47.6	-	-		
	E-46 500# I.C.	-	*	2538	507.6	2204	440.8			217	43.4	116	23.2	1	.2		
	M-46 Photoflash			15	-	15	-			-	-	-	-	-	-		
							Mission #264										
73WG	AN-M47A2 100# I.B.	Inst.	-	23871	823.2	22387	772.0			366	12.6	1101	38.0	17	.6		
	M-46 Photoflash			32	-	31	-			1	-	-	-	-	-		
							Mission #265										
313WG	AN-M47A2 100# I.B.	Inst.	-	6063	209.1	5860	202.1			-	-	198	6.8	5	.2		
	E-46 500# I.C.	-	*	2591	518.2	2385	477.0			80	16.0	125	25.0	1	.2		
							Mission #266										
314WG	AN-M47A2 100# I.B.	Inst.	-	11836	408.1	11398	393.1			-	-	438	15.0	-	-		
	E-46 500# I.C.	-	*	2640	528.0	2397	479.4			45	9.0	198	39.6	-	-		
	M-46 Photoflash			55	-	53	-			-	-	2	-	-	-		
							Mission #267										
315WG	AN-M64A1 500# G.P.	.1	.025	2044	511.0	1808	452.0			32	8.0	204	51.0	-	-		
TOTAL	AN-M47A2 100# I.B.			53650	1850.1	50145	1729.3			366	12.6	3117	107.4	22	.8		
	E-46 500# I.C.			7769	1553.8	6986	1397.2			342	68.4	439	87.8	2	.4		
	AN-M64A1 500# G.P.			2044	511.0	1808	452.0			32	8.0	204	51.0	-	-		
	M-46 Photoflash			102	-	99	-			1	-	2	-	-	-		
	TOTAL			63565	3914.9	59038	3578.5			741	89.0	3762	246.2	24	1.2		

* Clusters set to open 5000 feet above target.

MISSION 263 - 267

BOMBING RUN

DATE 12 July 1945

UNIT	TARGET BOMBED: NAME OF TARGET	TARGET BOMBED: TYPE	AIRCRAFT DROPPING BOMBS	TIME OF RELEASE: EARLIEST	TIME OF RELEASE: LATEST	ALT. OF RELEASE: LOWEST	ALT. OF RELEASE: HIGHEST	TARGET VISIBLE: VISUAL SIGHTING ONLY	TARGET VISIBLE: RADAR RUN WITH VISUAL CORRECTIONS	TARGET VISIBLE: DROPPING ON LEADER	TARGET NOT VISIBLE: VIS. SIGHTING ON REFERENCE OR OFFSET PT.	TARGET NOT VISIBLE: RADAR RUN	TARGET NOT VISIBLE: DEAD RECKONING	TARGET NOT VISIBLE: DROPPING ON LEADER
						Mission #263								
58WG	Utsonomiya	P	104	1423 Z	1639 Z	13500	14600	2	-	-	4	95	3	-
	Utsonomiya	P	11 a	1419 Z	1534 Z	13300	14200	-	-	-	-	10	1	-
	Taira	TO	1	1535 Z	-	14400	-	-	-	-	-	1	-	-
	Sendai	TO	1	1540 Z	-	14000	-	-	-	-	-	1	-	-
	Ishinomaki	TO	1	1548 Z	-	13700	-	-	-	-	-	1	-	-
	Otsu	TO	1 b	Unknown		Unknown		-	-	-	-	1	-	-
	Hitachi	TO	1	1635 Z	-	13800	-	-	-	-	-	1	-	-
	Unknown	TO	1	Unknown		Unknown		-	-	-				
						Mission #264								
73WG	Ichinomiya	P	112 c	1554 Z	1745 Z	6000	12200	8	2	-	-	101	1	-
	Ichinomiya	P	12 a	1553 Z	1629 Z	10600	11000	-	-	-	-	12	-	-
	Tsuruga	TO	1	1735 Z	-	11700	-	1	-	-	-	-	-	-
	Matsuzaka	TO	1	1559 Z	-	11000	-	-	-	-	-	1	-	-
	Hamamatsu	TO	1 b	Unknown		Unknown		-	-	-	-	1	-	-
						Mission #265								
313WG	Tsuruga Urban Area	P	81	1427 Z	1607 Z	12200	13400	-	-	-	1	78	2	-
	Tsuruga Urban Area	P	11 a	1400 Z	1500 Z	12300	13100	-	-	-	-	11	-	-
	Shingu	TO	1	1429 Z	-	9900	-	-	-	-	-	1	-	-
	Uji Yamada	TO	1	1550 Z	-	12000	-	-	-	-	-	-	1	-
						Mission #266								
314WG	Uwajima Urban Area	P	112 d	1428 Z	1626 Z	10400	16400	-	-	-	1	109	2	-
	Uwajima Urban Area	P	12 a	1413 Z	1440 Z	13900	15500	-	-	-	-	12	-	-
	Shimizu	TO	1 b	1542 Z	-	16000	-	-	-	-	-	1	-	-
	Sukumo	TO	1	1505 Z	-	9700	-	-	-	-	-	1	-	-
						Mission #267								
315WG	Kawasaki Petroleum Center	P	53	1506 Z	1619 Z	15300	16700	2	1	-	-	50	-	-
	Egawa Saki	TO	1	1550 Z	-	14550	-	-	-	-	-	1	-	-
TOTAL	Primary Targets	P	462	1423 Z	1745 Z	6000	16700	12	3	-	6	433	8	-
	Primary Targets	P	46 a	1400 Z	1629 Z	10600	15500	-	-	-	-	45	1	-

