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MAGOYA, JAPAN

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2-5239-96

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CONSOLIDATED MISSION REPORT

FIELD ORDER NUMBER 32  
 MISSION NUMBER 14  
 DATE OF MISSION  
 22 DECEMBER 1944

HEADQUARTERS  
 73RD BOMBARDMENT WING  
 APO #237, % POSTMASTER  
 SAN FRANCISCO, CALIFORNIA

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2-5239-96  
 M14



S E C R E T

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

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By *AK* NARA Date *8/19/05*



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Headquarters  
73rd Bombardment Wing  
APO #237, % Postmaster  
San Francisco, California

Field Order No. 32  
Mission No. 14  
Date of Mission  
22 December 1944

CONSOLIDATED MISSION REPORT

TACTICAL NARRATIVE

1. The Target

Field Order Number 32 of the 73rd Bombardment Wing, dated 21 December 1944, directed that each of the four Groups supply a maximum number of A/C to attack the Mitsubishi Aircraft Engine Factory (Objective Folder.No. 90.20-193) at Nagoya, Japan. No secondary target was specified. Aircraft were directed to attack any industrial city in Japan as a target of last resort.

2. Take-off

Of the 82 A/C scheduled to take off, 78 were airborne. The first A/C took off at 212026Z and the last at 212219Z.

3. Bomb Loading

Each A/C carried 11 x 500-lb M76 incendiary bombs; a total of 858 bombs (214.5 tons) was carried by all airborne aircraft. Each bomb was fused with an instantaneous nose and a non-delay tail.

4. Route Out

Airborne Squadrons 1, 2, 4, 5, and 6 proceeded to target via route "A", the easterly approach to the Japanese mainland. Assembly was completed at Marpi Point by 212155Z. Squadrons 1 and 2 deviated from the route as ordered by setting their course to 25°00'N-137°00'E and from there to landfall at 34°30'N-137°00'E in order to take advantage of prevailing westerly winds in the approach to the target.

Squadrons 1 and 2 arrived at the briefed IP (35°11'N-137°15'E) at 220359Z and 220403Z. Squadron 4 used the point 35°10'N-137°05'E for its IP. Squadron 5 circled a ditched B-29 at 22°42'N-141°37'E, beginning at approximately 220042Z; it then took up a course direct to the target. This delay allowed Squadron 6 to overtake and pass Squadron 5.

As Squadron 6 approached the briefed IP, its lead A/C was forced to relinquish its position to another A/C because of compass failure, a defective radar, and a runaway prop. Immediately upon assuming the lead, the replacing A/C lost power on two engines and descended 1000 feet. Followed by the formation, this lead A/C turned into a heading of 310° to the target.

Squadrons 3, 7, 8, and 9 proceeded via route "B" to the target. Squadron 3 arrived at the briefed IP (35°07'N-135°57'E) at 220429Z. Squadron 7 used the coordinates 35°10'N-135°50'E for its IP. Squadron 8 turned back to base shortly after reaching landfall because the leader decided the return was necessary when the Squadron was reduced to a 5-A/C formation owing to earlier aborting A/C. Squadron 9 made landfall to the left of the briefed IP and made its turn into the target at 35°50'N-136°04'E.

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5. Bombing Data

Although 49 A/C reached the primary target, one failed to bomb because of rack malfunction. Because visibility over the target during the period of the bomb run (220404Z to 220558Z) varied from 6/10 to almost 10/10, sighting was by radar, eight A/C sighting and 40 A/C dropping on their leaders. Six of the lead A/C were operated by the C-1 auto-pilot and the other 42 A/C were operated manually.

The first A/C dropped its bombs at 220404Z and the last at 220558Z. Bombing altitudes ranged from 28,800 feet to 32,600.

Five hundred and nineteen incendiary bombs (129.75 tons) were dropped on the Mitsubishi A/C Engine Factory at Nagoya.

Three A/C attacked targets of last resort. One A/C bombed the city of Toyohashi at 220358Z from 31,500 feet, dropping 11 IB's (2.75 tons). One A/C bombed Hamamatsu at 220445Z from 26,600 feet, dropping 11 IB's. One A/C bombed Murato Zaki (33°16'N-134°06'E) at 220500Z from 23,000 feet, dropping 11 IB's.

Eleven A/C bombed the following targets of opportunity: the islands of Iwo Jima, Pagan, and Anatahan. A total of 115 bombs (38.75 tons) was dropped on all of the targets of opportunity.

One hundred and eighty-five bombs (46.25 tons) were jettisoned by malfunctioning and early-returning A/C. One A/C returned six bombs owing to rack malfunctions.

6. Enemy Aircraft Opposition

From landfall to the IP (35°11'N-137°15'E), those of our A/C following route "A" received one attack from an IRVING at 29,000 feet, 22 attacks from TOJOs and three from TONYs at 30,000 feet, three from NICKs at the same altitude, and five from TONYs at 31,000 feet.

On route "B", from landfall to the IP (35°07'N-135°57'E), one attack was made by a TONY at 31,000 feet, and nine attacks by ZEKES and one by an IRVING were made at 32,000 feet. One TOJO attacked at 33,000 feet.

From IP to the target, on route "A", there were nine attacks by NICKs at 29,000 feet; 22 by TONYs, three by TOJOs and one by a ZEKE at 30,000 feet. At 31,000 feet there were 90 attacks by TOJOs, five by IRVINGS, three by ZEKES, and two by NICKs.

From the IP to the target, on route "B", our A/C received two attacks from ZEKES at 30,000 feet; one from a TONY at 31,000 feet; nine attacks from ZEKES, seven from TONYs, one from a TOJO and four from IRVINGS at 32,000 feet; at 33,000 feet, two attacks were received, one from a TOJO and one from an IRVING.

Over the target, at 29,000 feet, three attacks were made by TONYs, one by ZEKE, one by NICK, and one by an unidentified S/E aircraft. At 30,000 feet, 15 attacks were made by TONYs, eight by TOJOs, six by ZEKES, and one by NICK. Five attacks by TOJOs, three by IRVINGS, three by JACKs, one by RUFF, and four by unidentified S/E A/C were made at 31,000 feet. At 32,000 feet, four attacks were made by ZEKES, three by OSCARS, two by IRVINGS, and one by a ZEKE 32. Twenty-six attacks were made at this altitude by TONYs, seven by TOJOs, five by NICKs, one by BETTY, one by JACK, and four by unidentified T/E aircraft.

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6. (contd)

From the target to landsend, two attacks were made at 28,000 feet, one by a TONY and one by an IRVING. At 29,000 feet, three attacks were made by TOJO, five by TONY, five by NICK, one by ZEKE, and one by OSCAR. At 30,000 feet, there were 33 attacks by TOJOS, 41 by TONYs, four by ZEKES, one by NICK, one by IRVING, and four by unidentified T/E aircraft. At 31,000 feet, four attacks were made by TONYs, four by NICKs, and five by IRVINGs. At 32,000 feet, 17 attacks were made by TONYs, seven by ZEKES, six by IRVINGs, four by NICKs, and two by TOJOS.

After leaving the Japanese coast on the route back, our A/C received one attack from a TOJO at 27,000 feet, and five attacks from TONYs and one from an IRVING at 32,000 feet.

Several of the unidentified T/E aircraft which have been reported herein are the twin-inline engine, single-place Jap fighter type which has been mentioned in earlier reports.

7. Enemy Attack Data

From landfall until our A/C left the coast there were approximately 175 E/A airborne. Enemy aircraft fire was generally inaccurate. Fire seems to have been limited to the 7.7-mm and 12.7-mm machine gun and 20-mm cannon.

The number of attacks and the average range to which enemy aircraft pressed these attacks are shown below, according to clock quarters.

<u>CLOCK QUARTER</u>	<u>ATTACKS</u>	<u>AVERAGE RANGE (YDS)</u>
10:30 to 1:30	183 Above 54 Level 52 Below	250 400 375
1:30 to 4:30	39 Above 31 Level 38 Below	300 350 500
4:30 to 7:30	24 Above 9 Level 22 Below	400 400 500
7:30 to 10:30	21 Above 23 Level 13 Below	400 400 500

Markings on two E/A were unusual: an IRVING was observed with insignia on the underside of its wings which resembled the German Iron Cross. A NICK was seen which had four evenly spaced silver stripes painted across its red roundels.

There is evidence of an increasing aggressiveness on the part of enemy fighters. Some crews report Jap pilots were attacking entire formations rather than individual aircraft. Attacks were generally made singly, although instances of coordinated attacks were noted.

One Jap pilot indulged in aerobatic maneuvers near our A/C, at which an unidentified S/E camouflaged fighter made passes.

The typical attack was the shallow dive, usually from a frontal approach; the E/A instead of breaking away would then

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7. (contd)

fly straight through the formation.

Another attack pattern was used by two enemy fighter Squadrons of eight to ten A/C each. These Squadrons, flying line-astern, paced our A/C, one at 3 o'clock and the other at 9 o'clock, each taking turns in making passes.

There were several E/A which threw off considerable smoke, then dove, as if in difficulty, returning shortly to altitude for new attacks.

During the bomb run, an unidentified twin-engine E/A flying at 29,500 feet released one phosphorus bomb which did no damage to our aircraft. A phosphorus bomb was released at 4700 feet by a ZEKE which attacked an early-returning B-29 over Iwo Jima. The bomb burst about one mile behind the reporting aircraft.

8. Antiaircraft Fire

The lead Squadron, flying at 30,000 feet on route "A", following an attack by a wave of fighters at the coast line, flew through a barrage of heavy flak from batteries which seemed to be located near the airfield west of Hamamatsu. This barrage-type fire lasted only a few seconds, and was meager, inaccurate, and generally below to level with the formation, and to its left.

One A/C reported seeing two orange-red bursts "with tails", immediately after passing landfall, which left clouds of the same color that continued to glow from one to two seconds. These bursts were larger than flak bursts and smaller than phosphorus bursts.

From the IP to the target, heavy, inaccurate to accurate continuously-pointed flak was encountered by the lead Squadron flying at 30,000 feet on route "A". It tracked the formation into the target for a period of three to four minutes; although fire was generally inaccurate, several A/C were rocked by explosions.

Over the primary target, heavy, moderate to intense, and inaccurate to accurate flak was observed at altitudes varying from 28,800 feet to 32,600 feet. Gunfire was generally continuously-pointed, although some predicted concentrations and barrages were observed during the bomb run.

9. Route Back

The five Squadrons following route "A" were ordered to make a left turn after leaving the target to 26°00'N-140°00'E. The four Squadrons following route "B" were ordered to make a right turn to the same point. All A/C then returned to Base individually or in flights.

10. Damage Assessment

Strike photographs were taken only by the lead Squadron owing to increasing cloud cover which made further photography impossible. No bomb bursts are visible in the photographs taken over the primary target.

One A/C took strike photographs which show bursts on Shikoku Island along the narrow beach between the town of Okitsu and the ocean.

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11. Own Losses

One A/C, following failure of two engines, ditched on a heading of 60° at 22°42'N-141°37'E. A second A/C was hit by fighters or flak over the primary target and reported its distress position at 33°40'N-137°17'E; QUG (ditching message) was sent at 220452Z.

Seventeen A/C received battle damage.

Personnel casualties include 17 men missing, one seriously wounded, and one slightly wounded.

12. Claims

Nine E/A are claimed as destroyed, 17 as probably destroyed, and 15 as damaged.

13. Weather

The secondary cold front which had been predicted was encountered between 21° and 22°N. Cloud cover was 6/10 altocumulus at 10,000 feet, and 6/10 cirrus at 30,000 feet, varying slightly from this point to the target area, where cloud cover increased from 6/10 to nearly overcast during the one hour and a half our A/C were over Nagoya. Winds were 120 knots at 280°, 30,000 feet over the target. On return, visibility at base was 12 miles, 4/10 cumulus at 2000 feet, winds 12 knots at 70°.

14. Observations of Importance

At 35°00'N-136°54'E, one A/C observed, from 30,000 feet, a large factory which appeared to be processing heavy industrial materiel. Large stock piles abutted the factory, which had the general appearance of a steel mill. Huge fires were seen which may have emanated from blast furnaces.

15. Landing Data

Return was made without unusual incident to Isely Field, where the first A/C landed at 220946Z, and the last at 221337Z.

*Kenneth P. Bergquist*

KENNETH P. BERGQUIST  
Colonel, Air Corps  
DC/S, Opns and Trng

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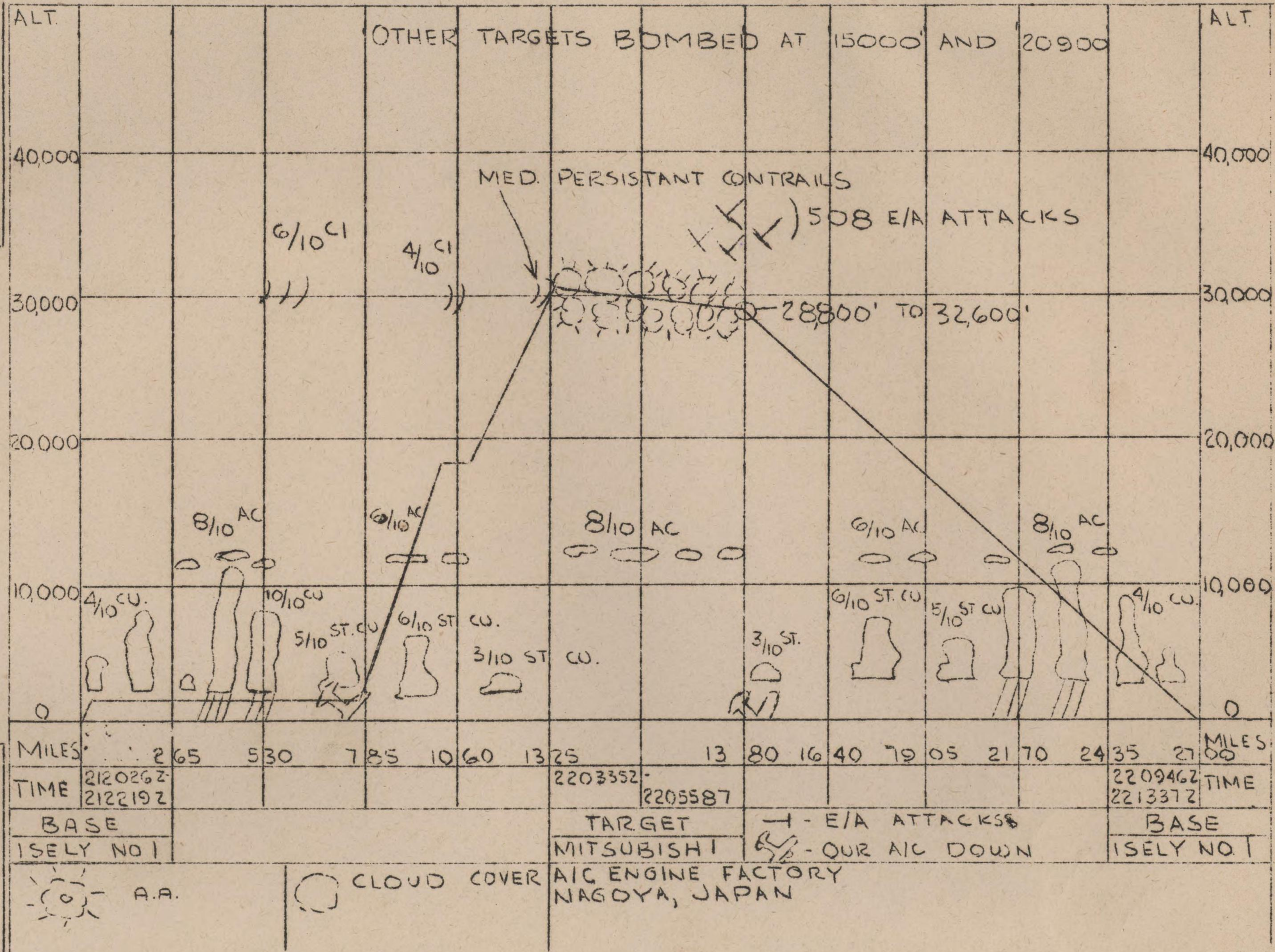


F.O. No. 32  
Mission No. 14  
22 December 44

CONSOLIDATED MISSION REPORT

VERTICAL CHART

73rd Bomb Wing  
8 Jan 1945  
Capt J.F. Davis





S E C R E T

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

BASIC DATA

1. TIME OF TAKE OFF:

Sq No	Gp No	Place	Time 1st A/C	Last A/C	Elapsed Time	No of A/C	Average take-off interval
1.	499	Saipan	212026Z	212035Z	9 min.	11	54 sec.
2.	499	Saipan	212036Z	212048Z	12 min.	9	72 sec.
3.	500	Saipan	212056Z	212106Z	10 min.	11*	54.5 sec.
4.	497	Saipan	212125Z	212130Z	5 min.	6	50 sec.
5.	497	Saipan	212131Z	212136Z	5 min.	6	50 sec.
6.	497	Saipan	212138Z	212146Z	8 min.	9	53.3 sec.
7.	498	Saipan	212154Z	212200Z	6 min.	7	51.4 sec.
8.	498	Saipan	212201Z	212209Z	8 min.	9	53.3 sec.
9.	498	Saipan	212210Z	212219Z	9 min.	9	60 sec.
Overall			212026Z	212219Z 113 min.		78**	-----

\*Excludes 1 a/c which took off with Sq #6 at 212147Z.  
 \*\*Total includes 1 a/c (see note #1) from Sq 3 which took off late with Sq #6, at 212147Z.

