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MISSION # 17 NAGOYA "MICROSCOPE 1"
3 January 1945

5239-101

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CONSOLIDATED MISSION REPORT

~~Mission No. 17~~
Field Order No. 35
3 January 1945

XXI Bomber Command.
Mission No 17.

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

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S E C R E T

Headquarters
73rd Bombardment Wing

Mission No. 17
Field Order No. 35
3 January 1945

CONSOLIDATED MISSION REPORT

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Headquarters
~~XXI~~ Bomber Com'd

Mission # 17

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Headquarters
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Mission Number 17
Field Order No. 35
Date of Mission
3 January 1945

CONSOLIDATED MISSION REPORT

TACTICAL NARRATIVE

1. The Target

Field Order Number 35 of the 73rd Bombardment Wing, dated 31 December 1944, directed that its four Groups supply a maximum number of A/C to attack the city of Nagoya. No secondary target was assigned. Any industrial city in Japan was designated as a last resort target.

2. Take-off

Of 101 A/C scheduled for the mission, 97 were airborne. The first A/C took off from Saipan at 022126Z and the last at 022223Z.

3. Bomb Loading

Each A/C was loaded with 14 x 350-lb M-18 IB clusters fused to open at 5000 feet and 1 x 420-lb T4E4 fragmentation cluster fused to open 1000 feet below the A/C. The fragmentation bombs were loaded to drop last.

4. Route Out

The ten airborne Squadrons proceeded in Squadron column to 26°30'N-137°00'E where they separated, two Squadrons following the eastern route "A", three Squadrons following the central route "B", and five Squadrons following the western route "C". Bad weather and the 18 early-returning A/C caused some interference with scheduled plans, but, for the most part, navigation was good.

5. Bombing Data

Of the 97 airborne A/C, 57 dropped 789 IB (138.08 tons) and 55 fragmentation bombs (11.55 tons) on the primary target. Nineteen A/C (one of which dropped half its bombs on the primary target) dropped 258 IB (45.15 tons) and 19 fragmentation (3.99 tons) on last resort targets. Opportunity targets received 42 IB (7.35 tons) and three fragmentation bombs (0.63 tons) from three A/C. Nineteen A/C jettisoned.

Seventy-two A/C dropped by visual means, six by radar. The first bombs were released on the primary target at 030545Z and the last at 030633Z.

6. Enemy Air Opposition

All B-29 formations encountered groups of 10 to 20 E/A before arriving over Nagoya. Over the target area, all but the first and second of the seven attacking Squadrons encountered 75 to 100 E/A, some of which continued their attacks to land's end. A total of approximately 160 E/A was met over Honshu.

7. Enemy Attack Data

Our A/C received approximately 346 attacks from landfall to land's end. Of these attacks, 123 came in level, 75 from above, and 148 from below. TONYs, TOJOs, ZEKES, OSCARS, IRVINGS, and NICKs made the majority of the attacks sustained. Attacks were generally uncoordinated; there were, however, instances of line-astern attacks, and a number of attacks made by pairs and trios of fighters, coming in usually from the front quarter of the clock, high and level.

8. Antiaircraft Fire

Antiaircraft fire was met from the time landfall was reached until our A/C left the coast on the route out from the target. Between the IP and the target, when the formations were flying at altitudes ranging from 29,300 to 30,000 feet,

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8. (Contd)

meager, accurate, predicted concentrations were noted. Over the target, continuously-pointed fire, barrages, and predicted concentrations were observed. Fire was meager and the bursts were black and white.

9. Route Back and Landing Data

Individual routes were followed from target to Base. The first A/C landed at 030948Z and the last at 031338Z.

10. Damage Assessment

Photographs, varying from poor to excellent quality, covered the northern and western sections of the city. Approximately 75 fires are visible with smoke rising to nearly 20000 feet. The largest concentration of fires is observed E of Nagoya RR station. Another concentration of fires is visible to the SE in the center of the city. Small concentrations and numerous individual fires are visible W of Nagoya station, N and S of the freight station, and in the area E of Naka Canal. As smoke clouds obscure most of the target area and eastern part of the city, bombing results cannot be determined.

11. Our Losses

Five A/C were lost, two from damage caused by E/A and three from unknown causes. A total of 21 A/C received battle damage -- 13 from E/A, two from AA, four from both E/A and AA, and two from other causes.

There was a total of 61 casualties -- two seriously injured, seven slightly injured, and 52 missing.

12. Claims

The 73rd Wing A/C claim 14 enemy aircraft destroyed, 14 probably destroyed, and 20 damaged.

13. Weather

From the Base to 20° N, scattered, moderate showers were encountered. The cloud cover steadily decreased to 25° N where a clear area began, lasting to 27° N. From then on, cumulus activity steadily increased to 6/10 at 31° N with tops averaging 7000 feet. These decreased gradually until about 60 miles south of Japan where they suddenly became 2-3/10.

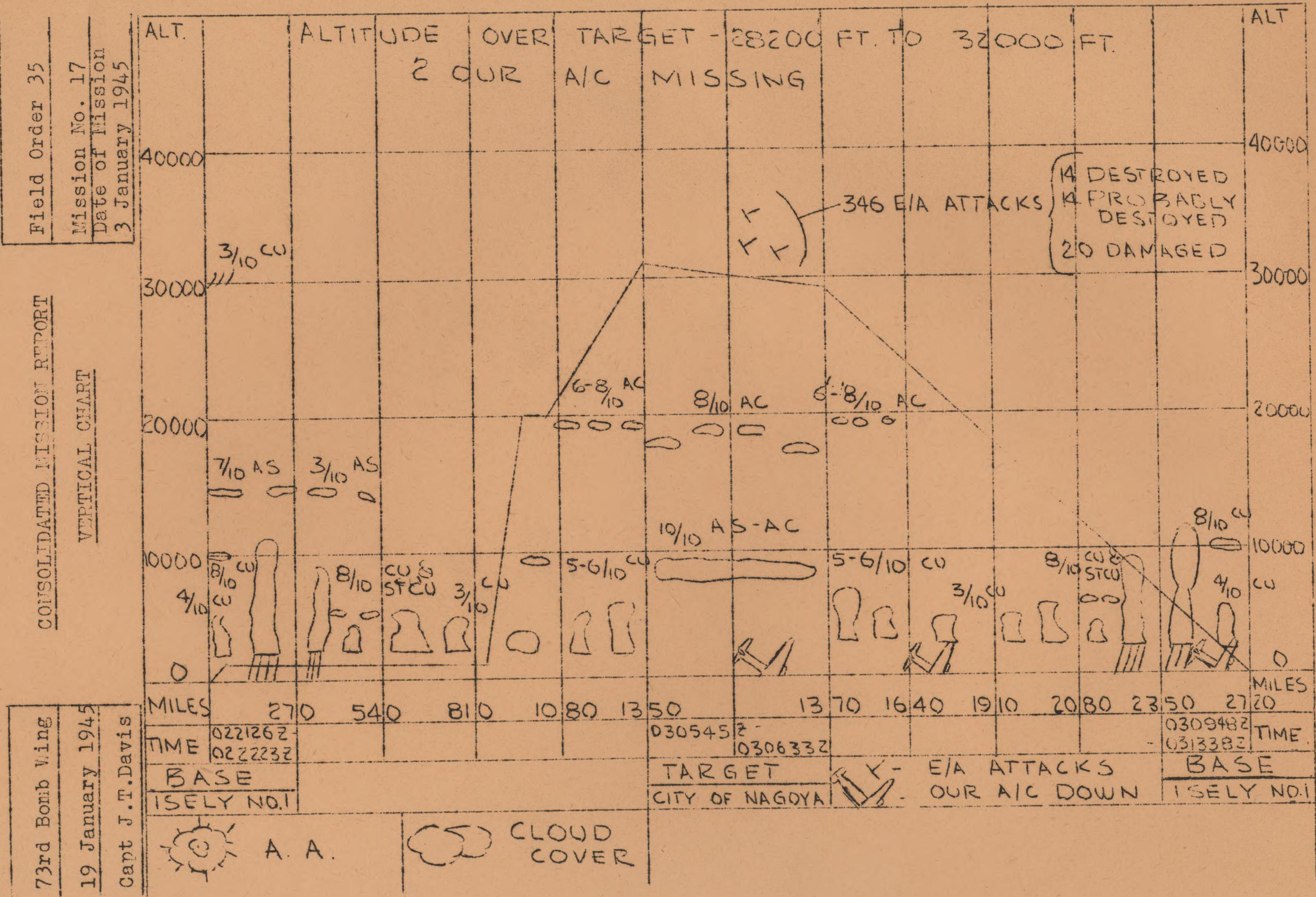
The average cloud cover at the target was 6/10 alto-cumulus with almost no low clouds.

The weather encountered on the return trip was the same as on the trip out except that no showers were reported.

Kenneth P. Bergquist

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

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Headquarters
73rd Bombardment Wing

Mission No. 17
Field Order No. 35
3 January 1945.

CONSOLIDATED MISSION REPORT

BASIC DATA

1. TIME OF TAKE OFF:

Sq No	Gp No	Place	Time		Elapsed Time	No. of A/C	Ave take-off Int.
			1st A/C	Last A/C			
1	497	Saipan, Isely #1*	022126Z	022137Z	12 min.	12	60 sec.
2	497	Saipan, Isely #1*	022138Z	022147Z	10 min.	9	66.6 sec.
3	498	Saipan, Isely #1*	022159Z	022206Z	8 min.	8	60 sec.
4	498	Saipan, Isely #1*	022207Z	022215Z	9 min.	9	60 sec.
5	498	Saipan, Isely #1**	022216Z	022223Z	7 min.	7	60 sec.
6	499	Saipan, Isely #1**	022127Z	022136Z	10 min.	10	60 sec.
7	499	Saipan, Isely #1**	022137Z	022145Z	12 min.	10	72 sec.
8	499	Saipan, Isely #1**	022147Z	022154Z	8 min.	8	60 sec.
9	500	Saipan, Isely #1**	022158Z	022208Z	11 min.	11	60 sec.
10	500	Saipan, Isely #1**	022211Z	022223Z	13 min.	13	60 sec.
Overall*							
Overall**			022126Z	022223Z		97	A/C air-borne

*Runway A

**Runway B

2. TIME OF LANDING:*

Sq No	Gp No	Place	Time of Landing		No. of A/C
			1st A/C	Last A/C	
1	497	Saipan, Isely #1	031049Z	031210Z	11
2	497	Saipan, Isely #1	031120Z	031224Z	6
3	498	Saipan, Isely #1	031140Z	031300Z	8
4	498	Saipan, Isely #1	031152Z	031321Z	5
5**	498	Saipan, Isely #1	031134Z	031232Z	6
6	499	Saipan, Isely #1	030948Z	031159Z	7
7	499	Saipan, Isely #1	031017Z	031159Z	9
8	499	Saipan, Isely #1	031039Z	031148Z	5
9	500	Saipan, Isely #1	031216Z	031338Z	8
10	500	Saipan, Isely #1	031150Z	031305Z	9
Overall			030948Z	031338Z	74

*For time of landing of A/C returning early, see Section 6

**Includes A/C T10(4767) which landed at Guam. It returned to Saipan 040530Z.

3. SQUADRON ASSEMBLY: Base

Sq No	Gp No	Place	Time	Altitude
1	497	Marpi Point	022140Z	1,000'
2	497	Same	022156Z	Same
3	498	Same	022213Z	Same
4	498	Same	022230Z	Same
5	498	Same	022238Z	900'
6	499	Channel between Saipan and Tinian	022148Z	1,000'
7	499	15°07'N, 145°40'E	022201Z	1,000'
8	499	15°15'N, 145°39'E	022206Z	680'
9	500	15°07'N, 145°47'E	022221Z	1,000'
10	500	15°05'N, 145°36'E	022232Z	1,200'

4. GROUP ASSEMBLY:

None ordered.

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5. WING ASSEMBLY:

None ordered

6. AIRCRAFT RETURNING EARLY:****

Sq No	A/C No	Time	Reason
1**	A 4(4596)	030734Z	Approximately 1:45 from target #4 engine developed oil leak of minor nature. #4 engine consumed more fuel than other engines. Bombed Iwo Jima.
2**	A47(3471)*	030820Z	Rear oil pressure #4 engine dropped 45 lbs. in 1 hour, approximately 1 hour from target. A/C returned with all 4 engines operative.
4	T44(4624)*	030805Z	#4 engine - Internal blower failure.
4	T48(4751)*	031201Z	Navigation error - insufficient fuel to reach target and return. Aborted 15 min from target.
4**	T50(4607)*	030927Z	Loss of oil #1 engine. Oil burned as it came from engine. Fire stopped when engine was feathered.
5	T 3(4608)*	030114Z	Bombardier accidentally suffered eye injury. NOTE: 6 A/C of Squadron 5 (498th Group) failed to reach primary target because of faulty navigation. Four* of these A/C dropped bombs at coordinates at least 10 miles from any industrial area and therefore are considered to have jettisoned their bombs. 2 of these 6 A/C bombed Katakami and are considered effective.
6	V32(5256)*	030657Z	Fuel transfer pump failure.
6	V29(4688)*	030609Z	#2 cylinder head #1 engine blown.
6	V25(4758)*	030916Z	#2 engine went out at 27,000'. 310° cylinder temperature.
7**	V46(4677)	030326Z	#2 engine rear oil pressure dropped to 18 lbs. Nose oil pressure OK, temp OK, oil consumption normal. Bombed Pagan.
8	V 8(4698)*	022330Z	Broken connecting rod and bent push rods #7 cylinder #3 engine.
8**	V12(3495)*	030212Z	#3 engine oil pressure went to 12 lbs, rear to 58 lbs, oil temp OK, oil consumption normal.
8**	V11(3483)*	030834Z	Excessive cylinder head temp #1 engine.
9	Z 8(4743)*	030232Z	Fuel transfer pump out.
9**	Z 3(5249)*	031016Z	Prop governor stuck at 2300 RPM, #1 engine. #1 and 2 engines heated up to 270° 200 miles from target.
10**	Z25(4785)	031008Z	#3 engine oil leak at altitude and high power setting. Bombed Iwo Jima.
10**	Z28(3436)*	030940Z	#1 engine backfired at 2400 RPM and 43½ inches MP. 1½ hours from target.
10**	Z50(4696)*	030039Z	Bomb bay doors came open in flight. Short in "salvo" switch on pilot's aisle stand.

TOTAL AIRCRAFT RETURNING EARLY: 18***

*A/C jettisoning bombs.

**Aborts considered questionable by Wing Abort Board.

***Total excludes 4 non-effective A/C from 498th Group, mentioned above, which returned at normal time

****All A/C returning early landed at Saipan.

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Basic Data, Page 3

7. ROUTE OUT:

a. Route "A" (497th Group)

Route as Ordered	Sq #1 Time	Sq #1 Altitude	CAS	Time	Sq #2 Altitude	CAS
From: Base (Assembly)	022126Z	---	---	022138Z	---	---
To: 17°00'N, 144°00'E	022231Z	1,000'	200	022247Z	1,400'	205
To: 26°30'N, 137°00'E	030230Z	1,000'	200	030237Z	1,450'	205
To: 33°30'N, 134°45'E	030510Z	29,000'	195	030420Z	20,500'	195
To: 34°45'N, 134°45'E	030530Z	29,000'	195	030444Z	29,200'	195
To: IP - 35°32'N, 135°39'E	030538Z	29,000'	195	030543Z	29,300'	195
To: Target	030545Z	29,000'	195	030558Z	29,000'	197

NOTE: For deviation of Squadron #2 at IP, see Section 9.

b. Route "B" (498th Group)

Route as Ordered	Sq #3 Time	Sq #3 Altitude	CAS	Time	Sq #5 Altitude	CAS
From: Base (Assembly)	022159Z	---	---	022216Z	---	---
To: 17°00'N, 144°00'E	022300Z	800'	200	022327Z	800'	205
To: 26°30'N, 137°00'E	030301Z	11,000'	200	030252Z	2,400'	206
To: 33°30'N, 134°45'E	030515Z	30,000'	200	030620Z	31,000'	205
To: 34°45'N, 134°45'E	030553Z	30,000'	195	See note below		
To: 35°07'N, 135°56'E (IP)	030610Z	30,000'	195	None used		
To: Target	030615Z	30,000'	195	Targets of Opportunity		

NOTE: Because of weather and navigation, Squadron #5 left group formation while on climb at 19,000' and divided into two separate elements. Poor weather conditions caused the 2 elements to further split after landfall. 2 A/C bombed Katakami, last resort target, and the other four bombed widely scattered targets of opportunity.

c. Route "C" (499th and 500th Groups)

Route as Ordered	Sq #6 Time	Sq #6 Altitude	CAS	Time	Sq #10 Altitude	CAS
From: Base (Assembly)	022127Z	---	---	022211Z	---	---
To: 17°00'N, 144°00'E	022220Z	680'	160K	022232Z	1,200'	202
To: 26°30'N, 137°00'E	030223Z	2,920'	167K	030315Z	18,000'	203
To: 34°56'N, 135°46'E (IP)	030530Z	30,900'	156K	030606Z	30,000'	200
To: Target	Did not reach target			030611Z	30,000'	195

Deviations:

1. Squadron #6 followed briefed route to landfall. At this point the last of four lead crews aborted leaving no lead crews in the formation. Out of the six ships remaining, only one ship had its radar operating and this was not operating properly. After numerous changes in lead, this A/C with the radar assumed leadership. At this point, the formation was over the coast, south of the IP. The navigator in the lead ship, not sure of his position, took a heading away from the IP which resulted in these A/C bombing a last resort target.
2. Squadron #8 followed the route approximately as briefed up to landfall, which point was reached with a minimum number of planes because of abortions. This situation accentuated by the fear that fuel would not be sufficient to carry them to the primary target and back caused the leader to decide to bomb a last resort target.

