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NO. 8 MUSASHINO A/C PLANT 27 NOV 44

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TACTICAL MISSION REPORT

TARGET; MUSASHINO A/C PLANT - TOKYO

XXI BOMBER COMMAND
HQ 73RD BOMB WING

FIELD ORDER NO. 22
MISSION NO. 8
DATE 27 NOVEMBER 1944

2-5239-90

178

HEADQUARTERS
73RD BOMBARDMENT WING
APO #5666
APO

CONSOLIDATED MISSION REPORT

Field Order No. 22
Target s: Masachino A/C Plant - Tokyo

Mission No. 8
Date of Mission
27 November 1944

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By MN NARA Date 8/30/05

S E C R E T

Headquarters
73rd Bombardment Wing
APO #5666, % Postmaster
San Francisco, California

Field Order No. 22
Mission No. 8
Date of Mission
27 November 1944

CONSOLIDATED MISSION REPORT

TACTICAL NARRATIVE

1. The Target

Field Order Number 22 of the 73rd Bombardment Wing directed that each of its four Groups supply a maximum number of aircraft which were to fly in Combat Groups composed of three Squadrons each. The Task Force was directed to bomb the Musashino A/C Plant (35°43'N, 139°35'E) west of Tokyo. The docking facilities and industrial area of Tokyo were to be attacked if conditions prevented attack on the primary target.

2. Take-off

Eighty-one (81) aircraft were airborne. The first aircraft departed at 262015Z and the last at 262146Z.

3. Bomb Loading

Airborne aircraft carried 3 x 500-lb M-76 IB and 7 x 500-lb GP bombs per aircraft, totalling 810 tons of bombs (567 x 500-lb GP's and 243 x 500-lb IB's). The GP bombs were fused .1 nose setting and a .025 tail setting; the IB's instantaneous nose setting and a non-delay tail setting.

4. Route Out

The Combat Groups proceeded by Route "A" as directed by Field Order Number 22, the westerly approach to target. The IP was Mt Fuji (35°23'N, 138°42'E); after passing to the left of the IP, the formation proceeded to the Aiming Point, the center of the west block of the Musashino A/C Plant.

5. Bombing Data

Sixty-two (62) of our aircraft reached the target area, nineteen (19) having returned to base because of mechanical and personnel failures, but because of 10/10ths cloud cover, the primary target was not attacked. Fifty (50) aircraft dropped their bombs on the secondary and last resort target by radar through a complete undercast. Twelve (12) aircraft attacked the following targets of opportunity: the cities of Hamamatsu, Shiznoka, Numazu, and Osaka; bombing in all cases was through complete undercast.

The first aircraft over the secondary and last resort target released its bombs at 270347Z and the last one at 270655Z. A total of 460 bombs (115 tons) was dropped on the secondary and last resort target, and 130 bombs (32.5 tons) were dropped on the targets of opportunity. One hundred and eighty-two (182) bombs were jettisoned, and twenty-eight (28) bombs were returned.

6. Enemy Opposition

There were no attacks by enemy aircraft.

7. Enemy Attack Data

See paragraph 6.

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- 1 -

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By *MNARA* Date *8/30/05*

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Tactical Narrative, Mission No. 8, page 2

8. Antiaircraft Fire

No flak was encountered over any of the targets attacked.

9. Route Back

Aircraft were directed by Field Order Number 22 to remain in close Squadron formation until they had passed the withdrawal line (36°18'N, 141°18'E) (34°00'N, 142°00'E) or beyond it until enemy action ceased; from such a point, aircraft were to fly route formation until dark, then by individual aircraft to base.

10. Damage Assessment

Owing to 10/10ths cloud cover, no strike photographs were obtained.

11. Own Losses

One aircraft ditched after leaving the target, cause unknown. One aircraft was damaged when it was fired upon by a PB4Y while it was on course to Guam for landing.

Twelve (12) men are missing.

12. Claims

There are no claims.

13. Weather

A front was encountered at 32°00'N. Clouds formed into a thick overcast about one hundred and fifty (150) miles south of the target and continued as far as one could see to the north of the target, with tops at 25,000 feet. Frosting was reported to be heavy at about 25,000 feet.

14. Observations of Importance

None.

15. Landing Data

Because of congested landing traffic at Saipan which utilized the single strip available at Isley No. 1, twenty (20) aircraft proceeded to Guam, the remainder landing at base, Saipan. The first aircraft landed at Saipan at 270916Z and the last at 271135Z. The first aircraft landed at Guam at 270930Z and the last at 271040Z.

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

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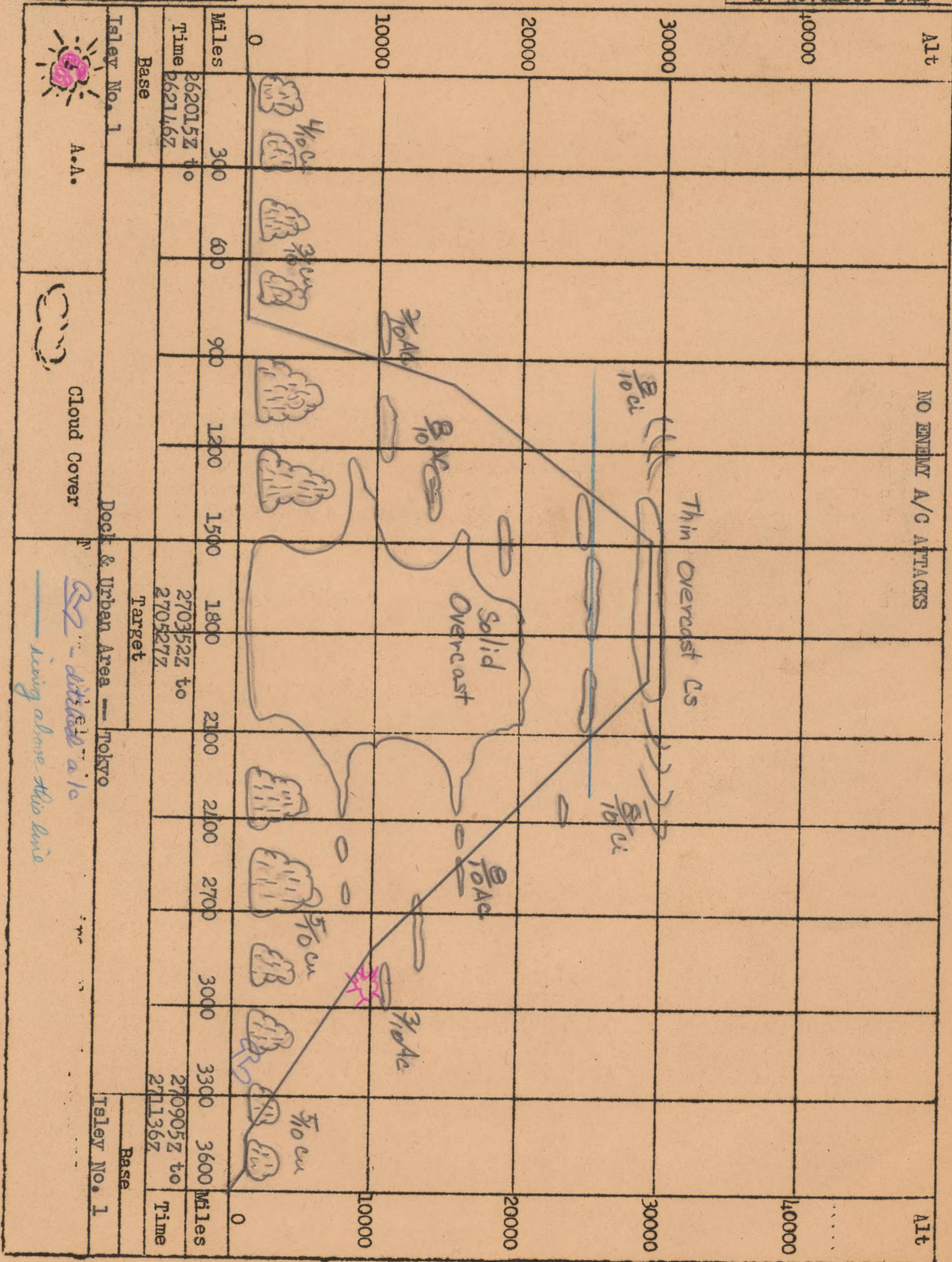
Authority *NND 760023*

By *MNARA* Date *8/30/05*

Group or Wing
7rd Bomb Wing
Date
2 December 1944
By
Capt. J. T. Davis

F.O. NO.
22
Mission No.
8
Date of Mission
27 November 1944

VERTICAL CHART



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S E C R E T

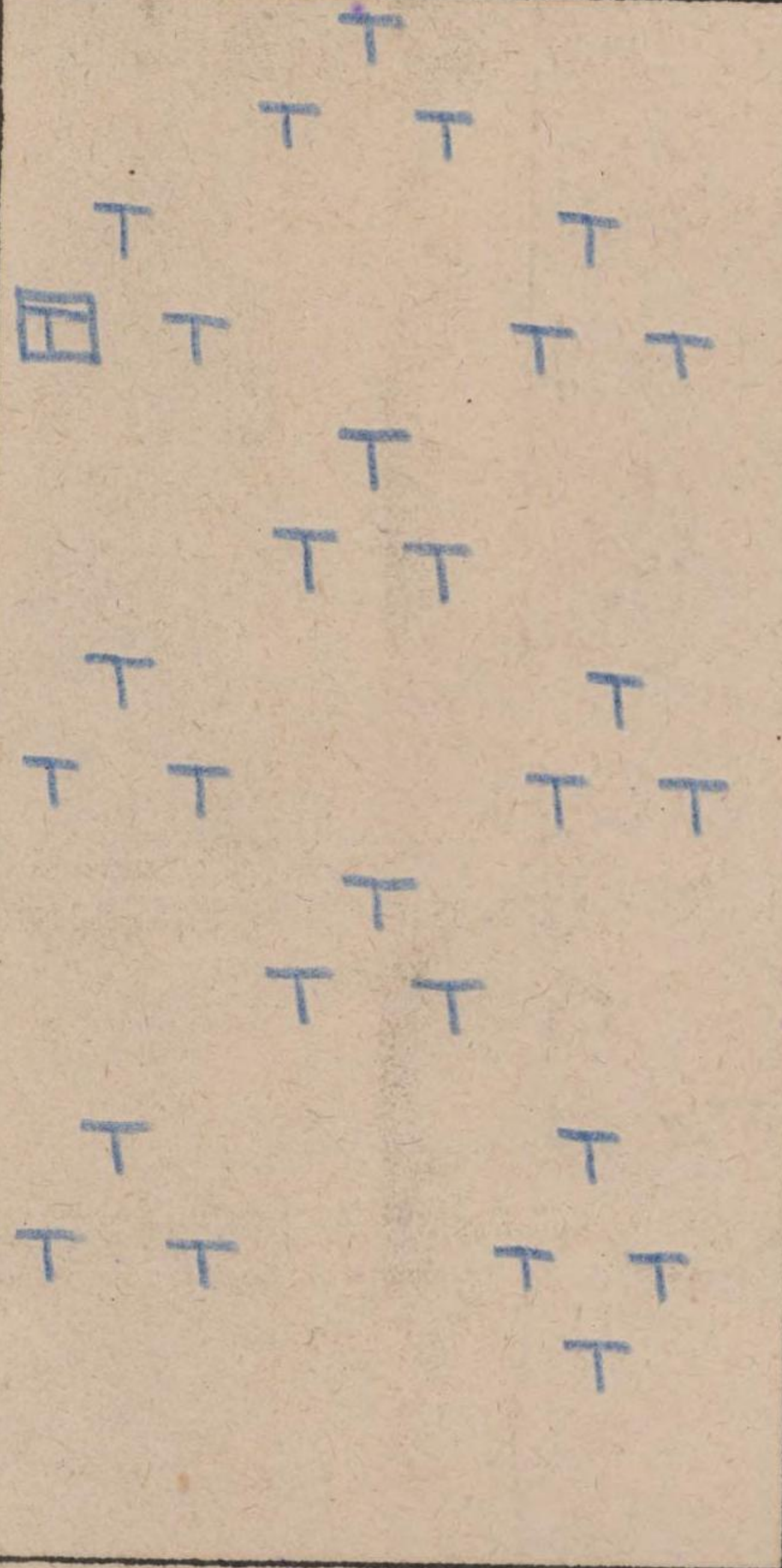
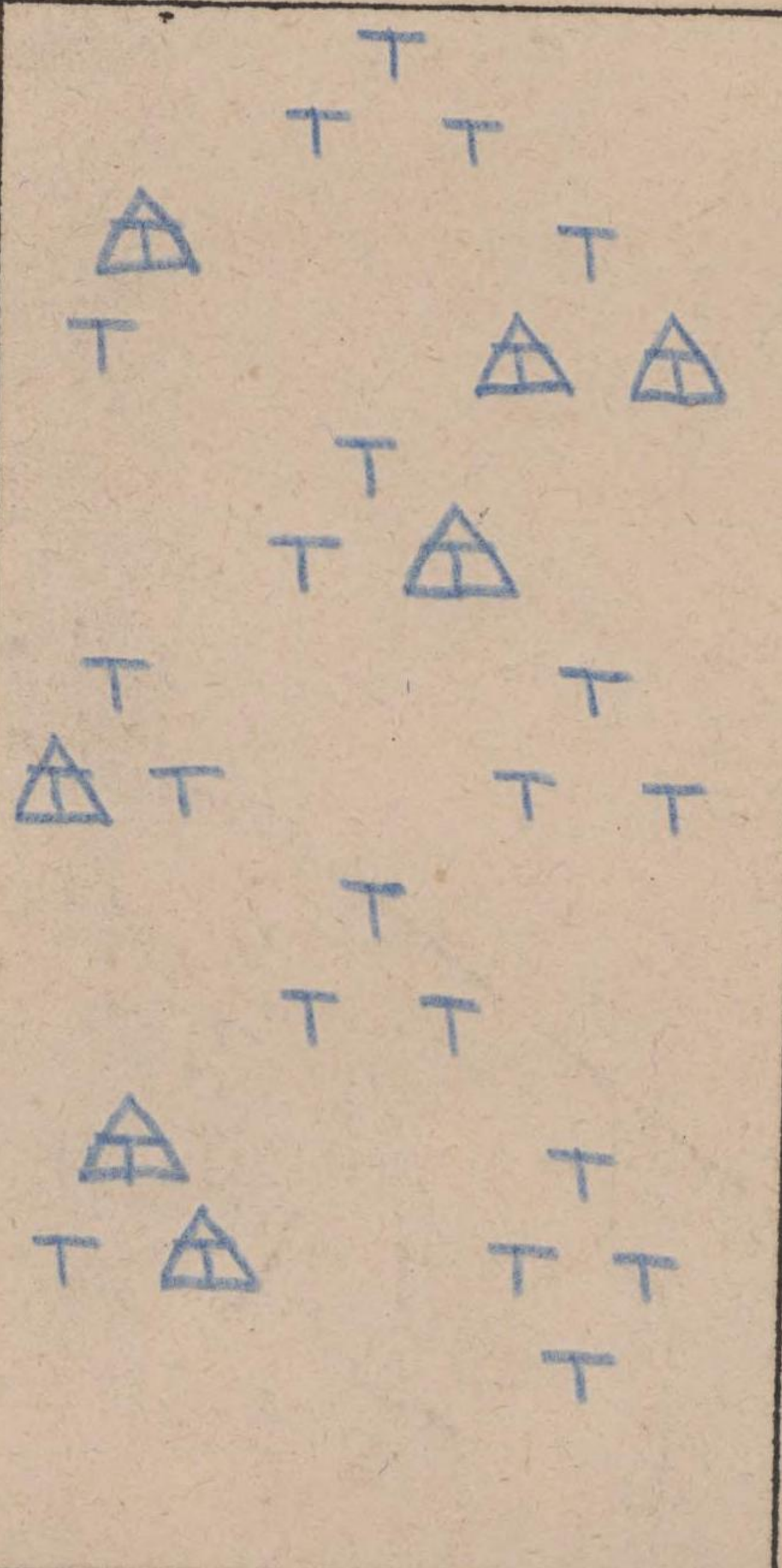
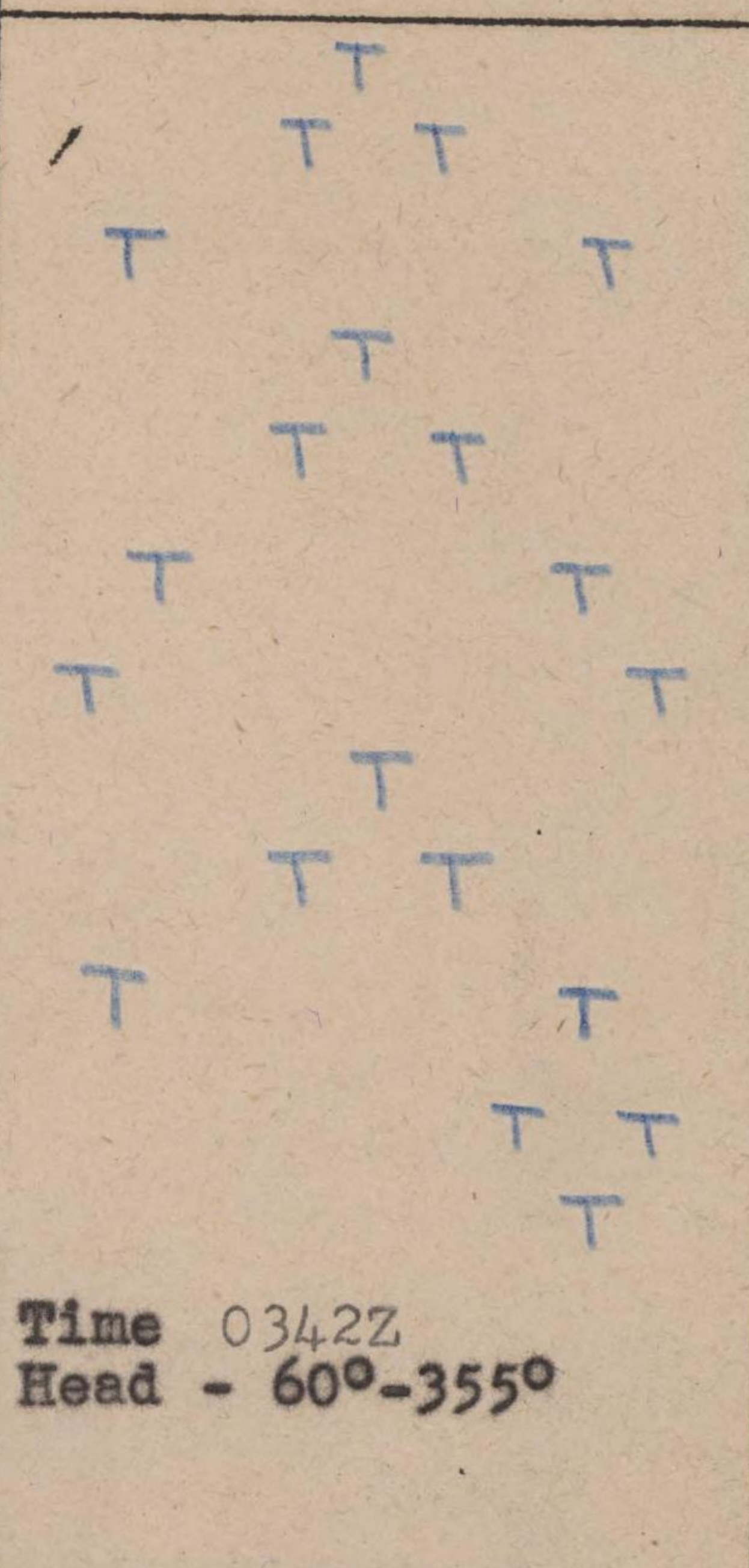
Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT



FORMATIONS

498th Gp

Take-off 1st A/C CUT 2015Z	CUT	I P
		 <p data-bbox="1274 1481 1554 1557">Time 0342Z Head - 60°-355°</p>
OVER TARGET NO. 1	OVER TARGET NO. 2	RETURN
NONE	Same as over IP	Aircraft Returned Individually
	Time (1st A/C) 0347Z Head - 60°-355°	Time 1st A/C down - 0928Z

COMMENTS: (Report position of your group to wing (a) according to F.O.;
(b) deviations if any and reasons)

LEGEND:

 Non-airborne A/C
 Aborts

S E C R E T

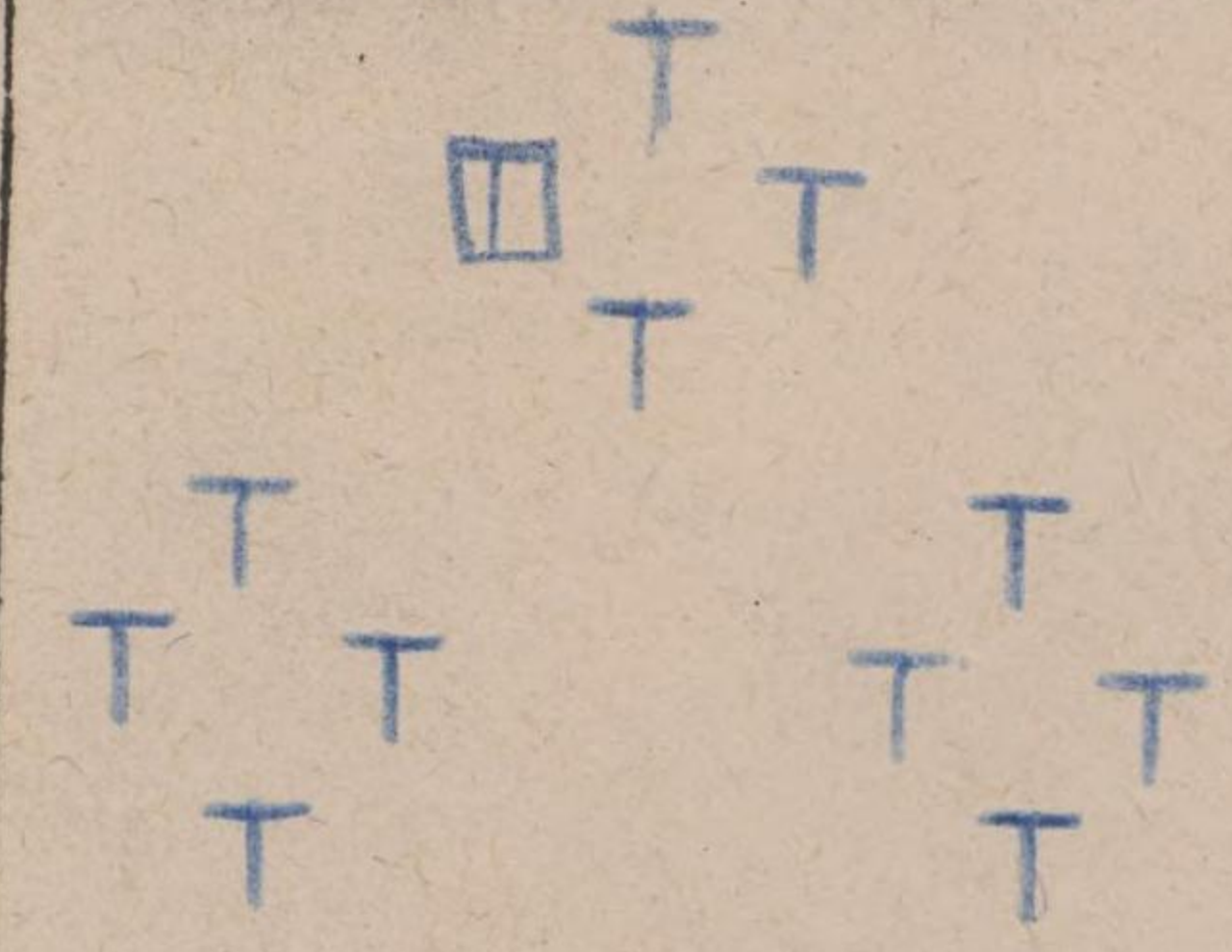
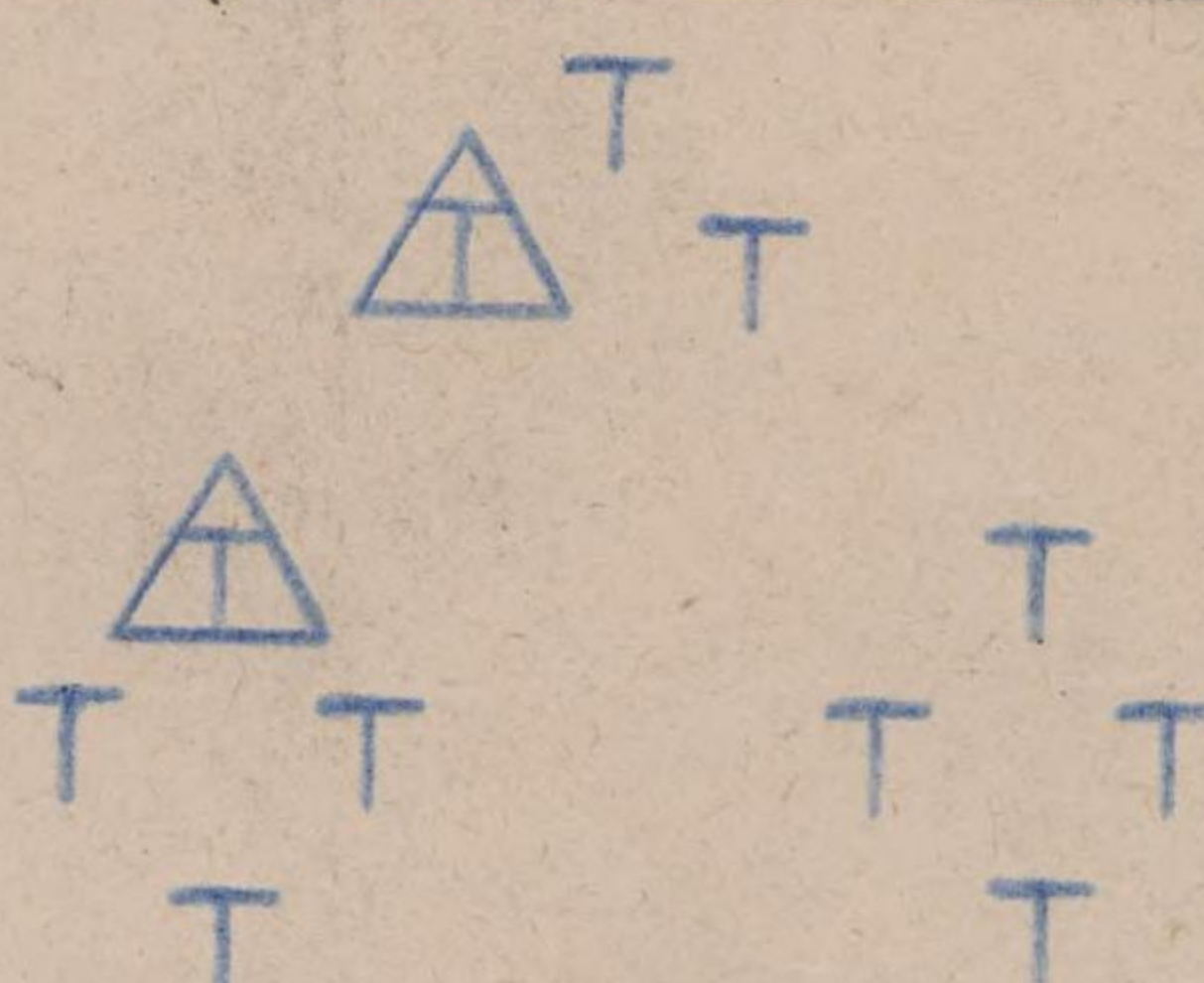
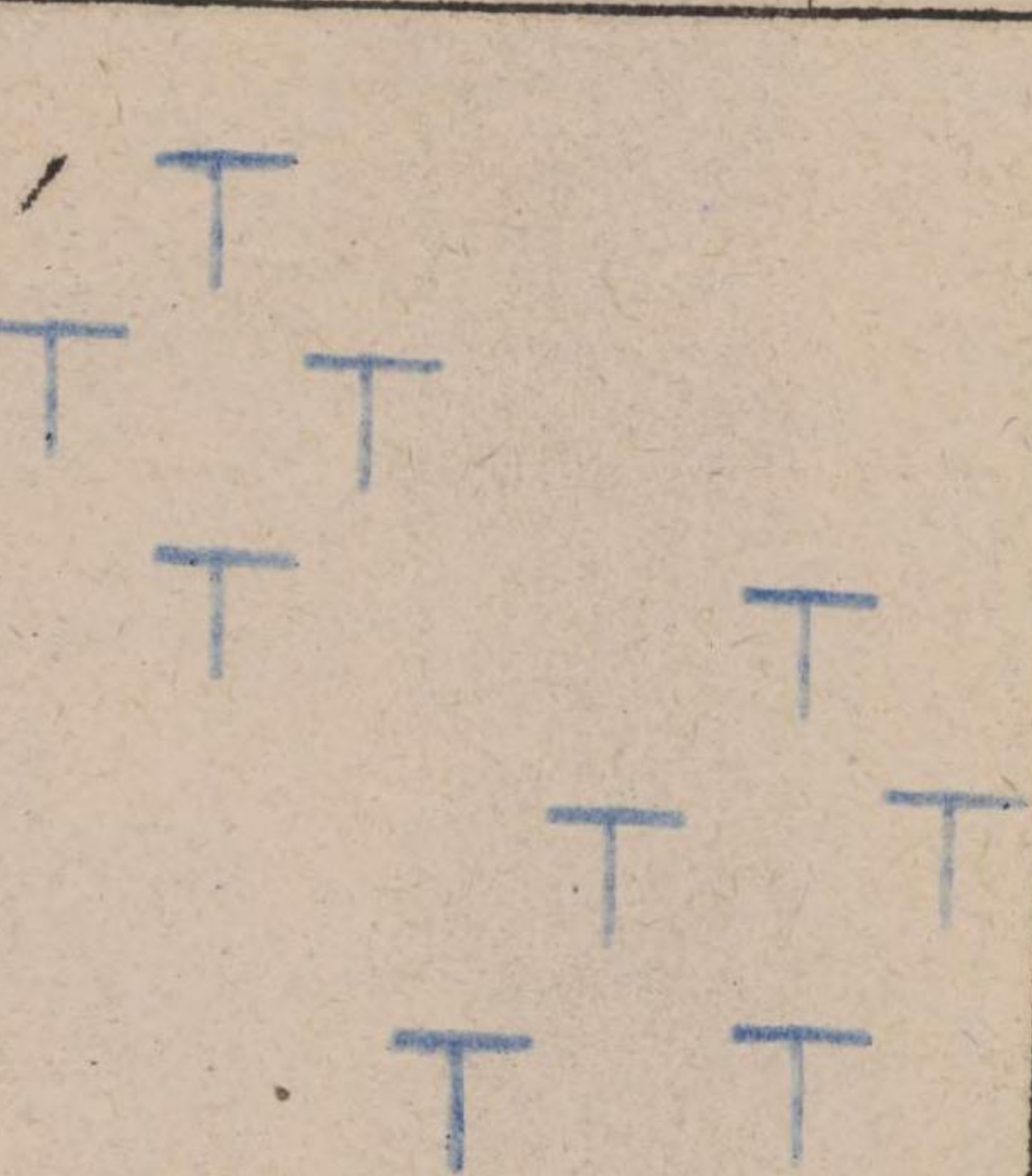
Headquarters
13th Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944



CONSOLIDATED MISSION REPORT

FORMATIONS

499th Bomb Group

Take Off (1st A/C) - 2042Z	CUT	I P
		 <p data-bbox="1263 1496 1709 1617">Time - did not use briefed IP Heading - 53° - 210° (Target of Opportunity)</p>
OVER TARGET NO. 1	OVER TARGET NO. 2	RETURN
None	Same as over IP	Aircraft Returned Individually
	Time - 0415Z Heading - 53° - 210° (Target of Opportunity)	Time 1st A/C down - 0916Z

COMMENTS: (Report position of your group to wing (a) according to F.O.;
(b) deviations if any and reasons)

Legend:  Non-airborne A/C
 Aborts

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73rd Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944

CONSOLIDATED MISSION REPORT

FORMATIONS

500th Bomb Group

CUT	CUT	I P
<p>Take off (1st A/G) - 2057Z</p>		
OVER TARGET NO. 1	OVER TARGET NO. 2	<p>Time - did not use briefed IP Heading - 77° to 254° RETURN</p>
None		<p>Aircraft Returned Individually</p>
	Time - 0435	Time 1st A/C down - 1019Z

COMMENTS: (Report position Heading - 77° to 254° (a) according to F.O.; (b) deviations if any and reasons)

Legend: Non Airborne Aborts Left formation shortly after IP turn and bombed individually Took off late - joined 500th Bomb Gp.