a Pathfinder aircraft. b Aircraft also bombed primary target. c Includes 1 weather aircraft. d Includes 1 wind run aircraft.

MISSION 263 - 267
DATE 12 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 MAJOR	TOTAL MINOR	TOTAL PARTICI-PATING	KILLED	MISS-ING	WOUNDED & INJURED	TOTAL CASUALTIES
										Mission #263											
58WG	-	-	-	1 a	-	-	1									None	1514	1	1	-	2
										Mission #264											
73WG							None									None	1496				None
										Mission #265											
313WG							None									None	1117				None
										Mission #266											
314WG							None									None	1504				None
										Mission #267											
315WG	-	-	-	1 b	-	1 c	2	-	-	-	-		-	1	-	-	1	642	1	16	-	17
TOTAL	-	-	-	2	-	1	3	-	-	-	-		-	1	-	-	1	6273	2	17	-	19

a Ditched enroute to base. 11 men aboard, 9 rescued, 1 killed, 1 missing.
b Crashed at sea enroute to target. 10 men aboard, 3 rescued, 1 killed, 6 missing.
c Missing, no word. 10 men aboard.

SECRET

MISSION 263 - 267

DATE 12 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	FIRED IN COMBAT	TEST FIRED	JETTISONED	ON LOST A/C	TOTAL
					Mission #263					
58 WG	9	-		- -	-	-	550	154	1600	2304
					Mission #264					
73 WG	12	-		- -	-	-	80	-	-	80
					Mission #265					
313 WG	2	-		- -	-	-	-	-	-	-
					Mission #266					
314 WG	6	-		- -	-	-	20	-	-	20
					Mission #267					
315 WG	38	2		- -	-	-	3020	-	2850	5870
TOTAL	67	2		- -	-	-	3670	154	4450	8274

SECRET

MISSIONS 263 - 267

DATE 12 July 1945

FLIGHT DATA & FUEL CONSUMPTION

MISSION NUMBER	#263	#264	#265	#266	#267
UNIT	58TH WG	73RD WG	313TH WG	314TH WG	315TH WG
AIRCRAFT CONSIDERED	93	121	89	118	53
AVERAGE FLYING TIME	15:06	13:33	13:26	14:39	14:19
FUEL CONSUMED:					
Average	5876	5712	5814	5937	5453
Maximum	6450	6228	6250	6347	6215
Minimum	5400	5056	5420	5520	5076
FUEL REMAINING:					
Average	664	873	820	700	1175
Maximum	1175	1444	1290	1099	1660
Minimum	100	279	342	269	570
AVG. GALS. USED PER HOUR	389.1	421.5	432.9	405.3	380.8
TOTAL USED ON AIRBORNE A/C	752093	742458	564497	769062	318577