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Par #7, cont'd.

3. Squadron #9 made landfall approximately 30 miles to the left of scheduled course. This brought the formation almost directly over the city of Osaka where it turned toward the briefed IP. A radar turn was made at the IP and the bomb run was begun.

8. ROUTE BACK:

Briefed route from target to 26°00'N, 140°00'E to Base. A/C followed individual routes, the first A/C arriving at Base at 030948Z and the last at 031338Z. A/C T10 (498th Group), through navigational error and poor weather conditions landed at Guam. All other A/C landed at home Base except those lost.

9. INITIAL POINTS:

a. Route "A" - as briefed, Cape Nokogiri (35°32'N, 135°39'E).

497th Group	
Sq No	Place
1	35°30'N, 135°45'E
2	35°32'N, 135°23'E

Time	Altitude
030538Z	29,000'
030543Z	29,300'

Slight deviation caused by high winds.

b. Route "B" - as briefed, Neck in Biwa Lake (35°07'N, 135°56'E)

498th Group

Sq 3 - 35°07'N, 135°56'E - 030610Z - 30,000'
Sq 4 - Same - 030628Z - 30,400'
Sq 5 - Used no IP. See Section 7 b NOTE.

c. Route "C" - as briefed, Fushimi (34°56'N, 135°46'E).

499th Group

Sq 6 - Did not reach IP, see Section 7 c NOTE 1.
Sq 7 - 35°10'N, 135°55'E - 030541Z - 30,500'
Sq 8 - Did not reach IP, see Section 7 c NOTE 2.

500th Group

Sq 9 - Fushimi - 030610Z - 30,000'
Sq 10 - Fushimi - 030606Z - 30,000'

NOTE: Squadron #10 reached IP before Squadron #9 because the former followed the briefed course more closely. Squadron #9 was to the left of course, over Osaka, until it turned and came over the briefed IP.

10. TARGETS ATTACK DATA:

a. Number of A/C attacking target:

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Basic Data, Page 5
Par 10, cont'd

Sq No	Gp No	Primary	Last Resort	Opportunity
1	497	10	1	1
2	497	7	1	0
3	498	8	0	0
4	498	5	1	0
5	498	0	2	0
6	499	0	7	0
7	499	8	1	1
8	499	0	5	0
9	500	9	0	0
10	500	10*	1*	1
Total		57	19	3

1. Primary Target: Nagoya within coordinates 35°10'N, 136°53'E - 35°10'N - 136°56'E - 35°08'N, 136°53'E - 35°08'N, 136°56'E.

2. Secondary Target: None.

3. Last Resort Target: Any industrial city.

Gp No	No of A/C	Target	Time	Altitude (feet)	Heading (Degrees)
497	1	Shingu	030455Z	28,690	37
497	1	Osaka	030533Z	29,850	75
498	1	Hamamatsu	030635Z	30,000	160
498	2	Katakami	030620Z	30,000	90 - 326
			030621Z	32,000	
499	7	Hamamatsu	030535Z	29,000	25 - 359
			030546Z	32,000	
499	1	Shingu	030502Z	27,900	360
499	1	Owashi	030515Z	28,000	80
499	4	Tanabe	030445Z	30,700	30
			030555Z	32,000	

*A/C Z11 dropped 7 bombs on primary target and 7 bombs on last resort target, Hamamatsu. It is counted in totals of both columns.

4. Targets of Opportunity:

Gp No	No of A/C	Target	Time	Altitude (feet)	Heading (Degrees)
497	1	Iwo Jima	030458Z	23,750	120
499	1	Pagan	030033Z	24,500	30
500	1	Iwo Jima	030657Z	23,500	61

b. Times over Targets:*

Sq No	Gp No	Primary
1	497	030545Z ¹
2	497	030558Z ³
3	498	030614Z to 030623Z ⁵
4	498	030633Z ⁷
5	498	-----
6	499	-----
7	499	030548Z ²
8	499	-----
9	500	030616Z ⁴
10	500	030611Z ⁶

*For times over Last Resort and Targets of Opportunity, see Section 10 a.

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Basic Data, Page 6
Par 10, cont'd

c. Heading and Altitude from IP to Target:

Sq No	Gp No	Heading	Altitude
*1	497	118°	29,000' ✓
*2	497	120°	29,300' ✓
*3	498	80°	30,800' to 31,300' ✓
*4	498	90°	30,000' to 30,300' ✓
5	498	Did not reach IP	
6	499	Did not reach IP	
7	499	100°	30,000' ✓
8	499	Did not reach IP	
*9	500	71°	30,500'
*10	500	58°	30,000'

d. Heading and altitude over Target:**

Sq No	Gp No	Heading	PRIMARY TARGET Altitude
1	497	136° to 138°	28,200' to 31,300'
2	497	135° to 140°	30,200' to 30,800'
3	498	79° to 90°	30,400' to 31,500'
4	498	90°	30,300'
5	498	-----	-----
6	499	-----	-----
7	499	90° to 100°	30,000' to 30,900'
8	499	-----	-----
9	500	70° to 78°	30,500' to 30,600'
10	500	58° to 78°	29,800' to 30,900'

*For headings and altitudes over Last Resort and Targets of Opportunity, see Section 10 a.

e. Breakaway:

497th Group - slow right turn losing altitude and gaining speed on course to Base
498th Group - Right turn to heading of 160°M
499th Group - Right turn after bombing.
500th Group - 130° to 160° - 29,000'.

f. Rally Point:

None ordered

g. Extra Runs over Target:

None

h. Reasons for Failure to Attack:

T49(4544) experienced rack malfunction over target. Bombed Hamamatsu.

11. ESCORT DATA:

No escort ordered.

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Headquarters
73rd Bombardment Wing

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Mission No. 17
Field Order No. 35
Date of Mission
3 January 1945

CONSOLIDATED MISSION REPORT

LOSS AND DAMAGE

12. CASUALTIES -- PERSONNEL

See Consolidated Statistical Report,
Table XII, Casualties.

13. AIRCRAFT LOST

- a. A-50(3418) ditched after bombing primary target. It was believed damaged by E/A. A-50 came to within 75 miles of home Base on three engines. Gas leak probably caused ditching.
- b. Z-22(4766) was reported lost over the target area as a result of fighter opposition. This A/C was leading the 2nd combat Squadron of this Group. The empennage of a S/E unidentified fighter was shot off by Z-22 and the shattered E/A struck Z-22 in the vicinity of the #3 engine nacelle. The B-29 staggered but apparently kept under control. Shortly afterward, however, the B-29 peeled off to the right gradually and left the formation. A little later, still losing altitude, the B-29 peeled off to the right still more but this time very suddenly and then went into a flat spin about 10,000 feet below the formation and about 5 miles away. It was heading 180° at the time toward the open sea. Another A/C reported seeing fighters jump the disabled plane and that one of the fighters was destroyed, blowing up in mid-air. At least three gunners from other planes saw the B-29 go into a full spin and crash into the ground about 20 miles southeast of Nagoya. No parachutes were seen, and no contact was made with the plane at any time after it was struck by the enemy fighter. The A/C was struck by the E/A shortly after bombs away. Most of the planes in the 2nd Squadron witnessed the accident.

14. AIRCRAFT MISSING

- a. A/C Z-48(4660) ditched about 350 miles off the coast of Japan on the return trip. Two messages from the A/C were received by the Base Ground Station, but no cause for the ditching was given. Two A/C reported seeing Z-48 about one hour out from the target. It was flying slightly below them and appeared to have a large hole in its left wing, about one foot in diameter. At the time, all engines appeared to be operating normally.
- b. A/C A-42(4626) bombed primary target. It was believed damaged by enemy action since it received heavy fighter attacks. It straggled from target and was last seen 50 miles off coast, 2 miles behind formation and 2000 feet below.
- c. A/C T-42(4748) bombed primary target. It is not known whether it was damaged by enemy action or not. It was last seen leaving coast of Japan heading approximately 186° T. All four propellers were turning at that time, and there was no indication of trouble. There were no radio messages received or intercepted from A/C T-42.

15. TOTAL A/C FAILING TO RETURN

Five A/C lost or missing. See paragraphs 13 and 14.

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Loss and Damage, page 2

16. DAMAGE TO AIRCRAFT

See Report of Battle Damage on following page.

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S-E-C-R-E-T

REPORT OF BATTLE DAMAGE

MISSION #17
3 Jan. 1944

TO BE READY FOR
COMBAT WITHIN

DESCRIPTION OF DAMAGE

SERIAL NO.

<u>SERIAL NO.</u>	<u>TO BE READY FOR COMBAT WITHIN</u>	<u>DESCRIPTION OF DAMAGE</u>
<u>497TH BOMB GROUP</u>		
42-24593	Indef	Tail gunner's and two panels in nose section cut. Hole in right horizontal stabilizer. Hole in right leading edge of wing. Right horizontal stabilizer tip damaged. Hole in fuselage below right elevator. Bombardier's left side window cracked.
42-24597	5 days	20 mm hole in upper forward turret. Flak hole in left flap. Left fuselage peppered with tiny holes.
42-63485	Indef	Hole in right outboard leading edge, number 3 engine out, left elevator trim tab bent, ship entirely stripped.
42-24616	1 day	Top pilot's window cracked.
42-24807	3 days	#1 Propeller blade bent. Engine change in compliance with T. O. 02-1-15.
42-24756	1 day	Tail gunner's window cracked.
42-24655	Indef	Hole in tail pipe of number three right supercharger. Hole in air scoop number three left supercharger also damaged.
Total Damaged - 497th Bomb Group: 7 Aircraft: 2 within 1 day 1 within 3 days 1 within 5 days 3 indefinite		

498TH BOMB GROUP

42-24760	Indef	Hole in nose section, 20 mm shell in #1 engine.
Total Damaged - 498th Bomb Group: 1 Aircraft: 1 indefinite		

499TH BOMB GROUP

42-24753	1 day	One very small flak hole in leading edge of right wing between #1 and #2 engines.
Total Damaged - 499th Bomb Group: 1 Aircraft: 1 within 1 day		

500TH BOMB GROUP

42-63441	5 days	Hole in flap, fuselage, and tail Command antenna shot off.
42-24761	2 days	Bombay tanks salvaged, flak suits thrown out, low on gas.

S-E-C-R-E-T

S-E-C-R-E-T

42-65251	2 days	Hole in #1 engine cowl and cylinder.
42-24652	2 days	Hole in fuselage cut oxygen line and wiring to lower aft turret.
42-24664	3 days	Hole in accessory section #1 engine change required.
42-24676	3 days	Hole in left outboard wing.
42-24785	1 day	Hole in right aileron.
42-24694	3 days	#1 engine change - propeller came off in flight.
42-63486	Indef	Holes in #3 and #4 nacelles.
42-24689	Indef	Hole in #4 cowl - right wing.
42-63489	Indef	Gun damage - radar room and tail compartment.
42-24672	4 days	Pilot's window cracked.

Total Damaged - 500th Bomb Group: 12 Aircraft:
 1 within 1 day
 3 within 2 days
 3 within 3 days
 1 within 4 days
 1 within 5 days
 3 indefinite

TOTAL DAMAGED - 73RD BOMB WING: 21 Aircraft:
 4 within 1 day
 3 within 2 days
 4 within 3 days
 1 within 4 days
 2 within 5 days
 7 indefinite

73rd Wing Stat

S-E-C-R-E-T

Headquarters
73rd Bombardment Wing

S E C R E T

Mission Number 17
Field Order No. 35
3 January 1945

CONSOLIDATED MISSION REPORT

AA AND AIR-TO-AIR BOMBING

17. ENEMY AA FIRE

Antiaircraft fire was encountered from the time of landfall, and was continuously observed from that point until the airplanes flew out to sea again.

At Osaka, when the aircraft were at altitudes ranging from 29,000 to 30,500 feet, inaccurate barrage and predicted concentration fire were observed. Bursts were generally widely dispersed right and left, and were behind and below. The colors of the bursts noted were black, brown, gray, and white.

At Kyoto, at altitudes ranging from 29,000 feet to 30,500 feet, predicted concentration fire was noted. Fire was meager to moderate, bursts were black, and were level, ahead, and behind. Fire was accurate, and one aircraft was rocked by the blast.

Between the IP and the target, the formation flew between 29,300 feet and 30,000 feet. Meager, accurate, predicted concentration fire was noted. One aircraft was damaged by the fire.

Over the target, some continuously-pointed fire, barrage, and some predicted concentration were observed. One aircraft, which later ditched, probably sustained damage here, and two others were certainly damaged. Bursts were black and white and were classed as meager.

At the turn and on the way out, one aircraft was rocked and hit by anti-aircraft fire.

On the route home, antiaircraft fire was observed at Chita Bay and the coast, at Haha Jima, and Iwo Jima. One aircraft flying over Iwo Jima at 23,500 feet in order to drop its bombs was hit by AA fire on the second run over the target.

At Iwo Jima, one airplane observed white streamers, coming up from the ground, which mushroomed and fell away without affecting the aircraft. One searchlight was observed on Iwo Jima.

The following table shows the total damage known to be caused by AA:

A/C 4597	29,000'	Hole in left flap
4807	29,000'	Propeller blade bent
4753	30,800'	Small hole in leading edge of right wing between #3 and #4 engines
3441	30,000'	Hole in flap, fuselage, tail. Command antenna shot off. (AA and E/A)
4785	23,500'	Hole in right aileron (Iwo Jima)

18. OUR TACTICS VERSUS AA

Our tactics consisted of turns and changes in altitude except during bomb run.

19. AIR-TO-AIR BOMBING AND ROCKETS

One rocket-type projectile was seen describing an arc over Nagoya. It rose to within 1000 feet of the formation and then turned to earth without exploding.

One instance was reported of an unidentified S/E fighter's flipping two white phosphorus bombs within approximately 500 yards of the formation. These bombs were ineffective.