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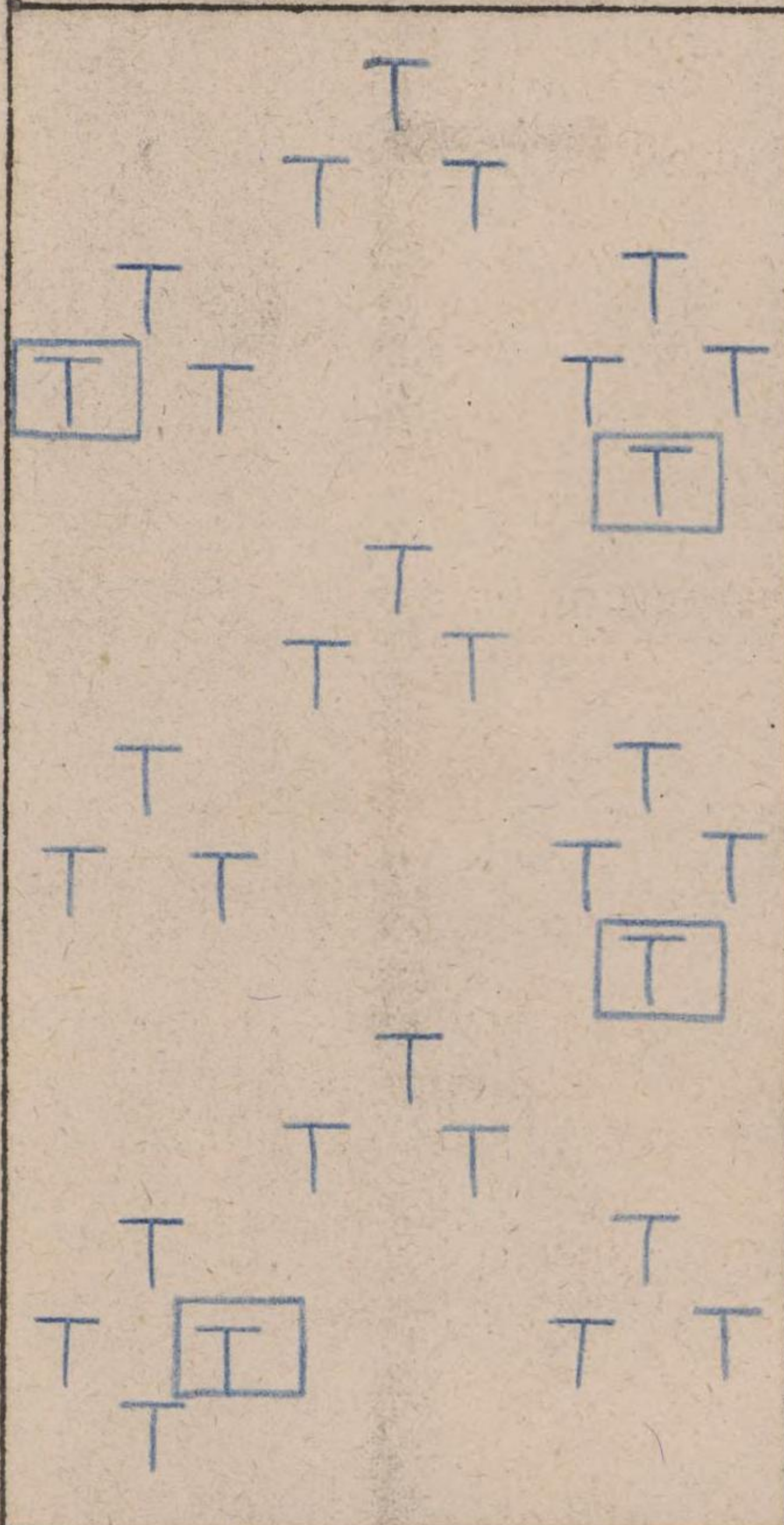
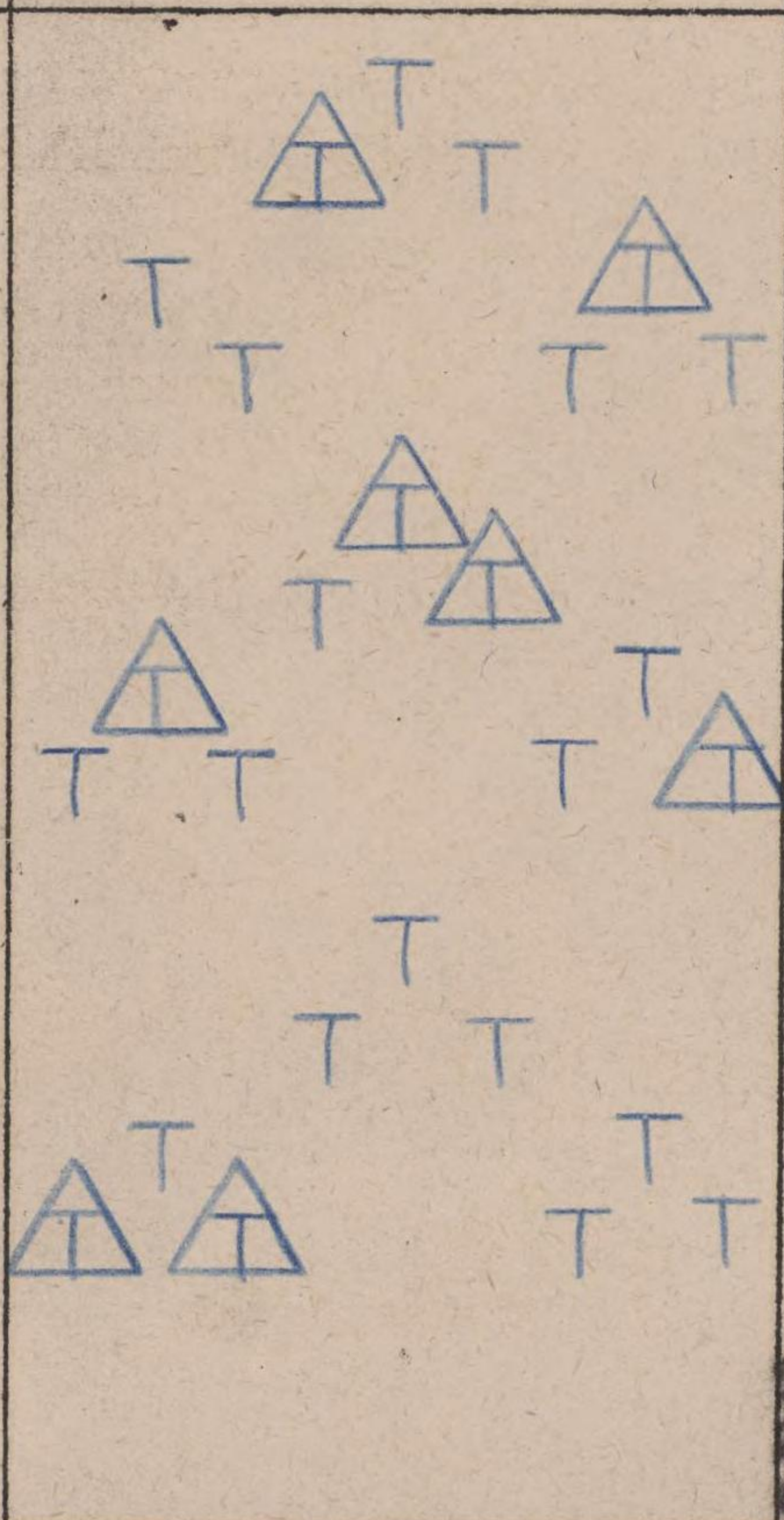
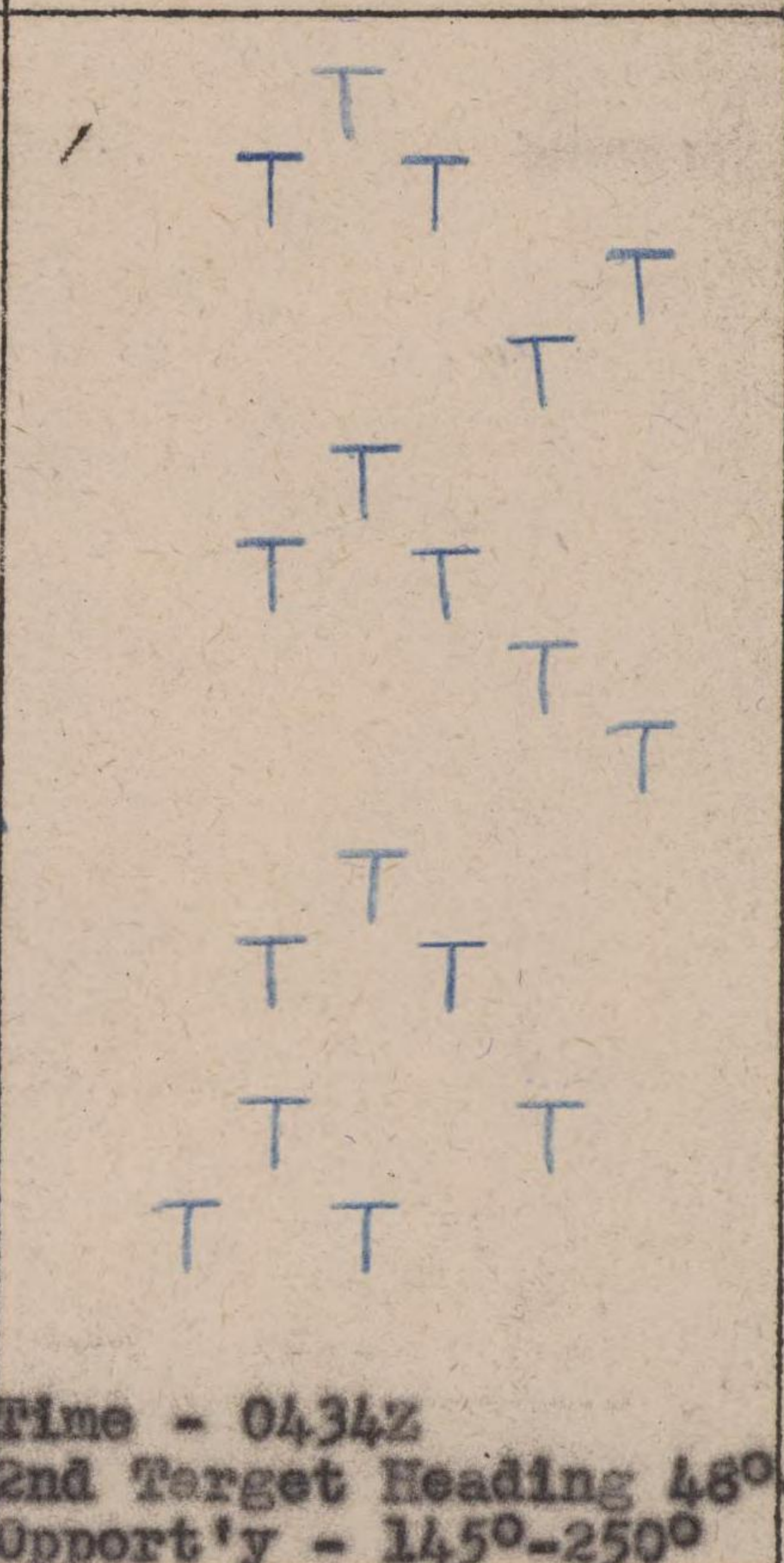
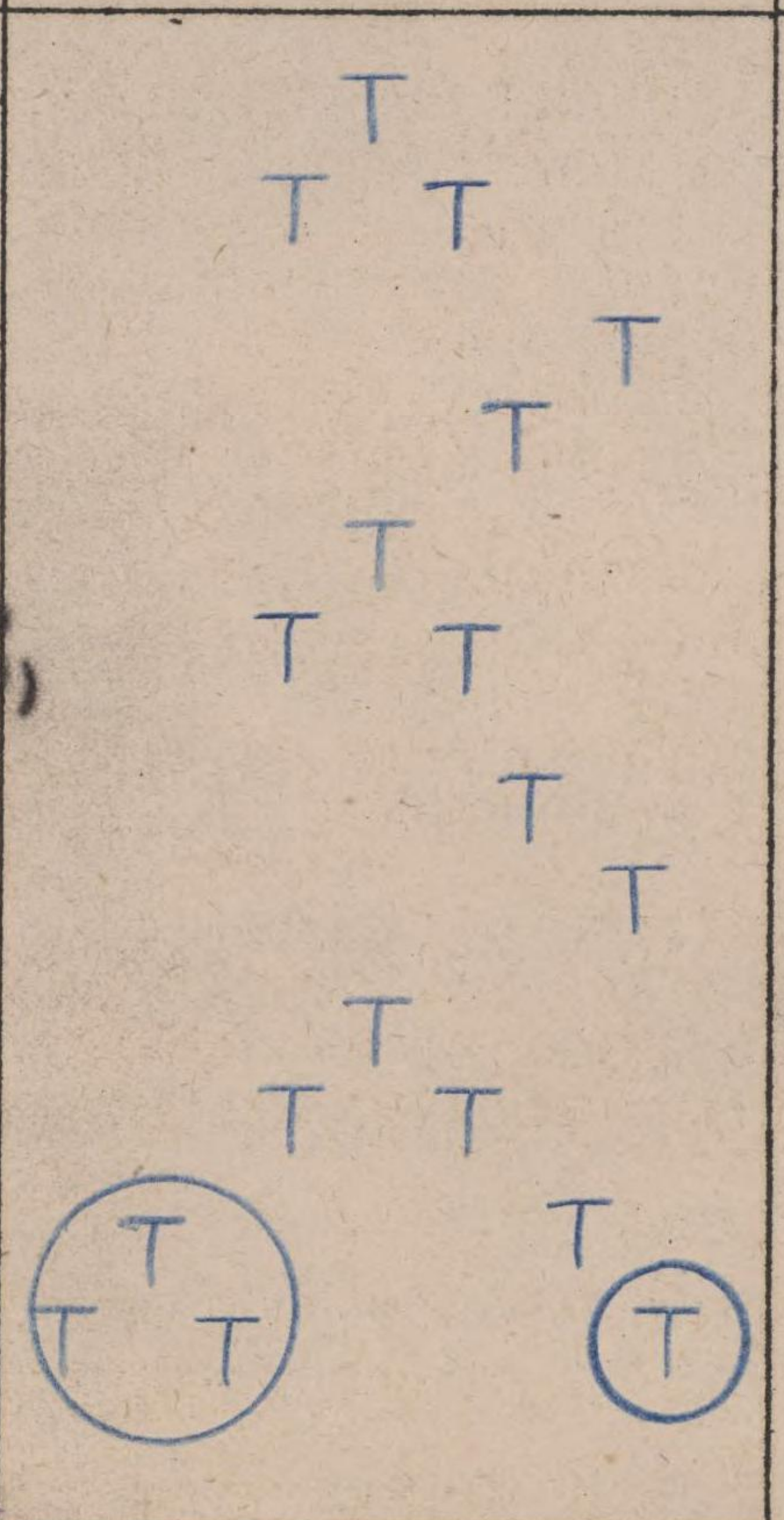
Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944



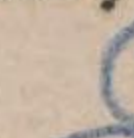

CONSOLIDATED MISSION REPORT

FORMATIONS

497th Gp

Take-off 1st A/C: CUT 2117Z	CUT	I P
		 <p data-bbox="1274 1512 1761 1602">Time - 0434Z 2nd Target Heading 48°-250° Opport'y - 145°-250°</p>
OVER TARGET NO. 1	OVER TARGET NO. 2	RETURN
<p data-bbox="538 1723 621 1769">NONE</p> <p data-bbox="507 1844 849 1890">(Over Target No.2:</p> <p data-bbox="518 1905 880 2041">1st A/C 0439Z Heading - 2nd Targ 48°250° Opp'ty 145°-250°)</p>		<p data-bbox="1315 1723 1636 1799">Aircraft Returned Individually</p> <p data-bbox="1274 2162 1522 2268">1st A/C Down: 0932Z</p>

COMMENTS: (Report position of your group to wing (a) according to F.O.;
(b) deviations if any and reasons)

LEGEND:  Non-airborne A/C
 Aborts
 A/C #2-26, 500 BG, joined
 Bombed Target of Opportunit'

6. SECRET

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Headquarters
73rd Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944

CONSOLIDATED MISSION REPORT

BASIC DATA

1. TIME OF TAKE-OFF:

- a. 498th Bomb Gp: from Isley Field #1, Saipan.
Time: First A/C - 262015Z
Last A/C - 262041Z
- b. 499th Bomb Gp: from Isley Field #1, Saipan.
Time: First A/C - 262042Z
Last A/C - 262054Z
- c. 500th Bomb Gp: from Isley Field #1, Saipan.
Time: First A/C - 262057Z
Last A/C - 262146Z
- d. 497th Bomb Gp: from Isley Field #1, Saipan.
Time: First A/C - 262117Z
Last A/C - 262143Z

* 1 A/C (500th Bomb Gp) took off with 2nd Sq, 4th Combat Gp - 262146Z.