WEIGHT DATA

NO. AIRCRAFT AIRBORNE	130	131	98	130	60
AVG. BASIC WT. OF AIRCRAFT	74901	75048	74765	75601	71378
AVERAGE USEFUL LOAD	59313	57768	60391	59963	63298
AVG. NO. OF BOMBS LOADED	Mixed Load	Mixed Load	Mixed Load	Mixed Load	34.1-M64
AVG. WT. OF BOMBS LOADED	14700	12769	15567	15026	18226
AVERAGE FUEL LOADED	6546	6598	6627	6638	6630
AVG. WT. OF FUEL LOADED	39276	39588	39762	39828	39780
AVERAGE MISC. WEIGHT	5337	5411	5062	5109	5292
AVG. GROSS WT. AT TAKE OFF	134214	132816	135156	135564	134676

Bomb Weights: M-47-A2 - 70 lbs.
E-46 - 425 lbs.
M-46 - 52 lbs.
M-64 (TNT) - 535 lbs.

ANNEX

F

XXI BOMBER COMMAND FIELD ORDER

Missions No. 263, 264, 265, 266 & 267

12/13 July 1945

SECRET
Auth: CG XXI BC
Initials:
Date: 12 July 1945

FIELD ORDERS)
:
NUMBER 98)

XXI BOMBER COMMAND
GUAM
12 July 1945 - 0800K

Maps: Japan Aviation Chart 1:218,880.

1. Omitted.

2. XXI Bomber Command attacks UTSUNOMIYA, ICHINOMIYA, TSURUGA, and UWAJIMA URBAN AREAS and target 90.17 - 128 on 13 July 1945.

3. a. 58th Wing:

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

MPI	FORCE REQUIRED
114104	Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic UTSUNOMIYA AREA 90.13 - Urban.

(2) Route:

Base
Iwo Jima
3545N - 14100E
3623N - 14038E (IP)
Target
Right Turn to landsend
3643N - 14043E
3600N - 14119E
Iwo Jima
Base.

(3) Altitudes:

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

(b) Of attack: 13,000 - 13,800 ft.

(c) Enroute from target: Above 15,000 ft.

(4) Bomb Load: 2 groups - M-47 IBs
2 groups - Clusters containing M-69 bombs.

(5) Intervalometer Setting: M-47 IBs - 75 ft.
M-69 ICs - 50 ft.

(6) Bombing Airspeed: CIAS 195 MPH.

(7) Takeoff: 121700K.

b. 73rd Wing:

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

MPI	Force Required
065087	Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic ICHINOMIYA AREA 90.20 - Urban.

F.O. #98

(2) Route:

Base
Iwo Jima
3353N - 13603E
3458N - 13555E
351230N - 13607E (IP)
Target
3520N - 13710E
343830N - 13604E
Iwo Jima
Base.

(3) Altitudes:

(a) Enroute to target: 4,000 - 4,300 ft. and 7,000 - 7,800 ft.

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

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

(4) Bomb Load: 4 groups - Clusters containing M-69 bombs to extent of supply; otherwise M-47 IBs.

(5) Intervalometer Setting: M-69 ICs and M-47 IBs - 50 ft.

(6) Bombing Airspeed: CIAS 195 MPH.

(7) Takeoff: 121900K.

c. 313th Wing:

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

Force Required

MPI

3 Groups

103084

MPI Reference: XXI BomCom Litho-Mosaic TSURUGA AREA 90.22 - Urban.

(2) Route:

Base
Iwo Jima
3354N - 13603E
3512N - 13604E (IP)
Target
Right Turn
3450N - 13636E
Iwo Jima
Base.

(3) Altitudes:

(a) Enroute to target: 5,000 - 5,800 ft. and 8,000 - 8,800 ft.

(b) Of attack: 12,000 - 12,800 ft.

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

F.O: #98

(4) Bomb Load: 1 group - M-47 IBs
2 groups - Clusters containing M-69 bombs.