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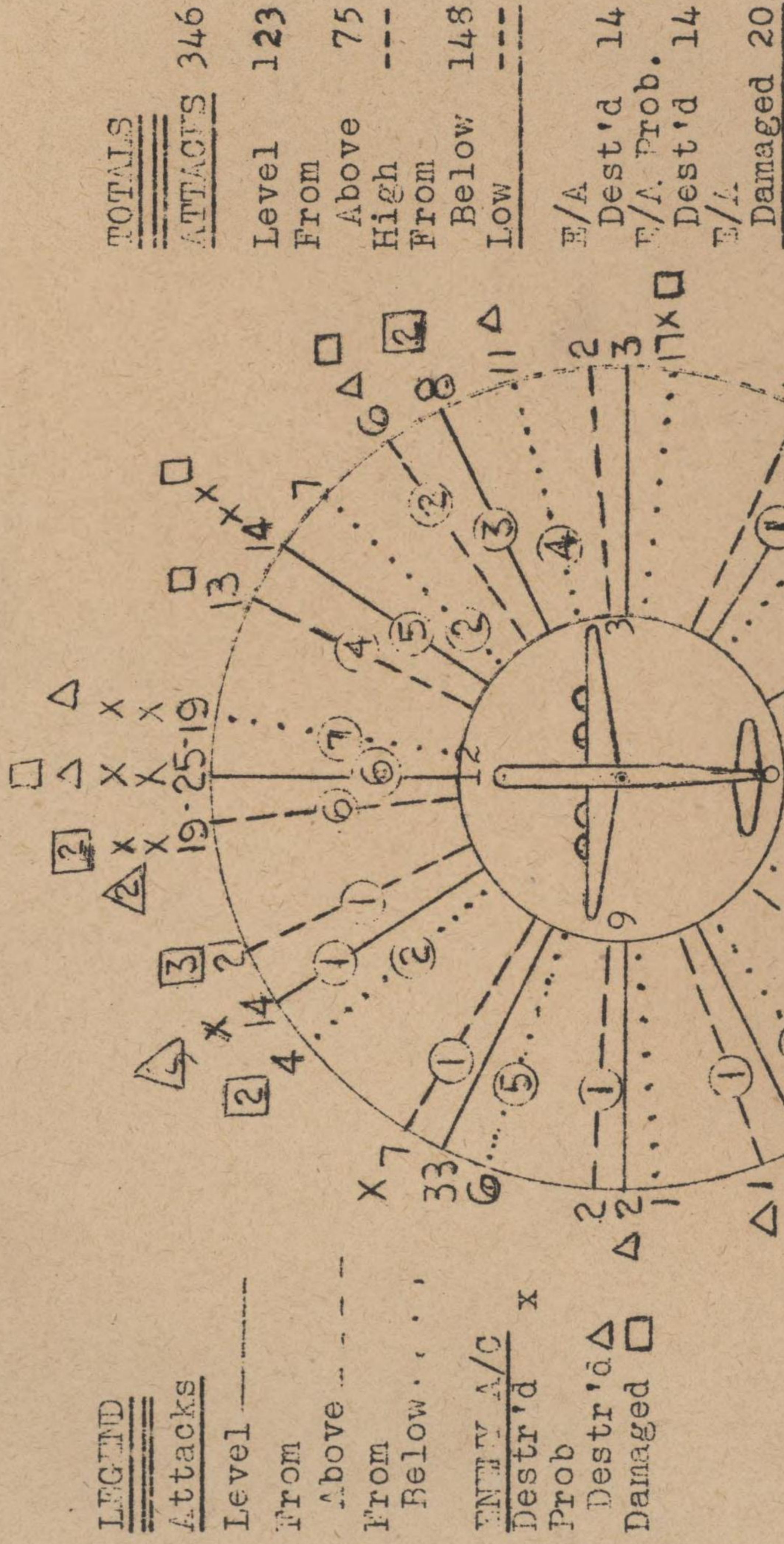
Headquarters
73rd Bombardment Wing

Field Order No. 35
Mission No. 17
3 January 1945

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 t/e 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 ENEMY AIRCRAFT OPENED FIRE:

Yds	100	200	300	400	500	600	700	800	900	1000 or more
No A/C Firing	3	4	5	8	37	17	20	65	59	128

SECRET

S E C R E T

21. COMMENTS (cont'd):

The average distances at which e/a opened fire and the directions and angles of attack are shown below:

Directions	Distances (in yards)	
	Above	Below
10:30 to 1:30	780	700
1:30 to 4:30	650	600
4:30 to 7:30	800	650
7:30 to 10:30	550	800

22. LOCATION, ALTITUDE, AND TYPES OF ENEMY AIRCRAFT ATTACKING:

It is estimated that approximately 160 separate e/a were encountered over Honshu. The 346 attacks are listed below according to location, altitude, and number of attacks by e/a.

Location	Altitude	No. & type E/A Attacking
Landfall to IP (Route A) (Over Osaka)	29,000'	1 TOJO
Landfall to IP (Route A) (Over Kobe)	29,000'	2 TOJO
Landfall to IP (Route C) (Fushimi)	30,000'	1 ZEKE (32)
		1 ZEKE
	31,000'	1 TONY
At IP (Route A) (Cape Nokogiri)	29,000'	1 TOJO
At IP (Route B) (Neckin Lake Biwa)	30,000'	10 TONY 3 OSCAR
At IP (Route C) (Fushimi)	31,000'	4 OSCAR
		7 TONY
		1 ZEKE
IP to target (Route B)	30,000'	8 TONY
IP to target (Route C)	30,000'	13 TONY
		4 OSCAR
	31,000'	5 S/E Unid. 1 OSCAR
Target Area (Nagoya)	30,000'	27 TONY 4 IRVING 5 OSCAR 5 NICK
Target to Coast (Return)	29,000'	34 TOJO 20 IRVING 10 NICK 2 JACK 1 OSCAR 14 IRVING 9 S/E Unid. 7 T/E (inline)
	30,000'	2 ZEKE 1 S/E Unid. 9 TOJO
At Coast (Return)	28,000'	2 TONY

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S E C R E T

22. cont'd.

The only types of airborne e/a sighted which did not attack were 2 BETTYS, observed after leaving the coast of Japan on the return trip, and one VAL, seen over target. Both BETTYS were approximately 30 miles out at sea, one at 27,000 feet and one at 28,000 feet. The single VAL was seen over Nagoya, flying at an altitude of 30,000 feet.

23. TYPE AND ACCURACY OF ENEMY FIRE AND TYPE OF PROJECTILE:

The type of enemy fire reported was limited to the 7.7-mm, 12.7-mm, and 20-mm projectiles. Generally, the fire was indicated as inaccurate. The following armament arrangements were reported.

TOJO (2)	- Four wing guns (2 in each wing)
TOJO (1)	- Fired two 12.7 m/g through nose and 2 x 20-mm from wing tips
OSCAR (1)	- Four wing guns (2 in each wing)
JACK (1)	- Four 20-mm cannons; 2 in each wing not synchronized
TONY (3)	- Fired both 12.7-mm and 20-mm type projectile
TONY (2)	- Cannon mounted in the nose
TONY (1)	- Wing m/gs and a nose cannon
TONY (1)	- Six guns mounted in the wings.
Unid E/A	- (possibly FRANK) - Nose guns only

The average distance to which enemy fighters pressed home their attack, coordinated with direction and angle, is shown below:

Directions	Distances (in yards)	
	Above	Level Below
10:30 to 1:30	360	250 375
1:30 to 4:30	250	325 400
4:30 to 7:30	500	400 465
7:30 to 10:30	200	350 450

24. ENEMY AIRCRAFT MARKINGS:

E/A continued to display a wide variety of colorings, with accentuation on the darker hues. Although there were no unusual markings as such, a number of odd color patterns were observed. Listed below are those e/a with accompanying data on color:

10 IRVING	- all black	6	TONY	- all black
IRVING	- dark with black circles on wings		TONY	- reddish brown
IRVING	- black with red roundels	5	TONY	- all tan
IRVING	- orange with black stripes & red roundels	2	TONY	- black fuselage and light colored cowling
IRVING	- camouflaged		TONY	- brown with yellow spinner
13 NICK	- all black		ZEKE	- all silver
3 NICK	- all brown		ZEKE	- silver with several small squares behind the cowling
2 NICK	- all grey			
ZEKE (32)	all black			
ZEKE (32)	yellow and red		NELL	- all black

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Par 24, cont'd

TONY - All silver with brown cowlng.
TOJO - all black
TOJO - all tan
TOJO - silver with red nose
2 TOJO - tan fuselage with a
 ten inch red band
 around the cowlng
TOJO - all tan with 2 twelve
 inch cream colored
 stripes around the
 fuselage, and a bor-
 der of yellow around
 the cream
TOJO - olive drab with two
 12 inch cream colored
 stripes running dia-
 gonally from the can-
 ope to the empennage

OSCAR - all silver
OSCAR - all green
JACK - brown on top and yellow
 underneath
KATE - dull green with red
 roundels
Unidentified T/E - black with
 red roundels

25. ENEMY TACTICS:

a. General Employment of E/A. All B-29 formations going into the primary target area had encountered groups of 10 to 20 e/a before getting in the vicinity of Nagoya. Apparently none of these e/a followed into the Nagoya area but remained to the west to make contact on the approaches. In the primary target area all but the first and second of the seven squadrons encountered 75 to 100 e/a, some of which continued on out, attacking, to the coast. In most cases the fighters from the Nagoya area broke off within 20 to 30 miles and other fighters picked up the contact and continued attacks out to the coast. Some possibly significant instances concerning the Jap fighter net are given below:

(1) The first squadron over Honshu, following Route "A" over the Kobe-Osaka district from the south. They encountered 15 to 20 fighters in that area and received three attacks from TOJOs at 29,000 feet. These fighters made no effort to intercept a straggler which pulled off and bombed Osaka nor did they follow the B-29s up to their IP. In the vicinity of the IP attacks were made by a NICK and a TOJO. As the bombers approached Nagoya, approximately 60 a/c were sighted milling around and climbing but none were high enough to attack. A few minutes after bombs away this squadron started receiving attacks which ran up to 25.

(2) The next squadron over the target, three minutes later, came in from the south on the IP at Fushimi, receiving five attacks before the IP and two after, at altitudes of 30,000 to 31,000 feet. No attacks were received over the target but between there and the coast six attacks were made.

(3) The third squadron over the target, following the same approximate course as the first squadron (Route "A"), about 15 minutes later, received no attacks until reaching the target area at 29,000 feet where they encountered approximately 75 e/a and received intensive attacks counting up to 115 before leaving the coast.

(4) The remaining four squadrons over the target at 29,000 to 30,000 feet received fewer attacks although encountering 75 to 100 a/c in the target area.

(5) The fifth and seventh squadrons over the target, going in on route "B" about 20 minutes apart, encountered two for-

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S E C R E T

25. cont'd

mations of unidentified s/e a/c between the IP and the target. These a/c were going in the opposite direction and did not attempt interception. The following squadron received 19 attacks in the vicinity of the IP.

(6) Seven a/c bombing Hamamatsu, four bombing Tanabe, one bombing Owasi and one bombing Shingu received no attacks.

b. Types of attacks. Except for cases listed in the following sub-paragraphs, attacks were reported as not being coordinated:

(1) One TONY and two IRVINGS, line astern, attacked from below at 4 o'clock, breaking away at 600, 500 and 400 yards.

(2) Seven or eight almost simultaneous passes were made on the tail B-29 in one squadron. Only two were pressed into attacks with the others breaking at 800 to 400 yards. No hits were sustained but immediately after this a TONY made an attack on the tail from above, out of the sun, and was not seen until within 200 yards of the B-29. Machine gun and 20-mm cannon hits were scored in the empennage.

(3) Two unidentified t/e a/c, line abreast, came in from 12 o'clock, just below wing level. One broke off at about 600 yards without firing. The other fighter, in a very well executed attack, started firing about 1200 yards out and came right on in firing medium bursts until he passed directly underneath. This attack resulted in two 20-mm shells in the nose and one in the number one engine.

(4) A TOJO and an IRVING came in at 11:30 o'clock from slightly below. The TOJO broke away to one side at about 600 yards with the IRVING coming on in and breaking under.

(5) Three IRVINGS and one TONY flying close line-abreast from 1 o'clock above on a squadron leader. The breakaway was at about 300 yards, going under the lead flight and out at 10 o'clock.

(6) Two TONYS, one from 4 o'clock above and the other from 7 o'clock above, closed to about 500 yards and broke by turning toward each other and going out low at 6 o'clock.

(7) Two TONYS came in, line abreast, from 2 o'clock below, breaking off at 300 yards, going down and out at 3 o'clock in half rolls.

(8) One TONY, two TOJOs, and two NICKS, line abreast and 25 to 100 feet apart, came in, three to the left and two to the right, at 12 o'clock above on the leader of a #2 flight. They appeared to be attempting to rake the entire flight and flew right over the formation with no observed breakaway.

(9) Two NICKS, abreast, from 1 o'clock level, closed to about 300 yards and broke by diving under.

(10) Two TONYS, abreast, from 1 o'clock level, closed to about 400 yards, breaking in a dive under.

(11) One NICK, one TOJO, and one TONY, line astern, closed to about 500 yards, breaking off in a dive under

(12) Two RUFES are reported to have carried on aerobatics off to one side and below while other fighters attacked. This was in the target area.

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S E C R E T

25. cont'd

c. Individual Tactics.

(1) One crew reported having seen unidentified fighters go down from combat, issuing white smoke as though seriously damaged, only to come back and renew attacks.

(2) It was observed by some crews that there were a number of nose cone attacks where e/a opened fire at 1200 yards, staying just below reach of the four gun turret. Only one or two of these attacks were pressed on in, the remainder breaking to one side or the other immediately when B-29s opened fire.

(3) Some crews reported that side cone attacks appeared to be ineffective because of fighters trying to hold pursuit curves which they have not been able to master.

(4) One TONY is reported to have come in from 11:00 o'clock level, doing a Split S and coming back in on the tail at about 7:30 o'clock.

(5) One TOJO is reported to have attacked from 1:00 o'clock level, going under the nose and left wing, then pulling around to come in from 9:00 o'clock level. This TOJO is claimed as destroyed by the Bombardier and Left Gunner.

d. Breakaways. The predominant types of breakaways are listed below according to the direction from which approaches were made:

(1) Frontal attacks were generally broken off with turns to right or left or by going under.

(2) Side attacks, consisting mostly of poorly executed pursuit curves, broke off by just falling behind the formation or making a tight turn away from the B-29 formation.

(3) Tail attacks broke off in dives, 180° turns, and Split S.

26. ENEMY FORMATIONS:

Except for the formations mentioned under "Coordinated Attacks" in paragraph 25, the only discernable formations reported were two groups of 12 to 15 unidentified s/e a/c flying in loose "Vs" as outlined in paragraph 25 a (5).

27. OUR TACTICS AND FIREPOWER VERSUS ENEMY AIRCRAFT:

In most instances our gunners opened fire at extreme range, estimated to be 1200 to 1500 yards, to discourage attacks. However, one combat squadron indicated an average range for opening fire of 800 yards. All squadrons reported flying in close formation.

One a/c commander, to avoid being rarmed (as he thought at the time) by an incoming enemy fighter at 1200 low, pulled back his control, bringing his a/c up and out of formation. Upon interrogation, this pilot changed his opinion and stated that the fighter was simply pressing the attack closely.

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28. RESULTS OF HITS ON ENEMY AIRCRAFT:

NICK - Tracers seen to hit; smoking from cowlings.
NICK - Smoke from cowlings; and into spin.
NICK - Exploded in air.
NICK - Exploded in air.
NICK - Smoke from cowlings.
NICK - Exploded; broke into large pieces.
NICK - On fire and smoking

TONY - Exploded
3 TONY - On fire, and smoking.
2 TONY - Tracers seen to hit, and small pieces broke off.
TONY - Exploded
TONY - Pieces of fabric broke off.
TONY - Pieces blown off.
TONY - Tracers seen to hit fuselage and cockpit.
TONY - "Collided" with B-29; major parts blown off.
TONY - Wing broke off; out of control
TONY - Pieces of plane fell off; out of control.
TONY - Burst into white flames, out of control.
TONY - Tracers seen to hit; smoking and out of control.

IRVING - In flames; parts fell off.
IRVING - Exploded and broke into four parts.
IRVING - Exploded.
IRVING - Fire seen in engine.
IRVING - Pieces blown off.
2 IRVING - On fire and smoking badly.
IRVING - Tracers seen to enter engine and belly.
IRVING - Parts blown off; smoking, and out of control.

TOJO - Engine and cockpit on fire.
TOJO - On fire and smoking.
TOJO - Wing shot off; smoking badly.
TOJO - Pilot bailed out.

JACK - Pieces broke off; in flames too.
JACK - Tracers seen to hit.

2 ZEKE - Pieces of plane shot off; out of control.
ZEKE - Tracers seen to hit; and out of control.
ZEKE - Tracers seen to hit underside of fuselage.