2. TIME OF LANDING: \*

Sq No	Gp No	Place	Time 1st A/C	Time Last A/C	No of A/C
1.	499	Saipan	220946Z	221035Z	10
2.	499	Saipan	220956Z	221015Z	5
3.	500	Saipan	221033Z	221106Z	7
4.	497	Saipan	221025Z	221206Z	6
5.	497	Saipan	221107Z	221200Z	4
6.	497	Saipan	221029Z	221100Z	5
7.	498	Saipan	221157Z	221337Z	7
8.	498	Saipan	-----	-----	0**
9.	498	Saipan	221151Z	221242Z	7
Overall			220946Z	221337Z	51

\*Excludes a/c returning early. See Section 6.  
 \*\*All a/c in Sq. 8 returned early.

3. SQUADRON ASSEMBLY: (as ordered - Marpi Point 15°17'N, 145°47'E).

Sq No	Gp No	Place	Altitude	Time
1.	499	15°17'N, 145°47'E	700'	212044Z
2.	499	Same	1,000'	212059Z
3.	500	15°16'N, 145°38'E	1,100'	212112Z
4.	497	15°17'N, 145°47'E	1,000'	212136Z
5.	497	Same	1,000'	212145Z
6.	497	Same	1,000'	212155Z
7.	498	Same	500'	212213Z
8.	498	Same	1,000'	212218Z
9.	498	Same	1,000'	212230Z
Overall		lowest a/c - 500' highest a/c - 1,100'		Time, first Sq - 213044Z Time, last Sq - 212230Z

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4. GROUP ASSEMBLY:

None ordered

5. WING ASSEMBLY:

None ordered

6. AIRCRAFT RETURNING EARLY: \*

A/C No.	Sq No	Place	Time	Reason
V49(5222)	1	Saipan	220815Z	Lost 9" manifold pressure at 18,000'. Bombed Iwo Jima.
V 9(4699)	2	Saipan	212306Z	#4 engine caught fire on take-off. Blew rear spark plug #1 cylinder.
V10(3440)	2	Saipan	220611Z	Personnel failure - unjustified abort. Selector valve would not feed to #3 tank but would feed back to center section tank. Bombed Pagan
V21(3477)	2	Saipan	220835Z	Lost fuel pressure #1 engine cut out at 30,000'. Bombed Anathan Island.
Z 7(3486)	3	Saipan	212344Z	Erratic manifold pressure on all engines. Malfunctioning of inverters for super-charger regulative system.
Z25(4686)	3	Saipan	220140Z	Cylinder head blown #4 engine.
Z30(4780)	3	Saipan	220540Z	#2 prop feathering line, #3 push rod housing hoses leaking, 2 warped rocker box covers #3 engine. Bombed Iwo Jima.
Z31(4785)	3	Saipan	220854Z	Excessive oil leak #3 engine. Loose push rod housing hose clamps. Hose blown on external part of oil system.
Z 3(3435)	3	Saipan	220745Z	Personnel failure -- unjustified abort. #1 engine overheating at altitude. Bombed Pagan.
A24(4604)	5**	Saipan	220700Z	#2 engine cut out, #3 engine malfunction.
A 4(4596)	6	Saipan	220644Z	#3 engine smoking. Using excessive amount of oil. Bombed Iwo Jima.
A 5(4598)	6	Saipan	220816Z	#16 cylinder #3 engine blown. Bombed Iwo Jima.
A 7(4593)	6	Saipan	220826Z	Blew out blister. Lost oxygen. Bombed Iwo Jima.
A10(4597)	6	Saipan	220654Z	#6 cylinder #4 engine blown.
T 1(4727)	8	Saipan	220500Z	Fuel transfer system inoperative.
T 3(4608)	8	Saipan	220903Z	#3 manifold pressure very low.
T 7(3468)	8	Saipan	220206Z	Personnel error - unjustified abort. #2 engine started to run rough; ground check found no malfunction.
T 9(4629)	8	Saipan	212318Z	Personnel error - unjustified abort. Slight oil leak #1 engine.
T 6(4795)	8	Saipan	220900Z	When lead a/c of Sq #8 reached landfall on approach to target, leader decided to return to Base because Sq was reduced to 5 a/c by aborts. Formation was poor.
T10(4767)	8	Saipan	220900Z	3 a/c bombed Iwo Jima.
T 8(4755)	8	Saipan	220906Z	Oil shutter would not work #1 engine.
T 2(4605)	8	Saipan	220910Z	Excessive oil leak #2 engine, loose oil line hose clamps, internal engine failure.
T 4(4611)	8	Saipan	220850Z	
T23(4601)	9	Saipan	220032Z	
T30(4654)	9	Saipan	212242Z	

Total No. of a/c returning early - 25

\*See Section 10 h for a/c which went over target but failed to bomb.

\*\*For information concerning a/c A31 (included in Consolidated Statistical Summary, Table II) see Section 13.

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7. ROUTE OUT:

- a. Route "A" - Followed by Squadrons 1, 2, 4, 5, and 6.

Route as Ordered	Time as Flown Sq #1	Sq #6	Altitude as Flown Low Sq	High Sq	CAS
From: Base	212026Z	212138Z	---	---	---
To: Assembly Pt-Marpi Pt.	212044Z	212155Z	700'	1,000'	174-205
To: 17°00'N, 144°00'E	212108Z	212252Z	1,000'	1,000'	174-200
To: 24°00'N, 140°00'E	-----*	220108Z**	1,000'	1,000'	174-200
To: IP - 35°11'N, 137°15'E	220359Z	-----***	30,000'	30,500'	170-200
To: Target	220405Z	220443Z****	29,300'	31,000'	170-200

\*Squadrons 1 and 2 deviated from route as ordered by setting course to 25°00'N, 137°00'E, thence to landfall at 34°30'N, 137°00'E, in order to take advantage of prevailing westerly winds in the advance to the target.

\*\*Squadron 5 circled ditched a/c at 22°42'N, 141°37'E at approximately 220042Z, then took up course direct to target. This allowed Squadron 6 to overtake and pass Squadron 5.

\*\*\*Squadrons 5 and 6 did not go over the IP. For explanation of this deviation, see Section 9. Squadron 4 went over IP at 220438Z.

\*\*\*\*For explanation of deviations, see Section 10 b.

- b. Route "B" - Followed by Squadrons 3, 7, 8, and 9.

Route as Ordered	Time as Flown Sq #3	Sq #9	Altitude as Flown Low A/C	High A/C	CAS
From: Base	212056Z	212210Z	---	---	---
To: Assembly Pt-Marpi Pt.	212112Z	212230Z	500'	1,100'	174-203
To: 17°00'N, 144°00'E	212153Z	212332Z	700'	1,800'	174-198
To: 24°00'N, 140°00'E	220034Z	220157Z	1,000'	2,200'	174-203
To: 33°00'N, 135°40'E	220329Z	220430Z	28,000'	31,000'	174-190
To: IP - 35°07'N, 135°57'E*	220429Z	220550Z	29,000'	32,600'	172-200
To: Target	220436Z	220557Z	29,000'	32,600'	170-200

\*Deviations at IP are shown in Section 9.

8. ROUTE BACK:

The five squadrons following route "A" were ordered to make a left turn after attack to 26°00'N, 140°00'E to Base. The four squadrons following Route "B" were ordered to make a right turn to 26°00'N, 140°00'E to Base. The a/c returned to Base following route ordered, individually or in flights. For time and place of landing, see Section 2.

9. INITIAL POINTS:

- a. Route "A" (as ordered - 35°11'N, 137°15'E)

Sq No	Gp No	Place	Time	Altitude
1	499	35°11'N, 137°15'E	220359Z	30,000'
2	499	Same	220403Z	30,200'
4	497	35°10'N, 137°05'E	220438Z	30,500'
5	497	None Used*	-----	-----
6	497	None Used**	-----	-----

\*Sq 5 did not reach briefed IP because it was believed that a visual bombing could be made on the heading then being followed (05°). Cloud cover, however, became so great that a radar run was made.  
 \*\*Sq 6 did not reach IP. On approaching the IP the lead a/c experienced compass failure, a runaway prop, and defective radar. The lead was surrendered to A/C A3. Immediately upon assuming lead, this a/c lost power on two engines and descended 1000'. This a/c, followed by formation, turned on a heading of 310° to the target.

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Basic Data, Page 4.  
Par 9, cont'd

- b. Route "B" (as ordered - 35°07'N, 135°57'E)

Sq No	Gp No	Place	Time	Altitude
3	500	35°07'N, 135°57'E	220429Z	32,600'
7	498	35°10'N, 135°50'E	220511Z	29,000'
8	498	None*	-----	-----
9	498	35°50'N, 136°04'E**	220552Z	30,000'

\*Sq 8 aborted shortly after landfall was reached. See Section 6  
\*\*Sq 9 made landfall to the left of point ordered. The leader altered the course to 66° to make IP. Radar went out on bomb run and bombs were dropped on word from squadron leader.

10. TARGETS ATTACK DATA:

- a. No. of a/c attacking target:

Gp No	Primary Target (90.20 193)	Last Resort Target (Any Industrial City)	Target of Opportunity
499	15	1	3
500	6	0	2
497	14	1	3
498	13	1	3
Total	48	3	11

- 499: 1 a/c bombed Toyohashi (last resort target)  
 1 a/c bombed Iwo Jima (Target of opportunity)  
 1 a/c bombed Pagan (target of opportunity)  
 1 a/c bombed Anatahan Island (target of opportunity)
- 500: 1 a/c bombed Iwo Jima (target of opportunity)  
 1 a/c bombed Pagan (target of opportunity)
- 497: 1 a/c bombed Hamamatsu (last resort target)  
 3 a/c bombed Iwo Jima (target of opportunity)
- 498: 1 a/c bombed Murato Zuki (33°16'N, 134°06'E) (last resort target)  
 3 a/c bombed Iwo Jima (target of opportunity)

- b. Times over target

Sq No	Gp No	Primary A/C		Last Resort
		First	Last	
1	499	220404Z	220404Z	-----
2	499	220413Z	220413Z	220558Z
3	500	220436Z	220436Z	-----
4	497	220445Z	220445Z	-----
5	497	220503Z	220504Z	-----
6	497	220443Z	220443Z*	220445Z
7	498	220418Z	220518Z	220500Z
8	498	-----	-----	-----
9	498	220447Z	220558Z	-----

- Sq 1 (499) A/C V49 bombed Iwo Jima at 220520Z.  
 Sq 2 (499) A/C V10 bombed Pagan 220342Z to 220544Z. Ten runs made over target. Rack malfunction permitted only one bomb to be dropped on each run.

- Sq 3 (500) A/C Z3 bombed Pagan 220642Z.  
 A/C Z30 bombed Iwo Jima 220640Z  
 Sq 6 (497) A/C A7, A4, A5 bombed Iwo Jima 220335Z to 220528Z.  
 Sq 8 (498) A/C T2, T4, T8 bombed Iwo Jima 220544Z to 220556Z.

S E C R E T



S E C R E T

Basic Data, Page 5.  
Par 10, cont'd

\*Sq 6 (497) reached target before Sq 4 (497) because the former squadron proceeded directly to the target from landfall. See footnote 2, Section 9 a.

c. Heading and Altitude from IP to target:

Sq No	Gp No	Heading (in Deg.)	Altitude
1	499	260 - 268	31,500'
2	499	268 - 270	29,700'
3	500	104	32,050'
4	497	270	30,800'
5	497	24	29,300'
6	497	310	31,500'
7	498	99 - 105	30,000'
8*	498	-----	-----
9	498	75 - 90	30,000'

\*Sq 8 aborted.

d. Heading and altitude over target:

Sq No	Gp No	Primary Target		Last Resort	
		Heading (Deg)	Altitude (Ft)	Heading (Deg)	Altitude (Ft)
1	499	269 - 273	29,500 - 32,000	---	---
2	499	265 - 270	31,000 - 32,000	40	31,500
3	500	85 - 115	32,000 - 32,600	---	---
4	497	268 - 280	29,970 - 30,800	---	---
5	497	24 - 30	29,160 - 29,300	---	---
6	497	310	30,400 - 31,400	200	26,600
7	498	99 - 105	28,800 - 29,600	330	23,000
8 *	498	---	---	---	---
9	498	75 - 90	28,800 - 29,800	---	---

\*Sq 8 aborted.

Heading and altitude over target of opportunity:

Sq 1: A/C V49 (Iwo Jima) - 290°; 25,000'  
 Sq 2: A/C V10 (Pagan) - 220°; 10,360'  
 A/C V21 (Anatahan Island) - 130°; 20,000'  
 Sq 3: A/C Z 3 (Pagan) - 15°; 12,500'  
 A/C Z30 (Iwo Jima) - 90°; 20,000'  
 Sq 6: A/C A7, A5, A4 (Iwo Jima) - 155° - 202°; 15,000' - 22,000'  
 Sq 8: A/C T2, T4, T8 (Iwo Jima) - 155° - 272°; 20,900' - 21,080'

e. Breakaway:

499th Group - by left turn.  
 500th Group - 90° to axis of attack - 31,050'  
 497th Group - descending left turn on course to Base.  
 498th Group - 168° - 28,000'

f. Rally Point:

None ordered

g. Extra Runs over Target:

Sq 2 (499) A/C V10 made 10 runs over Pagan. See Targets of Opportunity, Section 10 b.

h. Reasons for Failure to Attack:\*\*

A/C Z27(4668), rack malfunction, jettisoned bombs.  
 \*For a/c returning early, see Section 6.

S E C R E T

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S E C R E T

Basic Data, Page 6.

11. ESCORT DATA:

No escort ordered.

S E C R E T

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Authority *AND NEEDLES*  
By *AK* NARA Date *8/19/05*



Headquarters  
73rd Bombardment Wing

S E C R E T

Field Order No. 22  
Mission Number 14  
22 December 1944

CONSOLIDATED MISSION REPORT

LOSS AND DAMAGE

12. CASUALTIES - PERSONNEL

See Consolidated Statistical Report:  
Table XI, Casualties.

13. A/C LOST

A/C V7(4684) was hit over target by fighters or flak and reported distress position at 220444Z at 33040°N-137°17'E. Sent QUG message (ditching) at 220452Z.

A/C A31(4733) ditched. The following information was obtained from observing crew: at 220035Z, A/C A31 was observed by the remainder of its formation to be at an altitude of 500' with #2 propeller feathered. Shortly thereafter, the #3 engine caught on fire. At 220042Z, the A/C ditched on a heading of 60° at 22°42'N-141°37'E.

14. A/C MISSING

None.

15. TOTAL A/C FAILING TO RETURN

Two (see paragraph 13).

16. DAMAGE TO A/C

See Report of Battle Damage (following page).

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REPORT OF BATTLE DAMAGE

MISSION #11  
22 Dec 1944

TO BE READY FOR  
COMBAT WITHIN

SERIAL NO.

DESCRIPTION OF DAMAGE

497TH BOMB GROUP

42-24592	4 days	20 mm holes in vertical stabilizer.
42-24591	5 days	20 mm holes in vertical stabilizer and rudder.
42-63485	2 days	Bombardier's nose panel shot up, left pilot's panel hit, left horizontal stabilizer has small holes and de-icer boot ripped
42-24623	1 day	20 mm shell hole in right wing
42-63425	7 days	Entire empennage needs changing. Holes in radar dome. Pane in bombardier's section to be changed. Number 1, 2, 3, & 4 engine changes. Number 1 & 2 prop changes. Flak hole in right stabilizer. Holes between stations 1039.9 & 1057, left and right sides. Astro dome badly damaged. Left tail gunner's ammunition box damaged. Right side section of pressure line to tail position damaged.

42-63431	8 days	Burnt hole in trailing edge of nacelle number four engine. Holes in radar dome. Hole in forward end of left forward bombay door. Hole in dorsal fin above rear entrance. Number 1, 2, 3, and 4 engine changes. Airplane prepared to ditch when returning and all accessory equipment was tossed overboard.
----------	--------	--

42-65231	4 days	Bullet hole in nose wheel strut. Hole in left nose wheel well door. Small holes in floor of cockpit. Shattered windows pilot's and copilot's. Radar dome shot up. Hole in #2 prop. Hole in fairing of #4 engine, outboard supercharger.
----------	--------	---

Total Damaged - 497th Bomb Group:

7 Aircraft  
{ 1 A/C within 1 day  
{ 1 A/C within 2 days  
{ 2 A/C within 4 days  
{ 1 A/C within 5 days  
{ 1 A/C within 7 days  
{ 1 A/C within 8 days

498TH BOMB GROUP

42-63416	Indef.	Bullet holes in rear bombay and aft turret dome
24663	1 DAY	Small hole in FORWARD PROSSORIZED (RAIN) DUE TO EXPLODING GUN IN FORWARD UPPER TURRET.