2. TIME OF LANDING:

- a. 498th Bomb Gp:
 - (1) Place: Isley Field No. 1, Saipan
Time: First A/C - 270928Z
Last A/C - 271033Z
 - (2) Place: Guam
Time: First A/C - 270930Z
Last A/C - 271015Z
- b. 499th Bomb Group:
 - (1) Place: Isley Field No. 1, Saipan
Time: First A/C - 270916Z
Last A/C - 271135Z
 - (2) Place: Guam
Time: First A/C - 270930Z
Last A/C - 271003Z
- c. 500th Bomb Group:
 - (1) Place: Isley Field No. 1, Saipan
Time: First A/C - 271019Z
Last A/C - 271115Z
 - (2) Place: Guam
Time: First A/C - 271020Z
Last A/C - 271040Z
- d. 497th Bomb Group:
 - (1) Place: Isley Field No. 1, Saipan
Time: First A/C - 270932Z
Last A/C - 271127Z

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Basic Data (cont'd)

3. SQUADRON ASSEMBLY:

Gp. No.	Sq. No.	Place	Altitude	Time of Arrival
498	873	16°27'N, 144°34'E	1000'	262042Z
	874	Same	Same	262050Z
	875	Same	Same	262110Z
499	877	Same	Same	262128Z to 262133Z
	878	Same	Same	262130Z
	879	Same	Same	262134Z to 262140Z
500	1st Combat*	16°20'N, 144°20'E	Same	262132Z
	2nd Combat**	15°46'N, 145°09'E	Same	262142Z
497	869	16°27'N, 144°34'E	Same	262200Z
	870	Same	Same	262200Z
	871	Same	Same	262215Z

* Composed of A/C from 881st Bomb Sq and 882nd Bomb Sq.

** Composed of A/C from 881st Bomb Sq, 882nd Bomb Sq and 883rd Bomb Sq.

4. GROUP ASSEMBLY:
None ordered

5. WING ASSEMBLY:
None ordered

6. AIRCRAFT RETURNING EARLY:

A/C No	Sq No	Place	Time	Reason
T1 (42-63430)	873	Saipan	270715Z	Blown cylinder head.
T2 (42-24605)	873	Saipan	270815Z	Runaway prop.
T10 (42-63428)	873	Saipan	262153Z	Blown cylinder head.
T25 (42-24642)	874	Saipan	270535Z	Distributor oil seal failure.
T27 (42-24646)	874	Saipan	270117Z	Pushrod housing hose burst.
T44 (42-24624)	875	Saipan	270154Z	Engines transferred fuel backwards.
T47 (42-24649)	875	Guam	270948Z	Engine failure.
V5 (42-24682)	877	Guam	270420Z	Swallowed valve.
V47 (42-63439)	879	Saipan	270737Z	#4 Turbo out.
Z4 (42-24672)	881	Saipan	270900Z	#4 Supercharger out and #3 carburetor fouled.
A8 (42-24615)	869	Saipan	262213Z	#1 prop gov. stuck at 2650 rpm
A9 (42-24599)	869	Saipan	270038Z	Fire #1 engine because of internal failure and subsequent oil leakage.
A22 (42-24616)	870	Saipan	270950Z	#1 engine out -- carburetor or valves.
A26 (42-24745)	870	Saipan	270106Z	#2 prop gov. stuck at 2200 rpm.
A29 (42-24628)	870	Saipan	270653Z	Fuel transfer system inoperative.
A41 (42-63425)	871	Saipan	270939Z	Collector rings blown on #1, 2, & 4 eng.
A43 (42-24641)	871	Saipan	270715Z	#1 eng out -- lost all power -- probably internal failure.
A47 (42-63426)	871	Saipan	270241Z	Fuel transfer system inoperative.
A48 (42-24648)	871	Saipan	270133Z	Turret voltage regulator burned out. Inverters putting out 40 volts, turbs out, interphone out. #4 inboard regulator out.

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Basic Data (cont'd)

7. ROUTE OUT:

a. 498th Bomb Group:

Position	Time	Alt.	G.A.S.	Corr. Temp.
From: Base	262033Z	---	---	29C
To: 16°06'N, 144°44'E	262100Z	1,100'	192	28C
18°30'N, 143°03'E	262200Z	1,500'	200	26C
41°02'N, 141°30'E	262300Z	1,500'	200	25C
23°35'N, 139°52'E	262400Z	1,000'	200	26C
26°30'N, 139°08'E	270100Z	1,500'	200	22C
29°49'N, 138°24'E	270200Z	25,000'	200	-15C
Target	270404Z	32,000'	195	-32C

b. 499th Bomb Group:

From: Base	262048Z	---	---	26C
To: 16°25'N, 144°33'E	262133Z	1,000'	168	27C
33°30'N, 134°20'E	270405Z	31,000'	164	-18C
34°45'N, 137°40'E	270423Z	32,000'	160	-35C

c. 500th Bomb Group:

From: Base	262106Z	---	---	---
To: 16°27'N, 144°34'E	262156Z	1,000'	205	27C
27°16'N, 139°17'E	270204Z	1,000'	200	27C
35°22'N, 138°44'E	270423Z	31,000'	200	-36C
Target	270439Z	31,000'	197	-36C

d. 497th Bomb Group:

From: Base	262128Z	---	---	30C
To: 16°27'N, 144°34'E	262215Z	1,000'	205	28C
35°03'N, 138°42'E	270434Z	30,400'	195	-35C
Target	270456Z	30,000'	195	-35C

8. ROUTE BACK:

a. 498th Bomb Group:

From: Target	270404Z	32,000'	195	-32C
To: 32°20'N, 142°33'E	270500Z	28,000'	190	-25C
28°53'N, 142°58'E	270600Z	20,000'	188	-10C
24°58'N, 143°07'E	270700Z	14,000'	190	6C
21°00'N, 143°50'E	270800Z	6,500'	190	12C
18°27'N, 144°35'E	270900Z	6,500'	190	16C
15°20'N, 145°38'E	271000Z	1,000'	190	20C

b. 499th Bomb Group:

From: Target				
To: 32°00'N, 143°25'E	270520Z	24,000'	158	-19C
25°25'N, 141°15'E	270645Z	12,000'	165	12C
20°00'N, 143°22'E	270804Z	11,500'	163	12C
Base	271010Z	---	---	---

c. 500th Bomb Group:

From: Target	270439Z	31,000'	197	-36C
To: 35°45'N, 141°42'E	270447Z	26,000'	192	-18C

Direct back with individual ships determining best altitude and rate of descent.

d. 497th Bomb Group

From: Target	270456Z	30,000'	195	-35C
To: Rally Point	270510Z	30,000'	225	-35C
Base	271045Z	---	---	---

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Basic Data (cont'd)

9. INITIAL POINTS:

Gp. No.	Place	Time	Altitude
498	35°23'N, 138°42'E	270342Z	30,000'
499	Unable to bomb either primary or secondary targets because of weather.		
500	Initial point was not seen because of 10/10 undercast.		
497	35°23'N, 138°42'E	270434Z	30,000'

10. TARGETS ATTACK DATA:

a. No. of A/C attacking targets:

Gp No	Primary	Secondary	Last Resort	Opportunity
498	0	20	0	0
499	0	0	0	9*
500	0	16	0	0
497	0	14	0	3**
TOTAL	0	50	0	12

*Targets of opportunity: Hamamatsu, Shiznoka, Numazu, Osaka

**Targets of opportunity: Approx 35°30'N, 140°20'E

b. Times over Target:

Gp No	Target No	Time of 1st A/C	Time of Last A/C
498	2	270347Z	270655Z
499	4	270415Z	270421Z
500	2	270435Z	270445Z
497	2	270439Z	270521Z
497	4	270515Z	270522Z

c. Heading and Altitude from IP to target:

Gp No	Target No.	Heading	Altitude
498	2	60° to 355°	27,700' to 33,700'
499	4	53° to 210°	29,219' to 34,000'*
500	2	77° to 254°	30,350' to 33,300'
497	2	48° to 250°	29,000' to 33,000'
497	4	145° to 250°	32,100 to 33,000'

*A/C V5(42-24682) returned early. Its bombs were jettisoned on Rota at 270305Z, heading 210°, altitude 10,000'.

d. Heading and Altitude over target:
See Section 10 c.

e. Breakaway:

498 90° heading 27,700' to 33,700' altitude
 499 Breakaway by individual A/C
 500 Breakaway by individual A/C
 497 75° to 100° heading 29,000' to 31,500' altitude.

f. Rally Point:
None ordered

g. Extra Runs over Target:
None

h. Reasons for failure to attack:
See Section 6 for A/C returning early. All other A/C attacked either secondary target, target of last resort, or target of opportunity.

11. ESCORT DATA:
No escort ordered.

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 Authority NND 760023
 By M/NARA Date 8/30/05

S E C R E T

Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT

LOSS AND DAMAGE

12. CASUALTIES -- PERSONNEL:

See Consolidated Statistical Report, Table X,
Casualties.

13. AIRCRAFT LOST:

498th Group - None.
499th Group - None.
500th Group - A/C Z2(42-24662) is presumed to have
ditched since its ditching message was
received by at least 3 other A/C. Course
unknown. Position approximately 21°00'N,
147°00'E, last heard at 270836Z.
497th Group - None.

14. AIRCRAFT MISSING:

See paragraph 13.

15. TOTAL AIRCRAFT FAILING TO RETURN:

One (see paragraph 13).

16. DAMAGE TO A/C:

T42(65212) was fired upon by a PB4Y while on way to Guam
for landing. Minor damage.

S E C R E T

DECLASSIFIED

Authority NND 760023

By MMNARA Date 8/30/05

S E C R E T

Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT

AA AND AIR-TO-AIR BOMBING

17. ENEMY ANTI-AIRCRAFT FIRE:

No anti-aircraft fire was experienced over the primary target (37°43'N, 139°35'E) or over the secondary target (Dock Area, Tokyo Waterfront). Undercast was 10/10ths and bombing altitudes ranged from 27,700 feet to 34,000 feet.

No flak was encountered at targets of opportunity. Gun flashes were observed while over Iwo Jima, but no bursts were seen.

This was a daylight raid.

Comments: Although there is evidence that the Japanese use radar, this information is not authenticated sufficiently to determine whether such equipment is being used extensively in the above-mentioned areas. Reports from other air units which have been attacking the Japanese mainland over other areas reflect the fact that Japanese radar-controlled fire is not very accurate, due, probably, to inexperience in the use of their equipment.

18. OUR TACTICS VS AA:

None.

19. AIR-TO-AIR BOMBING AND ROCKETS:

None.

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Authority NND 160008

By M/NARA Date 8/30/05

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Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT

COMBAT DATA

Paragraphs 20 through 28-A:

There were no attacks by enemy aircraft.

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DECLASSIFIED
Authority NND 160028
By MM/NARA Date 8/30/05

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Headquarters
73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT
OBSERVATIONS AND CREW COMMENTS

29. EXPENDITURE OF AMMUNITION:

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

30. OUR OBSERVED LOSSES BY E/A:

None.

31. OUR OBSERVED LOSSES BY AA:

None.

32. OBSERVATIONS:

a. Convoy of 10 freighters escorted by small naval craft headed toward Japan at 270225Z, 30°00'N, 138°22'E, course at 336°T. Seen from altitude of 21,000 feet.

b. Small red flame and black smoke billowing quite high, 20°50'N, 145°10'E, time not given, altitude of observer, 8000'.

33. COMMENTS ON MAPS, CHARTS, AND PHOTOS USED:

a. Need more photographs of area.

b. Very adequate for accomplishment of assigned mission, except for 1:500,000 scale map for navigators.

34. CREW SUGGESTIONS:

a. Frosting bad in quite a few instances at altitudes over 25,000'. Several crews reported defrosters did not seem to work effectively.

b. More time is needed to work on A/C between missions.

c. Too many crews are careless in cleaning their guns on return flight after dark.

d. Radar should be pre-flighted aloft in leader's ship before mission.

e. More last resort or targets of opportunity should be briefed.

f. Pilots need information regarding code names of alternate air fields.

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Authority NND 760023
By MM NARA Date 8/30/05

S E C R E T

Headquarters
73rd Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944

CONSOLIDATED MISSION REPORT

GENERAL TECHNICAL DATA

35. FUNCTIONING OF OXYGEN SYSTEM:

Satisfactory in most planes:

T41 (42-24606) had 2 leaks in the gunner's compartment. The plane blew out a blister shortly before hitting the target. CFC gunner became unconscious from anoxia but was revived. Plane descended to 10,000' shortly after leaving the target.

T44 (42-65212) had gasoline fumes in the compartments of the plane. Crew became nauseated and drowsy. The pilot ordered the crew to use oxygen until the fumes were cleared. This corrected the unsatisfactory conditions.

36. FUNCTIONING OF CLOTHING AND PERSONAL EQUIPMENT:

Satisfactory

37. CAMERAS:

See Photographic Officer's report.

38. TECHNICAL FAILURES:

See Flight Engineer's report.

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By MMNARA Date 8/30/05

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Headquarters
73rd Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944

CONSOLIDATED MISSION REPORT

BOMBING DATA

39. BOMB DATA
See Consolidated Statistical Report.

40. TARGET ATTACK DATA:
See Consolidated Statistical Report.

41. CONDITIONS OVER TARGET:

There was a 10/10 undercast at all targets. No enemy AA or fighters were encountered.

42. IP & AP:

The IP (Mt. Fuji) was considered excellent as it is very visible from a great distance in clear weather and it also visible on the radar scope in the event of an undercast. The AP was not used due to a 10/10 undercast. The Offset Radar Aiming Point was not too satisfactory, the axis of attack did not offer the opportunity for the selection of a good OAP.

43. REASONS FOR FAILURE TO BOMB:

Of the A/C reaching the target four only dropped a portion of their bombs due to rack malfunctions.

44. RESULTS OF BOMBING OBSERVED:

Due to a 10/10 undercast, no bombing results were observed.

45. POSSIBLE SOURCES OF ERROR IN BOMBING:

No bombing results observed, radar results believed to be satisfactory.

46. USE OF RADAR AND EFFICIENCY:

No results observed but interrogation indicated that use was generally satisfactory on the bombing run.

47. COMMENTS AND SUGGESTIONS:

More compact formations over the target would produce a more compact bomb pattern.

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16.

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By *MW* NARA Date *8/30/05*

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Headquarters
73rd Bombardment Wing

Mission No. 8
Field Order No. 22
27 November 1944

CONSOLIDATED MISSION REPORT

BOMB IMPACT DATA

(Paragraphs 48 through 51)

DAMAGE ASSESSMENT

No. A/C over target: 50 over secondary and last resort.
12 over targets of opportunity at Shizuoka, Numazu,
Osaka, and a peninsula west of Hamamatsu.