OSCAR - Hit in nose; flaming, and out of control.
OSCAR - Smoking badly.

VAL - Hits in fuselage; and smoking

2 RUFÉ - On fire.

Unidentified S/E - Tracers seen to hit; and out of control.
Unidentified S/E - In flames.
Unidentified S/E - Tracers hit engine; smoking badly.

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S E C R E T

28A. CLAIMS BY AIRCRAFT AND BY GUN POSITION:

B-29 Serial No.	Gun Position	Type E/A	Claim
A-6(4594)	RG & LG	IRVING:	Dest'd.
A-7(4593)	TG	IRVING	"
A-9(3463)	TG	NICK	"
A-10(4597)	LG	ZEKE	"
A-10(4597)	Bombardier	JACK	"
A-13(4717)	TG	IRVING	"
A-28(3423)	TG	NICK	"
A-31(4756)	RG	NICK	"
A-31(4756)	TG	TONY	"
Z-22(4766)	Bombardier	TONY	"
Z-32(3497)	Bombardier	TONY	"
Z-10(5219)	Bombardier	TONY	"
Z-51(4761)	Bombardier & LG	TOJO	"
Z-7(3486)	Bombardier	TONY	"
A-7(4593)	Bombardier	IRVING	Prob. Dest'd.
A-7(4593)	RSG	TONY	"
A-10(4597)	Bombardier	NICK	"
A-10(4597)	TG	RUFE	"
A-43(4641)	LG	TONY	"
A-46(4655)	RSG	IRVING	"
A-46(4655)	TG	IRVING	"
A-52(5246)	TG	TONY	"
T-32(4749)	TG	IRVING	"
Z-22(4766)	Unknown	Unid. S/E	"
Z-4(4672)	Bombardier	TONY	"
Z-41(4675)	Bombardier & LG	IRVING	"
Z-7(3486)	LG	OSCAR	"
Z-52(5251)	Bombardier	TOJO	"
A-10(4597)	RG	RUFE	Damaged
A-10(4597)	RSG	JACK	"
A-10(4597)	Bombardier	TONY	"
A-12(3485)	RG	ZEKE	"
A-21(4623)	Bombardier	NICK	"
A-21(4623)	RSG	TONY	"
A-22(4616)	Bombardier	NICK	"
A-28(3423)	Bombardier	TONY	"
A-31(4756)	Bombardier	NICK	"
A-46(4655)	TG	TOJO	"
A-46(4655)	RG	OSCAR	"
T-32(4749)	Bombardier	IRVING	"
T-32(4749)	TG & RSG	TONY	"
T-35(3478)	LG & TG	V.L.	"
V-49(5222)	Bombardier	Unid S/E	"
V-47(3442)	Bombardier	ZEKE	"
V-43(4673)	Bombardier	TOJO	"
Z-10(5219)	Bombardier	TONY	"
Z-41(4675)	RG	ZEKE	"
Z-51(4761)	RG	Unid S/E	"

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SECRET

Headquarters
73rd Bombardment Wing

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

BOMBING DATA

39. Bombing Data: See Consolidated Statistical Report, Table IV.
40. Target Attack Data: See Consolidated Statistical Report, Table I.
41. Conditions over target: There was an almost complete overcast up to the IP's. There was a break in the cloud cover from the IP's to the target enabling all Squadrons to bomb visually against the primary target. The wind was about 150 K from 280° so that no excessive drifts were encountered. Fighter and AA were meager to moderate. All Squadrons bombing the primary target followed close to the briefed plan, and encountered no important difficulty on the bomb run. Smoke from earlier fires covered the target area for the later squadrons but did not interfere with bombing due to the fact that downwind run was being made.
42. IP and AP: The IP's selected were easily identified by either radar or visual means and they provided a bombing run of adequate length. The opinion was expressed by the Squadrons flying the longer route that the advantage of a slightly different route to the target was not worth flying over enemy territory for more than the minimum length of time actually necessary. The AP's were easily seen and identified.
43. Reasons for failure to bomb: Three cases of rack failure and one case of intervalometer failure.
44. Results of Bombing Observed: Results of bombing against the primary target were good. Practically all bombs hit in the designated target area and large fires were started.
45. Possible Source of Error in Bombing: In one Squadron the leader had trouble with his intervalometer and had a slight delay before he could Salvo. The deputy had a bombsight rate motor malfunction and was unable to sight for range. The bombs hit a different section of the city than intended. All other bombardiers hit within a reasonable distance of the aiming point.
46. Use of Radar and Efficiency: The radar was used as a navigational aid to the IP and to obtain a wind. It proved very valuable for these purposes.
47. Comments and Suggestions: Suggest that when M8 Incendiary Clusters are carried, that the A-2 nose arming control be used so as to avoid excessive bending of the arming wire. This has resulted in breakage in a few cases. Also these bombs may be salvoed armed without danger to the aircraft concerned in the event of trouble with normal releases. The lack of suitable sectional maps of Japan is a serious handicap to operating in the target area. These maps were ordered in June 1944 and have not yet been delivered.

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S E C R E T

Headquarters
73rd Bombardment Wing

Mission No. 17
Field Order No. 35
Date of Mission
3 January 1945

CONSOLIDATED MISSION REPORT

BOMB IMPACT DATA

Paragraphs 48 through 51.

No. A/C over target: 57 A/C bombed primary target; 19 A/C bombed targets of last resort (2 - Shingu, 1 - Osaka, 9 - Hamamatsu, 2 - Katakami, 1 - Owashi, 4 - Tanabe) and 3 A/C bombed bombed targets of opportunity (2 - Iwo Jima, 1 - Pagan).

Bomb Load: 14 x 350-lb M-18 IB; 1 x 420-lb T4E4 frag.

Direction of Attack: Varied from 58° T to 118° T.

Aiming Point: East edge of Nagoya RR Station for two Groups, and east edge of barge basin.

Photographic Coverage and Quality: Photographs varying from excellent to poor quality cover northern and western section of city. Target area obscured by smoke in photographs of last three Squadrons.

SUMMARY

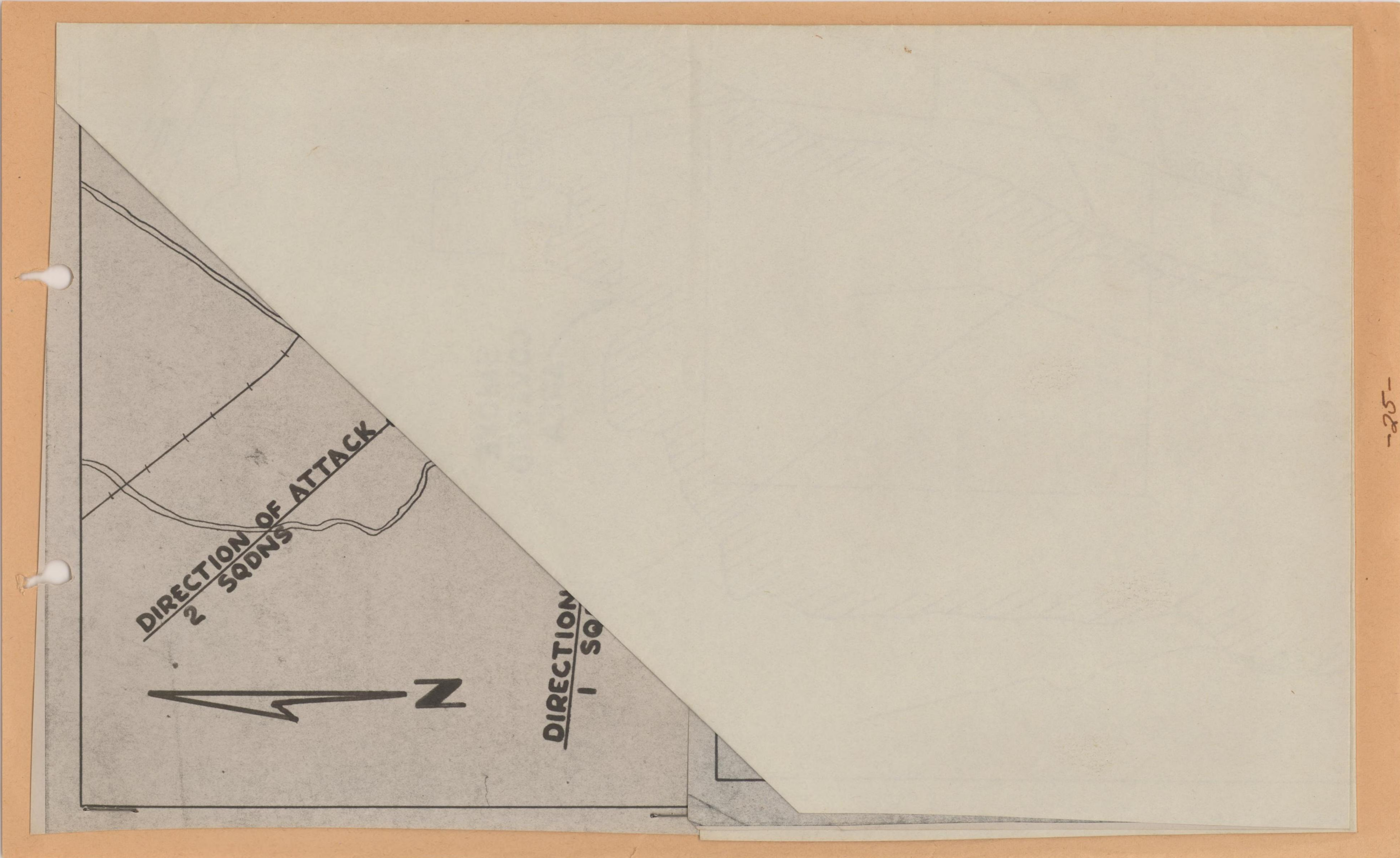
Approximately 75 fires are visible with smoke rising to nearly 20,000 feet. The largest concentration of fire is observed E of Nagoya RR Station. Another concentration of fires is visible to the southeast in the center of the city. Small concentrations of fires and numerous individual fires are visible west of Nagoya station, north and south of the freight station and in the area east of the Naka Canal.

CONCLUSION

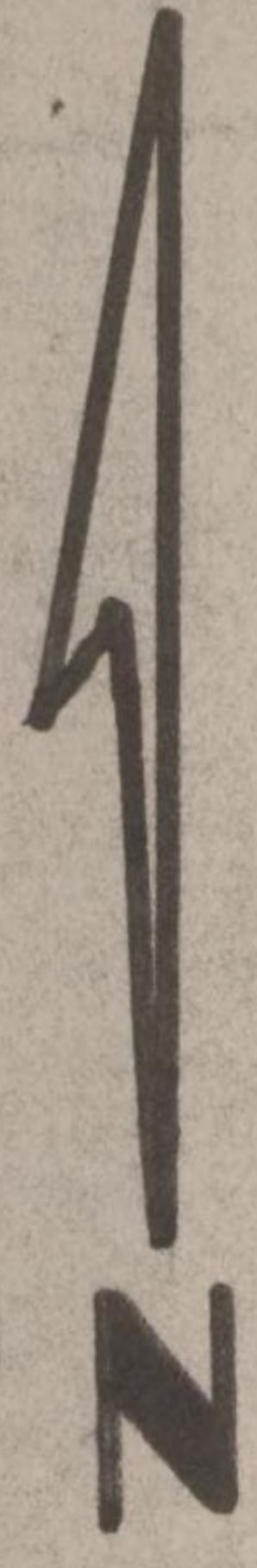
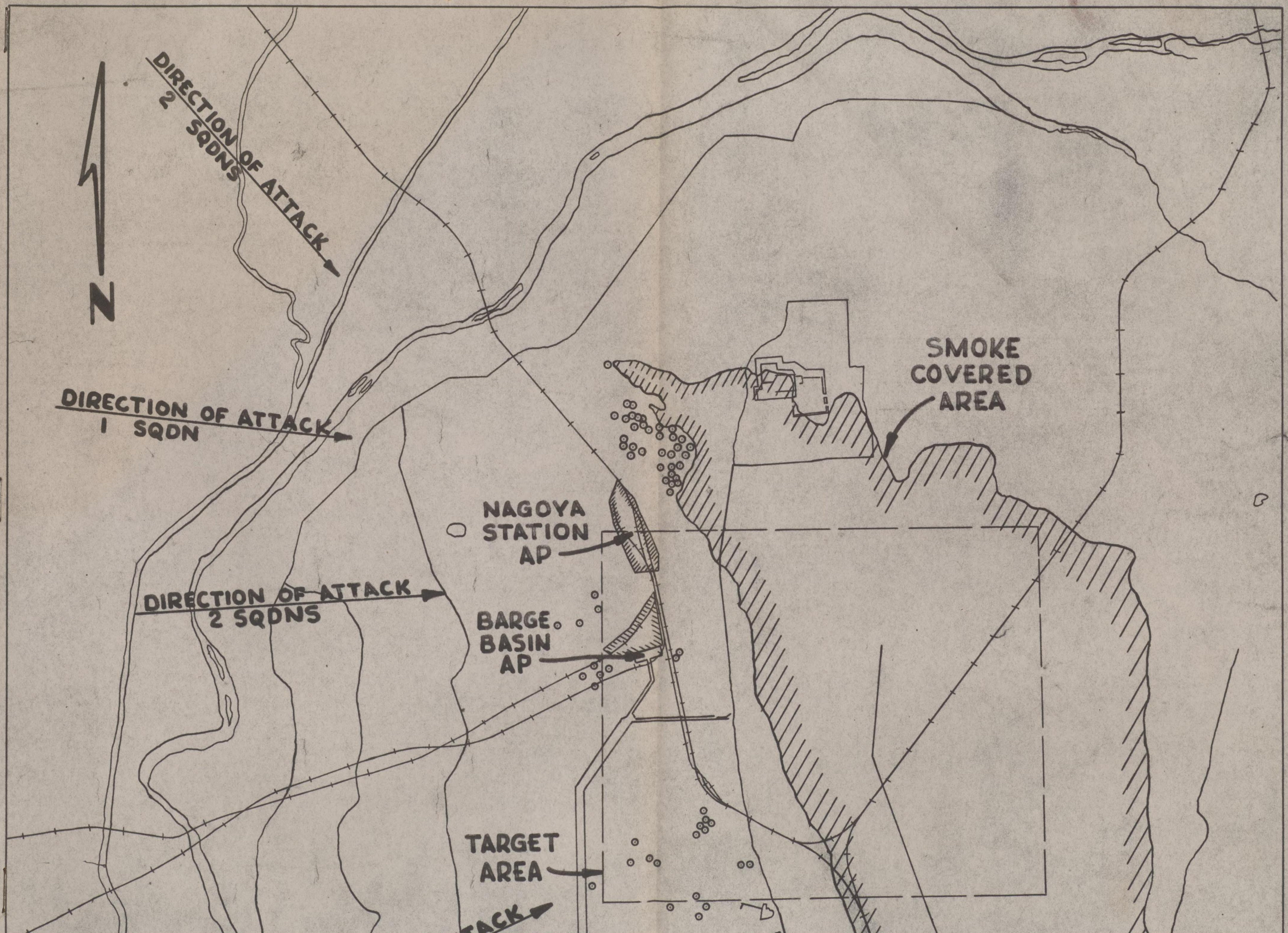
As smoke clouds obscure most of target area and eastern part of city, bombing results cannot be determined.