Total Damaged - 498th Bomb Group:

1 Aircraft  
(A/C indefinite)

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499TH BOMB GROUP

42-24754	4 days	One flak hole in lower left forward pressurized compartment. Two large 20 mm and several bullet holes in dorsal fin. One bullet hole in #4 prop and #4 nacelle.
42-24758	3 days	One flak hole under right wing between fuselage and #3 nacelle.
42-24769	3 days	One flak hole in dorsal fin.
42-24644	3 days	Bullet hole in rudder.
42-24673 24677	1 day	Flak hole in tail gunner's compartment Flak hole in <i>NO RT. WING</i>

Total Damaged - 499th Bomb Group:

5 Aircraft  
(1 A/C within 1 day  
(3 A/C within 3 days  
(1 A/C within 4 days

500TH BOMB GROUP

42-24652	Indef.	Bullet hole in radar dome
42-24676	1 day	Flak hole in fuselage opposite rear door.
42-65247	Indef.	Bullet hole through #1 engine nacelle, bullet hole in radar dome, hole in #1 oil tank.
42-63429	2 days	20 mm hole in astro dome, 3 bullet holes in vertical stabilizer.

Total Damaged - 500th Bomb Group:

4 Aircraft  
(1 A/C within 1 day  
(1 A/C within 2 days  
(2 A/C indefinite

TOTAL DAMAGED - 73RD BOMB WING:

~~4~~ 5 Aircraft  
(5 A/C within 1 day  
(2 A/C within 2 days  
(3 A/C within 3 days  
(3 A/C within 4 days  
(1 A/C within 5 days  
(5 A/C 7 days or over

73rd Wing Stat

SECRET



Headquarters  
73rd Bombardment Wing

S E C R E T

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

AA AND AIR-TO-AIR BOMBING

17. ENEMY ANTI-AIRCRAFT FIRE

Primary target: heavy, moderate to intense, and inaccurate to accurate flak was observed over the primary target at altitudes varying from 28,800 to 32,600 feet. Gunfire was generally continuously-pointed, although some predicted concentrations and barrages were observed during the bomb run. Bursts were evenly distributed in direction.

Bursts were generally black; one A/C reported seeing two orange-red bursts "with tails", leaving clouds of the same color. This glowed for one or two seconds. These bursts were larger than flak and smaller than phosphorus bursts and were about one-half mile on either side of reporting A/C immediately after landfall.

Forty-eight A/C bombed the primary target. Eleven A/C which suffered flak damage are as follows:

<u>A/C No</u>	<u>Altitude</u>	<u>Position in Formation</u>
A-41	30,800	3rd A/C 1st Flight 4th Sq
A-44	30,600	2nd A/C 1st Flight 4th Sq
A-51	29,970	4th A/C 1st Flight 4th Sq
T-46	29,000	1st A/C 1st Flight 7th Sq
V-30	30,000	2nd A/C 1st Flight 1st Sq
V-25	30,000	3rd A/C 3rd Flight 1st Sq
V-27	30,000	1st A/C 3rd Flight 1st Sq
V-43	30,000	1st A/C 1st Flight 1st Sq
V-46	30,000	3rd A/C 1st Flight 1st Sq
Z-24	32,000	2nd A/C 2nd Flight 3rd Sq
Z-29	32,600	1st A/C 2nd Flight 3rd Sq

This was a daylight mission.

Comments: none.

18. OUR TACTICS VS AA

Slight turns and loss of altitude after bombs away.

19. AIR-TO-AIR BOMBING AND ROCKETS

One phosphorus bomb was dispatched by an unidentified twin-engine enemy aircraft against the formation during the bomb run. Enemy aircraft was flying at an altitude of 29,500 feet when it dispatched the bomb. No damage to our aircraft resulted.

One white phosphorus bomb was released against one of our A/C which aborted and bombed Iwo Jima as a target of opportunity. When our A/C was over Iwo Jima at 4700 feet, one ZEKE came in out of the sun at 10 o'clock high and released its bomb which burst about one mile behind the B-29.

S E C R E T

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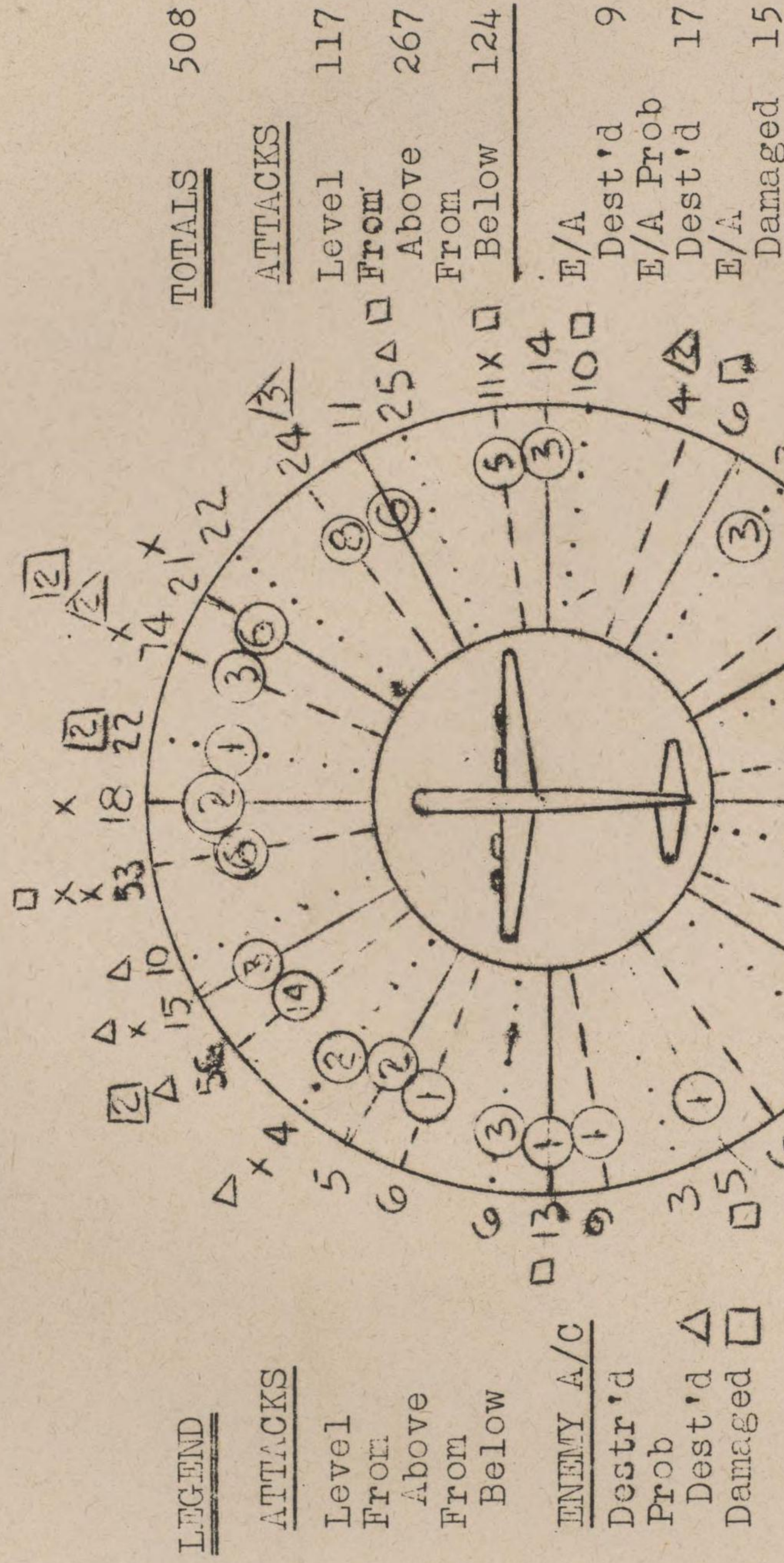
Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission Number 14  
22 December 1944

CONSOLIDATED MISSION REPORT

COMBAT DATA

20. ANALYSIS OF ATTACKS BY ENEMY AIRCRAFT



NOTE: The number of E/A attacking is shown at the outside end of each line. Attacks made by twin-engine E/A are indicated by "o" interruption in attack line, and when more than one T/E attack is made, the total is shown inside the "o".

21. YARDS AT WHICH E/A OPENED FIRE

Yards	100	200	300	400	500	600	700	800	900	1000 or more
No. A/C Firing	1	14	30	25	51	83	75	115	45	69

Comments: (See following page)

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Combat Data (Contd)

21. (contd)

Comments:

The average distance at which enemy fighters are estimated to have opened fire, from the various directions and angles of attack, are shown below.

<u>CLOCK QUARTER</u>	<u>DIRECTION</u>	<u>DISTANCE (YDS)</u>
10:30 to 1:30	Above Level Below	750 800 600
1:30 to 4:30	Above Level Below	500 700 700
4:30 to 7:30	Above Level Below	500 700 550
7:30 to 10:30	Above Level Below	600 800 600

22. LOCATION, ALTITUDE AND TYPE E/A ATTACKING

The 508 attacks are shown below, according to location, altitude, and type of E/A attacking:

<u>Location</u>	<u>Altitude</u>	<u>No. &amp; Type of E/A Attacking</u>
Landfall to IP (35°11'N-137°15'E)	29,000 30,000 31,000	1 IRVING 22 TOJOS, 3 TONYs, 3 NICKS 5 TONYs
IP to target	29,000 30,000 31,000	9 NICKS 3 TOJOS, 22 TONYs, 1 ZEKE 90 TOJOS, 2 NICKS, 3 ZEKES 5 IRVINGs
		<u>ROUTE "B"</u>
Landfall to IP (35°07'N-135°57'E)	31,000 32,000 33,000	1 TONY 9 ZEKES, 1 IRVING 1 TOJO
IP to target	30,000 32,000 33,000	2 ZEKES 7 TONYs, 1 TOJO, 3 IRVINGs 1 IRVING
		<u>NON-BRIEFED ROUTE</u>
(24°00'N-140°30'E) to target	32,000	9 TOJOS, 7 TONYs, 5 ZEKES 1 NATE, 9 Unident S/E 2 Unident T/E

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Combat Data (Contd)

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22. (contd)

<u>Location</u>	<u>Altitude</u>	<u>No. &amp; Type of E/A Attacking</u>
<u>NON-BRIEFED ROUTE</u>		
(22°42'N-141°37'E) to target	29,000	4 OSCARS, 2 TONYS, 1 IRVING 1 NICK, 2 ZEKES, 1 Unident S/E 1 Unident T/E
Over Target	29,000	1 ZEKE, 3 TONYS, 1 NICK 1 Unident S/E
"	30,000	6 ZEKES, 15 TONYS, 1 NICK 8 TOJOS
"	31,000	3 IRVINGS, 3 JACKS, 5 TOJOS 1 RUFÉ, 4 Unident S/E
"	32,000	4 ZEKES, 2 IRVINGS, 1 ZEKE 32 3 OSCARS, 1 JACK, 26 TONYS *1 BETTY, 5 NICKS, 7 TOJOS 5 Unident S/E, 4 Unident T/E
Leaving target (target to coast)	28,000 29,000	1 TONY, 1 IRVING 5 TONYS, 5 NICKS, 3 TOJOS, 1 ZEKE, 1 OSCAR
	30,000	33 TOJOS, 41 TONYS, 1 NICK, 4 ZEKES, 1 IRVING, 4 Unidentified T/E
	31,000 32,000	4 TONYS, 4 NICKS, 5 IRVINGS 2 TOJOS, 17 TONYS, 4 NICKS 7 ZEKES, 6 IRVINGS
After leaving coast (returning)	27,000 32,000	1 TOJO 5 TONYS, 1 IRVING

\* Crew of attacked aircraft was closely questioned regarding the identity of this enemy aircraft. The feeling was very strong among the crew members that this was a BETTY.

Several of the unidentified twin-engine aircraft reported above are the twin in-line engine, single-place Jap fighter type which have been indicated in previous reports.

22 A. ENEMY A/C SIGHTED (NOT ATTACKING)

It is impossible to state definitely the number of E/A that were airborne during the one hour and fifty-three minutes the B-29's were over the targets. From landfall until leaving the coast of Japan, it is estimated that there were approximately 175 separate E/A airborne including those which attacked.

The only type observed and not listed above as attacking was FRANCES. It paced the formation 25 minutes out to sea after leaving the Japanese coast.

Both the bombardier and navigator record impressions of an unidentified E/A, definitely twin-boom, and probably twin-engine. Following are their observations: twin-boom, resembling American P-38, except the booms were more squared; general impression was of "squarish" aircraft; the nose was shorter than that of the P-38; estimated length was 40 feet, and wing span, 54 feet; bombardier thinks he observed two propellers; A/C reported as clean-looking; no roundels seen. Another report

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S E C R E T

Combat Data (contd)

22A. (Contd)

was made of three of the same type of aircraft climbing and hanging on their props at 26,000 feet, apparently unable to reach the altitude at which observing aircraft was flying (31,000 feet).

Thirty-nine unidentified twin-engine aircraft were observed at an airfield on an island west of Toyahashi.

Forty-one twin-engine aircraft, unidentified, were observed at an airfield just east of Fukuoka.

An observation of one four-engine aircraft was made by a B-29 gunner, on an airfield in the vicinity of Tachikawa. There were 75 to 100 A/C of all types on the field. The four-engine A/C was clearly observed. It had a long, narrow, Davis-type wing with equal taper on both leading and trailing edges. The leading edge of the horizontal stabilizer showed more taper than the trailing edge. The lines in general resembled those of a B-29 or a B-32, with shorter nacelles. Aircraft had the silver color of an unpainted plane. No markings were observed. Observation was made from an altitude of 30,000 feet, with perfect visibility.

23. TYPE AND ACCURACY OF ENEMY FIRE AND TYPE PROJECTILE

Enemy fire was reported as generally inaccurate. Type of gunfire was apparently limited to the 7.7-mm, 12.7-mm machine gun, and 20-mm cannon. Specific armament arrangements were identified in the following aircraft.

- a. IRVING - firing 4 nose guns
- b. TOJO (2) - equipped with 3 guns on each wing
- c. TONY (2) - firing 12.7-mm machine guns
- d. NICK (10) - firing 20-mm cannon
- e. TONY (16) - firing 20-mm cannon

The average range to which enemy aircraft pressed their attacks is shown below.

10:30 to 1:30	Above Level Below	250 (yds) 400 375
1:30 to 4:30	Above Level Below	300 350 500
4:30 to 7:30	Above Level Below	400 400 500
7:30 to 10:30	Above Level Below	400 400 500

S E C R E T

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S E C R E T

Combat Data (contd)

24. ENEMY A/C MARKINGS

There were two reports of E/A markings which were slightly unusual:

- a. IRVING - insignia on underside of wings resembled the German Iron Cross.
- b. NICK - all black with four evenly spaced silver stripes painted across the red roundels.

As on previous missions there appeared to be a wide diversification of color schemes with dark shades predominating. Conventional use of red roundels was generally noted. Such specific observations as were reported are listed below:

NICK (3) - olive drab  
IRVINGS - green on top with silver bellies; black and white stripe near wing tip parallel to fuselage  
IRVINGS - olive drab with three orange bands around fuselage in front of empennage  
IRVING - all black  
IRVING - dark green  
TONY (6) - all black  
TONY (3) - all black with yellow cowling  
TONY (2) - black with white nose  
TONY (1) - silver with red nose, orange band around fuselage  
TONY (3) - olive drab  
TONY (2) - gray  
TOJO (2) - gray  
TOJO - olive drab  
JACK - silver with red cowling; red tail section and bright red rising-sun insignia  
RUFFE - olive drab  
BETTY - all black

3 Unidentified twin-boom - all black  
1 Unidentified single-engine - camouflaged with "all colors of rainbow"

25. ENEMY TACTICS

Enemy fighters were reported to have been more aggressive than on any previous mission, with a large majority of attacks occurring in the target area. According to some crews, Jap fighters appeared to be attacking our entire formation rather than individual aircraft. Generally, the attacks were made singly. However, instances of possible coordination of attack were reported and are listed below.

- a. A TONY and a TOJO, abreast, made 14 separate attacks from above to level, in which they sprayed the entire formation. The typical attack consisted of a shallow dive, usually from front approach, and flying right through without any specific breakaway.