Bomb Load: 7 X 500-lb GPs; 3 X 500-lb M76 IBs.

Direction of Attack: Actual heading varied from 53° to 94°, 150° to 220° and
from 345° to 360°.

Aiming Point: Center of northern tip of the island at Sumida River mouth.

Photographic Coverage and Quality: Due to 10/10 cloud cover, no strike photo-
graphs were obtained.

SUMMARY

None

CONCLUSION

None

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NAVIGATION SUMMARY
MISSION NO. 8 F.O. 22

The route to the target and back to base was generally as briefed with the exception of one group that was considerably off course to the west. This was personnel error.--The navigator not checking his astro compass before taking off on the mission. Radar was used as an navigational aid to and from the target.

All units of this Hq are not completely supplied with the proper charts, from the base to the target and the run up charts of the target.

No serious consequences have arrived from faulty navigation to date. Navigators and Pilots now realize for the first time the complexity of the long over water flight. Unless better navigational aids are installed at the home base there will be many navigators getting lost.

Navigational equipment must be maintained - or replenished. The humid climate is causing delicate navigation equipment, i. e. watches, octants to rust and warp.

Navigators of this unit on a whole show a high degree of proficiency and are developing more confidence on every flight.

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By M/NARA Date 8/30/05

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73rd Bombardment Wing

Field Order No. 22
Mission No. 8
27 November 1944

CONSOLIDATED MISSION REPORT

BOMBARDIER

See paragraphs 41 through 47.

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By MM/NARA Date 8/30/05

HEADQUARTERS 73rd BOMBARDMENT WING
CONSOLIDATED MISSION REPORT

3 Dec 1944

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WEATHER SUMMARY .

FC # 22

Mission 8

27 Nov 1944

A moderate frontal system oriented nearly E-W and forecast to cross the route at 29 N was the major concern in the forecast for this mission. The prognostic map gave a moderate on shore wind along the eastern and northeastern coast of HONSHU giving a low deck of 8/10 stratocumulus with tops at 5000 ft. From the forecast position of the front a layer of 6/10 altocu at 15000 in the vicinity of the front dwindling to 2/10 and then disappearing altogether about a hundred miles south of the target was forecast. Cirrus clouds (2/10) at 29000 ft were forecast over the target.

On this basis the mission was set up for radar bombing using visual methods if possible as a check.

The mission actually encountered the front at 32 N lat. The clouds encountered in this part of the frontal system gave evidence of a strong overrunning of warm air from the south with large amounts of altocu and altostratus. These became a thick overcast about one-hundred and fifty miles south of the target and continued as far as could be seen to the north of the target with tops at 25000 ft. In addition a thickening layer of cirrus became a thin cs overcast at 23000 ft. This high layer was thin enough so that no difficulty in formation flying was reported. (Flight level 29000 ft).

Since the high immediately to the west of the route was farther northeast than forecast the winds were forecast to be of too light a velocity. This agrees with navigators observations. The stronger winds encountered did not interfere with the flight plan. The wind forecast for the bomb run was accurate.

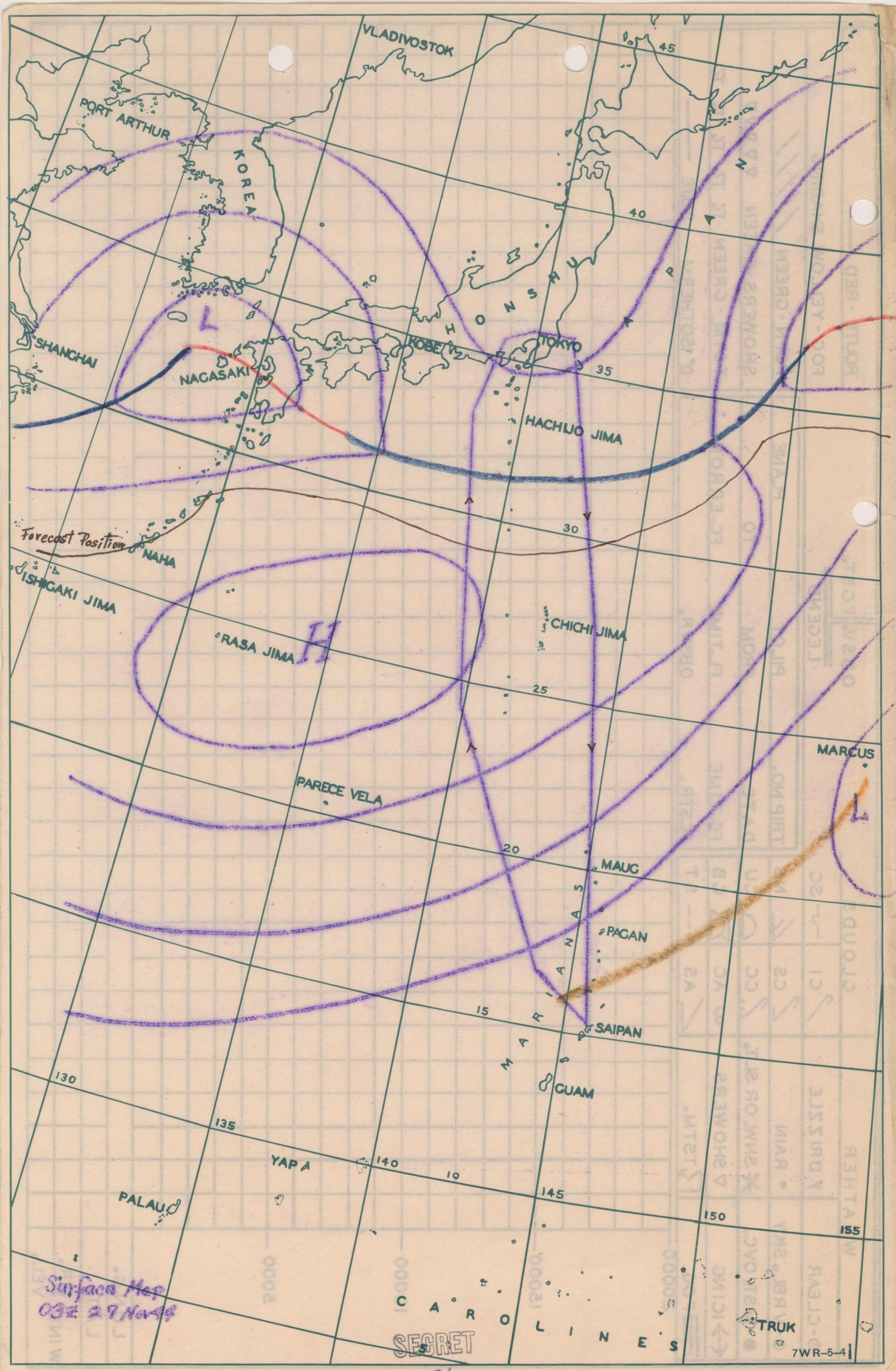
A few checks on the experimental bombardiers pressure altitude forecast were obtained and were consistent in reporting that true altitudes forecast were approximately 300 feet too low.

20. SECRET

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By M/NARA Date 8/30/05

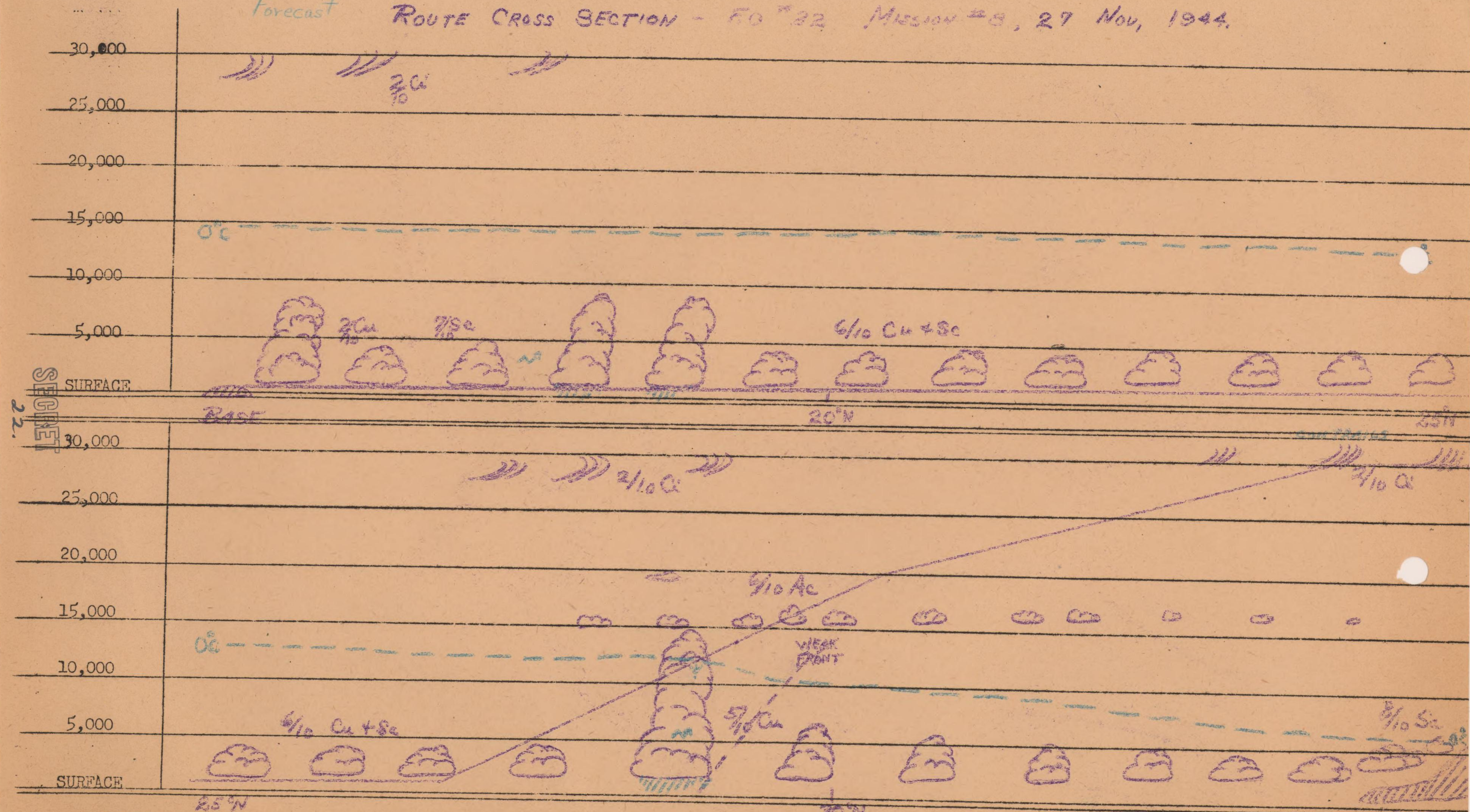


Surface Map
 032 27 Nov 49

SECRET

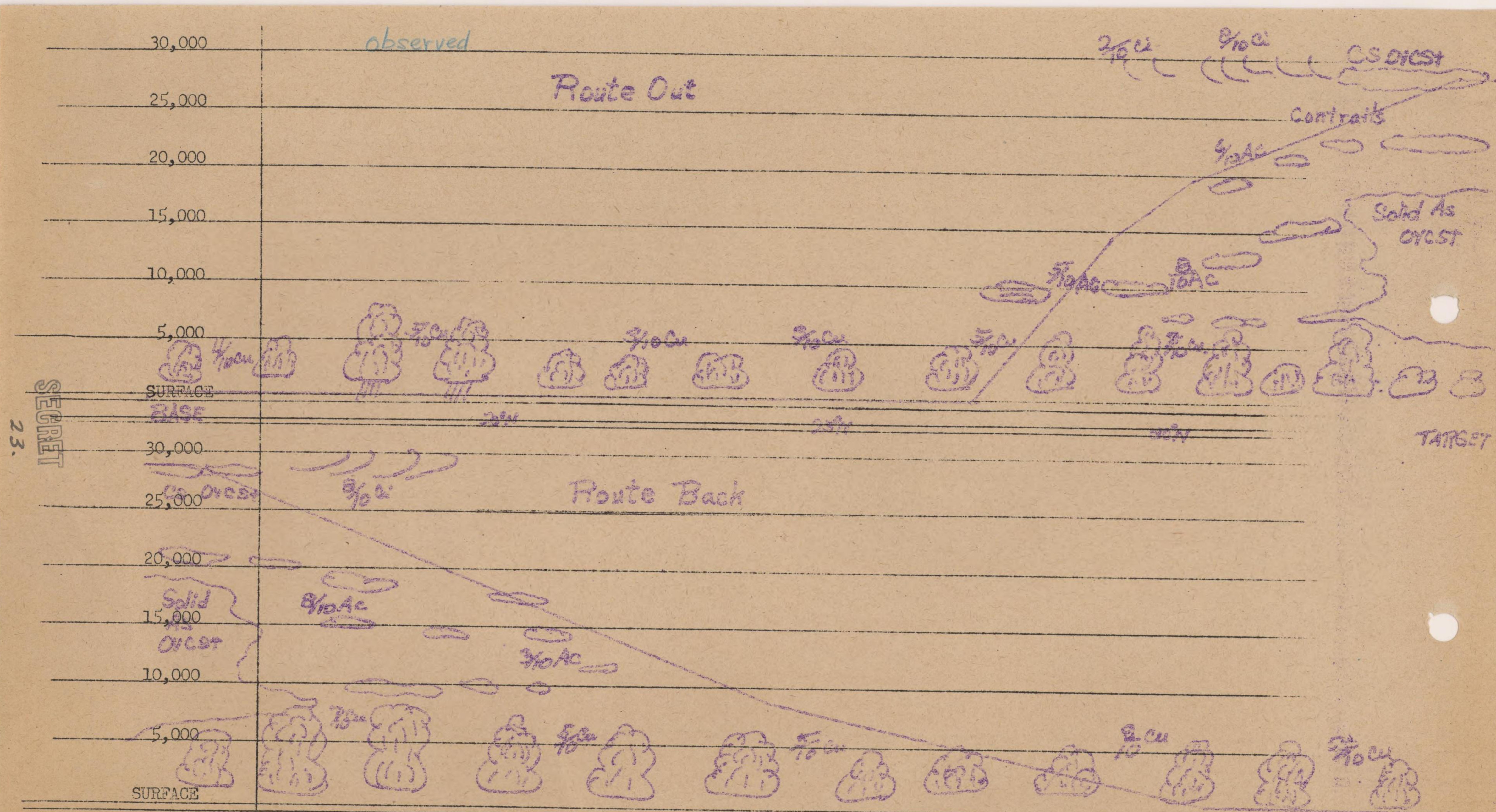
7WR-5-4

Forecast ROUTE CROSS SECTION - 50°32' MISSION #8, 27 Nov, 1944.



SECRET
22.

ADDITIONAL TARGET DATA: Altimeter Setting: 30.12 in. ; Mean Temperature from Surface to 29,000 feet: -14°C.



SECRET
23.