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DIRECTION OF ATTACK
2 SQDNS

DIRECTION OF ATTACK
1 SQDN

DIRECTION OF ATTACK
2 SQDNS

NAGOYA
STATION
AP

BARGE.
BASIN
AP

SMOKE
COVERED
AREA

TARGET
AREA

TACK

N

DIRECTION OF ATTACK
1 SQDN

DIRECTION OF ATTACK
2 SQDNS

DIRECTION OF ATTACK
2 SQDNS

NAGOYA
STATION
AP

BARGE
BASIN
AP

TARGET
AREA

SMOKE
COVERED
AREA





BOMB PLOT - MISSION #17
TARGET INTELLIGENCE SECTION
73RD BOMB WING
NAGOYA CITY
3 JANUARY 1945

(18PL883BS4761A/C5M)XIV 7 XI:3:1410(24:26500)(35 09 N136 55'E)(NAGOYA)(CONF)



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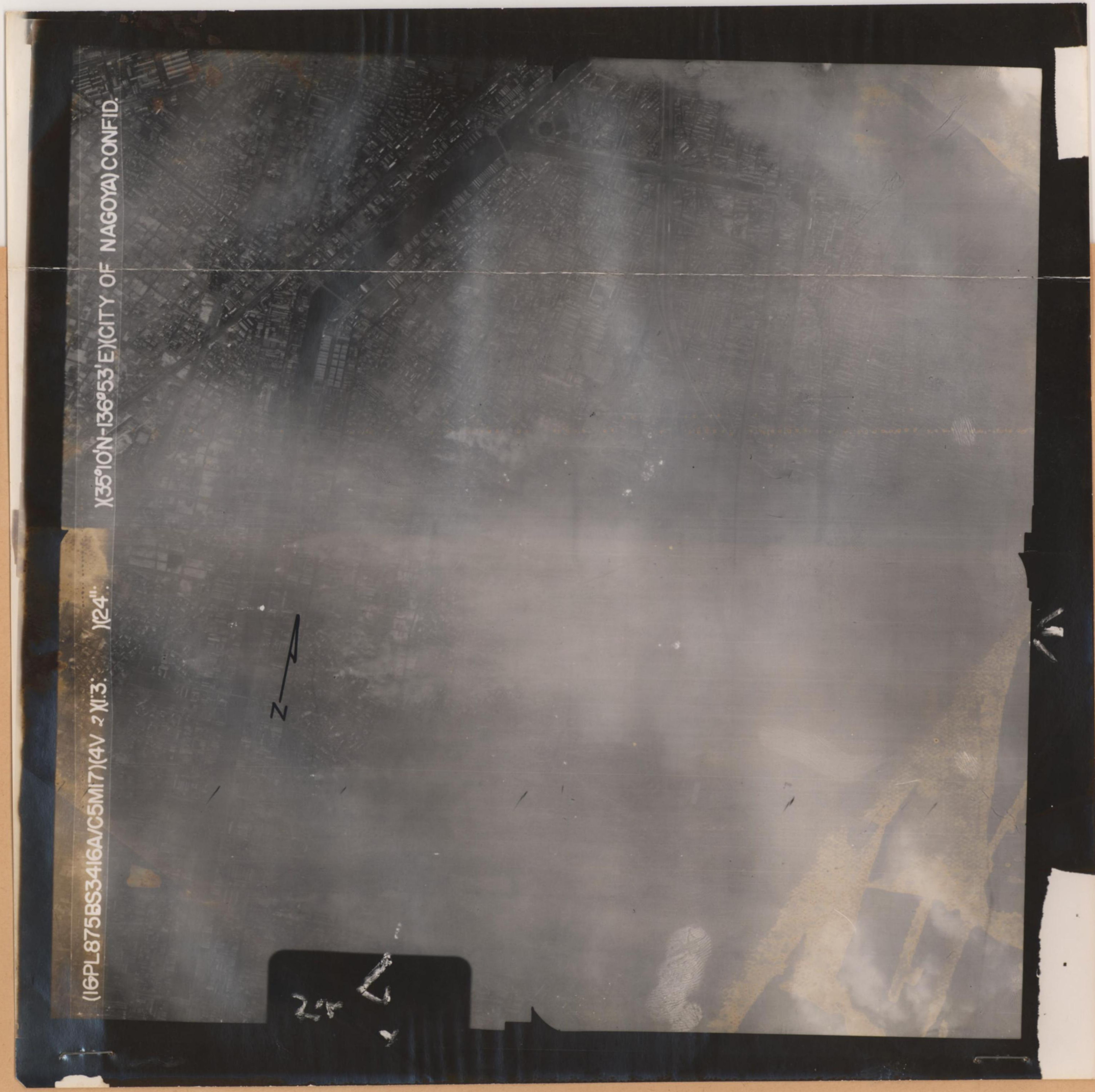


(CONF)

DECLASSIFIED
Authority *AND 6063*
By *NAKA* Date *11/10*

(16PL875BS3416A/C5MI7)(4V 2 XI:3:)124"

(35°10'N-136°53'E)(CITY OF NAGOYA) CONFID.



24 7

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DECLASSIFIED
Authority *AND 60063*
By *AN* NAKA Date *11/10*

SECRET

Headquarters
73rd Bombardment Wing

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

NAVIGATOR

1. The route to the target was flown as briefed with the exception of two squadrons, which flew to the left. One of these squadrons corrected after orientating themselves, but bombed a last resort target, South of Nagoya. The other squadron bombed a last resort target 220 nautical miles West of the primary target.
2. Celestial (Sun Lines) was used as the primary aid to dead reckoning, crossing celestial lines with loran lines to obtain an accurate fix. This type fix could be obtained by a few navigators 1,000 miles from this base.
3. 85% of the loran equipment was operating satisfactory.
4. Many navigators are still reaching the final altitude too soon. This situation however is improving.
5. Radar AN/APQ-13 was used as a navigational aid to land fall, to determine wind, and to do precision navigation in the target area.
6. The route to the base was flown as briefed, using all navigational aids available.
7. Long range navigation for this mission could be considered satisfactory. Target area navigation is improving.

SECRET

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S E C R E T

Headquarters
73rd Bombardment Wing

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

BOMBARDIER

See Par. 39 through 47.

S E C R E T

- 29 -

8 Jan 1945
JSA
WEATHER SUMMARY.

HEADQUARTERS 73rd BOMBARDMENT WING
CONSOLIDATED MISSION REPORT

PO # 35
Mission # 17
Mission Date;
3 Jan 1945

At takeoff time scattered cumulus with bases at 1000 ft and a few scattered showers which did not interfere with takeoff prevailed. Visibility averaged 15 miles surface wind 070-12 K.

Enroute scattered moderate showers were encountered from the base to 20°N. These showers caused very little trouble in keeping formation.

The cloud cover steadily decreased until a clear zone between 25 and 27°N. From then on the cumulus activity steadily increased to 6/10 at 21°N with tops averaging 7000 ft. These decreased gradually until about 60 miles south of the Empire where they suddenly became 2-3/10 and continued to the coast.

At the target there was a broken deck of alto cu over the mountains breaking up to the south (see cross section). The average cloud cover in the target area was 6/10 Alto cu with almost no low cloud. At about 75 miles to the north the alto cu deck became overcast and increased in altitude. Next squamrons banded vertically thru wide holes in the deck the rest bombed by radar thru a patch of cloud as it drifted over the target. The mountains were almost completely obscured by clouds.

The weather encountered on the return trip was the same as on the outgoing trip except that no showers were observed.

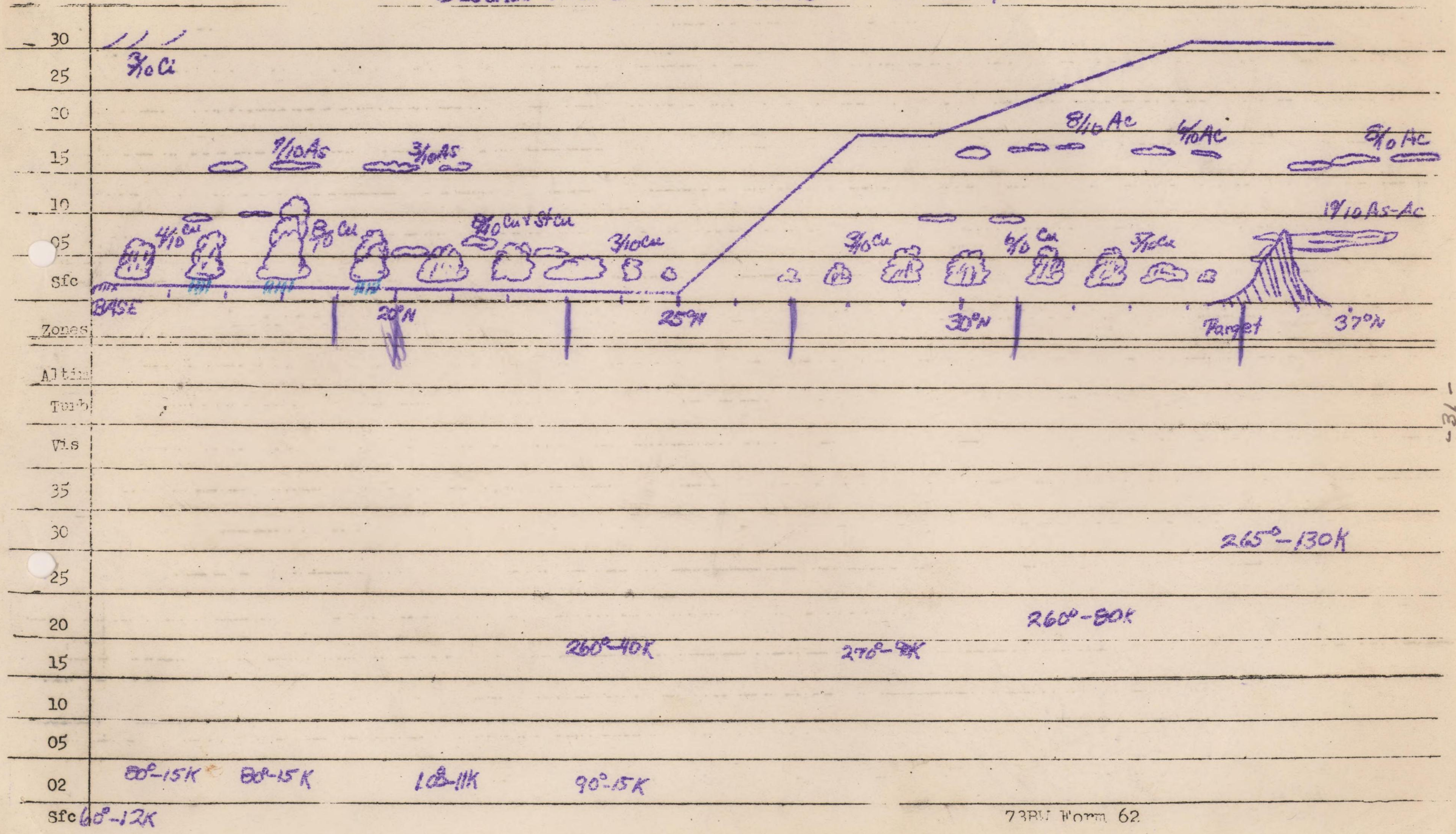
The weather at the base on return was the same as at takeoff except that no showers occurred.

The cloud forecast was good the only serious error being a few more clouds at the target and the clear space at 25°N.

The winds however, were apparently much more northerly than forecast the those reported do not deviate greatly from those forecast. The mission was an hour late in arriving at the target which means an average loadwind component of 20-25 knots! This was very serious as many planes returned practically out of fuel.

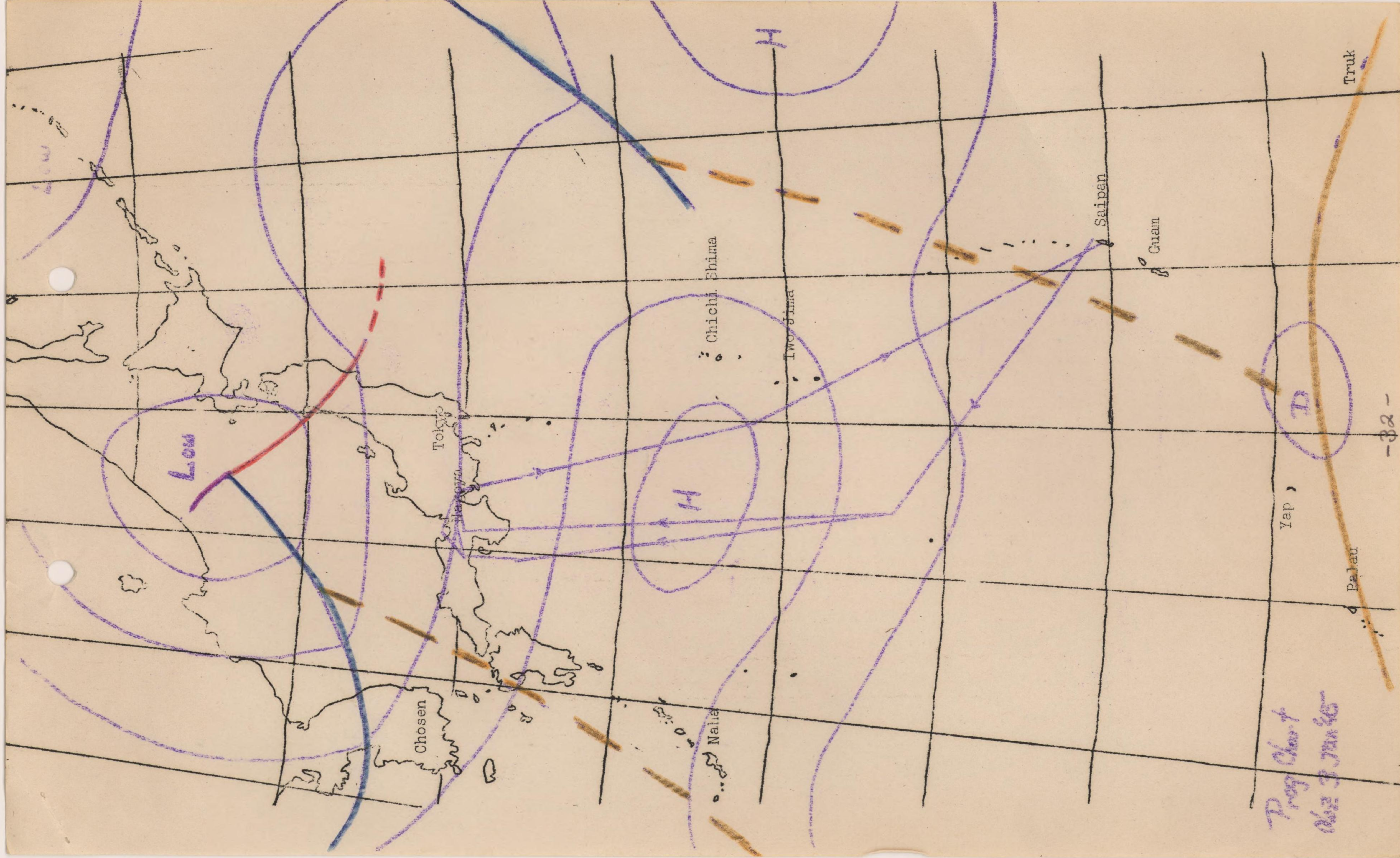
The temperatures were again reported higher than forecast. An experimental modification on the thermostat or installation has been started to determine the cause of the error in these observations, suspected to be conduction.