(5) Intervalometer Setting: M-47 IBs - 50 ft.
M-69 ICs - 35 ft.

(6) Bombing Airspeed: CIAS 195 MPH.

(7) Takeoff: 121800K.

d. 314th Wing:

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

MPI — Force Required

063062 — Normal Effort

MPI Reference: XXI BomCom Litho-Mosaic UWAJIMA URBAN AREA.

(2) Route:

Base
Iwo Jima
3242N - 13150E
331430N - 13147E
332030N - 13201E (IP)
Target
Right Turn
Iwo Jima
Base.

(3) Altitudes:

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

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

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

(4) Bomb Load: 2 groups - M-47 IBs
2 groups - Incendiary clusters containing M-69 bombs.

(5) Intervalometer Setting: M-47 IBs - 75 ft.
Clusters - 50 ft.

(6) Bombing Airspeed: CIAS 195 MPH.

(7) Takeoff: 121700K.

(8) 314th Wing will dispatch two special jamming A/C to orbit the target assigned to 315th Wing in a circle with 10 miles radius with center at 3530N - 13942E at an altitude of 17,000 ft. for one and 17,500 ft. for the other. These A/C will orbit point until stream of bombers have passed over target.

e. 315th Wing:

(1) Primary visual and radar target: 90.17 - 128 Petroleum Center, KAWASAKI

F.O. #93

MPI | Force Required

135150 | 70 A/C

MPI Reference: XXI BomCom Litho-Mosaic YOKOHAMA URBAN AREA.

(2) Route:

Base
Iwo Jima
34363ON - 13851E
3457N - 13909E (IP)
Target
3524N - 14024E
Iwo Jima
Base.

(3) Altitudes:

(a) Enroute to target: 3,000 - 3,300 ft. and 6,000 - 6,300 ft.

(b) Of attack: 15,000 - 16,000 ft.

(c) Enroute from target: Minimum 12,000 ft.

(4) Bomb Load: 500 lb GPs.

(5) Intervalometer Setting: Minimum.

(6) Takeoff: 121330K.

x. (1) Method of Attack: By individual A/C.

(2) All wings will d esignate the first 12 A/C scheduled to take off first as pathfinder A/C flown by the best radar bombing crews.

(3) Bomb Fusing: M-47 IBs - instantaneous nose
Clusters - open 5,000 ft. above target
500 lb GP- 1/10 nose and 1/40 tail.

4. Tactical Mission Numbers:

UTSUNOMIYA - No. 263
ICHINOMIYA - No. 264
TSURUGA - No. 265
UWAJIMA - No. 266
90.17 - 128 - No. 267.

5. a. (1) The special jamming aircraft for the 314th 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 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.

F.O. #98

(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:

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

DISTRIBUTION:
2 - CG, 58th Bomb Wing
2 - CG, 73rd Bomb Wing
2 - CG, 313th Bomb Wing
2 - CG, 314th Bomb Wing
2 - CG, 315th Bomb Wing
1 - CG, VII Fighter Comd (CT 93.4)
1 - CO, 3rd Photo Recon Sq
6 - A-3 Tactics, XXI BC
2 - 33rd SCU , XXI BC
1 - Communications, XXI BC
1 - OAS, XXI BC
2 - CIU, XXI BC
1 - A-2 Reporting, XXI BC
4 - A-2, XXI BC

XXI BOMBER COMMAND
GUAM
12 July 1945 - 0900K

FIELD ORDERS)
:
NUMBER 98)

AMENDMENT NO. 1

Change paragraph 3. b. (1) to read:

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

MPI	FORCE REQUIRED
095087	Normal Effort

MPI Reference: XXI Bomber Command Litho-Mosaic ICHINOMIYA AREA 90.20 - URBAN.