S E C R E T

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S E C R E T

Combat Data (contd)

28. RESULTS OF HITS ON ENEMY AIRCRAFT

Our gunfire resulted in hits on 47 enemy aircraft, analysis of which reveals the following:

Exploded: 2 NICKS 2 IRVINGS  
2 TONYs

Burning and Smoking:  
6 TONYs 5 TOJOs  
2 IRVINGS 1 OSCAR  
1 JACK 1 BETTY  
1 Unidentified T/E

Parts of A/C Shot Off:  
3 TOJOs 2 TONYs  
1 NICK 1 ZEKE

Tracers seen to hit A/C; A/C smoking:  
3 ZEKES 3 TONYs  
1 NICK

Crashed into Water:  
1 ZEKE

Smoking:  
6 TONYs 2 ZEKES  
1 Unidentified S/E

28A. CLAIMS BY A/C AND BY GUN POSITION

A/C Number	Type E/A	Gun Position	Claim
42(4626)	TONY	RSG	Destroyed
44(3431)	TOJO	Bomb, RSG	"
49(3431)	TONY	RSG	"
21(4623)	NICK	TG	"
12(3485)	TONY	RSG	"
3(4591)	IRVING	Bomb	"
8(4698)	ZEKE	Bomb	"
7(4684)	ZEKE	Unknown	"
29(3429)	TONY	Bomb	"
41(3425)	TOJO	RG	Probable
43(4641)	TONY	RSG	"
43(4641)	TOJO	Bomb	"
44(3431)	IRVING	RSG	"
51(5231)	TONY	Bomb	"
51(5231)	ZEKE	TG	"
21(4623)	TONY	FSG	"
21(4623)	NICK	RSG	"
23(4619)	S/E Unident	TG	"
23(4619)	TONY	RG	"
24(4625)	OSCAR	RSG	"
46(3416)	IRVING	RG	"
8(4698)	JACK	RSG	"
51(5245)	TONY	TG, RG	"
51(5245)	TONY	Bomb	"
27(4668)	IRVING	RSG	"
29(3429)	TONY	RG, TG	"

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S E C R E T

Combat Data (contd)

28A. Contd

A/C Number	Type E/A	Gun Position	Claim
12(3485)	TONY	Bomb	Damaged
12(3485)	T/E Unident	TG	"
3(4591)	TOJO	Bomb	"
13(4717)	BETTY	LG	"
21(4623)	ZEKE	LG	"
21(4623)	TONY	RSG	"
23(4619)	ZEKE	RSG	"
41(3425)	TOJO	RSG	"
43(4641)	TOJO	RSG	"
51(5231)	NICK	TG	"
32(4749)TR	ZEKE	LG	"
24(4676)	TOJO	RSG, TG	"
21(4652)	TONY	RSG	"
2(4792)	TONY	RSG	"
4(4672)	TONY	Bomb, TG, RSG, RG	"

S E C R E T

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Headquarters  
73rd Bombardment Wing

SECRET

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT  
OBSERVATIONS AND CREW COMMENTS

29. EXPENDITURE OF AMMUNITION

See Consolidated Statistical Report,  
Table XIII, Ammunition Consumption Data.

30. OUR OBSERVED LOSSES BY E/A

A/C V-7(4684). See par 13.

31. OUR OBSERVED LOSSES BY AA

None.

32. OBSERVATIONS

At 35°00'N-136°54'E, altitude 29,360', an A/C observed a large factory which appeared to be heavy industry. Large stock piles abutted factory. Factory had the general appearance of a steel plant. Huge fires were seen which may have been blast furnaces.

33. COMMENTS ON MAPS, CHARTS, AND PHOTOS USED

None.

34. CREW SUGGESTIONS

- a. Recommend guards on fans, especially in bombardier's section.
- b. Controls on CFC too far away for gunners.
- c. Defrosting system on non-modified A/C should be changed.
- d. Safety belt of left gunner does not permit enough freedom of action to do best firing in wide vertical arc.

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Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

S E C R E T

CONSOLIDATED MISSION REPORT

GENERAL TECHNICAL DATA

35. FUNCTIONING OF OXYGEN SYSTEM

A/C V-23(4644) experienced break in oxygen system which depleted entire oxygen supply and prevented A/C from reaching primary target.

36. FUNCTIONING OF CLOTHING AND PERSONAL EQUIPMENT

Satisfactory.

37. CAMERAS

See report of Photographic Officer.

38. TECHNICAL FAILURES

See report of Engineering Officer.

S E C R E T

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SECRET

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

BOMBING DATA

41. Condition over Target: The target was almost completely overcast requiring all squadrons to use radar for bombing. The wind was approximately 110 kts from 270°. AA was generally moderate and inaccurate. Fighter attacks were numerous with many pressed attacks.
42. IP and AP: The IP's were satisfactory as they offered good radar check points. The AP used was not definite on the radar scope and the target was not well suited for radar bombing.
43. Reasons for Failure to Bomb: Two cases of A-2 bomb release malfunctions reported.
44. Results of Bombing: Unobserved.
45. Possible Source of Error in Bombing: All bombing runs were made by radar. The target was not suitable for precision bombing by radar.
46. Use of Radar and Efficiency: One lead aircraft turned the lead over to a deputy due to radar malfunction. Other aircraft encountered no trouble in operation although difficulty was encountered in identification of the aiming point.
47. Comments and Suggestions:
  - a. Bombardiers should be provided with maps similiar to the sectional maps of the United States.
  - b. Field Orders should be given the groups at least 48 hours in advance so as to allow time for preparation of briefing and time following briefing for crew study.
  - c. Strip photographs of the area from IP to Target should be provided the bombardier.
  - d. Movies of the run from the IP to the target should be provided by the reconnaissance squadron whenever possible.
  - e. Lead crews must practice.

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DECLASSIFIED

Authority *AND NEEDLES*  
By *AK* NARA Date *8/19/03*



SECRET

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

BOMB IMPACT DATA

Paragraphs 48 through 51.

No. A/C over target: 48 A/C bombed primary target, 3 A/C bombed targets of last resort (Murato Zaki, Hamamat-su, Toyohashi) and 11 A/C bombed targets of opportunity (8 - Iwo Jima, 2 - Pagan, 1 - Anatahan).

Bomb Load: 11 x 500-lb M76 IB

Direction of Attack: Varied from 240°T to 310°T

Aiming Point: NE corner of built up area of Nagoya (radar)

Photographic Coverage and Quality: Photographs were taken only by lead Squadron due to cloud cover. Photographs of good quality cover SE section of Shikoku Island.

SUMMARY

No bomb bursts are visible on photographs taken over primary target.

Photographs from single A/C show bursts on Shikoku Island on the narrow beach between the town of Ukitsu and the ocean.

CONCLUSION

None.

OBJECTIVE INTELLIGENCE DATA

Roof areas at Ht.7, V3.5; H7.7, V3.6 (the sub-assembly buildings between the new and old plant areas) and H9.3, V3.8 (SE part of the westernmost final assembly building) are being repaired. Some of the debris is being cleared away in the residential area north of the plant. Print reference 3 PR 4 M17-2-15.

SECRET





(17FL 879BS 4673A/C 4M6) (1V3) (12:22.1404) (24°36.600) (35°11'N, 136°51'E)  
MITSUBISHI ENGINE PLANT. NAGOYA. CONFIDENTIAL.

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(17PL 879BS 4673A/C 4M6)(1V3) (12:22.1404) (24" 36.600) (35°-11' N, 136°-57' E)  
MITSUBISHI ENGINE PLANT. NAGOYA. CONFIDENTIAL.



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Authority *MD 70063*  
By *AK* NARA Date *8/19/05*

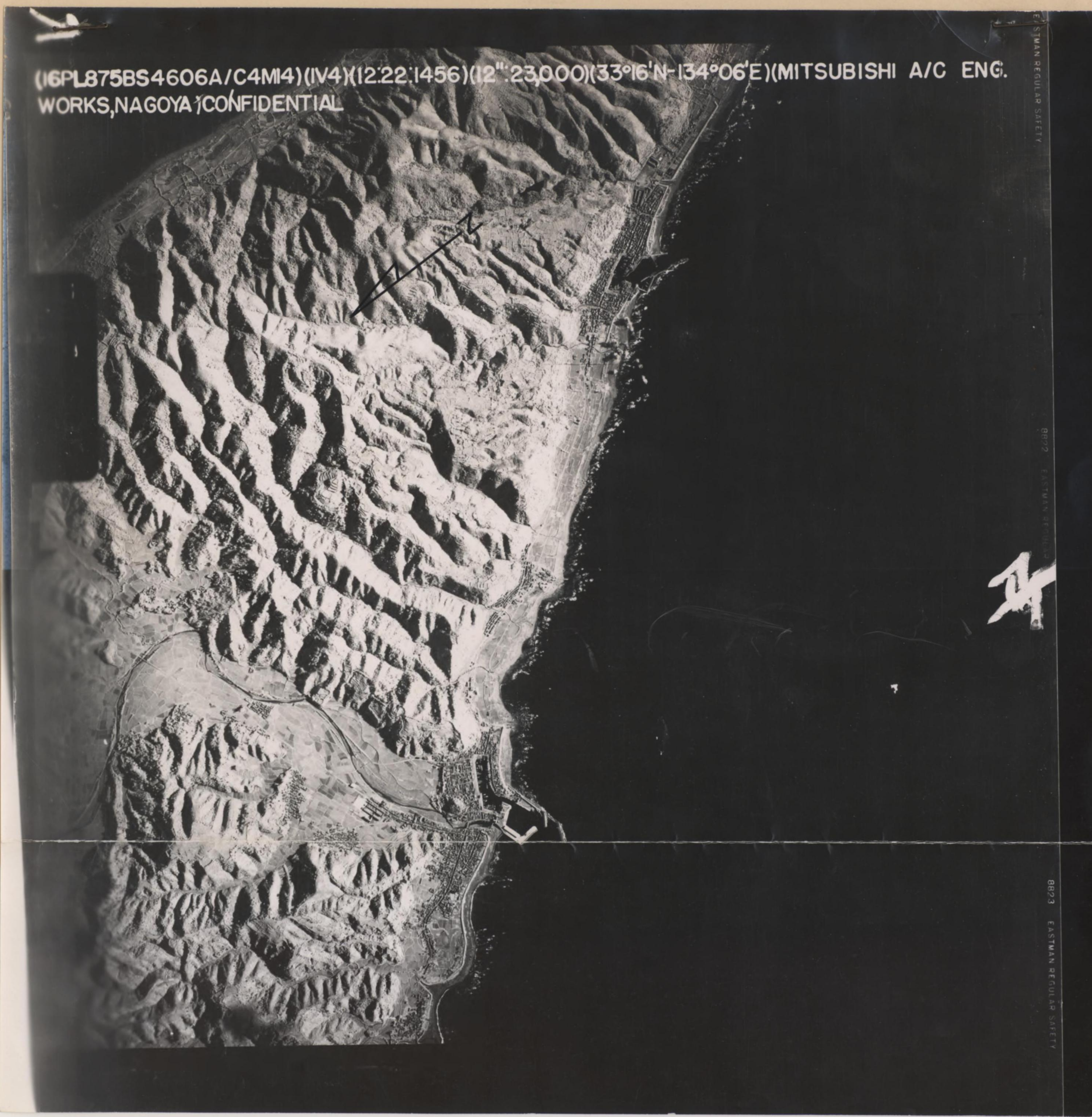




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16  
(16PL875BS4606A/C4M4)(IV4)(12.22.1456)(12":23,000)(33°16'N-134°06'E)(MITSUBISHI A/C ENG.  
WORKS,NAGOYA)CONFIDENTIAL



BR02 EASTMAN REGULAR SAFETY

BR02

BR03 EASTMAN REGULAR SAFETY

取

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Authority *MD 70063*  
By *AKARA* Date *8/19/05*



SECRET

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

NAVIGATOR

1. The mission to Nagoya, flown 22 December 1944, was briefed for two axis of attacks, one east, and one west. Two squadrons flying west over the target, made very good radar bombing runs. The two squadrons briefed for a west run, failed to find the initial point, and flew cross-wind over the target; attempting to home on the target, consequently drifting to the right of the target. The two squadrons flying east over the target made successful Land Falls and approaches to the target. One squadron attempting an East run, dropped bombs on Dead Reckoning position, this was due to faulty radar operation.
2. Celestial, combined with Loran, was used to determine the aircraft position for the first six hundred miles from this base. Sun Lines were then used as speed checks until the Land Fall was made with the radar, APQ 13.
3. Long range navigation can be considered very good for this mission. Target area navigation was generally poor.

SECRET

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Authority AND NEEDLES  
By MT NARA Date 8/19/03



6 Jan 43

WJH  
WEATHER SUMMARY.

PG# 32  
Mission # 1A  
Mission Date  
22 Dec 44

The forecast for this mission hinged on the position of the secondary cold front moving down over the empire from the north. The frontal system enroute was not very intense and it was quite certain that the low center would move well to the east of the route so that no trouble was anticipated from it. There was no evidence of anything that would cause poor weather at the base.

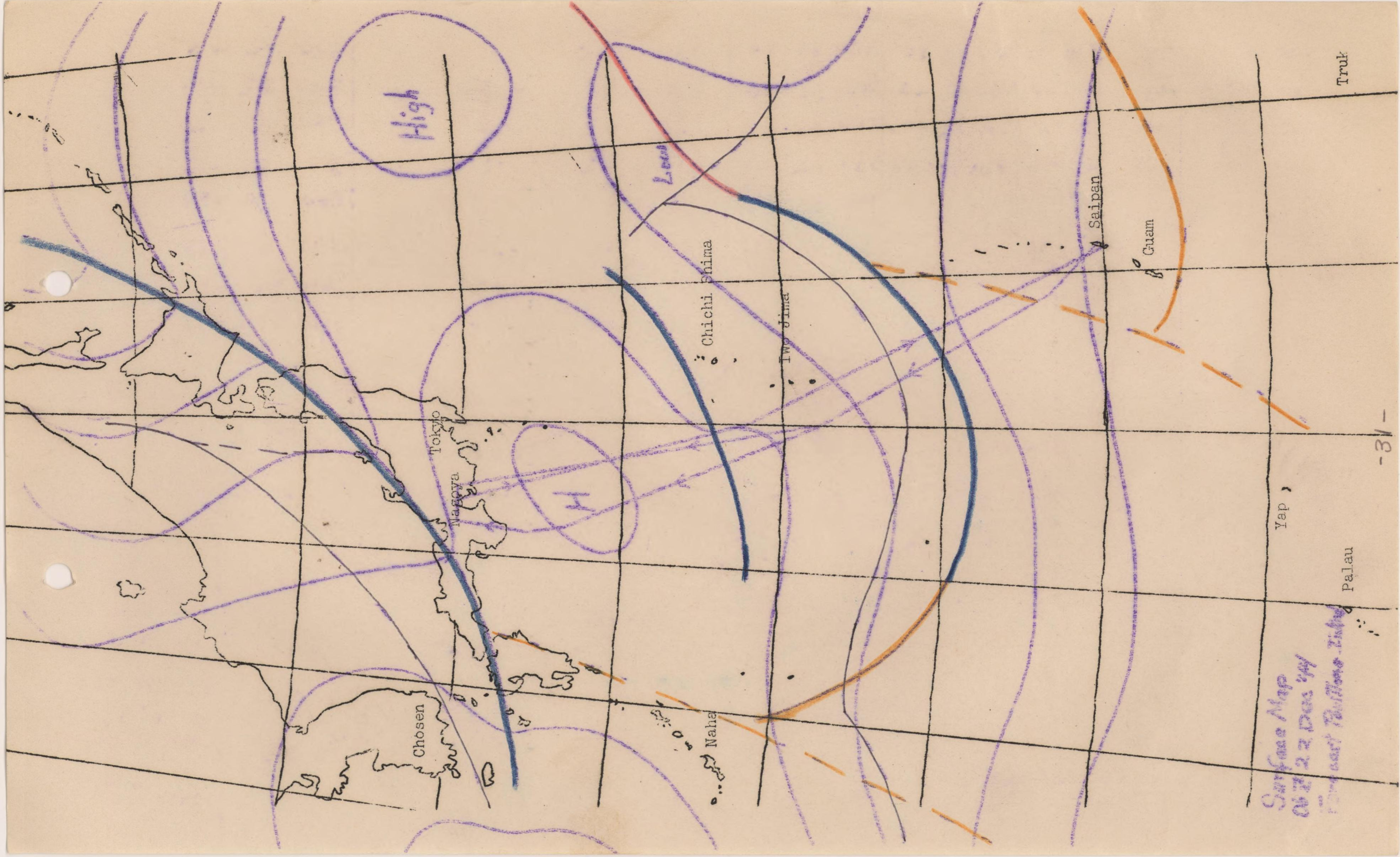
The mission encountered the front in approximately the forecast position the winds, however, did not back as far to the north as forecast as the low center to the east did not deepen as much as forecast. The front was not as intense as forecast and few middle clouds were observed as compared with those forecast.

At the target more middle cloud was encountered than forecast and seemed to be coming from the north over the mountains. During a period of one and one half hours in which our planes were over the target the middle cloud deck the quite patchy seemed to increase steadily from an average of six tenths to nearly overcast. The wind over the target was as forecast.

The increased cloud cover at the target seriously interfered with the visual bombing so that almost all bombs were dropped by radar.

The fact that the wind enroute were not as northerly as forecast was good as less headwind was effective during the critical period when the ships were climbing while heavily loaded. Clouds in the frontal area were down to 5000 feet lower than forecast but did not interfere with the formation as their usual route altitude is below this level. This front was easily topped at 12,000' on return.