Observed Cross Section 3 Jan '45 73rd Wing



73BW Form 62

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Prog Chart
 Aug 3 Jan 65

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Operational Forecast for 0400K-2200K 3 January 1945

Return Similar
 Base on Return

30	<i>111</i>	<i>111</i>	<i>111</i>	<i>111</i>	<i>111</i>	<i>111</i>	<i>111</i>	<i>111</i>	
25	<i>2/10 Ci</i>		<i>2/10 Ci</i>		<i>2/10 Ci</i>		<i>2/10 Ci</i>		<i>2/10 Ci</i>
20									
15	<i>5/10 As-Hc</i>		<i>2/10 Hc</i>		<i>2/10 Hc</i>		<i>2/10 Hc</i>		<i>2/10 Hc</i>
10	<i>4/10 Sc</i>	<i>2/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>
05	<i>4/10 Sc</i>	<i>2/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>
sfc	<i>4/10 Sc</i>	<i>2/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>4/10 Sc</i>	<i>2/10 Cu</i>
Zones	Base	20°N	25°N	30°N	Target				
Altim	<i>29.81"</i>	<i>30.00"</i>	<i>30.00"</i>		<i>29.94"</i>				<i>29.76"</i>
Turb	<i>Light</i>	<i>Light</i>	<i>Light</i>		<i>Nil</i>				<i>Nil</i>
vis	<i>12 miles; 1 mile in showers</i>	<i>12 mi</i>	<i>12 mi</i>		<i>12 mi</i>				
35	<i>320° 40K -43°C</i>	<i>260° 95K -45°C</i>	<i>270° 150K -48°C</i>	<i>260° 150K -51°C</i>	<i>260° 135K -59°C</i>				
30	<i>320 35 -31</i>	<i>260 85 -34</i>	<i>270 120 -37</i>	<i>260 135 -41</i>	<i>260 115 -48</i>				
25	<i>320 25 -19</i>	<i>260 70 -23</i>	<i>270 110 -27</i>	<i>260 120 -32</i>	<i>260 95 -38</i>				<i>Same as</i>
20	<i>340 15 -08</i>	<i>260 55 -12</i>	<i>270 95 -16</i>	<i>260 100 -21</i>	<i>260 80 -27</i>				<i>Base-20°N</i>
15	<i>020 05 02</i>	<i>260 40 -01</i>	<i>260 75 -05</i>	<i>260 80 -10</i>	<i>250 65 -16</i>				
10	<i>060 10 12</i>	<i>260 25 07</i>	<i>260 60 03</i>	<i>250 60 -02</i>	<i>250 50 -07</i>				
05	<i>080 10 18</i>	<i>210 15 14</i>	<i>300 40 10</i>	<i>260 45 06</i>	<i>260 35 01</i>				
02	<i>080 15 23</i>	<i>100 15 18</i>	<i>320 25 16</i>	<i>270 25 11</i>	<i>270 20 07</i>				
sfc	<i>080 14 27</i>	<i>070 12 23</i>	<i>300 10 18</i>	<i>250 15 15</i>	<i>250 15 11</i>				

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S E C R E T

Headquarters
73rd Bombardment Wing

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

CFC GUNNERY

1. Crews encountered moderate to heavy fighter opposition. Again the greatest frequency of attacks was from the nose sector. For the first time nose gunners used the procedure of setting in false rates of range change and false present range. Results were very satisfactory and all bombardier nose gunners expressed great enthusiasm for its use. A brief explanation of the procedure, which was first suggested by the Operations Analysis Section of the XXI Bomber Command, is as follows:

- a. Preset nose pedestal sight at maximum range (minimum reticule).
- b. Locate E/A and span it at over 1500 yards.
- c. When E/A fills 3/4 of reticle at maximum range (approximately 1500 yds) spin range knob as fast as possible from maximum to minimum and commence firing.
- d. The above compensates for the error produced by an input of present range into the time of flight circuit, and projectiles will intersect target at proper future range. This procedure also permits the rate mechanism to operate at its maximum speed of 270/yds second which is the closest to the desired 350 yds/second.
- e. This Headquarters has designed a modification to permit the rate of the range mechanism to approximate that of true combat rates of closure. Upon completion of static and service tests, complete data will be submitted through proper channels on a unsatisfactory report.

2. Equipment operation was very satisfactory as indicated below:

- a. Cal. 50 ammunition (all types) expended----- 146,656.
- b. 20 mm ammunition (all types) expended----- 2,206.
- c. Used turrets (individual operative)----- 98.3%
- d. Used complete CFC system (no total failure) operative 100%
- e. Used Cal. 50 machine guns, operative----- 97.4%
- f. Used 20 mm cannon, operative----- 100%

3. Comments of combat crew gunners and interrogators are as follows:

- a. It was recommended that all preventative maintenance be completed at completion of preflight by the gunners. Instances have occurred where maintenance personnel have unloaded turrets with out the knowledge of the gunners thus necessitating difficult and unnecessary work in the air.
- b. Briefing of all gunners in target area identification as directed by this Headquarters, has resulted in more accurate reporting of occurrence in target area.
- c. Replacement crew gunners are poorly prepared to do a complete and efficient preflight (as outlined in section four and six of Gunners Information file published by the General Electric Co., G.E.J. 1631). A program for checking replacement crew gunners is directed in Memorandum 55-6, this Headquarters dated 23 December 1944.

S E C R E T

Headquarters
73rd Bombardment Wing

SECRET

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

GROUP FLIGHT ENGINEER AND ENGINEERING OFFICER

A. Malfunction of Engineering Equipment

	<u>TOTAL</u>
1. Power Plant	
a. Cylinder Head Blown	2
b. Short stacks Burned Loose	1
c. Exhaust Collector Ring	1
d. Internal Failure	2
e. Carburetor	1
2. Oil System	
a. Oil cooler regulator	3
b. Oil pressure (Not within limits)	3
c. Oil leaks	6
3. Propeller	
a. Governor Inoperative	5
4. Supercharger	
a. Surging at altitude	4
b. Amplifier failure	2
c. Running Away	1
5. Fuel System	
a. Fuel transfer pump failure	4
b. Failed to transfer	2
c. Failure of Bomb bay shut off valve	2
6. Electrical	
a. Generator failure	1
b. Voltage regulator	2
c. Starter failure	1
7. Instrument failure	
a. Cylinder head temperature	7
b. Flight indicator	3
c. Carburetor air temperature	6
d. D.C. Voltmeter	2
e. Tachometer	2
f. Ammeter	1
8. Airplane in General	
a. Bomb bay doors	1
b. Oxygen system	
(1) Leaks	1
(2) Regulator Failure	3
c. Sighting blister blown	1
d. Astro dome blown	1
e. Landing gear lights	1
f. Hydraulic leaks	2
g. Recognition Lights	1

SECRET

B. Battle Damage
Refer to Par. 16 Consolidated Mission Report.

C. Analysis of Cruise Control

- (1) Fuel Aboard 8,000 Gals.
- (2) Ammunition 6,000 rds. Cal. 50
- (3) Bomb load 5,320 lbs.
- (4) Fuel Consumption Refer to Table XIII of Consolidated Statistical Report.
- (5) App. Gross Wt. 137,500 lbs.
- (6) Average time of flight 14 hrs.
- (7) Analysis

(a) Average to Target

- (1) Fuel 5,166 Gals.
- (2) Time 8 hrs 11 min.

<u>Altitude</u>	<u>CAS</u>	<u>Power Setting</u>	<u>% of Planes using power used</u>	<u>Time</u>
1000'	200	2150-33	57 percent	4:40
		2175-34	"	"
		2200-35	21	"
Climb 18000'	200	2250-37	5	1:05
		2300-37	45	"
		2350-39	44	"
		2400-43	6	"
Cruise 18000'	195	2150-32	50	:20
		2175-34	16	"
Climb Bombing Alt 195		2200-35	34	"
		2300-37	45	1:20
		2350-40	40	"
Cruise Bombing Alt 195		2400-43	15	"
		2250-31	32	:46
		2350-40	30	"
		2300-39	33	"
		2400-43	7	"

(3) Average Return

- 1. Average Time
- 2. Average Fuel used 2128 Gals.
- 3. Average Air Speed 187 MPH.

SECRET

Wing 73BW
~~SECRET~~
 Date 15 Jan 45
 By Wg Photo O.

~~SECRET~~
~~CONFIDENTIAL~~

CONSOLIDATED MISSION REPORT

PHOTOGRAPHIC

F. O. No. 35
 Mission No. 17
 Date of Mission 3 January 1945

	K-18	K-19	K-20	K-22	K-25	K- Total
a. Cameras installed	11	0	22	26	30	89
b. Cameras in aborting A/C	5	0	2	7	6	20
c. Cameras in lost A/C	0	0	4	1	1	6
d. Camera in A/C not lost but not returning.	0	0	0	0	0	0
e. Cameras with malfunctions	0	0	0	1	0	1
f. Cameras in operating condition not taking photos	4	0	12	13	9	38
g. Camera taking photos	2	0	4	4	14	24

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-25
4761	6.3	1/150	7	26500	12			
4763	6	1/50	7	30500	26			8
4601	8	1/250		31000		4		
3463						1		
4648						1		
4623						2		12
3416	8	1/150	6				2	
3478	6	1/150	6				6	
4609	8	1/150	13	30000			3	
4771	8	1/150	13	31000			6	8
3423								9
5246								12
4610								7
4625								5
4650								3
5256								4
4669								13
4753								11
4664								28
4689								10
Incl 8 4792								5

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3. Breakdown of cameras not taking photos by cause:

Cause	No. of Cameras	Explanation
a. Mechanical failure		
b. Installation error		
c. Processing error		
d. Camera doors not open	3	
e. M/Switch not on	1	
f. Vacuum failure		
g. Power failure	3	Radar set out.
h. Light failure (Target)	2	Undercast.
i. Enemy action	1	Cameras not turned on.
j. Others	1	Hatch doors not locked open.
k.	3	Cameras turned on or off too soon.
l.	10	Cameras not used.
m.	10	No photos taken of Intell. value.
n.	5	No strikes shown due to bombs used.
o. Total	39	

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:

1a, b, c, d, are self explanatory.

1e - The number of malfunctions due to installation or processing.

1f - 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.

1g. f 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

Headquarters
73d Bombardment Wing

~~SECRET~~

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

COMMUNICATIONS

- Strike Reports: The Ground Station received eleven (11) bombs away reports and eleven (11) amplified strike reports. Original primary strike report has been changed to the bombs away report and still contains the same information.
- Fox Transmissions: Weather, encoded in Ucopac, and time ticks were transmitted on the half hour and hour respectively. The Ground Station, upon receipt of the first bombs away report, retransmitted it on all strike frequencies for information to all aircraft.
- Frequencies: All bombs away and amplified strike reports were received on 11160 KC without difficulty. Aircraft signals over the target varied from fair to excellent. Ground Station signal over the target on 11160 KC was excellent and was readable above all interference. It is estimated that forty-two (42) per cent of the net operation was carried out on 11160 KC, thirty-nine (39) per cent on 3145 KC and nineteen (19) per cent on 7310 KC. Heavy CW interference during the entire mission was noted on 7310 KC. Frequencies 3145 KC and 11160 KC received moderate CW interference at different periods during the mission.
- Navigational Aids: The Ground Station received seventy-one (71) requests for bearings during the last five hours of the mission. Sixty-six (66) of these were obtained. The difference between bearings requested and bearings obtained was due to weak signals of aircraft, interference from our own aircraft and the priority of urgent bearings over check bearings. In a breakdown of all bearings, thirty-five (35) were shot on 3145 KC, eight (8) on 7310 KC, and twenty-three (23) on 11160 KC. Radio Range was utilized by the majority of the planes, while Homer received moderate use. Condor Base received thirteen (13) requests for VHF bearings; all were obtained.
- Net Discipline and Security: In proportion to the number of aircraft participating in the mission, the net discipline was exceptionally good. Only three incidents of our own aircraft interfering with net operation were noted. Net security was very good with one exception: one aircraft operator transmitted a message composed of code groups and clear text. One hour after receipt of this message, this airplane ditched. Investigation will be initiated when and if this crew is rescued.
- Enemy Transmission: Aerial radio operators report the following jamming and interference: steady tone signal on 3145 KC blocked out Ground Station eight hundred (800) miles from Base; tone signal on 3145 KC over target; heavy CW interference on 11160 KC by stations using call signs FFE 8 and FFE 3; Jap voice, CW and tone on 4475 KC and

- 1 -

~~SECRET~~

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DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) of (E)

Authority *NAID 60063*
By *CCD/BJ* NARS, Date *10/11/75*

SECRET

500 KC; Jap station, though to be on Minomi Jima interferred with homing beacon on 1195 KC.

7. Distress: Ground Station received two (2) SOS messages from airplanes in distress. Position and bearing were obtained from one aircraft while the second aircraft's position was not obtained due to interference from another airplane. Investigation of the latter incident has been initiated. On the return leg of the mission, aircraft requested ten (10) urgen bearings; all bearings were obtained.

8. Equipment Malfunctions:

SET	MALFUNCTION	497	498	499	500
AN/ART-13	Inoperative		2		
	Not putting out	1			
	Intermittent, relay sticking	1			
BC-348	Background noise and static, no signal				1
AN/ARN-7	Needle hunting	2	1		
	Cannot be tuned on antenna position		1		
	Antenna lead-in broken	1			1
	Tube burned out	1			
	Front mast antenna broken			1	
RC-36	Mike button sticking		3		
	Interphone leakage		2		
	Right-gunner position inoperative				1
	Rear-gunner mike switch inoperative				1
	Intermittent				1
Misc.	Trailing antenna wouldn't reel out				
	Trailing wire wouldn't reel in		1		
	Trailing antenna lost				1
Loran	Receiver inoperative				1

Decrease of malfunction on AN/ART-13 and BC-348 indicates improved maintenance. Further discussion of predominant equipment malfunctions and steps to correct them were emphasized at a meeting of all Group and Squadron Communication Officers.

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Headquarters
73rd Bombardment Wing

Field Order No 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

RADAR EMPLOYMENT AND RADAR EQUIPMENT PERFORMANCE

1. Employment
 - a. AN/APQ-13 (Blind Bombing)
All lead A/C began bombing runs on radar and made final corrections and release visually. In some cases target visibility occurred during the final minute before release and visual corrections were not completed before bombs away. Extensive undercast except over the target made radar the primary means of navigation in the target area.
 - b. SCR-718 (Altimeter)
Employment was normal.
 - c. SCR-695 (IFF)
Employment was normal.
2. Equipment Performance
 - a. AN/APQ-13
Of 87 A/C radar equipped:
 - (1) 65 A/C reported equipment performance satisfactory for bombing.
 - (2) 75% of the radar equipments were operational in the target area.
 - b. SCR-718
One (1) SCR-718 Altimeter failure was reported.
 - c. SCR-695
No SCR-695 IFF equipment failure were reported.

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Headquarters
73rd Bombardment Wing

SECRET

Field Order No. 35
Mission No. 17
3 January 1945

CONSOLIDATED MISSION REPORT

RCM REPORT

1. Number of Radar Observers participating 8.
2. Number of Radar Observers completed mission 3.
3. Equipment employed:

<u>Sets</u>	<u>AV Hours On</u>	<u>Malfunctions</u>
AN/APR4	22:15	Antenna unconnected or faulty.
AN/APR5A	15:35	Antenna unconnected or faulty.
AN/APR5	22:15	
AN/APAGX	10:45	
AN/ANQ-2	7:30	

4. Signals logged:

<u>Band</u>	<u>Number</u>	<u>PRF Range</u>	<u>Pulse width range</u>
A-60-85	32	602	38.4 u sec.
B-85-120	45	670	28 u sec.
C-120-170	15	440	60 u sec.
D-170-220	5	737.5	30 u sec.
E-220-300	--	---	-----
F-300-1000	--	---	-----
Above, specify Frequency	27-60 19	---	-----

5. Remarks.

a. Of the eight (8) Radar Observers:

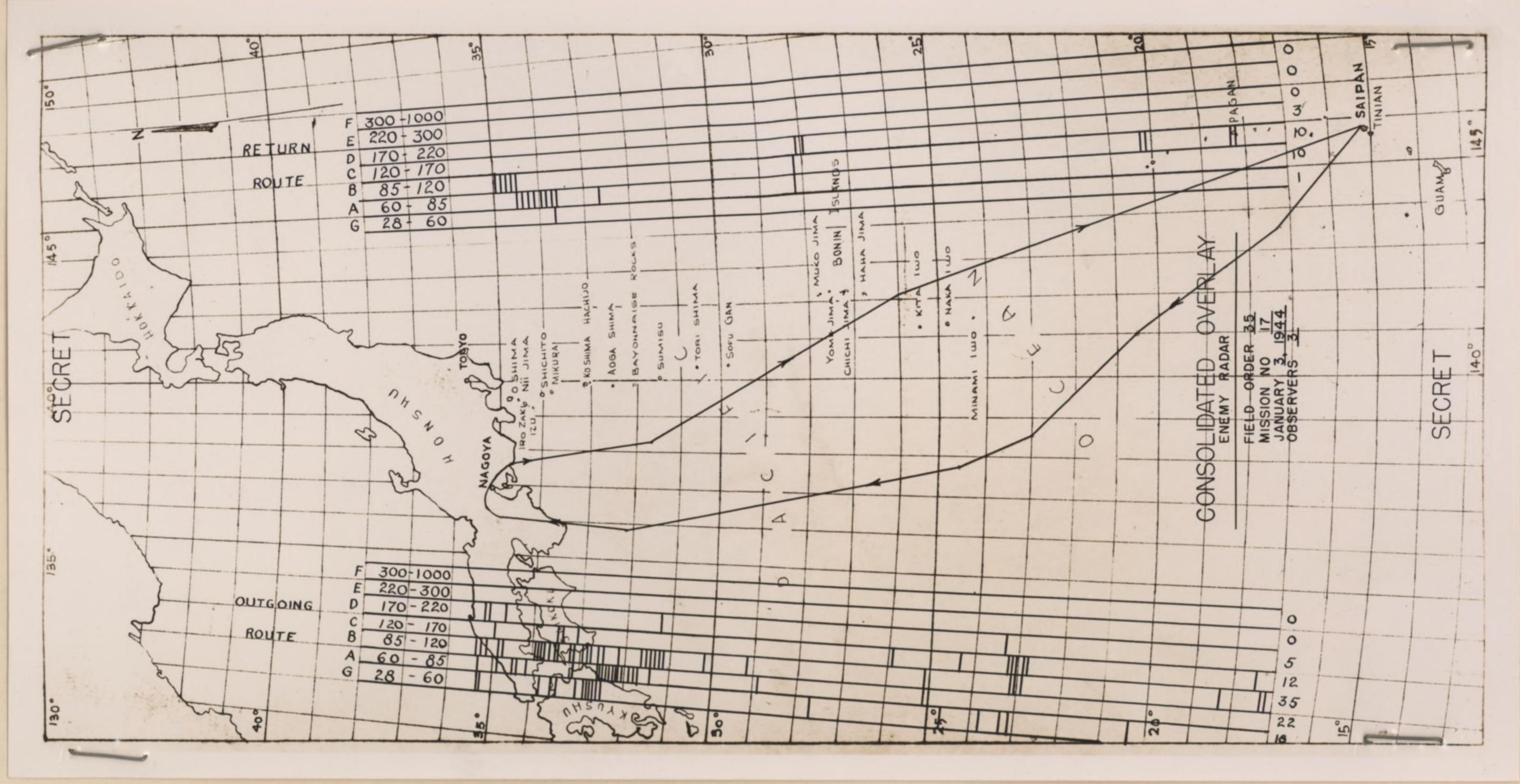
Three (3) completed the mission.
One (1) is missing.
Four (4) aborted.

b. Jap VHF signals were logged between 27 and 50 mcs. and in the target area on 91 and 93 mcs.

c. Two recordings were made. One covering 27 mcs. and one covering 27, 29, 33, 91 and 94 mcs. Translation unsuccessful due to poor recordings.

d. 4475 Kcs. Command frequency was jammed in the target area by Jap R/T.