BY COMMAND OF MAJOR GENERAL LeMAY:

A J KISSNER
Brigadier General, USA
Chief of Staff

OFFICIAL:

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

ANNEX

G

DISTRIBUTION LIST

Missions No. 263, 264, 265, 266 & 267

12/13 July 1945

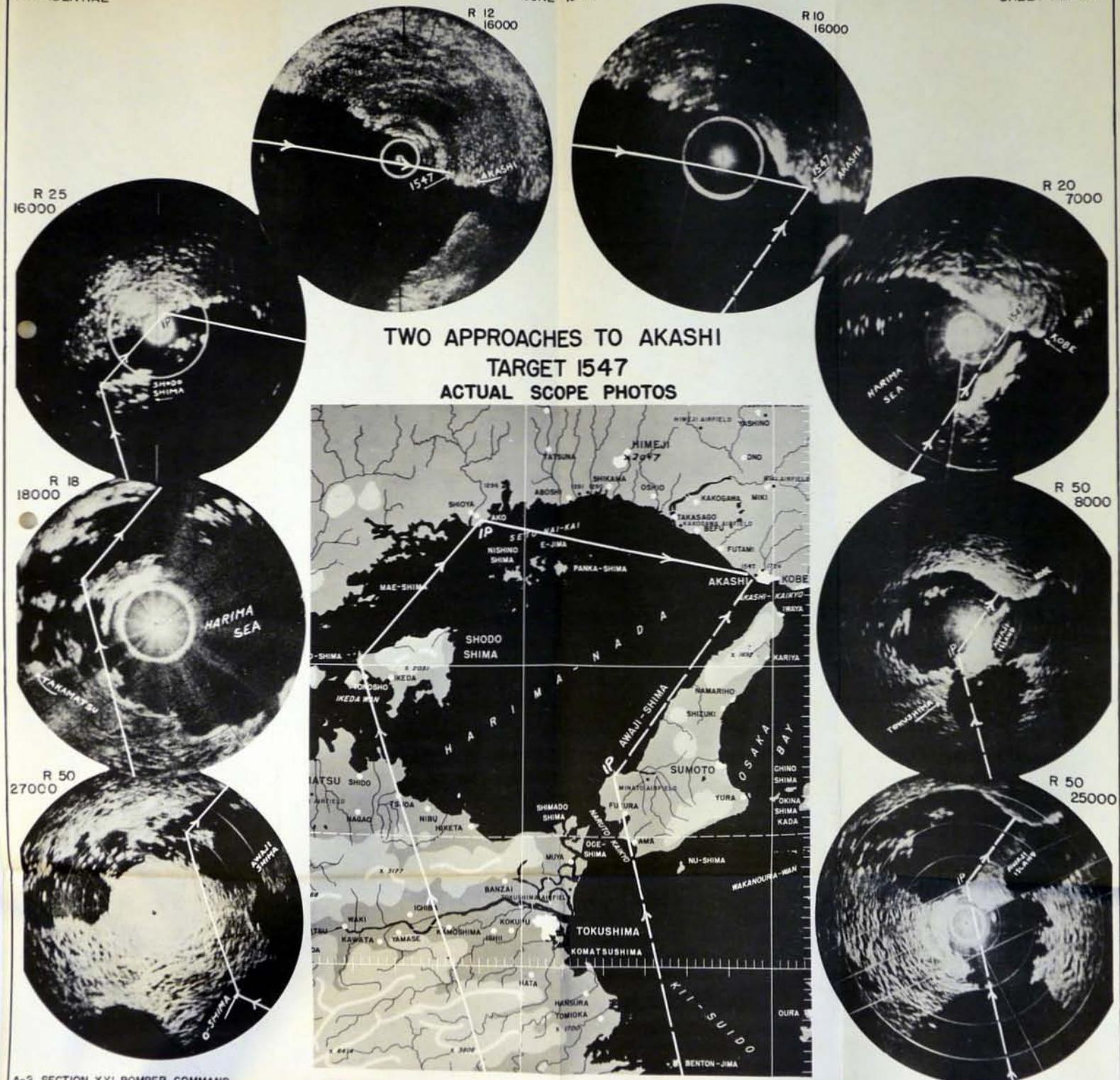
DISTRIBUTION

TACTICAL MISSION REPORT

Copy No.	
1	Commanding General, Army Air Forces
2	Commanding General, U.S. Army Strategic Air Forces (Rear)
3	Commanding General, U.S. Army Strategic Air Forces (Guam)
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