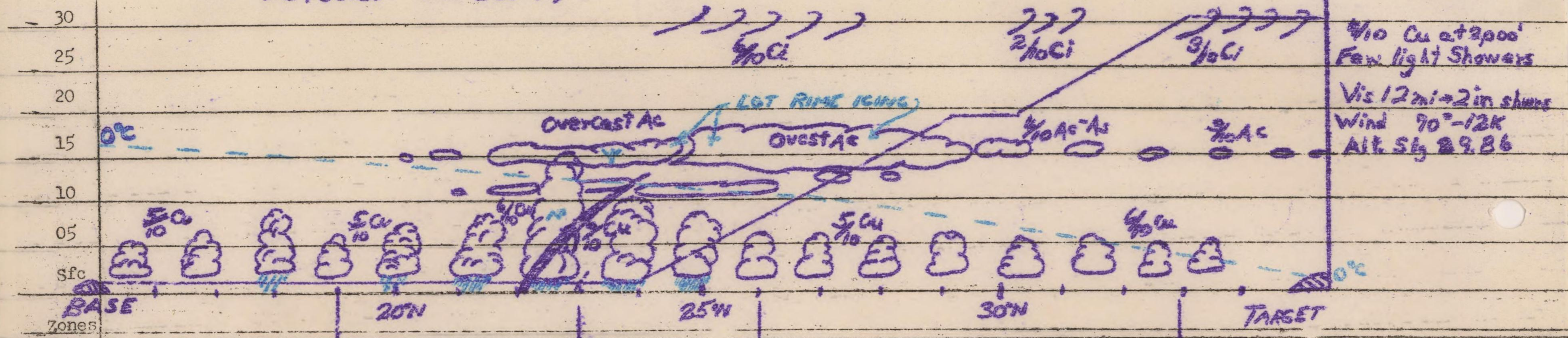






# Forecast 22 Dec '44

Base on Return



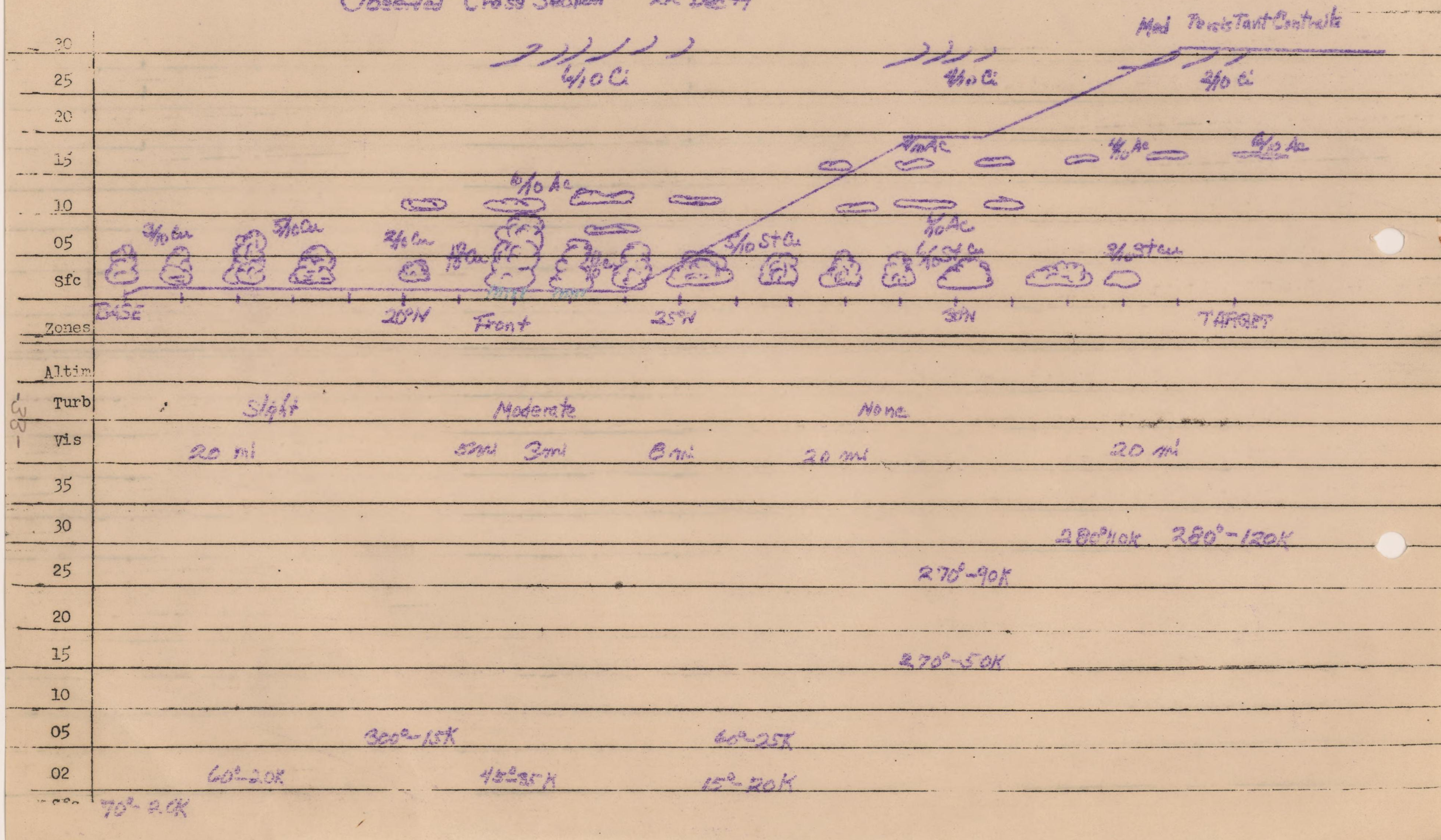
4/10 Cu at 2000'  
 Few light Showers  
 Vis 12 mi → 2 in shwrs  
 Wind 90°-12K  
 Alt. Sfc 29.86

Zones	BASE	20N	25W	30N	TARGET	
Altitude	29.86	29.90	29.90	29.94	30.05	
Turb		Slight	Slight			
Vis	12 mi (2 in shwrs)		10 mi (zero in shwrs)	10 mi	15 mi	
35				300° 140K -56	280° 115K -57	
30				300 125 -46	280° 105 -51	
25				300 105 -35	280 90 -39	
20				300 85 -25	290 70 -28	
15	110° 20K +01	310 30K	250° 35K -02	270 55 -6	310 65 -15	300 55 -18
10	110 20 10	310 25K	230 25 +07	280 45 +3	320 45 -06	320 40 -10
05	110 20 17	350 20	180 15 14	300 35 10	330 30 +2	340 25 -03
02	090 20 23	290 15	120 15 20	300 20 14	340 25 6	350 15 +2
sfc	080 14 27	090 12	090 10 24	320 20 18	320 15 9	350 10 5

Winds on Return Only



Observed Cross Section 22 Dec '44





SECRET

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

CFC GUNNERY

1. Mission 14, encountered heavy, aggressive and relatively ineffective enemy fighter opposition. Effectiveness evaluation is qualified to include numbers of E/A, E/A aggressiveness and damage inflicted on B-29's
2. Of tactical importance the following should be noted:
  - a. For the first time evidence was observed, of the enemy attempting to extend there early warning radar screen. A cruiser was sighted 150 miles off the coast of Honshu at a bearing due south.
  - b. The lead element was intercepted effectively for the first time.
  - c. E/A were vectored for the first time, to intercept formations from approximately 60 miles off the coast to the I.P. and from target to 60 miles off the coast on the return to base.
  - d. The standard enemy tactics of exploiting position to execute nose attacks, (precise analysis of the character of nose attacks is not available to date) is continuing in greater frequency.
3. The equipment operation efficiency was as follows:

a. Used total CFC systems (no total failure), operative-----	100%
b. Used individual turrets, operative-----	98.5%
c. Used Cal. 50 machine guns, operative-----	93.5%
d. Cal. 50 ammunition (all types) expended-----	119,722
e. 20 mm ammunition (all types) expended-----	1,519
4. In reports of previous missions mention was made that equipment malfunction was primarily caused by personnel failure. Investigation of five reported malfunctions of this mission disclosed that aircraft were made available by Unit Engineering Sections less than twelve hours prior to take off and that preflight was very unsatisfactory. Experience has indicated that complete preflight as outlined in section three and six of Gunners Information File, as published by the General Electric Company, takes eight hours by the entire crew. It is therefore essential that combat crew gunners be alerted a minimum of 24 hours in advance to accomplish this complete preflight and that the inspection be completed 14 to 16 hours prior to the mission take off.
5. Comments and suggestions by combat crew personnel are as follows:
  - a. Gunners in two formations that received heavy attacks, noted that of 88 attacks 60 were between 1030 and 130 o'clocks. The majority of these were from above and not committed to precise point but rather attempted to strafe entire formation. This is mentioned to emphasize the problem encountered in great numbers over the Japanese homeland.
  - b. Freezing of guns has been reported on previous missions but could have been attributed to excess oil on recoiling parts. One group reports that bolting open of ejection chute doors on lower turrets definitely causes freezing. This is being investigated for necessary action.
  - c. In one group which encountered over 200 attacks, twenty two guns ran out of ammunition. In as much as this group has been loading excess ammunition further study must be made before recommending additional ammunition be carried.
  - d. All personnel expressed great enthusiasm for the entire system operation as indicated by this mission results as this was the most extensive use of the Control Station Fire Control equipment by this command to date.

SECRET

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By AK NARA Date 8/19/01



Headquarters  
73rd Bombardment Wing

SECRET

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

GROUP FLIGHT ENGINEER AND GROUP ENGINEERING OFFICER

1. Refer to table I of Consolidated Statistical Summary.
2. Refer to table II of Consolidated Statistical Summary.
3. See item 8 below.
4. Refer to par. 16 Consolidated mission report.
5. Cruise Control Analysis.
  - a. Average gross weight at take off 137,500 lbs.
  - b. Fuel aboard 8,000 gallons.
  - c. Ammunition 6,000 rds 50 Cal. and 120 rds 20 mm.
  - d. Bomb load 5,250 lbs.
  - e. Fuel consumption (Refer to table XII Consolidated Statistical Summary)
  - f. Analysis of cruise (Average for Wing)

(1) To the Target

1000'	200-193	4 hrs 25 min	2200-35 (40 Min)
Climb to 18,000'	205-195	50 min	2150-34 (Lean)
Level 18,000'	195	27 min	2300-39 (Min)
Climb to Bomb Alt 200-190		55 min	2350-41 (AV)
Bombing Alt 195		1:05 (Max)	2400-43 (Max)
		:54 (AV)	2200-35 (70% of A/C)
		:30 (Min)	2150-31 (30% of A/C)
			2400-43 (50% of A/C)
			2350-41 (40% of A/C)
			2300-39 (10% of A/C)
			2400-43 (30% of A/C)
			2350-41 (50% of A/C)
			2300-39 (20% of A/C)

Average fuel used to the target 4850 gallons.

- (2) Return from target: Due to varying altitudes, the return flight cannot be tabulated, however airspeeds varied from 195 to 185 mph, and the following were the average power settings and time:

1 hr 30 min	- 2150 RPM - 31" MP.
1 hr	- 2000 RPM - 29" MP.
2 hr	- 1800 RPM - 29" MP.
1 hr	- 1700 RPM - 29" MP.

6. See Part 4 Section 8.
7. Suggested Changes in Equipment and Recommendations:
  - a. A hand pump for emergency transfer of fuel.
  - b. Remote indicating fuel gages for bomb bay and center wing tank.
  - c. Upper forward bomb bay tank be tapped into port of transfer valve provided for rear bomb bay tanks
  - d. Recommend replacement of all carbon vane fuel transfer pumps with later type having steel edge bronze blades.

SECRET

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S E C R E T

497th Group

Summary of Malfunctioning of Engineering Equipment

A/C No.

Malfunction

- 1----- #1 & #4 loose boost at altitude. #2 prop out of control at 30,000' for short time.
- 3----- #2 turbo out, #2 & 3 oil cooler inoperative in auto. Cabin air valve sticky, pilots rate of climb out, #3 cyl temp out, #3 fuel gage out.
- 4----- Scavanger oil line nose oil slump loose-lost oil. #4 CHT out, #1 CAT out.
- 6----- #4 manifold surged at 31,000'. #1 MP, RPM and fuel pressure surged at 28,000'. IH landing light out.
- 7----- CFC blister blew out at 28,500', #3 tack (enrg) itttatic. IH blister cracked.
- 10----- #4 engine blew #6 cylinder head. #1 outbd gen voltage could not be reduced.
- 12----- #1 C.H.T. out, defroster system on IH side out, IFF out.
- 13----- #2 fuel quantity gage and #3 oil quantity have shorts in system
- 21----- Fuel gages out-antenna shot off.
- 22----- #2 backfired and kicked throttle slightly during mission.
- 23----- Nose gear failed to retract on normal. Tail skid failed to retract. #1 fuel press. high #4 C.H.T. out, #1 and 3 oil cooler regulator out in automatic.
- 28----- #1 oil cooler out of control. #1 fuel pressure gage out. API short.
- 42----- #2 heated up, cut out in A.L., ran rough on return.
- 43----- #2 cyl. temp gage out. #3 gen out.
- 44----- Airplane stripped after #3 and #4 engine feathered.
- 49----- #1 out and inbd gen gives excessive voltage.

498th Group

- T-43----- No. 1 engine ran away - No 4 CHT out. Jettisoned ampilidines, gun sights, bomb sights, glass armor, bomb bay tanks and center racks.
- T-8 ----- No. 1, 3, and 4 rear oil pressure lines too wobbly. Should be bled. Crack in right waist blister - two cracks. All four cylinder head temperature gages should be calibrated. Invertor voltage AC excessive 27.3 to 28.5, spare invertor out. Oil leaks on all engines - especially No. 4. Oxygen leak in radar station.
- T-2 ----- Invertor oscillates. No. 4 cylinder head temperature out. First aid kits missing and incomplete. Co-pilot's clock inoperative. Two turret clips broken on upper aft turret cover. Tail gunner's mike button inoperative at altitude. One small and one large walk around bottle in pressurized compartment leak. API sticks on certain headings. IFF wirks intermitently
- T-10----- Calibrate tachometers, replace fluxgate, both out. Auto-pilot erratically. On stabalizer and rudder axis. Generators out of parallel.
- T-3 ----- No. 3 manifold pressure dropped to 16" at 20,000'. At reading of 6,000' could only get 22" with throttle fully advanced. At sea level could get at maxium of 26". No. 1 and No.4 cylinder head temperature gages out.
- T-4 ----- No. 3 engine has nose oil leak. (sligh t). A.F.C.E. aileron control is over sensitive.
- T-44----- No. 4 engine oil leak. No 4 fuel pressure low 11# - 13.5#. No. 4 oil temperature low. 45° - 60°. No. 3 prop toggle Switch inoperative. No. 1 engine backfires at low power and at low altitude. No. 3 cabin air valve stuck open.
- T-50----- No. 3 rear oil pressure 50 psi. No. 1 oil cooler shutter inoperative in automatic. Interphone system gave intermittent operation. Necessary to use command at times.
- T-41----- No. 4 engine lost all oil and CHT went to 50°.
- T-46----- No. 3 nose oil pressure drops 5 - 7 at altitude.
- T-49----- No. 2 fuel press indicator reads 4.5° too high. No 2 rear oil pressure indicator vibrates, tail guns inoperative.
- T-45----- No. 2 oil leak over nose section. Bombardier's and Engineer's free air temperature out.
- T-23----- No. 1 oil temperature uncontrollable - oil cooler actusting, motor was filled with grease making motor inoperative. Oil cooler motor inoperative.

S E C R E T

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By AK NARA Date 8/19/03



S E C R E T

A/C No.

Malfunction

T-33----- No. 2 fuel pressure 20 psi. Two leaks in tail gunner's compartment. inter-coolers went fully open. No. 2 prop sticks at high rpm. No. 2 and 4 turbos surged at altitude. Radio operators flight engineer's indicator erratic. Auto pilot sluggish.

T-32----- No. 4 fuel pressure dropped to 70 psi. No. 3 CAT out. No. 2 engine runs too hot excessive cowl flap opening required for operation. Front upper turret inoperative.

T-26----- Lights in tail and rear unpressurized compartment out.

T-27----- No. 3 fuel pressure gage high 20 psi. No. 4 fuel gage fluctuating.

T-21----- API out. No. 4 fuel pressure low at altitude. No. 3 fuel gage out. Upper aft turret out. Radio operator jackbox leaks thru laieon.

T-24----- Cowl flap switches sticks. Top white reconation light out. Pilot's and co-pilot's bank and turn indicator out. No. 1 and No. 2 gyro temperature out.

T-25----- No. 3 and No. 4 oil pressure inoperative. No. 4 starter switch sticks in start position.

T-1 ----- Fuel transfer system inoperative after transfer to No. 1 and No. 4 tanks.

T-7 ----- 100 rpm drop left mag. No. 1 engine thought to be fouled and in flight mag check showed drop still there. No. 3 engine backfired on engine run up and later in flight left mag caused engine to backfire severely.