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73RD BOMB WING

S-E-C-R-E-T

FIELD ORDER NO. 35MISSION NO. 173 January 45

Consolidated Statistical Summary

Primary Target NAGOYA, JAPAN

Table I Aircraft Participating

	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
A/C Scheduled to Take-off	101	23	26	28	24
A/C Failing to Take-off	4	2 a	2 e	0	0
A/C Airborne	97	21	24	28	24
A/C Airborne Failing to Bomb Designated Targets	22	2	8	7	5
% Of Airborne A/C Failing to Bomb Designated Targets	23%	10%	33%	25%	21%
A/C Bombing Primary Target	57	17	13	8	19
% of Airborne A/C Bombing Primary Target	59%	81%	54%	29%	79%
A/C Failing to Return to Home Base	6	2 b	2 d	0	2 e
Time of Take-off:		2 Jan	2 Jan	2 Jan	2 Jan
Earliest		2126Z	2159Z	2127Z	2158Z
Latest		2223Z	2147Z	2223Z	2223Z
Time of Return:		3 Jan	3 Jan	3 Jan	3 Jan
Earliest		0948Z	1049Z	0948Z	1150Z
Latest		1338Z	1224Z	1321Z	1338Z

- a A/C 414 damaged by rough landing previous day
A/C 231 Crew claimed mag. drop on #4 engine -- Personnel error -- A/C o.k.
- b A/C 626 missing, A/C 418 ditched
- c A/C 629 #3 engine failure
A/C 755 electrical fire in bombay
- d A/C 748 missing, A/C 767 landed at Guam -- navigation error
- e A/C 766 lost over target
A/C 660 ditched

S-E-C-R-E-T

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73RD BOMB WING

S-E-C-R-E-T

FIELD ORDER NO. 35MISSION NO. 173 January 45

Consolidated Statistical Summary

Table II Breakdown of Aborting Aircraft by Cause

C A U S E	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
Mechanical Failure	16	2 a	2 b	7 d	5 e
Personnel Failure	6		6 c		
Flight Conditions					
Enemy Action					
Unknown					
Other					
Total	22	2	8	7	5

a * A/C 471 rear oil pressure #4 engine dropped 45 lbs in 1 hr. Approximately 1 hr from target. A/C returned to base with all 4 engines operating.
 * A/C 596 approximately 1:45 from target #4 engine developed oil leak of minor nature. #4 engine consumed more fuel than other engines. Bombed Iwo Jima.

b A/C 624 #4 engine. Internal blower failure.
 * A/C 607 loss of oil #1 engine. Oil burned as it came from engine. Fire stopped when engine was feathered.

c A/C 608 bombardier accidentally suffered eye injury.
 A/C 751 navigation error - insufficient fuel to reach target & return. Aborted 15 minutes from target
 6 A/C of 873rd Sq failed to reach primary target because of faulty navigation. Four of these A/C dropped bombs at coordinates at least 10 miles from any industrial area & are therefore considered to have jettisoned their bombs.
 2 A/C Bombed Katakami & are considered effective.

d A/C 698 broken connecting rod & bent push rods #7 cylinder #3 engine.
 * A/C 495 #3 engine oil pressure went to 12 lbs, rear to 58 lbs, oil temp o.k., oil consumption normal.
 * A/C 483 excessive cylinder head temp #1 engine.
 A/C 688 #2 cylinder head #1 engine blown
 A/C 256 fuel transfer pump failure.
 A/C 759 #2 engine went out at 27,000 ft. 310 degrees cylinder temperature.
 * A/C 677 #2 engine rear oil pressure dropped to 18 lbs. Nose oil pressure o.k., temperature o.k.; oil consumption normal. Bombed Pagan.

e A/C 743 fuel transfer pump out.
 * A/C 249 prop governor stuck at 2300 RPM #1 engine. #1 & 2 engines heated up to 270 degrees 200 miles from target.
 * A/C 785 #3 engine oil leak at altitude & high power setting. Bombed Iwo Jima.
 * A/C 436 #1 engine backfired at 2400 RPM & 43½ inches MP. 1½ hrs from target.
 * A/C 696 bomb bay doors came open in flight. Short in "salvo" switch on pilot's aisle stand.

* Aborts considered as questionable by Wing Abort Board.

S-E-C-R-E-T

73RD BOMB WING

S E C R E T

FIELD ORDER NO. 35MISSION NO. 17

3 January 45

Consolidated Statistical Summary

Table III Breakdown of Aircraft Failing to Bomb Primary Target

A/C Bombing Last Resort Targets

C A U S E	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
Mechanical Failure	5	1 a	1 c	3 e	
Personnel Failure	8		2 d	6 f	
Flight Conditions					
Enemy Action					
Unknown					
Other	5	1 b		4 g	
Total	18	2	3	13	0 h

a A/C 648 could not stay up with formation. Engines did not seem to develop power at altitude. Bombed Osaka.

b A/C 807 low on fuel. Bombed Shingu.

c A/C 544 bomb rack malfunction over primary target. Bombed Hamamatsu.

d 2 A/C of 873rd Sq Bombed Katakami. Did not reach primary target due to navigation error. (see Table II note c)

e A/C 699 excessive cylinder head temperature #2 engine. Bombed Owashi.
* A/C 750 #3 manifold pressure gauge out, cylinder head temp gauges #2 & #3 out.
Bombed Shingu.

* A/C 644 crack in CFC blister and bad icing. Bombed Tanabe.

f 6 A/C of 878 Sq were unable to reach primary target because of navigation error & confusion as to which A/C was to act as leader after 3 lead A/C aborted.
Bombed Hamamatsu.

g 4 A/C of 877 Sq bombed last resort targets because aborts left only 4 A/C in Sq and they had difficulty getting in formation. Lacked sufficient fuel to get over primary target. 3 A/C Bombed Tanabe; 1 A/C Bombed Hamamatsu.

h A/C 489 bombed primary target but because of rack malfunction released only 8 bombs. 6 incendiaries and 1 frag Dropped in Vicinity of Hamamatsu.

* Aborts considered as questionable by Wing Abort Board.

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73RD BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. 35

3 January 45

Table IV Bombing Run

MISSION NO. 17

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	17	17		17	0545Z	0558Z	28200	31300	2		15			2	15
	2	/		1	/	0455Z		28,690		1					1	1
	3	/		1	/	0533Z		29,850		1					1	
	4	/		1	/	0458Z		23,750		1					1	
498	1	14	13		13	0614Z	0633Z	30300	31500	2	1	10			2	11
	5	1		1	1	0635Z		30,000		1					1	
	6	2		2	2	0620Z	0621Z	30000	32000				1	1	1	1
499	1	8	8		8	0548Z	0548Z	30000	30900	1	1	6			1	7
	2	1		1	1	0502Z		27,900		1					1	
	7	1		1	1	0515Z		28,000		1					1	
	5	7	5	2	7	0535Z	0546Z	29500	32000	3		4			2	5
	8	4	3	1	4	0445Z	0555Z	29000	32000	1			1	2	2	2
	9	1		1	1	0033Z		24,500					1		1	
500	1	19	19		19	0611Z	0616Z	29800	30900	4		15			2	17
	5	1		1	1	not available - a/c also bombed Nagoya										
	4	1		1	1	0657Z		23,500		1					1	
WING	1	58	57		57	0545Z	0633Z	28200	31500	9	2	46			7	50

TARGETS:

- | | | |
|----------|-------------|----------|
| 1 Nagoya | 4 Iwo Jima | 7 Owashi |
| 2 Shingu | 5 Hamamatsu | 8 Tanabe |
| 3 Osaka | 6 Katakami | 9 Pagan |

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73RD BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. 35

3 January 45

Table V Loading & Disposal of Bombs

MISSION NO. 17

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		PRIMARY NAGOYA		LAST a RESORT		OPPORTUNITY b		No.	Tons	No.	Tons	No.	Tons	
				No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons							
497	350 lb Incend M18	44 sec	none	322	56.35	294	51.45	238	41.65	28	4.9	14	2.45	14	2.45					90%
	420 lb Frag T484	8 sec	none	23	4.83	21	4.41	17	3.57	2	.42	1	.21	1	.21					
498	350 lb Incend M18	44.5-45.4 sec	none	364	63.7	336	58.8	179	31.33	42	7.35			113	19.77			2	.35	66%
	420 lb Frag T484	8.2-1.3 sec	none	26	5.46	24	5.04	12	2.52	3	.63			8	1.68			1	.21	
499	350 lb Incend M18	45.8 sec	none	392	68.6	392	68.6	112	19.6	182	31.85	14	2.45	84	14.7					75%
	420 lb Frag T484	9 sec	none	28	5.88	28	5.88	8	1.68	13	2.73	1	.21	6	1.26					
500	350 lb Incend M18	45.4 sec	none	336	58.8	336	58.8	260	45.5	6	1.05	14	2.45	56	9.8					79%
	420 lb Frag T484	8.2 sec	none	24	5.04	24	5.04	18	3.78	1	.21	1	.21	4	.84					
WING	350 lb Incend M18	44-45.8 sec	none	2114	2474.5	1358	2376.5	789	1380.8	258	45.15	42	7.35	267	46.72			2	.35	77%
	420 lb Frag T484	8-9 sec	none	101	2121	97	20.37	55	1155	19	3.99	3	.63	19	3.99			1	.21	
TOTAL				1515	268.66	1455	258.02	844	149.63	277	49.14	45	7.98	286	50.71			3	.56	

a LAST RESORT TARGETS:
 Shingu Owasht
 Osaka Tanabe
 Hamamatsu Katakami

NOTE: Bomb Load per A/C - 14 350 lb Incend. and 1 420 lb Frag

b TARGETS OF OPPORTUNITY:
 Iwo Jima
 Pagan

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73RD BOMB WING

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FIELD ORDER NO. 35

MISSION NO. 17

Consolidated Statistical Summary

Table VI Bombing Accuracy

Target Nagoya

G R O U P	BOMBS RELEASED ON TARGET	NUMBER OF HITS AND DISTANCE FROM AIMING POINT												
		0-500'		500'-1000'		1000'-2000'		2000'-3000'		TOTAL				
		No.	%	No.	%	No.	%	No.	%	No	%			
		TYPE OF BOMBS USED AND INADEQUATE PHOTOGRAPHIC COVERAGE MAKES SPOTTING OF BOMB HITS IMPOSSIBLE.												

Table VII Number of Hits on Target

GROUP	NO. OF HITS ON TARGET	% OF BOMBS RELEASED HITTING TARGET
TOTAL		

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73RD BOMB WING

S-E-C-R-E-T

FIELD ORDER NO. 35MISSION NO. 173 January 1945

Consolidated Statistical Summary

Table VIII Attacks & Passes by Enemy Aircraft

DIRECTION	ALTITUDE															Total Wing		
	HIGH			LEVEL			LOW			TOTAL								
	497	498	499	500	497	498	499	500	497	498	499	500	497	498	499		500	
0100	5			8	2	3	1	8			3	4		7	6	1	20	34
0200	4	1		1	5	1	2		1	4		6		10	6	2	7	25
0300	1			1	1			2	11	2	2	2		13	2	2	5	22
0400				1		6		2	10	2	1	2		10	8	1	5	24
0500					1		6	4	14	3		1		15	3	6	5	29
0600	1					3		1	2	5		15		3	8		16	27
0700									16	2		5		16	2		7	25
0800	1							1	1			4		2			5	7
0900				2	2							1		2			3	5
1000	7				20	4		9	2	2		2		29	6		11	46
1100	19			2	11			3	3			1		30	3		6	39
1200	4			15	5	4	1	15	1	9		9		10	13	1	39	63
TOTAL	42	1		32	47	21	10	45	58	35	3	52		147	57	13	129	346

Table IX Enemy Aircraft Destroyed & Damaged

GROUP	DESTROYED	PROBABLY DESTROYED	DAMAGED
497	9	8	11
498	0	1	3
499	0	0	3
500	5	5	3
TOTAL WING	14	14	20

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73RD BOMB WING

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Consolidated Statistical Summary

Table X 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 a			1 d	13	5	1		7 f
ENEMY FLAK						2	1		1	
ENEMY A/C & FLAK						4	1			3
ACCIDENT										
SELF-INFLICTED										
UNKNOWN			1 b	1 c	1 e					
OTHER						2				2
TOTAL	5	2	1		2	21	7	1	1	12

a A/C 418 Ditched, ran out of fuel. Fuel shortage believed due to hole in wing caused by enemy fighters.

b A/C 626 Missing

c A/C 748 Missing

d A/C 766 lost over target. Enemy fighter, believed out of control, collided with A/C.

e A/C 660 Ditched. Left wing damaged by enemy action - not known whether damage

caused by A/C or flak.

f Includes 1 A/C damaged by debris from repair of damaged aircraft

AIRCRAFT TO BE REPAIRED BY:	497	498	499	500	TOTAL
TACTICAL GROUP	5	1	1	8	15
SERVICE GROUP	2	0	0	4	6
DEPOT GROUP	0	0	0	0	0
TOTAL	7	1	1	12	21
NOT REPARABLE	0	0	0	0	0

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DECLASSIFIED

Authority

By

NAKA Date

 Authority AND 60063
 By NAKA Date 11/10

73RD BOMB WING

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FIELD ORDER NO. 35MISSION NO. 17