Target ADDITIONAL TARGET DATA: Altimeter Setting: _____ in. ; Mean Temperature from Surface to _____ feet: _____ °

Bombardiers Forecast

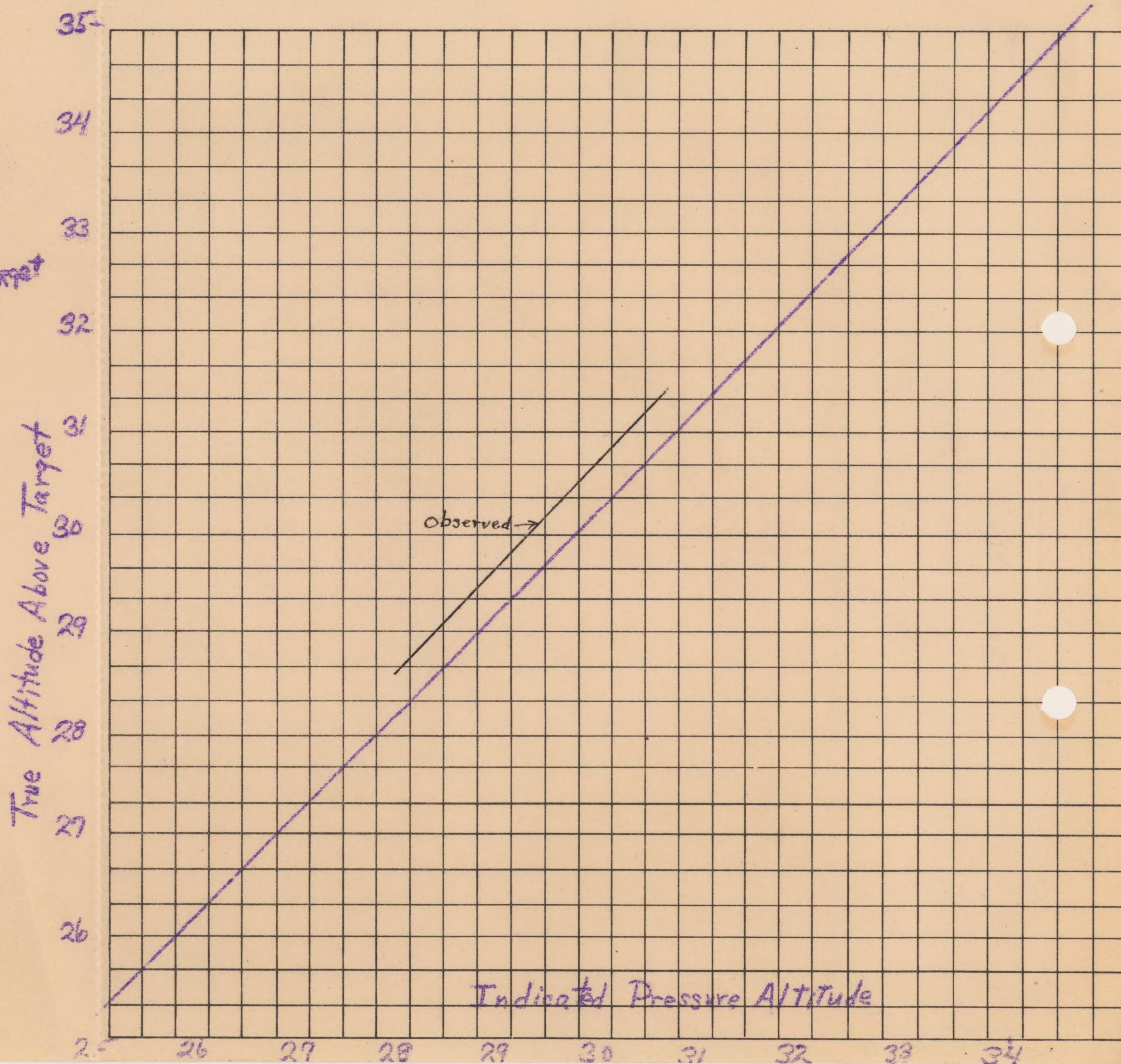
For Target 27 Nov 44 03Z

PIA	28000	29000	30000	
Bombing Alt	28216	29218	30220	Above Target
Wind Dir	280°	280°	280°	
Wind Speed	92 mph	98 mph	99 mph	
Temp Aloft	-40°C	-43°C	-45°C	
Mean Temp	-13°C	-14°C	-15°C	

SECRET
24.

Pressure Alt of Target 0 ft.

Target Alt. Stg. 30.12'



CONSOLIDATED MISSION REPORT

CFC GUNNERY

MISSION NO. 8 F.O. 22

1. No E/A were encountered. All firing was test or practice and was uncontrolled.

2. Of interest are the following test firing values:

- a. % of Used Turrets Operative - 97.3
- b. % of Complete CFC systems " -100
- c. % of Used Cal. .50 guns " - 97.4
- d. % of Used 20 mm cannon " - 93.5
- e. 57,538 rounds Cal. .50 ammo., all types, expended.
- f. 1,066 rounds 20 mm ammo., all types, expended.

3. The only pertinent gunnery fact learned on this mission is that continued study must be given to directing upper ring gunner to exercise primary control of upper forward turret. The fire power of this turret is apparently lost because of continued frosting of forward compartment windows. At present and until further evidence can be compiled, this Headquarters recommends authorizing the Ring station gunner exercising primary control of upper forward turret, upon order of the Fire Control Officer Pilot.

4. Malfunction of equipment as listed in Par 2 above was primarily caused by Maintenance personnel (both combat crew and ground) failure rather than equipment failure.

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25.

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By M/NARA Date 8/30/05

Wing
~~73BW~~ 73BW
 Date 6 Dec. 1944
 By Wing Photo O.

CONFIDENTIAL
 CONSOLIDATED MISSION REPORT
 PHOTOGRAPHIC

F. O. No. 22
 Mission No. 8
 Date of Mission 27 Nov. 1944

1.		K-18	K-19	K-20	K-22	K-24	K-35	Total
a.	Cameras installed	5	0	10	22	4	1	42
b.	Cameras in aborting A/C	2	0	1	6	0	0	9
c.	Cameras in lost A/C	1	0	0	0	0	1	2
d.	Camera in A/C not lost but not returning.	0	0	0	0	0	0	0
e.	Cameras with malfunctions	0	0	0	0	0	0	0
f.	Cameras in operating condition not taking photos	2	0	9	16	0	0	27
g.	Camera taking photos	0	0	0	0	4	0	4

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

A/C No.	Vertical camera			Number of photos taken					
	f.stop	shutter interval	altitude	K-18	K-19	K-20	K-22	K-24	K-
4671									3
4689									15
4653									12
4695									7

Incl 8

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26.

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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		
e.	M/Switch not on		
f.	Vacuum failure		
g.	Power failure		
h.	Light failure(Target)	27	Heavy Undercast
i.	Enemy action		
j.	Others		
k.			
l.			
m.			
n.			
o.	Total	27	

4. Remarks and suggestions:

5. Instructions for preparing this form:

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

b. Items:

la, b, c, d, are self explanatory.

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

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

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

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

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

Certified by _____
~~GROUP S-3~~
Rank

Prepared by Glenn F. Hellman
GLENN F. HELLMAN
~~Photo Lab Commander~~
WING PHOTO OFFICER
Rank

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73rd Bomb Wing
30 November 44

Field Order No 2.

COMMUNICATIONS

1. Strike Report: Submitting of initial and amplified strike reports was effected without difficulty.
2. Fox Messages: Aircraft encountered no difficulty in receiving Fox Messages enroute to and from the target.
3. Radio Frequencies: Ground Station signals were received over entire route at strengths from 3 to 5 for 11160 KCS, 1 to 5 for 7310 KCS. Frequency 3145 KCS can generally be considered as satisfactory up to 700 miles. Signals from aircraft were generally strong over entire route. Excessive interference exists on 7310 KCS. A study is being conducted on nearby frequencies with the view of a changeover.
4. Navigational Aids: A total of 18 requests for bearings were made by aircraft, and 18 bearings were obtained. Bearings on 11160 KCS have been unsatisfactory. Some difficulty has been encountered in obtaining bearings on 7310 KCS due to heavy background traffic. The D/F Station performed in a superior manner.
5. Security and Net Discipline: Aircraft radio discipline definitely improved over the previous mission. Security was entirely satisfactory.
6. Enemy Transmissions: Both 7310 KCS and 11160 KCS suffered considerable interference close to the target.
7. Distress and Emergency Signals: The Ground Station received 9 urgent and ~~XXX~~ requests for bearings and ditching report relayed by 50V534 for 49V533. All requests for bearings were satisfied. Fifty percent of all bearing requests had urgent priority.

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

NND 740120
By CD/MT NARS, Date OCT 21 1975

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27.

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Authority NND 760028

By MN NARA Date 8/30/05

8. Malfunctions:

Set	Malfunction	497	498	499	500
AN/ART-13	Antenna broken over target	1			
	Inoperative				1
	CW Relay defective				1
BC 348-R	Intermittent	1			
	Insensitive	1			
	Dynamotor failure		1		
AN/ARN-7	Low sensitivity on high ends				
	of all bands	1			
	Sense antenna broken				1
	Noisy	1			
	Inoperative on "Compass" and				
	"Loop" position after climb				
	to altitude	1			
	Inoperative on compass				
	position	2			
	Indicator hunts		2		1
	Antenna lead-in broken			1	
BC347A	Noisy	1			1
	Shorted		1		
RL42A	Trailing wire would not reel				
	out	1			
RC-36	Shorting out			1	
Mike	Inoperative		1		
Switch					
R.O.					
Floor	Sticks		1		
Switch					
Right					
Gunner					
SCR 522	Dynamotor burned up				1

SECRET

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S E C R E T

Consolidated Mission Report

Mission 8 FO 22

RADAR EMPLOYMENT AND RADAR EQUIPMENT PERFORMANCE

1. RADAR EMPLOYMENT:

- a. All A/C bombed by radar, bombing results were unobserved
- b. Difficulty was experienced in getting to the briefed IP due to the high cross wind. A/C not making the briefed bomb run bombed on the general target area of Tokyo City and released.

2. RADAR EQUIPMENT PERFORMANCE:

a. Of 62 A/C reporting-

A/C - Radar satisfactory for bombing	45 A/C	73%
A/C - Radar unsatisfactory for bombing	17 A/C	27%

b. Of 43 separable malfunctions reported-

1. Inverter failures accounted for	11
2. Pressurization failures accounted for	10
3. Low sensitivity and miscellaneous failures accounted for	22

c. Approximately 25% of malfunctions are traceable to equipment failure.

3. SCR 695 (IFF) AND SCR 718 (ALTIMETER)

- a. SCR 695 Failures 2 A/C
- b. SCR 718 Failures 1 A/C

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By MMNARA Date 8/30/05

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HEADQUARTERS
73RD BOMBARDMENT WING

FO 22
COMBAT MISSION #8
27 November 1944

CONSOLIDATED COMBAT REPORT

RCM

1. Number of Radar Observers participating 6.
2. Number of Radar Observers completed mission 5.
3. Equipment employed:

Sets	Av Hours On	Malfunctions
AN/APR4	6 - 32	
AN/APR5A	1 - 15	
AN/APR5	3 -	
AN/APAGX	1 - 4	

4. Signals logged:

Band	Number	PRF Range	Pulse Width Range
A-60-85	34		
B-85-120	18		
C-120-170	32		
D-170-220	36		
E-220-300	18		
F-300-1000	0		
Above Specify Frequency	1		

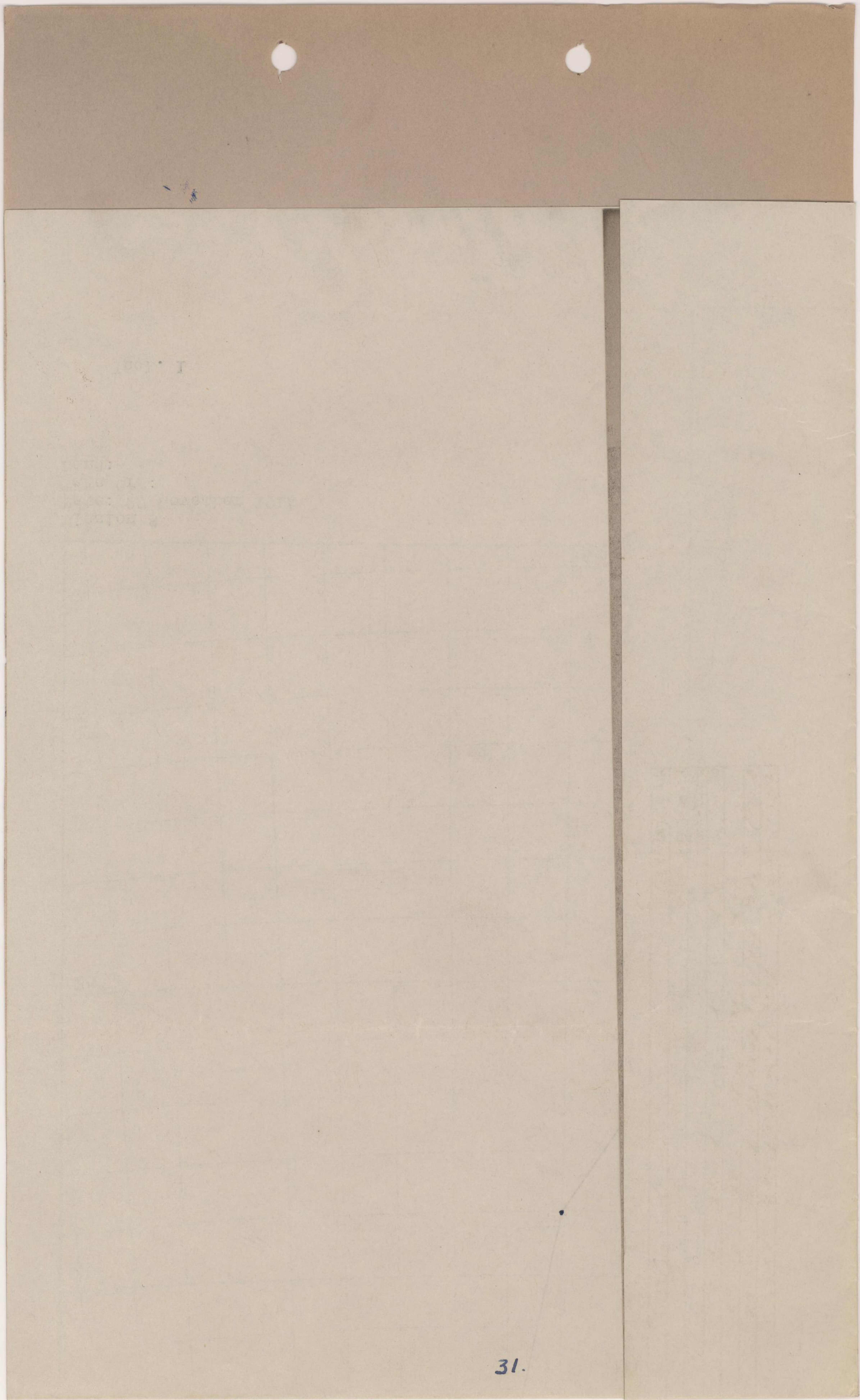
5. Track overlay: Annotated map showing:
 - a. Track made good.
 - b. Position in hourly intervals (Z Time).
 - c. Approximate position at intercept of signals.
(Letters A-F are encircled to show location of A/C when signals in the band specified were heard).
6. Remarks.
 - a. Earlier indication of complete EW coverage enroute to mainland appear substantial.
 - b. Numerous signals from 70 to 220 mc logged in the target area. Reports of probable CGI & AA do not as yet point to effective employment.
 - c. A centimeter signal was again logged in the Tokyo area. The frequency being recorded as 1505 or 3010 mc.