499th Group

46V533----- Cyl. head temp gage out on #2.

43V533----- Oil leak on #3. Flak damage to gunners compartment, insufficient to cause depressurization. Flak damage to rudder and horzonal stabilizer. #1 erratic on M.P. fluctuating slowly an inch or two - also throttle must be set fuller than others, particularly in lean mixtures, possible exhaust flow by; oil leak #1 gov.

50V533----- #1 carb. air temp gage out. #1 rear oil press. gage ~~XXXX~~ reads 20 psi.

25V533----- #2 cyl temp max 290 in last leg of climb and on bomb run. #1 MP fluctuated 500 RPM at 28,000'.

30V533----- Turbo surge - 30000'. Cabin pressure inoperative. from 16000' down.

48V533----- #1 fuel press. 1 lb fluctuates at alt. 25000' Cabin pressure system erratic

49V533----- Lost boost #4 eng. (could not stay with formation). #2 cat, gage out. Pilots and eng. No. 2 and 3 tachs fluctuate (100 RPM). No heat supplied by No. 2 press duct. Radio compass out.

22V533----- A.F.C.E. precessed 2° every 5'. oil leak #1 inbd. #3 fuel gage oscillated between 300 gal and full when fuel level reaches 300-400 gal intermittent.

24V533----- #2 prop gov slow acting. #2 cat. gage out. No landing lights.

2V533 ----- #4 lagged on changing of RPM. Blisters iced. No blowers working. A.P.I. out.

8V533 ----- #2 fuel pressure gage reads 6 lbs at 30,000 ft. #2 tach fluctuates. Radar out. API inop. #1 prop gov. surges about 300 RPM. #3 fuel gage erratic. Turbo surge reduce MPS and increase throttle cut out surge on 1 but not on 4.

23V533----- #1 and 4 turbo surge caused excessive yawing loss of formation. Increased RPM to relieve surge. #1 and 4 fuel gage out.

9V533 ----- Carb, air out. Oil leak #2 eng. #2 oil cooler regulator very poor. Sudden leak in T.G. oxygen came after steep bank of ship. Sharp noise was heard in regulator, oxygen gushed into mask and could not be stopped. Tach oscillated on #4 engine on TO. PDT clutch slips for auto pilot. #1 surge slightly on power charge.

21V533----- Blew spark plug on #4 eng. #1 cyl. rear Air in oil and fuel instrument lines. #1 eng. #2 cyl head reads high. #3 fuel gage out, (reads full scale). fuel transfer pump would not transfer deliver fuel to #3 tank apparently due to selector valve malfunction Spordaic action would sometimes deliver fuel to other position and at other times it was inoperative. Checked out OK on ground after landing. #2 backfired and stopped 150 RPM on right mag. #1 nose oil leak, fuel transfer selector off. Bomb racks inoperative, #2 backfired again in flight.

21V533----- #2 eng ran very lean 1200-17" AR on ground C.H.T. 230° engine cooled with primer to 200 for TO. C.H.T. 255° on TO. with 6 C.F. Other operations of engine normal. #1 eng 30,000' ingoing from 2400-43½" to 2300-39" 15 psi fuel press. high boost. Fuel press. dropped to 8 psi and engine began to cut out. P.M. fuct. 28-39" about four times in thirty sec. Then every thing OK. Fuel press back to 15 psi. 27,000' 2150 rpm pressure fluct. rapid 1 psi ran up to 2300 rpm.



SECRET

A/C No.

Malfunction

21V533----- Steady at 15 psi. pulled off T.B.S. to seven and reduced rpm 2150  
press const. at 16 psi. high boost 15 psi low. 23,000 2150 rpm turbo  
mps 6-6½ flow, press 17 and steadier. Vac at 20,000 8" removed cap to  
adjust no adj. poss. Left cap off and got 4" put cap back on at low  
altitude.

500th Group

42-63435----- #3 distributor gasket defective.  
42-24652----- Oil leaks, #1 and #4 engine. #4 engine cuts out.  
42-24676----- Flap indicator inoperative. #1 cylinder head temperature gage out.  
42-65247----- Oil leak #4 engine.  
42-24668----- Command receiver out. #3 auto oil cooler out. Pilot's #2 manifold  
pressure erratic.  
42-63429----- Oil leak #3 engine. #1 boost pump out. Main gear, tires and wheels  
to be changed because of emergency landing.  
42-24652----- Prop switch sticks on #1 and #4. Oil leak #1 engine.  
42-24766----- #1 oil cooler relay out.  
42-63436----- #2 carb. air temp out.  
42-24727----- #1 engine backfires.  
42-24695----- #3 engine rough.

SECRET

-4-

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Authority AND NEEDLES  
By MT NARA Date 8/19/03



Wing  
 73BW  
 Date 1 Jan 1945  
 By Wing Photo O.

C O N F I D E N T I A L  
 CONSOLIDATED MISSION REPORT  
 PHOTOGRAPHIC

F. O. No. 32  
 Mission No. 14  
 Date of Mission  
 22 Dec. 1944

1.	K-100	K-19	K-20	K-35 K-			Total
				K-22	K-20	K-22	
a. Cameras installed	8	0	12	29	25		74
b. Cameras in aborting A/C	1	0	3	9	6		19
c. Cameras in lost A/C	1	0	0	1	1		3
d. Camera in A/C not lost but inattending.	0	0	0	0	0		0
e. Cameras with malfunctions	0	0	0	2	0		2
f. Cameras in operating condition not taking photos	5	0	8	16	7		36
g. Camera taking photos	1	0	1	1	11		14

2. Breakdown of cameras taking photos by A/C Number:

A/C No.	Vertical camera		altitude	Number of photos taken				
	f. stop	shutter interval		K-18	K-19	K-20	K-22	K-35
4673	6	1/50	36600	3				
3416		7				7		
4760	8	1/150	23000			4		
4623								12
4641								4
4594								5
4626								8
4642								2
4625								10
4663								6
3440								18
4769								18
4669								9
4673								11

Incl 8

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



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3. Breakdown of cameras not taking photos by cause:

Cause	No. of Cameras	Explanation
a. Mechanical failure	2	Shutter Frozen; Mag. Coupling Sheared
b. Installation error	1	Lens Cone set too high in well
c. Processing error	1	
d. Camera doors not open		
e. M/Switch not on		
f. Vacuum failure		
g. Power failure	2	Radar set out
h. Light failure (Target)	18	Heavy Undercast
i. Enemy action		
j. Others	2	Scope not bright enough
k.	2	Camera thrown out to lighten plane
l.	2	No photos taken of Infall value.
m.	1	No time to take photos.
n.	7	Not used at all.
o. Total:	34	

4. Remarks and suggestions:

5. Instructions for preparing this form:

a. This report will be prepared by Photo Lab Commander and certified by Group S-3:

b. Items:

la, lb, lc, ld, are self explanatory.

le - The number of malfunctions due to installation or processing.

lf - Number of non-effective cameras due to camera m/switch not turned on, failure of vacuum to the extent of rendering pictures void, Intervalometer or camera fuze blown, tampering with intervalometer or camera, light conditions over target, enemy action, etc.

lg. g is equal to a minus b, c, d, e, and f.

Item 2 - The f. stop, shutter speed, interval between exposures, altitude will be given for only the vertical cameras by A/C number.

Item 3 - Give a definite explanation of the reason for any malfunction.

Certified by \_\_\_\_\_

Group S-3

Rank \_\_\_\_\_

Prepared by \_\_\_\_\_

Photo Lab Commander

Rank \_\_\_\_\_

CONFIDENTIAL



S E C R E T

Headquarters  
73d Bombardment Wing

Field Order No. 32  
Mission No.  
December 1944

CONSOLIDATED MISSION REPORT

COMMUNICATIONS

1. Strike Reports: All preliminary and amplified strike reports were received by the Ground Station without difficulty.
2. Fox Transmissions: Weather and time ticks were transmitted to the aircraft on the half hour and hour respectively. Weather Section failed to relay weather to Ground Station from 0900Z to 1000Z. One incident of weather being improperly enciphered; investigation shows that weather was enciphered incorrectly at Isely Weather Station. Ground Station time ticks were reported to be 10 seconds slow by aircraft operators. Steps have been taken to insure proper transmission of time ticks.
3. Frequencies: All preliminary and amplified strike reports were received on 11160 KCS. All strike frequencies were utilized by aerial operators on return leg of mission. Heavy interference received on 7310 KCS making it difficult to read aircraft signals. 3145 KCS and 11160 KCS received moderate interference at different intervals on return leg of mission. It is estimated that 55 percent of the traffic was carried out on 11160 KCS, 25 percent on 3145 KCS and 20 percent on 7310 KCS.
4. Navigational Aids: A total number of 44 bearings were requested from Ground Station; 42 of these were obtained. Two bearings could not be transmitted because of aircraft's weak signal and distance from Base. Of the 42 bearings, 23 were obtained on 11160 KCS, 14 on 3145 KCS and 7 on 7310 KCS. This is the least number of bearings requested on a mission so far, indicating utilization of other navigational aids. ADCG received 10 to 12 requests for VHF bearings; all bearings obtained.
5. Net Discipline and Security: Net discipline during return leg of mission surpassed that of past missions. Only two violations of discipline were noted by Ground Station. Security for this mission was good with one exception. One aircraft transmitted "VHF TRANSMITTER OUT, RECEIVER OK" in clear text. Investigation of this breach of security has been initiated.
6. Enemy Transmissions: Step-tone and buzz-saw jamming were reported on 11160 KCS 500 miles from Base. Station transmitting "Q2L Q5L" caused heavy interference on 7310 KCS. Japanese voice station was picked up on 7310 KCS near the target. Aircraft radio operators reported an unknown station sending dashes when Ground Station transmitted bearings to aircraft on 3145 KCS. Jap voice station picked up on 4475 KCS over target and when nearing Iwo Jima.
7. Distress: The Ground Station received one SOS message from aircraft over target. Position and course of aircraft were received and relayed to Wing Control by the Ground Station. Status of crew still unknown. One aircraft ditched enroute to target. "Buddy" aircraft stood by transmitting position of ditched aircraft which led to rescue of part of the crew by the Navy.

S E C R E T - 40 -

DECLASSIFIED  
E.O. 11652, Sec. 3(a) and 5(D)  
REF ID: A66740120  
EX-107  
COMINT WARS, Date OCT 21 1975

DECLASSIFIED

Authority *AND 740120*  
By *AK* NARA Date *8/19/01*



S E C R E T

"Consolidated Mission Report -  
Communications," Hq 73 BW, FO #32,  
Mission No , December 1944

8. Equipment Malfunctions:

SET	MALFUNCTION	497	498	499	500
AN/ART-13	Antenna shot off	2			
	Antenna broken off	1		1	
	Inoperative				
BC-238	Calibrations off	1	1		
	Dynamotor inoperative	1			
	Noisy and fading	1			
	Intermittent reception	1			
AN/ARN-7	Hunting needle	3			1
	Sense antenna lead-in broken			1	
	Sense antenna broken	1			
	Broken control cable		1		
	Intermittent operation	1			
	Inoperative high al- titude position	1			
	Needle turns on anten- na	1			
SCR-522	Inoperative	1			2
	Receiver out		1		
	Receiver weak		1		
RC-36	Shorted	1			1
	Resister R-11 out	1			
	Mike switch shorted	1			
	Inoperative from ex- cessive high voltage				2
	Foot switch sticking		1		
SCR-274	Receiver out	1		1	1
Misc.	Trailing wire would not reel out	3			
	Trailing wire would not reel in	1			
	Trailing wire sticking			3	

At a meeting of all Group and Squadron Communications Officers, modification, preventive maintenance and improved preflight were discussed in order to eliminate outstanding equipment malfunctions.



SECRET

Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

RADAR EMPLOYMENT AND RADAR EQUIPMENT PERFORMANCE

1. Radar Employment.
  - a. AN/APQ-13 (Blind Bombing)
    - (1) Seven squadrons bombed the primary target by radar.
    - (2) Three squadrons made bomb runs as briefed. Photographs taken near release indicated good bomb runs for these squadrons.
    - (3) One squadron made a cross-wind attack, approaching the target from the South. Last photograph before a release indicates results to be poor. The heading of this formation approximately 4 miles from release would place the bombs 2 to 3 miles East of the target.
    - (4) One squadron began a cross-wind approach, heading generally North West. Documentation of the run is incomplete.
    - (5) One squadron, briefed for an up-wind run, took photographs only on with-drawal. Its axis of attack is not covered by photographs.
    - (6) One squadron missed its navigation on the target area. Verbal reports indicate that the radar operator had switch to 20 miles range on the scope, presenting a confusing picture over the mountamous area North of Kobe.
    - (7) Good results were reported in using the AN/APQ-13 on 4-mile range to maintain contact with A/C in the formation while climbing through overcast.
  - b. SCR-718 (Altimeter)  
Employment of the SCR-718 Altimeter was normal.
  - c. SCR-695 (IFF)  
Employment of the SCR-695 IFF equipment was normal.
2. Radar Equipment Performance.
  - a. AN/APQ-13 (Blind Bombing)  
of 73 A/C reporting:
    - (1) 15 reported excellent performance.
    - (2) 51 reported satisfactory performance.
    - (3) 7 reported unsatisfactory performance.
    - (4) 90% of the A/C reported the AN/APQ-13 operational over the target.
  - b. SCR-718 (Altimeter)  
One (1) SCR-718 failure was reported.
  - c. SCR-695 (IFF)  
One (1) SCR-695 failure was reported.

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By *MT* NARA Date *8/19/03*



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Headquarters  
73rd Bombardment Wing

Field Order No. 32  
Mission No. 14  
22 December 1944

CONSOLIDATED MISSION REPORT

RCM REPORT

1. Number of Radar Observers participating 2

2. Number of Radar Observers completed mission 2

3. Equipment employed:

<u>Sets</u>	<u>No</u>	<u>Av Hours On</u>	<u>Malfunctions</u>
AN/APR4	2	04:40	-----
AN/APR5A	2	02:15	-----
AN/APR5	-	--	-----
AN/APA6X	2	04:40	PRF inaccurate
AN/ANQ2	2	02:30	-----

4. Signals logged:

A-60-85	9	500-1500	25-50
B-85-120	9	325-1500	10-100
C-120-170	11	475-800	10-50
D-170-220	1	1000-1200	12-40
E-220-300	-	----	--
F-300-1000	-	----	--
Above, specify Frequency	-	----	--

5. Remarks:

a. No Jap VHF recorded.

b. Some indication that possible diversions are being watched for Radar hacking formation were observed to break away and track individual aircraft which left the formation.

c. Efforts being made to intensify search for GCI communications channel.

d. Particular attention to be paid to enemy radar characterized by high recurrence frequencies and narrow pulse widths.