3 January 1945

Consolidated Statistical Summary

TABLE XII Casualties

	Total	P	CP	NB	BN	FE	ROM	RO	CFC	LG	BG	TG	Other
Killed:													
497th													
498th													
499th													
500th													
Total Wing													
Missing:	18	1	2	1	1	2	1	2	2	1	2	2	1
497th	11	1	1	1	1	1	1	1	1	1	1	1	1
498th													
499th	23	2	2	2	2	2	2	2	2	2	2	2	1
500th	52	4	5	4	5	5	4	5	5	4	5	5	2
Total Wing													
Seriously Injured:													
497th	1									1			
498th	1				1								
499th													
500th	2				1					1			
Total Wing													
Slightly Injured:													
497th	2												1
498th	1				1								
499th	4		1						1		2		
500th	7		1		1			1	1		2		1
Total Wing													
Total Casualties:													
497th	21	1	2	1	1	2	1	3	2	2	2	3	1
498th	13	1	1	3	1	1	1	1	1	1	1	1	1
499th	27	2	3	2	2	2	2	2	3	2	4	2	1
500th	61	4	6	4	6	5	5	6	6	5	7	6	3
Total Wing													
No. Participating													
497th	238	21	21	21	21	21	21	21	21	21	21	21	7
498th	206	24	24	24	24	24	24	24	24	24	24	24	2
499th	323	28	28	28	28	28	28	28	28	28	28	28	15
500th	271	24	24	24	24	24	24	24	24	24	24	24	7
Total Wing	1098	97	97	97	97	97	97	97	97	97	97	97	31

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Consolidated Statistical Summary

Table XIII Fuel Consumption Data

	TOTAL WING	GROUP			
		497 a	498 b	499 c	500 d
Average Fuel Aboard	7995	7948	7993	8031	8000
Average Flying Time	14:00	13:55	14:13	13:40	14:13
Average Distance - Nautical Air Miles	2968	3040	2951	2924	2973
Fuel Used:					
Average	7234	7067	7244	7243	7362
Median	7248	7029	7300	7238	7398
Maximum	7800	7800	7664	7742	7700
Minimum	6450	6450	6720	6740	6730
Fuel Remaining:					
Average	761	882	749	783	638
Median	756	950	700	797	602
Maximum	1358	1358	1280	1325	1270
Minimum	200	200	266	338	300
Av Gallons per Hour	517	507	513	530	518
Av Gallons per Mile	2.44	2.33	2.46	2.48	2.48
Total Gasoline Con- sumed & Lost	670,477	167,225	159,430	178,520	165,302

a based on 15 a/c
 b based on 18 a/c
 c based on 18 a/c
 d based on 17 a/c

APPROXIMATE GROSS WEIGHT AT TAKE-OFF: 137,500 LBS

TIMES AT VARIOUS ALTITUDES:

497 1,000 ft 5:15, 20,000 ft :20, 29,000 ft :40
 498 1,000 ft 4:30, 31,000 ft 1:10
 499 1,000 ft 4:30, 18,000 ft 1:00, 30,000 ft 1:30
 500 1,000 ft 4:33, 18,000 ft :15, 30,000 ft :40

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73RD BOMB WING

S E C R E TFIELD ORDER NO. 35MISSION NO. 173 January 1945

Consolidated Statistical Summary

Table XIV Ammunition Consumption Data

	AMMUNITION EXPENDED PER GROUP						TOTAL
	497th	498th	499th	500th	500th	TOTAL	
20 MM.							
Fired	673	593	120	820		2206	
On Lost A/C	240	120	0	240		600	
Total	913	713	120	1060		2806	
.50 Cal.							
Fired	35115	35735	42590	39216		176656	
On Lost A/C	12000	6000	0	12000		30000	
Total	47115	41735	42590	45216		176656	

	AMMUNITION EXPENDED PER PLANE						TOTAL WING
	497th	498th	499th	500th	500th	TOTAL WING	
Upper front	529	534	412	490		490	
Lower front	318	412	345	536		402	
Upper rear	243	308	181	231		243	
Lower rear	393	404	456	409		415	
.50 Cal. Tail	367	444	246	288		336	
Total .50 Cal.	1848	2102	1640	1954		1886	
20 MM Tail	35	35	5	48		31	

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COPY NC 10

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By Auth of CG 73BW

SMTW 12/31/44
Initials Date

73d Bomb Wg
SAIPAN
0200Z 31 Dec 44

FO 35

Maps: AAF Special Plotting Chart, scale 1:5,000,000.
Objective Folder 90.20.

1. a. (1) Hv moderate accurate AAA in target area OSAKA and KOBE.
- (2) More than 200 fighters are capable of interception.
- b. (1) Lifeguard submarines and destroyers to follow.
- (2) Dumbo to follow.

2. 73d Wg Atks NAGOYA with Max force.

Primary target: 90.20 area within coordinates
(35° 10'N - 136° 53'E) - (35° 10'N - 136° 56'E)
(35° 08'N - 136° 53'E) - (35° 08'N - 136° 56'E)

Secondary target: None.

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: 497th and 498th Gps - East edge of NAGOYA RAILWAY STATION (35° 09' 50"N - 136° 53' 25"E). 499th and 500th Gps - BARGE BASIN (35° 09' 20"N - 136° 53' 25"E).

Aiming point radar: Center of built up area.

Routes out: "A" - Base - Assembly -
(17° 00'N - 144° 00'E)
(26° 30'N - 137° 00'E)
(33° 30'N - 134° 45'E)
(34° 45'N - 134° 45'E)
(35° 32'N - 135° 39'E)

T A R G E T
IP: CAPE NOKOGIRI (35° 32'N - 135° 39'E)
Axis of Atk: 110° T.

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"B" -- Base -- Assembly --
 (17° 00'N - 144° 00'E)
 (26° 30'N - 137° 00'E)
 (33° 30'N - 134° 45'E)
 (34° 45'N - 134° 45'E)
 (35° 07'N - 135° 56'E)

T A R G E T

IP: Neck in LAKE BIWA (35° 07'N - 135° 56'E)
 Axis of Atk: 88° T.

"C" Base -- Assembly --
 (17° 00'N - 144° 00'E)
 (26° 30'N - 137° 00'E)
 (34° 56'N - 135° 46'E)

T A R G E T

IP: FUSHIMI (34° 56'N - 135° 46'E)
 Axis of Atk: 77° T.

Maneuver after Atk: Right turn.

Route back: Target - (26° 00'N - 140° 00'E) - Base.

3. a. 497th Bomb Gp Max No A/C takes off Zero Hr on runway "A" bombs at 29,000 ft and flies Route "A".
- b. 498th Bomb Gp Max No A/C takes off Zero Hr plus 30 min on runway "A" bombs at 30,000 ft and flies Route "B".
- c. 499th Bomb Gp Max No A/C takes off Zero Hr on runway "B" bombs at 29,000 ft and flies route "C".
- d. 500th Bomb Gp Max No A/C takes off Zero Hr plus 30 min on runway "B" bombs at 30,000 ft and flies route "C".
- x. (1) Zero Hr: D day and Zero Hr to follow.
 (2) Gasoline load: 8,000 gals.
 (3) Bomb load: 15 Ea M-18 IB clusters fused to open at 5,000 ft.
 (4) Intervalometer setting: 250 ft.
 (5) Ammunition: 6,000 Rds .50 cal., 120 Rds 20 mm.
4. No change.
5. No change.

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

Asst A-3
 Annex 1 - Communications
 Annex 2 - Radar Counter Measures

SECRET

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SECRET

By Auth of CG 73rd BW

Initial 31 Dec. 44
Date

SECRET

ANNEX 1 TO EO # 35 BW

COMMUNICATIONS

1. Codes, Ciphers and Recognition Signals:

a. CSP 1270 ().

2. Radio Buoys: - None.

3. Rescue Facilities:

a. Call Signs and Call Words.

(1) CW: Dumbo only - 24V213.

(2) VOICE: Voice calls for all Rescue facilities will be the code names extracted from letter, CINCPAC, Subject: "Air Sea Rescue Reference Point and Code Words", dtd 19 Oct. 44. and addendum 1 to this letter. Following reference points will be used:

DAIO SAKI LIGHT
HACHIJO SHIMA
IWO JIMA
PAGAN ISLAND

b. Frequencies:

(1) Rescue facilities guard the following frequencies:

4475kc, 500kc and Channel "C" VHF (140.58mc)

(2) Dumbo will also guard 7310kc.

c. Do not send coordinates of ditching location in the clear

d. Include the Loran line in position report in distress messages.

4. IFF: (The following procedure will be standard for all missions)

a. Turn on at take-off. Turn off 300 miles from Base. Enroute home, turn on again when 100 miles from enemy coastline and leave on until landing.

1. Check IFF at 500 miles from Base. If IFF is inoperative, the pilot will direct the Radio Operator to contact the Wing Ground Station on CW, transmitting the following information encoded in CSP 1270 (), until receipt for:

- (1) IFF inoperative.
- (2) Course.
- (3) ETA.

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

By NND 740120 NARS, Date 02/11/78

SECRET

DECLASSIFIED

Authority

By NND 740120
NAKA Date 11/10

S E C R E T

- c. When 15 \emptyset miles from the Base, the pilot will establish VOICE contact with the base on Channel "C", VHF and state that his "Bojangles" is out, giving course and ETA.

5. Changes in SOP 30-3, dated 8 Dec. 44.:

a. Call Signs:

- (1) Add Net Call - \emptyset V53 \emptyset
- (2) Voice calls as assigned in classified letter, this Hqs., dtd 19 Dec. 44., Subject: "Aircraft Call Signs."

b. Frequencies:

- (1) Channel 9 (AN/ART 13) 7215kc 30th Gp (Primary)
- (2) Channel 10 (AN/ART 13) 7455kc 30th Gp (Secondary)

c. Contact Reports:

- (1) Contact reports will be transmitted only after leaving the target area and will be transmitted on 4475kc as well as Strike frequency.
- (2) All contact Reports will be encoded using the Contact Report Section of CSP 1270().
- (3) Contact Reports on Submarines sighted will not be made on radio at any time.

d. Strike Reports:

- (1) Strike Reports will be transmitted in accordance with Tactical SOP 30-2, dtd. 31 Dec. 44.
- (2) The preliminary Strike Report received by the Ground Station from the first Squadron over the target will be retransmitted by the Ground Station immediately on all Strike frequencies in an "F" type message.

e. Tower Frequencies:

- (1) Primary - Channel "A" (VHF).
- (2) Secondary - 65 \emptyset kc.

f. VHF:

- (1) VHF Bearings will be obtained by calling "CONDOR GRANNY" on Channel "D" VHF.
- (2) The Squadron leader of each Squadron will monitor channel "B" VHF at \emptyset times to

S E C R E T

S E C R E T

note unnecessary transmissions, chatter and Security violations. Such accurances will be reported immediately after landing.

g. Radio Compass Monitoring:

- (1) Two (2) Radio operators per Squadron will be assigned to monitor Japanese Broadcast stations 100 miles out from the enemy coastline going to the target until 100 miles out from the enemy coastline on return. The following information will be logged.

- (a) Time of reception.
- (b) Frequency.
- (c) Bearing of Station.
- (d) Call Signs of Station if obtained.
- (e) Remarks such as strenght, type of program, any interruptions etc.

h. Radio Silence:

- (1) Radio silence enroute to the target will be enforced with the following exception:

- (a) One A/C from each Sqdn., will be designated to report any A/C within that Squadron which ditches without being able to radio that fact to Ground Station or Rescue Facilities.
- (b) In reporting the ditching of another A/C of a formation, while enroute to target ONLY ONE OTHER AIRCRAFT will make the radio report. The call sign of the distressed A/C will be used.

By command of Brigadier General O'DONNELL:

BERGQUIST
DC/S, O & T.

OFFICIAL:

HOTCHKISS
COMM. O.

S E C R E T

ANNEX NO 2 TO FO 35, 73D BOMB WG

RADAR COUNTER MEASURES

1. Each Gp will equip two (2) A/C with search equipment as follows:
 - a. One (1) A/C to include:
 - (1) AN/APR 4 (with TU 16, 17 and 18)
 - (2) AN/APR 5
 - (3) AN/APA 6X
 - (4) AN/ANQ 2
 - b. One (1) A/C to include:
 - (1) AN/APR 4 (with TU 16 and 17)
 - (2) AN/APR 5
 - (3) AN/APA 6X
 - (4) AN/ANQ 2
2. Each Gp will provide two (2) Radar Observers (7888) to operate this equipment.
3. Operation will be in accordance with TAC SOP 35-1 with the following exceptions:
 - a. Radar Observers operating equipment specified under #1, b. will record any Jap voice transmissions intercepted. The frequency band from 30 to 100 Mc will be constantly monitored in the target area (for this purpose the target area is defined as that area including the mainland and extending out fifty (50) miles over the ocean). Jap voice transmissions have been heard between 90 and 95 Mc. The possible use of a lower V.H.F. channel between 30 and 60 Mc for G.C.I. will be fully explored.
 - b. Radar Observers operating equipment specified under 1. a. will log all signals possible in the target area between 70 and 300 Mc. Particular attention will be paid to signals with short pulse widths and/or high P.R.F.s. Pulse widths will be carefully measured on the AN/APA 6X. Any Jap voice transmissions heard in this frequency spectrum will be recorded.
 - c. Recorders (AN/ANQ 2) will be used to record voice transmissions and comments made by the observer. Enemy radar signals will not be recorded.
4. All search receivers (AN/APR 4 TU 16 and 17 and AN/APR 5) will be calibrated and frequency correction curves prepared. A TS 174/U will be used as a primary standard for calibrating a TS 47/APR which in turn will be used to prepare a frequency correction curve for the above specified search gear.

By command of Brigadier General O'DONNELL:

OFFICIAL:
John S. Johnson
JOHNSON
Wg Staff RCM 0

S E C R E T
BERGQUIST
DC/S, O & T

-1-

-57-

S E C R E T

ALL-END 1 TO ANNEX 1 TO FO #35 73BW

1. Change Par. 5, d, (1)

(1) Strike Reports will be transmitted in accordance with Tactical SOP 30-2, dtd. 12 Dec. 44.

2. Add Par. 5. d. (3)

(3) The Bombs Away Report will consist of three groups.

(a) First Group will contain information prescribed in Par. 1, Tactical SOP 30-2, dtd 12 Dec. 44.

(b) Second Group consists of three digits giving the wind direction at the target.

(c) Third Group will consists of three digits giving wind velocity at the target.

3. Add Par. 5, d, (4).

(4) The tail letter and tail number of A/C reported in the column headed "Aircraft losses Enemy Action" will be transmitted immediately after the last Group of the Strike Report prescribed in Par 2, Tactical SOP 30-2 dtd 12 Dec. 44.

OFFICIAL:
HOTCHKISS
COLM.

By command of Brigadier General O'DONNELL:

BERGQUIST
DC/C O & T.

SECRET

AMEND 2 TO ANNEX 1 TO FO #35 73BW

Add to Par 3.

b. Stations and Frequencies:

<u>TYPE</u>	<u>STATION</u>	<u>REF PT</u>	<u>FREQ GUARDED</u>
Sub.	33-45N 137-15E	Daio Saki Light	4475, 500kc & 140.58mc
Sub.	32-00N 138-00E	Hachijo Shima	4475, 500kc & 140.58mc.
Sub.	27-00N 139-45E	Iwo Jima	4475, 500kc & 140.58mc.
Dumbo	22-00N 143-25E (after 020030Z ³)	{ Iwo Jima Pagan	4475, 500kc & 140.58mc (also 7310kc)
Dest.	20-00N 143-15E (on ret. flight)	{ Iwo Jima Pagan	4475, 500kc & 140.58mc
Dest.	16-50N 145-40E	{ Iwo Jima Pagan	4475, 500kc & 140.58mc-

By command of Brigadier General O'DONNELL:

OFFICIAL:

H. H. K.
HOTCHKISS
Lt. Colonel, Air Corps
Comm.

BERGQUIST
Colonel, Air Corps
DC/S Op & Tng.

SECRET

73BW

NR 1

OPERATIONAL PRIORITY

1 JAN RT

TO CO 500 BOMGP
CO 499 BOMGP
CO 498 BOMGP
CO 497 BOMGP

FIELD ORDER NR 35 IS NOW SCHEDULED FOR 3 JAN 45.

CHANGE 1 TO FO 35:

CHANGE PAR E X (3) TO READ:

X 3. X. (3) BOMB LOAD: 14 X M-18 LB CLUSTERS FUSED TO OPEN AT
5000 FT AND 1 X T4E4 FRAGMENTATION CLUSTER FUSED TO
OPEN 1000 FT BELOW THE A/C. FRAGMENTATION BOMB WILL
BE LOADED TO DROP LAST.

O'DONNELL CG 73BW

OFFICIAL:

T.S. GREEN,
Capt., AC,
Wg Controller.

SECRET

-60-