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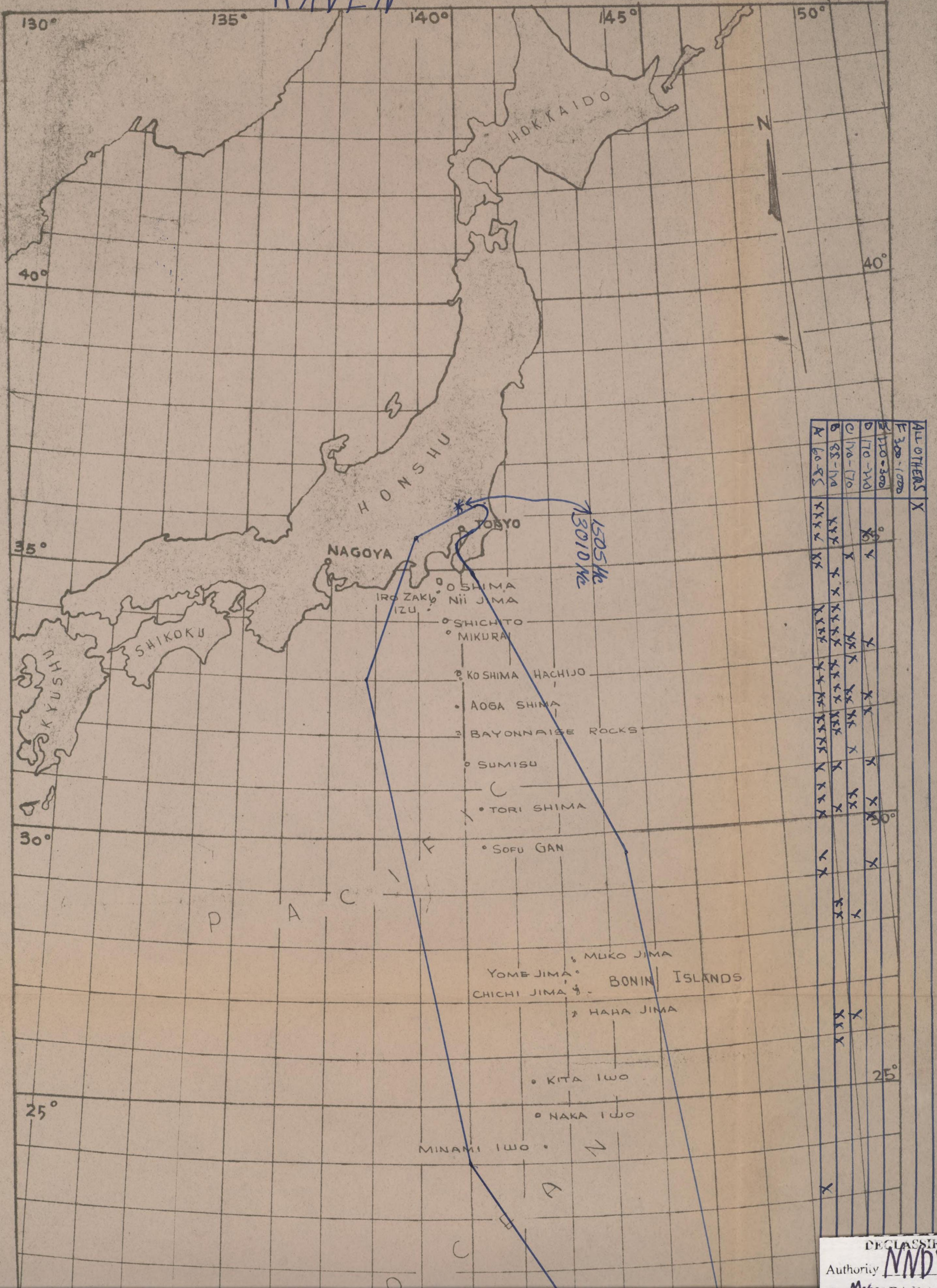
Authority NND 760023

By MW NARA Date 8/30/05

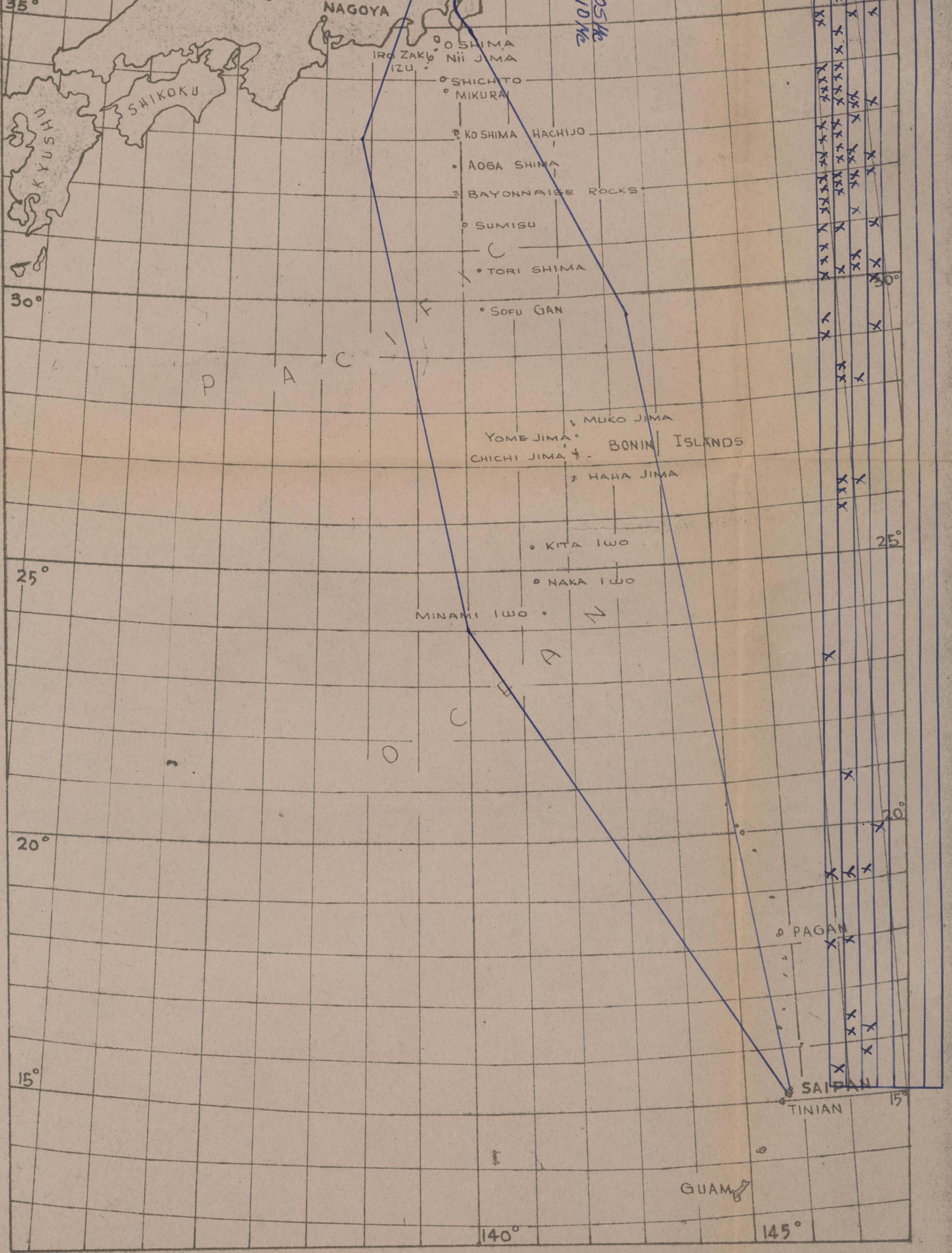


INC. 1#

RAVEN



	ALL OTHERS
F 300-1000	X
E 110-300	X
D 170-210	X
C 170-170	X
B 85-170	X
A 60-85	X



Mission 8
 Date: 27 November 1944
 Take Off:
 Land:

Incl. 1

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 Authority: NND 160023
 By: MNARA Date: 8/30/05

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7 December 1944

Field Order #22

Part E

Mission #8

CONSOLIDATED MISSION REPORT OF ACTING GROUP FLIGHT ENGINEERS

1. Aircraft Scheduled but Failed to Takeoff.

497th Group

A/C No. A-4 #1 Engine rough

" " A-28 Tail turret electrical system burned out

" " A-51 #4 Turbo inoperative

" " A-30 Fuel pump out. Bad oil leak in hydraulic panel.

499th Group

A/C No. 4670 No power from inverter circuit

500th Group

A/C No. 3429 Cowl flaps and bomb racks inoperative.

2. Aircraft Malfunctioning (Early Return)

497th Group

A/C No. A-41 #4 Eng out. (blew out ring cowl)

" " A-43 #1 Eng out (internal failure)

" " A-47 Fuel transfer system inoperative

" " A-48 Electrical system burned out

" " A-29 Fuel transfer system out

" " A-8 #3 Prop governor remained at 2650 RPM

" " A-9 #1 Eng out (internal failure)

" " A-22 #1 Eng out (valve trouble)

" " A-26 #2 Prop governor remained at 2200 RPM

498th Group

A/C No. T-1 Head on #2 cylinder on #2 engine blew

" " T-2 #1 prop governor uncontrollable

" " T-10 #8 Cylinder head on #1 eng blew

" " T-44 Return due to loss of fuel from bomb bay

" " T-27 Bad oil leak on #4 engine caused by a crack in push rod housing

" " T-25 Severe back firing on #4 engine (oil in distributor)

-1-

SECRET

32.

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498th Group (cont'd)

A/C No. T-47 #2 Engine failure

499th Group

A/C No. 3439 #4 Turbo failed when climb to target began

" " 4682 Swallowed valve on #2 engine

500th Group

A/C No. 4672 Loss of power on #4 engine

3. Aircraft Malfunctioning (Aircraft Completing Mission)

a. Malfunctions

1. Turbo Surging At High Altitude. Six A/C reported turbo surging at altitudes above 29,000 ft.
 2. Turbos Inoperative. Two A/C reported not being able to obtain boost from one of the turbos.
 3. Oil Coolers. Four reported automatic control non operative, also door sticking.
 4. Electrical System. One reported system out. Two generators reported out.
 5. Prop Governor. Six reported malfunctioning and sticking.
 6. Oil Leaks. Twelve engines reported as leaking excessive. Primary cause reported as broken push rod housing seals.
 7. Oil In Distributor. Two reported.
 8. Flight Indicator. Three reported out.
 9. Fuel Transfer System. Three reported burning out pumps.
 10. Blown Exhaust Stacks. One reported.
 11. Fuel Quantity Gages. 75% reported inaccurate.
 12. Cylinder Head Temp. Gages. Ten reported inoperative.
- b. Suggested Changes In Equipment and Recommendations.
1. Investigation of turbo surging at high altitudes.
 2. Immediate installation of pressure switch in fuel transfer system in all aircraft.

S E C R E T

S E C R E T

3. Provision be made for accurate determination of fuel flowing to engines (Flowmeters)
 4. Accurate fuel quantity gages.
 5. Completion of modification of defrosting systems on all aircraft.
4. Damage To Aircraft
- A/C T-42 (5212) was fired on by FB4Y. Minor damage.
5. Cruise Control Analysis
- a. See table XI under consolidated statistical summary for fuel consumption data.
 - b. Analysis incomplete.

-3-

S E C R E T

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S E C R E T

73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 NOV 44

Consolidated Statistical Summary

Primary Target MUSASHINO A/C PLANT - TOKYO, JAPAN

Table I Aircraft Participating

	NUMBER OF AIRCRAFT				
	TOTAL WING	GROUP			
		497	498	499	500
A/C Scheduled to Take-off	87	30	27	12	18
A/C Failing to Take-off	6	4a	0	1d	1f
A/C Airborne	81	26	27	11	17
Number of Non-Effective Sorties	19	9	7	2	1
Percent of Airborne A/C Non-Effective	23%	35%	26%	18%	6%
A/C Reaching Target	62	17	20	9	16
A/C Bombing Target	62	17b	20c	9e	16g
A/C Failing to Return to Home Base	1	0	0	0	1h
Time of Take-off:	26 Nov	26 Nov	26 Nov	26 Nov	26 Nov
Earliest	2015 Z	2117Z	2015 Z	2042 Z	2057 Z
Latest	2146 Z	2143Z	2041 Z	2054 Z	2146 Z
Time of Return:	27 Nov	27 Nov	27 Nov	27 Nov	27 Nov
Earliest	0905 Z 0916 Z	0932Z	0928 Z	0916 Z	0905 Z 1019Z
Latest	1135 Z	1127Z	1133 Z	1135 Z	1115 Z

- a. A/C 596 #1 engine carburetor failure
A/C 423 tail turret out - burned out relay in control panel.
A/C 461 fuel pump #1 and hydraulic leak
A/C 231 #4 Turbo inoperative
- b. 14 A/C bombing Secondary Target and 3 A/C bombing T. O.
- c. All A/C bombed Secondary Target
- d. A/C 670 electrical system failure
- e. All A/C bombed T. O.
- f. A/C 429 cowl flaps and bomb racks inoperative
- g. 15 A/C bombing Secondary Target and 1 A/C bombing Last Resort Target
- h. A/C 662 Ditched - cause unknown.

S E C R E T

S E C R E T

73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary

Table II Breakdown of Non-Effective Aircraft by Cause

CAUSE	NUMBER OF AIRCRAFT				
	TOTAL WING	497	498	499	500
Mechanical Failure	18	9 a	6 b	2 d	1 e
Personnel Failure	1		1 c		
Flight Conditions					
Enemy Action					
Unknown					
Other					
Total	19	9	7	2	1

- a. A/C 615 #1 PROP. GOV. FAILURE, STUCK AT 2650 RPM
A/C 599 #1 ENGINE FAILURE, FIRE DUE TO INTERNAL FAILURE & OIL LEAK
A/C 616 #1 ENGINE FAILURE, CARBURETOR OR VALVES
A/C 745 #2 PROP GOV. MALFUNCTION, STUCK AT 2200 RPM
A/C 628 FUEL TRANSFER SYSTEM OUT
A/C 425 #1 ENGINE BLOWN EXHAUST STACK, BURNED RING COWLING
A/C 641 #1 ENGINE FAILURE, LOST ALL POWER
A/C 426 FUEL TRANSFER MALFUNCTION
A/C 648 ELECTRICAL SYSTEM OUT
- b. A/C 430 #16 CYLINDER BLEW THROUGH COWL
A/C 642 #4 ENGINE BACKFIRES, OIL IN DISTRIBUTOR
A/C 605 #1 ENGINE RAN AWAY
A/C 428 OIL LEAK, FEATHERED ENGINE
A/C 646 RUPTURED HOSE CONNECTION ON PUSHROD HOUSING #4
A/C 624 BROKEN LINE ON BOMB BAY TANK
- c. A/C 649 TRANSFERRED FUEL BACKWARDS
- d. A/C 439 #4 TURBO OUT
A/C 682 #4 ENGINE FAILURE - SWALLOWED VALVE, METAL PARTICLES IN SUMP
- e. A/C 672 #4 SUPERCHARGER OUT #3 CARBURETOR OUT

S E C R E T

36

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Authority NND 760028

By M/NARA Date 8/30/05

S E C R E T

73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary

Bombing Data - Effective A/C

Table III Bombing Run

	TOTAL WING	NUMBER OF AIRCRAFT			
		GROUP			
		497	498	499	500
A/C Reaching Target	62	17	20	9	16
A/C Dropping Bombs					
In Formation	50	17	18	0	15
Individual	12	0	2	9	1
Total	62	17	20	9	16
Time of Release:		a	b	c	d
Earliest	0347 Z	0439 Z	0347 Z	0415 Z	0435 Z
Latest	0655 Z	0522 Z	0655 Z	0421 Z	0445 Z
Altitude of Release:		a	b	c	d
Lowest	27,700	29,000	27,700	29,219	30,350
Highest	34,000	33,000	33,700	34,000	33,300
Visual Bombing - A/C Sighting for:					
Range & Deflection	0	0	0	0	0
Range	0	0	0	0	0
A/C Dropping on Leader	0	0	0	0	0
Radar Bombing:					
A/C Sighting	21	4	5	9	3
A/C Dropping on Leader	41	13	15	0	13
A/C Operated by:					
C - 1	13	3	5	2	3
Manual	49	14	15	7	13

- a. INCLUDES 3 A/C BOMBING T.O. 0515 Z to 0517Z AT 32,100 TO 33,000 FT.
- b. ALL A/C BOMBED SECONDARY TARGET
- c. ALL A/C BOMBED TARGETS OF OPPORTUNITY
- d. EXCLUDES 1 A/C BOMBING AT 0518 Z. 1 A/C BOMBED TARGET OF LAST RESORT.