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Authority AND 70063  
By AK NARA Date 8/19/03

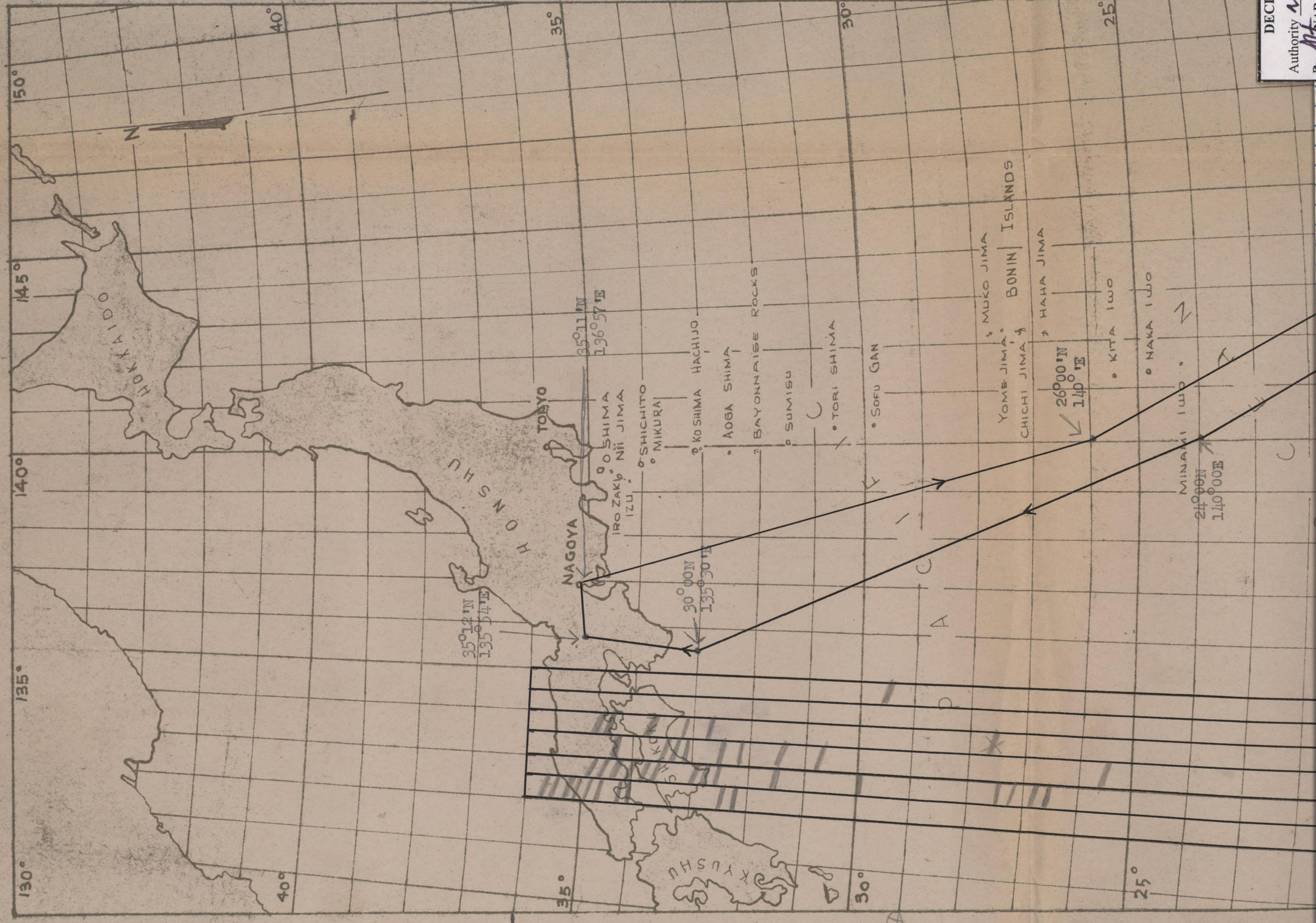


SECRET

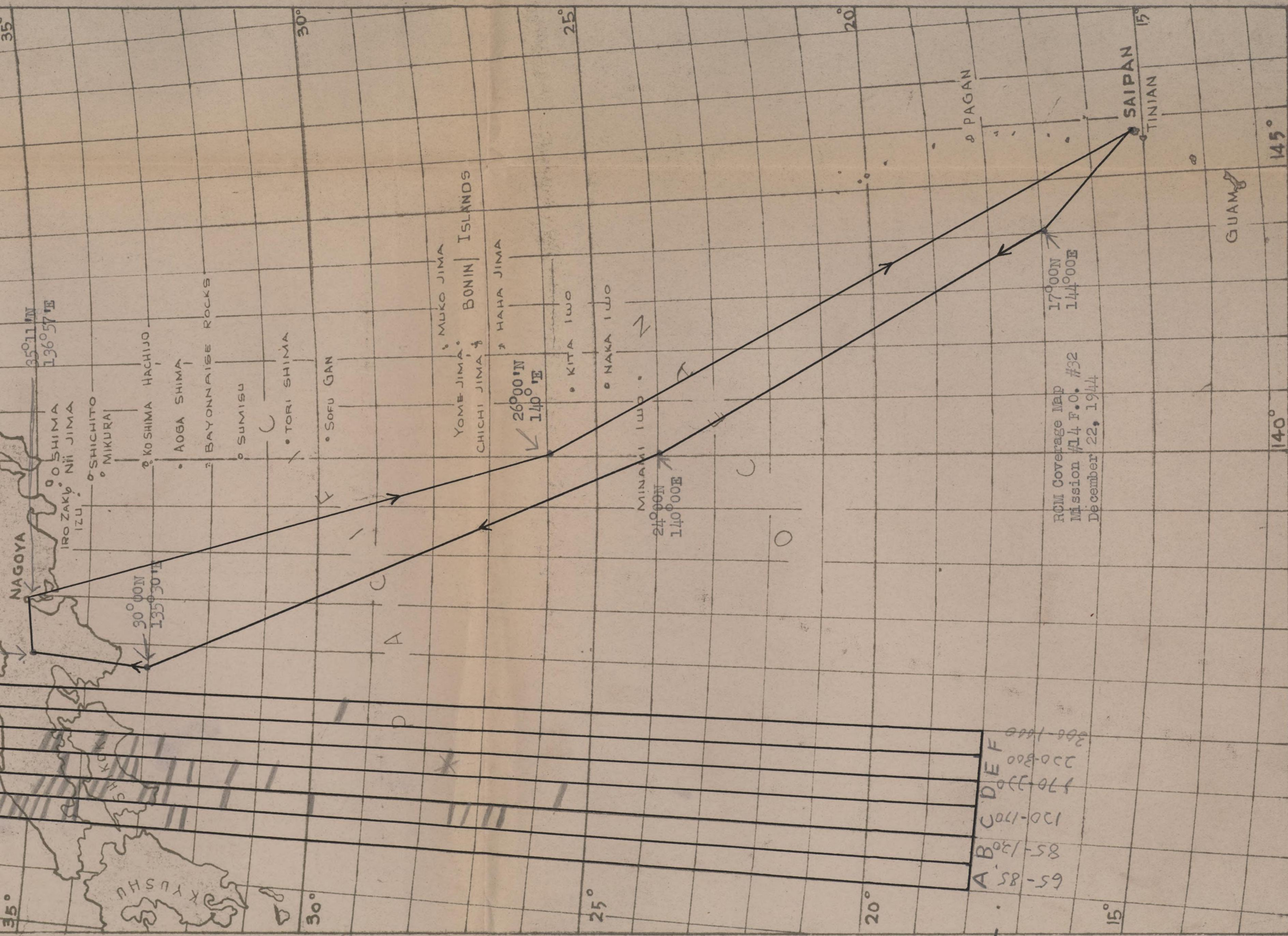
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SECRET





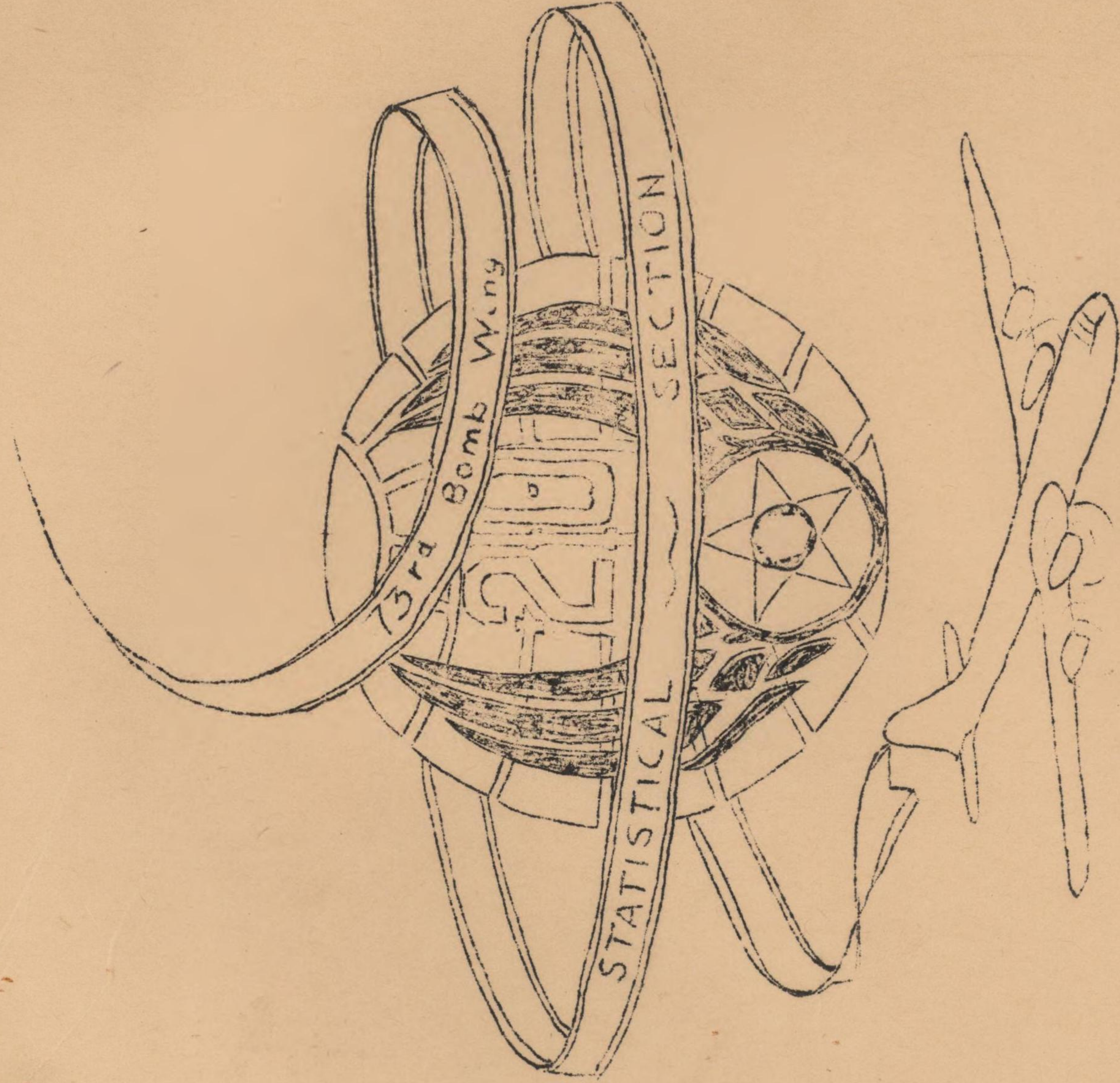


A B C D E F  
 65-85  
 85-120  
 120-170  
 170-220  
 220-300  
 300-1440

RCM Coverage Map  
 Mission #14 F.O. #32  
 December 22, 1944

SECRET





FORM 34

CONSOLIDATED STATISTICAL SUMMARY

FOR

FIELD ORDER NO. 32 - MISSION NO. 14

MITSUBISHI AIRCRAFT ENGINE FACTORY

NAGOYA, JAPAN

22 DECEMBER 1944

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A.F.S.



73RD BOMB WING

S-E-C-R-E-T

FIELD ORDER NO. 32MISSION NO. 14

22 Dec 44

## Consolidated Statistical Summary

Primary Target MITSUBISHI AIRCRAFT ENGINE FACTORY, NAGOYA, JAPAN

Table I Aircraft Participating

	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
A/C Scheduled to Take-off	82	21	25	22	14
A/C Failing to Take-off	4	0	0	2 b	2 d
A/C Airborne	78	21	25	20	12
A/C Airborne Failing to Bomb Designated Targets	27	6	11	4	6
% Of Airborne A/C Failing to Bomb Designated Targets	35%	29%	44%	20%	50%
A/C Bombing Primary Target	48	14	13	15	6
% of Airborne A/C Bombing Primary Target	61%	67%	52%	75%	50%
A/C Failing to Return to Home Base	2	1 a	0	1 c	0
Time of Take-off:	21 Dec	21 Dec	21 Dec	21 Dec	21 Dec
Earliest	2026Z	2125Z	2154Z	2026Z	2056Z
Latest	2219Z	2146Z	2219Z	2048Z	2147Z
Time of Return:	22 Dec	22 Dec	22 Dec	22 Dec	22 Dec
Earliest	0946Z	1025Z	1151Z	0946Z	1033Z
Latest	1337Z	1206Z	1337Z	1035Z	1106Z

- a. A/C 733 DITCHED ENROUTE TO TARGET. ONE ENGINE ON FIRE AND ONE FEATHERED.  
 b. A/C 442 BLEW AMPLIFIER FUSES IN TURBO CONTROL MOTORS  
 c. A/C 658 MAINTENANCE SCHEDULED FOR COMPLETION BEFORE MISSION WAS NOT FINISHED.  
 d. A/C 684 DITCHED OFF COAST OF JAPAN AFTER BEING DAMAGED BY ENEMY A/C OVER TARGET.  
 A/C 219 EXCESSIVE MAG DROP #4 ENGINE  
 A/C 664 FUEL TRANSFER SYSTEM FAILURE.

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Authority MD 70063  
By AK NARA Date 8/19/05



73RD BOMB WING

S E C R E T

FIELD ORDER NO. 32

MISSION NO. 14

22 Dec 44

## Consolidated Statistical Summary

Table II Breakdown of Non-Effective Aircraft by Cause

Aircraft Failing to Bomb Designated Targets

CAUSE	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
Mechanical Failure	18	6 a	4 b	3 e	5 g
Personnel Failure	4		2 c	1 f	1 h
Flight Conditions					
Enemy Action					
Unknown					
Other	5		5 d		
Total	27	6	11	4	6

- a A/C 596 #3 engine smoking. Using excessive amount of oil. Bombed Iwo Jima  
A/C 598 #16 cylinder #3 engine blown. Bombed Iwo Jima.  
A/C 593 Blew out blister. Lost oxygen. Bombed Iwo Jima.  
A/C 597 #6 cylinder #4 engine blown.  
A/C 604 #2 engine cut out. #3 engine malfunction.  
A/C 733 Ditched enroute to target. Two engines out.  
b A/C 727. Fuel transfer system inoperative.  
A/C 608 #3 manifold pressure very low.  
A/C 601 oil shutter would not work #1 engine.  
A/C 654 Excessive oil leak #2 engine, loose oil line hose clamps leaking push rod housing clamps, internal engine failure  
c A/C 468 Personnel error - unjustified abort. #2 engine started to run rough, ground check showed it to be O.K.  
A/C 629 Personnel error - unjustified abort. Slight oil leak #1 engine when lead A/C of Sq reached landfall on approach to target, leader decided to re-turn to base because Sq was reduced to 5 A/C by aborts. Formation was poor.  
d 3 A/C bombed Iwo Jima.  
e A/C 599 #4 engine caught fire on takeoff. Blew rear spark plug #1 cylinder. A/C 222 lost 9" manifold pressure at 18,000 ft. Bombed Iwo Jima  
A/C 477 lost fuel pressure #1 engine cut out at 30,000 ft. Bombed Anathan Island.  
f A/C 440 personnel error - unjustified abort. Selector valve would not feed to #3 tank but would feed back to center section tank. Bombed Pagan.  
g A/C 486 erratic manifold pressure on all engines. Malfunctioning of inverters for supercharger regulating system.  
A/C 686 cylinder head blown #4 engine  
A/C 668 Bomb rack malfunction.  
A/C 700 #2 Prop feathering line, #3 push rod housing hoses leaking, 2 warped rocker box covers #3 engine. Bombed Iwo Jima.  
A/C 785 Excessive oil leak #3 engine. Loose push rod housing hose clamps. Hose blown on external part of oil system.  
h A/C 435 personnel error. unjustified abort. #1 engine overheating at altitude. Bombed Pagan.

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73RD BOMB WING

S E C R E TFIELD ORDER NO. 32MISSION NO. 14

22 December 1944

## Consolidated Statistical Summary

Table III Breakdown of Aircraft Failing to Bomb Primary Target  
Aircraft Bombing Last Resort Targets

C A U S E	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
Mechanical Failure	3	1 <sup>a</sup>	1 <sup>b</sup>	1 <sup>c</sup>	
Personnel Failure					
Flight Conditions					
Enemy Action					
Unknown					
Other					
Total	3	1	1	1	

a A/C 594 - Turbs & props surged continuously; could not keep up with formation. Bombed Hamamatsu.

b A/C 606 - #4 engine lost all oil. Bombed Murato Zaki, Shikoko.

c A/C 644 - Oxygen system failure. Bombed Toyohashi.