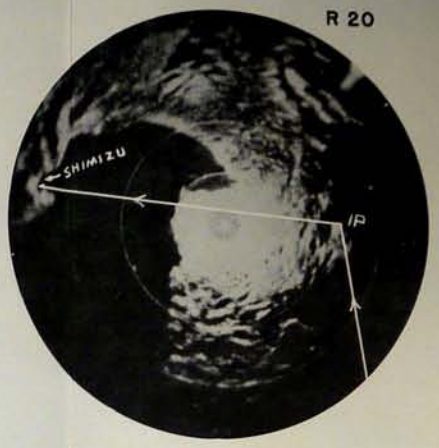
81 Commanding General, 58th Bombardment Wing
82 Commanding General, 73rd Bombardment Wing
83 Commanding General, 313th Bombardment Wing
84 Commanding General, 314th Bombardment Wing
85 Commanding General, 315th Bombardment Wing
86 Commanding Officer, 3rd Photo Reconnaissance Sq
87 Commanding Officer, 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)
116 Reporting Unit, A-2, Twentieth Air Force (File Copy)
117 - 130 Reporting Unit, A-2, Twentieth Air Force

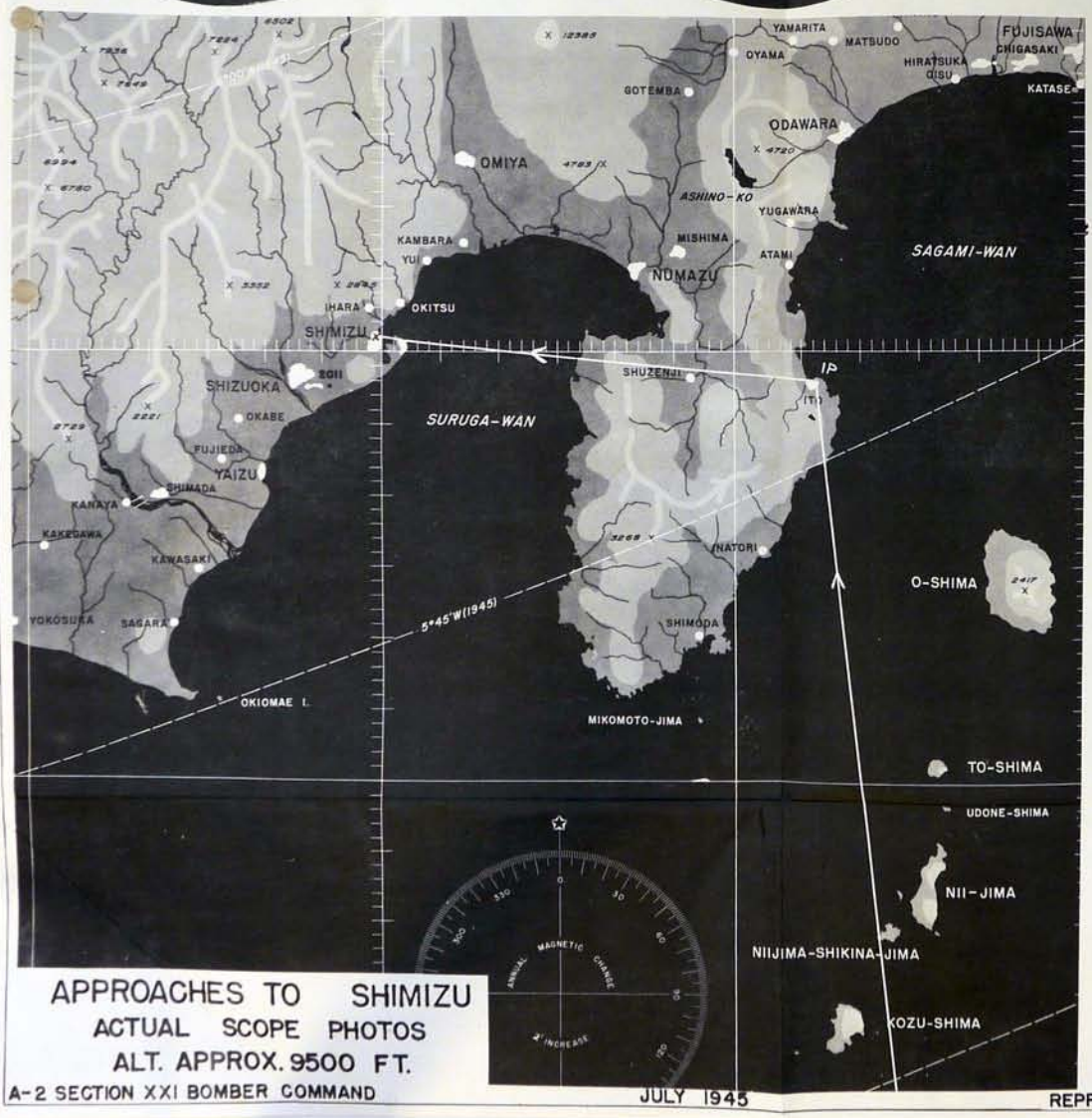
TWO APPROACHES TO AKASHI
TARGET 1547
ACTUAL SCOPE PHOTOS

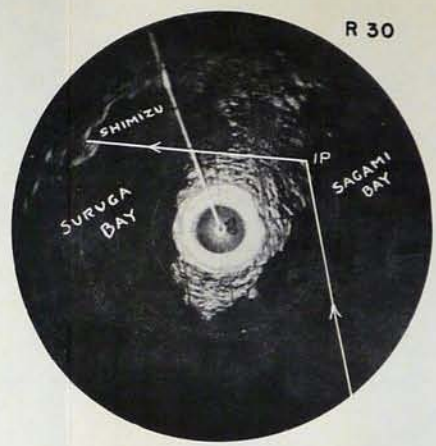


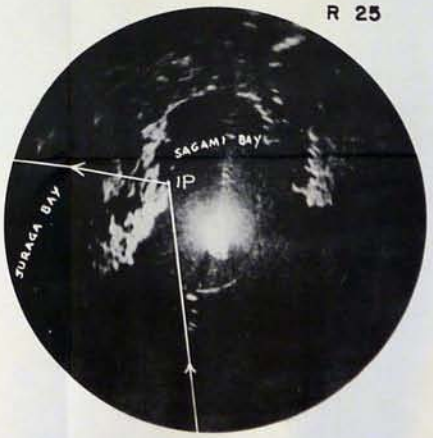
CONFIDENTIAL

SHEET RM-62









APPROACHES TO SHIMIZU

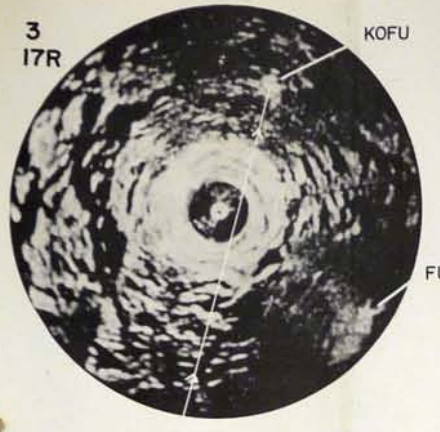
ACTUAL SCOPE PHOTOS

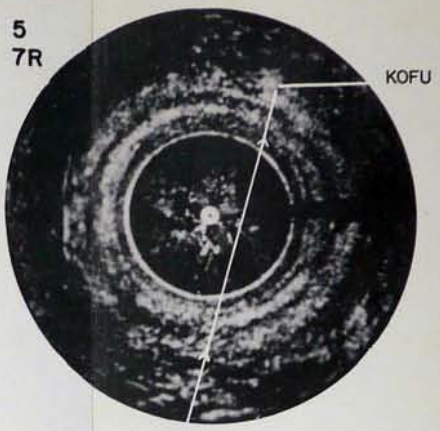
ALT. APPROX. 9500 FT.

A-2 SECTION XXI BOMBER COMMAND

JULY 1945

REPRODUCED BY 949TH ENGR AVN TOPO CO





APPROACHES TO KOFU
ACTUAL SCOPE PHOTOS
ALT. APPROX. 10,000'