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73RD BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. 32

Table IV Bombing Run

MISSION NO. 14

22 December 1944

GROUP	TARGET NUMBER	NO. A/C REACHING TARGET	A/C DROPPING BOMBS			TIME OF RELEASE		ALTITUDE OF RELEASE		VISUAL BOMBING A/C SIGHTING FOR:			RADAR BOMBING		A/C OPERATED BY:	
			IN FORMATION	INDIVIDUAL	TOTAL	EARLIEST	LATEST	LOWEST	HIGHEST	R & D	RANGE	DROP ON LEADER	A/C SIGHTING	A/C DROPPING ON LEADER	C-1	MANUAL
497	1	14	14		14	0443Z	0504Z	29160	31400							
	2	1		1	1		0445Z		25600		1		3	11	1	13
	3	3		3	3	0335Z	0528Z	15000	22000				3		1	2
498	1	13	13		13	0518Z	0558Z	28800	29800							
	4	1		1	1		0500Z		23000				2	11	2	11
	3	3	2	1	3	0544Z	0556Z	20900	21080				1		1	1
499	1	15	15		15	0404Z	0413Z	29500	32000							
	3	1		1	1		0520Z		25000				2	13	2	13
	5	1		1	1		0358Z		31500		1		1		1	1
	6	1		1	1	0342Z	0544Z		10360		1				1	
	7	1		1	1		0948Z		20000		1				1	
500	1	7	6		6		0436Z	32000	32600							
	3	1		1	1		Data not available						1	5	1	5
	6	1		1	1		Data not available				1			1	1	
Wing	1	49	48		48	0404Z	0558Z	28800	32600							

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Target Numbers

- #1 Mitsubishi A/C Engine Factory, Nagoya
- #2 Hamamatsu
- #3 Iwo Jima
- #4 Murato Zaki
- #5 Toyohashi
- #6 Pagan
- #7 Anatahan Island

S-E-C-R-E-T



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73RD BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. 32

22 Dec 44

Table V Loading & Disposal of Bombs

MISSION NO. 14

GROUP	TYPE & WEIGHT OF BOMBS	FUSE SETTING		LOADED				RELEASED ON TARGET						JETTISONED		UNKNOWN		RETURNED		PER CENT OF BOMBS RELEASED ON TARGET
		NOSE	TAIL	ON ALL AIRCRAFT		ON AIRBORNE AIRCRAFT		MITSUBISHI A/C ENGINE PLANT, NAGOYA		LAST RESORT		OPPORTUNITY		No.	Tons	No.	Tons	No.	Tons	
				No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons							
497	500 lb M76 Incendiary	Inst	Non-Delay	242	60.5	231	57.75	145	36.25	11	2.75	33	8.25	42	10.5					67%
498	500 lb M76 Incendiary	Inst	Non-Delay	275	68.75	275	68.75	143	35.75	11	2.75	33	8.25	88	22					56%
499	500 lb M76 Incendiary	Inst	Non-Delay	231	57.75	220	55	165	41.25	11	2.75	27	6.75	11	2.75			6	1.5	80%
500	500 lb M76 Incendiary	Inst	Non-Delay	132	33	132	33	66	16.5			22	5.5	44	11					50%
WING	500 lb M76 Incendiary	Inst	Non-Delay	880	220	858	214.5	519	129.75	33	8.25	115	28.75	185	46.25			6	1.5	64%

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LAST RESORT TARGETS:

MURATO ZAKI  
HAMAMATSU  
TORCH4581

NOTE: BOMB LOAD PER A/C - 11 500 lb M76 INCENDIARY BOMBS

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TARGETS OF OPPORTUNITY:

TWO JIMA  
ANATHAN IS.  
PAGAN







73RD BOMB WING

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MISSION NO. 14

22 December 1944

## Consolidated Statistical Summary

Table VII Attacks &amp; Passes by Enemy Aircraft

DIRECTION	ALTITUDE															TOTAL	Total Wing
	HIGH			LEVEL			LOW			TOTAL			500	500	500		
	497	498	499	500	497	498	499	500	497	498	499	500					
0100	48	1	22	3	15	2	4	17	4	1	80	1	28	8	117		
0200	11		3	10	4	4	3	19	1	4	34	1	11	14	60		
0300	4	6	1		2	6	6	4	2	4	10	6	9	10	35		
0400	4				2	2	2	3			9	2	2		13		
0500	6	1	1		4		7	1	2		17	2	3		22		
0600	5	5			2		5				12	5			17		
0700	2	2		2	1	2	4				7	4		2	13		
0800	6				5		3				14				14		
0900	5			4	10	1	1	2		4	17	1		9	27		
1000	3		1	2	3	1	2	2	1	1	8		3	5	16		
1100	42		7	7	6	1	7	8	1	1	56	1	9	15	81		
1200	30	2	19	2	6	3	9	16	4	1	52	6	23	12	93		
TOTAL	166	17	54	30	60	6	32	90	6	15	316	29	88	75	508		

Table VIII Enemy Aircraft Destroyed &amp; Damaged

GROUP	DESTROYED		PROBABLY DESTROYED		DAMAGED	
	6	0	10	2	10	1
497	6		10		10	
498	0		2		1	
499	2		3		0	
500	1		2		4	
TOTAL WING	9		17		15	



73RD BOMB WING

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## Consolidated Statistical Summary

Table IX Aircraft Lost and Damaged

CAUSE	AIRCRAFT LOST				AIRCRAFT DAMAGED					
	TOTAL WING	497	498	499	500	TOTAL WING	497	498	499	500
	ENEMY A/C	1			1 b		6	4		1
ENEMY FLAK						5		4		1
ENEMY A/C & FLAK						6	3	1	1	1
ACCIDENT										
SELF-INFLICTED						2		1		1
UNKNOWN										
OTHER	1	1 a								
TOTAL	2	1		1		19	7	2	6	4

a A/C 733 DITCHED 2 ENGINES FAILED

b A/C 684 DITCHED OFF COAST OF JAPAN AFTER BEING DAMAGED OVER TARGET BY ENEMY A/C

Table X Repair of Damaged Aircraft

AIRCRAFT TO BE REPAIRED BY:	497	498	499	500	TOTAL
TACTICAL GROUP	0	2	6	3	11
SERVICE GROUP	7	0	0	1	8
DEPOT GROUP	0	0	0	0	0
TOTAL	7	2	6	4	19
NOT REPARABLE	0	0	0	0	0

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73RD BOMB WING

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FIELD ORDER NO. 32

MISSION NO. 14

22 December 1944

## Consolidated Statistical Summary

TABLE XI Casualties

	Total	P	CP	NB	BN	FE	ROM	RO	CFC	LG	BG	TG	Other
<b>Killed:</b>													
497th													
498th													
499th													
500th													
Total Wing													
<b>Missing:</b>													
497th	5			1			1			1	1	1	
498th													
499th	12	1	1	1	1	1	1	1	1	1	1	1	1
500th													
Total Wing	17	1	1	2	1	1	2	1	1	2	2	2	1
<b>Seriously Injured:</b>													
497th	1				1								
498th													
499th													
500th													
Total Wing	1				1								
<b>Slightly Injured:</b>													
497th	1								1				
498th													
499th													
500th									1				
Total Wing	1								1				
<b>Total Casualties:</b>													
497th	7			1	1		1		1	1	1	1	
498th													
499th	12	1	1	1	1	1	1	1	1	1	1	1	1
500th													
Total Wing	19	1	1	2	2	1	2	1	2	2	2	2	1
<b>No. Participating</b>													
497th	237	21	21	21	21	21	21	21	21	21	21	21	6
498th	279	25	25	25	25	25	25	25	25	25	24	23	7
499th	227	20	20	20	20	20	20	20	20	20	20	20	7
500th	133	12	12	12	12	12	12	12	12	12	12	12	1
Total Wing	676	78	78	78	78	78	78	78	78	78	77	76	21

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73RD SOB SQUADRON

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MISSION NO. 14

22 Dec 44

## Consolidated Statistical Summary

Table XII Fuel Consumption Data

	TOTAL WING	GROUP			
		497 a	498 b	499 c	500 d
Average Fuel Aboard	8010	7983	8000	8047	8000
Average Flying Time	13:50	13:15	14:13	14:00	13:56
Average Distance - Nautical Air Miles	2890	2865	3007	2896	2712
Fuel Used:					
Average	6964	6855	6962	6970	7170
Median	6979	6802	6937	7017	7160
Maximum	7835	7420	7325	7835	7515
Minimum	5950	5950	6580	6512	6715
Fuel Remaining:					
Average	1046	1128	1038	1077	830
Median	1042	1181	1063	1083	840
Maximum	1553	1450	1420	1553	1285
Minimum	165	580	675	165	485
Av Gallons per Hour	504	517	482	498	516
Av Gallons per Mile	2.41	2.39	2.32	2.41	2.64
Total Gasoline Consumed & Lost	480,704	136,323	140,785	131,427	72,169

a BASED ON 14 A/C  
b BASED ON 13 A/C  
c BASED ON 15 A/C  
d BASED ON 7 A/C

APPROXIMATE GROSS WEIGHT AT TAKE-OFF: 137,500 POUNDS.

TIMES AT VARIOUS ALTITUDES:

497	1000 ft	4:50,	19,000 ft	:25,	31,000 ft	:30
498	1000 ft	4:30,	30,000 ft	1:00		
499	1000 ft	4:30,	20,000 ft	:30,	30,000 ft	1:00
500	1000 ft	4:42,	18,000 ft	:40,	32,500 ft	1:05

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73RD BOMB WING

S E C R E TFIELD ORDER NO. 32MISSION NO. 14

22 December 1944

## Consolidated Statistical Summary

Table XIII Ammunition Consumption Data

AMMUNITION EXPENDED PER GROUP					
	497th	498th	499th	500th	TOTAL
20 MM.					
Fired	495	290	267	467	1519
On Lost A/C	0	0	0	0	0
Total	495	290	267	467	1519
.50 Cal.					
Fired	57110	25390	18502	18720	119722
On Lost A/C	3005	0	5500	0	8505
Total	60115	25390	24002	18720	128227

AMMUNITION EXPENDED PER PLANE					
	497th	498th	499th	500th	TOTAL WING
Upper front	1002	339	450	904	674
Lower front	478	203	235	410	332
Upper rear	496	254	158	467	344
Lower rear	599	68	199	430	324
.50 Cal. Tail	431	152	168	463	304
Total .50 Cal.	3006	1016	1200	2674	1978
20 MM Tail	26	12	13	67	118

S E C R E T

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Copy No 12

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SECRET  
By Auth of CG 73d BW

SMW 21 Dec 44  
Initials Date

73D BOMB WG  
SAIPAN  
0430Z 21 Dec 44

FO 32

Maps: Long Range Navigational Charts JAPAN and CAROLINE ISLANDS. Scale  
1:3,000,000. Gridded photos 3 PR 4 M 17-2-15.

1. a. No change.
- b. (1) Lifeguard information: See Annex I.

A rescue destroyer will be located in the vicinity of (20° 00'N -  
142° 45'E) from 1700K. A second destroyer will be on station  
at (16° 56'N - 145° 40'E) during entire flight.

- (2) No change.

2. 73d Wg Atks NAGOYA with Max force.

Primary target: 90.20, 193 within grid coordinates (3 PR 4M 17-2-15)  
V4.8, H7.3-V3.0, H8.5-V3.2, H6.8-V4.0, H9.0.

Last resort target: Any industrial city.

Formation: Sq column.

Method of bombing: Sq pattern complete radar approach with final adjustment  
visually if possible.

Aiming point-visual: Bldg at center, grid coordinate V3.9, H8.0.  
radar: NE corner built-up area of NAGOYA (actual target)

Route "A": Base to MARPI POINT - Assemble  
(17° 00'N - 144° 00'E)  
(24° 00'N - 140° 00'E)  
Step in climb 15 min 18000 ft  
(34° 00'N - 138° 00'E) - Reach altitude  
2 min dogleg  
(35° 11'N - 137° 15'E) - IP  
Target  
Axis of Atk: 270° T  
Maneuver after Atk: Left turn  
(26° 00'N - 140° 00'E)  
Base

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S E C R E T

FO 32 (contd)

Route "B": Base to MARPI POINT - Assemble  
(17° 00'N - 144° 00'E)  
(24° 00'N - 140° 00'E)  
Step in climb 15 min 18,000 ft.  
(32° 00'N - 136° 00'E)  
(33° 00'N - 135° 40'E) - Reach altitude  
2 min dogleg  
(35° 07'N - 135° 57'E) - IP  
Target  
Axis of Atk: 85° T  
Maneuver after Atk: Right turn  
(26° 00'N - 140° 00'E)  
Base

3. a. 499th Bomb Gp Max No A/C takes off Zero Hr. Climbs to 30,500 ft bombs at 29,500 ft. Flies Route "A".
- b. 500th Bomb Gp Max No A/C takes off Zero Hr plus 30 min. Climbs to 29,500 ft bombs at 28,500 ft. Flies Route "B".
- c. 497th Bomb Gp Max No A/C takes off Zero Hr plus 60 min. Climbs to 31,500 ft bombs at 30,500 ft. Flies Route "A".
- d. 498th Bomb Gp Max No A/C takes off Zero Hr plus 90 min. Climbs to 30,000 ft bombs at 29,000 ft. Flies Route "B".
- x. (1) Zero Hr: 2025Z 21 Dec 44.  
(2) Gasoline load: 8000 gal.  
(3) Bomb load: 11 x 500 lb M76 IB fused instantaneous nose, non-delay tail.  
(4) Intervalometer setting: 150 ft.  
(5) Ammunition: 6000 Rds .50 cal 120 Rds 20 mm.  
(6) All 6 in. cameras will be started at landfall and remain on until leaving the coast. 497th and 499th Gps will use 80 sec intervalometer setting, 498th and 500th Gps will use 50 sec intervalometer setting. Intervalometer setting for all other K-22 cameras will be 5 sec for 497th and 499th Gps and 4 sec for 498th and 500th Gps.
4. Each Gp will furnish this Hq at Zero Hr minus 120 min schedule of A/C Nos, call signs and Pilot's names in order of take off.
5. No change.

By command of Brigadier General O'DONNELL: BERGQUIST  
DC/S, O & T

OFFICIAL: *Wilkinson*  
WILKINSON  
Asst A-3

Annex 1 - Communications S E C R E T  
Annex 2 - Radar Counter Measures -2-

DECLASSIFIED

Authority *MD 70063*  
By *AK* NARA Date *8/19/01*



SECRET

ANNEX 1 TO FO #32 73BW

SECRET  
By Auth of CG 73D  
Bomb Wing

COMMUNICATIONS  
(See TAC SOP 30-3)

*SM*  
Initials 21 Dec 44  
Date

1. Codes-Encoding and Authentication:
  - a. Current edition CSP 1270 (DA5).
2. Radio Buoys: None.
3. Rescue Facilities:
  - a. Stations and Frequencies.

<u>TYPE</u>	<u>STATION</u>	<u>REF. PT.</u>	<u>FREQ. GUARDED</u>
Sub.	34-00N 137-18E	Daio Saki Light	4475, 500KC & 140.58MC
Sub.	32-00N 138-00E	Hachijio Shima	4475, 500KC & 140.58MC
Sub	26-00N 140-00E	Iwo Jima	4475, 500KC & 140.58MC
Dumbo	21-30N 141-25E	Iwo Jima	4475, 500KC & 140.58MC
Dumbo	21-30N 141-25E	Pagan	(also 7310 KC)
Dest.	20-00N 142-45E	Iwo Jima	4475, 500KC & 140.58MC
Dest.	20-00N 142-45E	Pagan	
Dest.	16-56N 145-40E	Iwo Jima	4475, 500KC & 140.58MC
Dest.	16-56N 145-40E	Pagan	

b. Call Signs

(1) Voice.

(a) Current call for reference point extracted from letter, CINCPAC, dated 19 Oct 44, subject: "Air-Sea Rescue Reference Point and Code Words".

(b) Addendum 1 to letter listed in Par. above.

(2) CW - Dumbo only - 24V213

c. Include Loran line in position report in distress message.

4. IFF:

a. Turn on at take off. Turn off 300 miles from base.

DECLASSIFIED

E.O. 11652, Sec. 3(E) and 5(1) or (E)

By *CB/ml* NARS, Date 7 4 0 1 2 0 1975

Authority *MD 74063*

By *MD* NARA Date 8/19/03

DECLASSIFIED

Authority *MD 74063*  
By *MD* NARA Date 8/19/03



S E C R E T

- Enroute home turn on again when 100 miles out from enemy coast line.
- b. If IFF is inoperative at a distance of 500 miles or less from the base, the pilot will have radio operator contact Wing Ground Station on CW, transmitting the following information, encoded in CSP 1270 ( ), until receipted for:
- (1) IFF inoperative.
  - (2) Course.
  - (3) ETA.
- c. When 150 miles from the base, the pilot will establish voice contact with Condor Base on Channel "C"; SCR-522 and state that his Bojangles is inoperative, course and ETA.
5. Changes to SOP 30-3, dated 8 December 44:
- a. Call Signs.
    - (1) CW calls will be Victor calls previously assigned.
    - (2) Voice calls as assigned in classified letter this Headquarters dated, 19 Dec 44, subject: "Aircraft Call Signs".
  - b. Contact and Strike Reports:
    - (1) No contact report by radio of any submarines sighted.
    - (2) Strike reports will be made in accordance with TAG SOP 30-2, dtd, 12 Dec 44.
  - c. Two radio operators per sqd. will be assigned to monitor radio compass from 100 miles out from enemy coast line going to target until 100 miles out re-turning from target.
  - d. Frequencies: Channel "D" (VHF) will be used when requesting VHF/DF bearings.

By Command of Brigadier General O'DONNELL:

OFFICIAL:

*Edwin L. Hotchkiss*  
EDWIN L. HOTCHKISS  
Lt. Colonel, Air Corps  
Communications Officer.

KENNETH P. BERGQUIST  
Colonel, Air Corps  
Dep C/S Op and Trg

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S E C R E T

ANNEX NO 2 TO FO 32 73D BOMB WG

RADAR COUNTER MEASURES

1. Each Gp will equip one (1) A/C with search receivers and where practical a sound recorder.
2. Each Gp will provide one Radar Observer (7888) to operate this equipment.
3. Operation will be in accordance with Tac SOP 35-1 with the following exceptions:
  - a. In the target area the 80-100 Mc will be periodically scanned for Jap VHF signals voice modulated.
  - b. The probable use of the following frequencies for GCI has been observed - 90, 91.5, 93 and 94 Mc.
  - c. An effort to record (AN/ANQ2) Jap voice transmissions in this frequency spectrum will be made.

By command of Brigadier General O'DONNELL:

OFFICIAL:

J  
JOHNSON  
Wg Radar O

BERGQUIST  
DC/S, O & T

S E C R E T

-1-

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