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 Authority NND 760023
 By MM/NARA Date 8/30/05

S E C R E T

73RD BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. 22

Table IV Loading & Disposal of Bombs

MISSION NO. 8

27 NOV 44

GROUP	TYPE & WEIGHT OF BOMBS	FUSE SETTING		NUMBER OF BOMBS														PERCENT OF BOMBS RETAINED ON TARGET		
		NOSE	TAIL	LOADED ^a				RELEASED				JETTISONED		UNKNOWN		RETURNED				
				NO. ALL AIRCRAFT	TONS ALL AIRCRAFT	NO. AIRBORNE AIRCRAFT	TONS AIRBORNE AIRCRAFT	NO. PRIMARY TARGET	TONS PRIMARY TARGET	NO. OTHER TARGETS ^c	TONS OTHER TARGETS	NO.	TONS	NO.	TONS	NO.	TONS		NO.	TONS
497	500 lb GP AN-M64 M76	.1 Inst.	.025 Non-Delay	210	52.5	182	45.5	90	22.5	21	5.25	56	14.0	15	3.75	8	2.0	15	3.75	60%
498	500 lb GP AN-M64 M76	.1 Inst.	.025 Non-Delay	196	49.0	189	47.25	136	34.0	49	12.25	21	5.25	4	1.0	1	0.25	4	1.0	72%
499	500 lb GP AN-M64 M76	.1 Inst.	.025 Non-Delay	182	45.5	77	19.25	37	9.25	63	15.75	14	3.5	8	2.0	4	1.0	8	2.0	82%
500	500 lb GP AN-M64 M76	.1 Inst.	.025 Non-Delay	147	36.75	119	29.75	41	10.25	7	1.75	8	2.0	7	1.75	3	.75	7	1.75	87%
WING TOTAL	500 lb GP AN-M64 M76	.1 Inst.	.025 Non-Delay	735	183.75	567	141.75	323	80.75	91	22.75	127	31.75	7	1.75	19	4.75	19	4.75	
TOTAL	500 lb IB M76	Inst.	Non-Delay	315	78.75	243	60.75	137	34.25	39	9.75	55	13.75	3	.75	9	2.25	9	2.25	
TOTAL				1050	262.5	810	202.5	460	115.0	130	32.5	182	45.5	10	2.5	28	7.0	28	7.0	74%

^a A number of A/C loaded were damaged by enemy action and could not go on mission
^b TOKYO Dock Area.

S E C R E T

^c Targets of opportunity
^d Includes 10 bombs dropped on ROTA by a Non-effective A/C

S E C R E T

73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary
 Table ^{VI} 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																	
0200																	
0300																	
0400																	
0500																	
0600																	
0700																	
0800																	
0900																	
1000																	
1100																	
1200																	
TOTAL																	

Table ^{VII} Enemy Aircraft Destroyed & Damaged

GROUP	DESTROYED	PROBABLY DESTROYED	DAMAGED
497	0	0	0
498	0	0	0
499	0	0	0
500	0	0	0
TOTAL WING	0	0	0

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 Authority NND 760023
 By MW/NARA Date 8/30/05

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73RD BOMB WING

FIELD ORDER NO. 22
 MISSION NO. 8
 27 Nov 44

Consolidated Statistical Summary

Table **VIII** Aircraft Lost and Damaged

CAUSE	AIRCRAFT LOST					AIRCRAFT DAMAGED				
	TOTAL WING	497	498	499	500	TOTAL WING	497	498	499	500
ENEMY A/C										
ENEMY FLAK										
ENEMY A/C & FLAK										
ACCIDENT										
SELF-INFLICTED										
UNKNOWN	1				1a					
OTHER						1		1b		
TOTAL	1	0	0	0	1	1	0	1	0	0

- a. A/C 662 DITCHED AFTER LEAVING TARGET - CAUSE UNKNOWN.
- b. A/C 649 DAMAGED BY FIRE FROM A PBL4

Table **IX** Repair of Damaged Aircraft

AIRCRAFT TO BE REPAIRED BY:	497	498	499	500	TOTAL
TACTICAL GROUP	0	1	0	0	1
SERVICE GROUP	0	0	0	0	0
DEPOT GROUP	0	0	0	0	0
TOTAL	0	1	0	0	1
NOT REPARABLE	0	0	0	0	0

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73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary

TABLE X Casualties

	Total	P	CP	NB	BN	FE	ROM	RO	CFC	LG	BG	TG	Other
Killed:													
497th													
498th													
499th													
500th													
Total Wing													
Missing:													
497th													
498th													
499th													
500th	12	1	1	1	1	1	1	1	1	1	1	1	1
Total Wing	12	1	1	1	1	1	1	1	1	1	1	1	1
Seriously Injured:													
497th													
498th													
499th													
500th													
Total Wing													
Slightly Injured:													
497th													
498th													
499th													
500th													
Total Wing													
Total Casualties:													
497th													
498th													
499th													
500th	12	1	1	1	1	1	1	1	1	1	1	1	1
Total Wing	12	1	1	1	1	1	1	1	1	1	1	1	1
No. Participating													
497th	292	26	26	26	26	26	26	26	26	26	26	26	6
498th	305	27	27	27	27	27	27	27	27	27	27	26	9
499th	131	11	11	11	11	11	11	11	11	11	11	11	10
500th	196	17	17	17	17	17	17	17	17	17	17	17	9
Total Wing	924	81	81	81	81	81	81	81	81	81	81	80	34

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 By MMNARA Date 8/30/05

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73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary

Table XI Fuel Consumption Data

	TOTAL WING	GROUP			
		497 ^a	498 ^b	499 ^c	500 ^d
Average Fuel Aboard	8009	8000	8000	8035	8000
Average Flying Time	13:35	13:25	13:43	13:38	13:25
Average Distance - Nautical Air Miles	2980	2787	2847	3084	2840
Fuel Used:					
Average	6916	6750	7023	7176	6715
Median	6918	6855	7057	7035	6718
Maximum	7672	7200	7475	7672	7119
Minimum	6200	6200	6510	6844	6350
Fuel Remaining:					
Average	1093	1250	977	866	1279
Median	1096	1145	943	1036	1260
Maximum	1800	1800	1490	1236	1650
Minimum	240 ^e	800	523	240 ^e	950
Av Gallons per Hour	509	503	512	526	501
Av Gallons per Mile	2.39	2.42	2.47	2.32	2.38
Total Gasoline Con- sumed & Lost	483,957	143,870	165,519	73,368	101,200

- a Based on 17 A/C completing mission
 - b Based on 20 A/C completing mission
 - c Based on 9 A/C completing mission
 - d Based on 16 A/C completing mission
 - e 160 gals. lost when tanks were salvaged. Next lowest fuel remaining 323 gals.
- NOTE: APPROXIMATE GROSS WEIGHT AT TAKE-OFF:

497 - 137,500 499 - 138,000
 498 - 138,000 500 - 137,000

TIMES AT VARIOUS ALTITUDES:

497 1000 ft 5:00, 29,000 ft :30, 10,000 ft 2:00
 498 1000 ft 4:45, 30,000 ft 1:20
 499 1000 ft 5:15, 32,000 ft 1:00
 500 1000 ft 3:53, 32,000 ft :31

DATA IS FOR MOST PART CALCULATED, NOT SERVICED

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S E C R E T

73RD BOMB WING

FIELD ORDER NO. 22

MISSION NO. 8

27 Nov 44

Consolidated Statistical Summary

Table XII Ammunition Consumption Data ^a

AMMUNITION EXPENDED PER GROUP					
	497th	498th	499th	500th	TOTAL
20 MM.					
Fired	700	251	23	95	1069
On Lost A/C	0	0	0	120	120
Total	700	251	23	215	1189
.50 Cal.					
Fired	39,070	8,450	4,920	5,064	57,504
On Lost A/C	0	0	0	6,000	6,000
Total	39,070	8,450	4,920	11,064	63,504

a DATA INCOMPLETE

AMMUNITION EXPENDED PER PLANE ^a					
	497th	498th	499th ^b	500th	TOTAL WING
Upper front	525	97		33	218
Lower front	337	75		124	179
Upper rear	212	71		19	101
Lower rear	378	33		120	177
.50 Cal. Tail	328	37		112	159
Total .50 Cal.	1780	313		408	834
20 MM Tail	32	9		6	16

a TEST FIRING ONLY
b NOT AVAILABLE

S E C R E T

44.

#31
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By Auth of CG 73d BW

MM 26 Nov
Initials Date

73d Bomb Wg
SAIPAN
1100Z 26 Nov 44

FO 22

Maps: Long Range Navigation Charts: CAROLINE ISLANDS and JAPAN, scale 1:3,000,000. Target Folder 90.17 JAPAN.

1. a. No change.
 - b. (1) (a) Com Air Forward will provide air defense of the operating bases.
 - (b) One Dumbo A/C will arrive at (23° 15'N - 140° 18'E) 30 min prior to ETA of strike force on route out and patrol in this vicinity to the limit of endurance. Additional Dumbo A/C will be available on call during the route back of strike force.
 - (2) (a) Five lifeguard submarines to provide rescue measures will be located at the following points. Standard operating procedure will be used to make contact. If possible do not ditch within a seven (7) mile radius of INUBIO SAKI (35° 43'N - 140° 52'E). Enemy mine fields prohibit friendly subs from penetrating this area.
 1. (34° 00'N - 138° 00'E)
 2. (35° 20'N - 141° 00'E)
 3. (33° 00'N - 141° 45'E)
 4. (30° 00'N - 142° 50'E)
 5. (25° 00'N - 144° 10'E)
 - (b) A rescue destroyer will be located in vicinity of (21° 00'N - 144° 00'E).
2. 73d Wg Atks targets TOKYO 27 Nov 44. Primary target: 90.17 - 357 (35° 43'N - 139° 35'E). Secondary and Last Resort target: Docking facilities and built up area in TOKYO bounded by coordinates
(35° 39'N - 139° 46'E) (35° 43'N - 139° 47'E)
(35° 43'N - 139° 52'E) (35° 39'N - 139° 52'E)

SECRET

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By MM NARA Date 8/30/05

Method of bombing: Sq pattern (A/C drop on Sq leader, Deputy leader sight for range).

Primary target: Visual with radar as aid.

Secondary and Last Resort target: Complete radar approach with final adjustment by visual sighting if possible. See Annex 1.

Sq leader makes decision at or before IP whether to Atk Primary or Secondary target.

Formation: Combat Gps composed of three Sqs. Route formation from Departure Point to top of climb then Sqs in close formation until withdrawal line ($36^{\circ} 18'N - 141^{\circ} 18'E$) ($34^{\circ} 00'N - 142^{\circ} 00'E$) or beyond until E/A cease Atks. Then route formation until dark then individual A/C to base.

Route out and back: See Annex 6.

IP: MOUNT FUJI ($35^{\circ} 23'N - 138^{\circ} 42'E$). Approach and pass left of IP descend to bombing Alt between IP and target.

Axis of Atk: Primary - $63^{\circ} T$. Secondary - $71^{\circ} T$.

Cruise control: See Annex 2.

Aiming point: Primary - Center of West block. Secondary - Radar: Northern tip of island at mouth of SIMIDA RIVER. Visual: Any industrial target in area specified above.

Maneuver after Atk: Primary target - turn left 45° then right to withdrawal line point ($36^{\circ} 18'N - 141^{\circ} 18'E$) to point ($24^{\circ} 00'N - 142^{\circ} 00'E$). Secondary target - right turn to withdrawal line. Sq leader decides route from target to withdrawal line.

Alternate Plan: Route B to be used only if ordered by this Hq. All crews will be briefed on both routes.

Route out and back: See Annex 6.

IP: OHAMI AIRFIELD ($35^{\circ} 28'N - 140^{\circ} 25'E$).

Axis of Atk: Primary - $290^{\circ} T$. Secondary - $293^{\circ} T$.

Aiming point: Primary target - Power house in center of East block. Secondary - Radar: Mouth of ARA RIVER ($35^{\circ} 40'N - 139^{\circ} 51'E$). Visual: Any industrial target in area as specified above.

Maneuver after Atk: Turn right 180° to withdrawal line.

S E C R E T

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By M/NARA Date 8/30/05

3. a. 498th Bomb Gp maximum No A/C takes off at Zero Hr climbs to 29,000 ft Atks at 28,000 ft and 28,500 ft.
- b. 499th Bomb Gp, maximum No A/C takes off at Zero Hr plus 26 min climbs to 30,000 ft Atks at 29,000 ft and 29,500 ft.
- c. 500th Bomb Gp, maximum No A/C takes off at Zero Hr plus 52 min climbs to 31,000 ft Atks at 30,000 ft and 30,500 ft.
- d. 497th Bomb Gp, maximum No A/C takes off at Zero Hr plus 78 min climbs to ~~29,000~~ ^{30,000} ft Atks at ~~28,000~~ ^{29,000} ft and ~~28,500~~ ^{29,500} ft.
- x. (1) Zero Hr: 2015Z 26 Nov 44.
- (2) Bomb Load: 3 X 500 lb M-76 IP, 7 X 500 lb GP. Fuze GPs .10 sec nose .025 sec tail; IBs Inst nose none-delay tail.
- (3) Interverlometer setting: 150 ft.
- (4) Gasoline load: 8,000 gals.
- (5) Ammunition load: 6,000 Rds .50 cal, 120 Rds 20mm.
- (6) Each Sq will carry a minimum of three K-22 cameras for strike photos.
- (7) Formations will continue on general axis of Atk until strike photos have been taken.
4. Each Gp furnish this Hq at Zero Hr minus 60 min schedule of A/C numbers, call signs, Pilot names,, by combat Sq.
5. a. (1) Annex 3 (Comm).
- (2) SOP Communications XXI Bom Com dd 15 Nov 44.
- b. Comd Posts:
- (1) Air - Sq Leaders.
- (2) Ground - Hq 73d Bomb Wg.

By command of Brigadier General O'DONNELL:

OFFICIAL:

Walker
WALKER
Asst A-3

- Annex 1 - Bombing Data
Annex 2 - Cruise Plan
Annex 3 - Communications
Annex 4 - Radar Counter Measure
Annex 5 - Reconnaissance
Annex 6 - Navigation

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BRUGGE
DC/S, O & T

S E C R E T

ANNEX NO 1 TO FO 22 73D BOMB WING

BOMBING DATA

1. Bomb Load - (Use M-43 Bomb Tables Only)

7 ea 500 lb AN-M-64 GP: AN-M-103, .1 sec delay nose fuse;
AN-M-101A2, .025 sec delay tail fuse.

3 ea 500 lb AN-M-76 IB: AN-M-103, instantaneous nose fuse;
AN-M-101A2, non-delay tail fuse.

Intervalometer spacing: 150 ft

Subtract 20 mils of trail for visual bombing, do not subtract trail for
for radar bombing.

Order of release: 3 GP, 1 IB, 2 GP, 1 IB, 2 GP, 1 IB.

2. Primary Target: MUSASHINO PLANT (90.17-357)
Coordinates: (35° 43'N - 139° 35'E)
Axis of Atk: 63°T
Aiming Point: Center of Plant
Target Dimension: Approx 2000' x 3200'
Elevation: 183'
Initial Point: MT FUJI (35° 22'N - 138° 43'E) Route A
Variation: 6°W
Method of Atk: By Sqs - Visual with radar as an aid,
leader sights for range and deflection,
others drop on leader.
Bombing Airspeed: 195 MPH CIAS
Bombing Altitude: 498th - 28,000 PIA
499th - 29,000
500th - 30,000
497th - 29,000

3. Secondary and Last Resort Target: Docks and Urban Area of TOKYO
a. Coordinates: (35°41'N - 139°49'E)
Axis of Atk: 71° T
Aiming Point: Any industrial target visible, otherwise a
radar approach.
Elevation: Average 50'
Initial Point: MT FUJI (35°22'N - 138°43'E) Route A
Method of Atk: By Sqs - Radar for leader, deputy leader
sights for range only, others drop on
leader.
Airspeeds and Altitudes: Same as for Primary Target
Offset Aiming Point for Radar: Northern tip of island
in mouth of SUMIDA RIVER (35°40'N-139°47'E)
Measure Course Error at 11.0 NM Slant Range
Begin Final Correction, Start Rate Motor at 8.0 NM.
OAP to 1st Bomb: 10,000 ft.

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By M/NARA Date 8/30/05

S E C R E T

Annex No 1 to FO 22 (cont'd)

b. Special Instructions:

- (1) Radar Bomb Runs on other than planned radar bombing course will be executed as follows:
 - (a) Bombsight Sighting Angle preset according to Par 3. d.
 - (b) Release Circle preset at 11.0 NM slant range.
 - (c) A/C will fly a trackcourse to cross the center of the TOKYO CITY area between the SUMIDA and ARA RIVERS.
 - (d) Telescope will be started when the Release Circle crosses the estimated centeroff area between the SUMIDA and ARA RIVERS.
 - (e) Precomputed Final Correction Tables in Par 3. c. will not be used on Radar bomb runs other than the planned run.
- (2) Bombing will be done on 20 mile range of scope.
- (3) Adjustable Range Control will be preset to give 17 miles actual range on scope, for bombing.

S E C R E T

- 2 -

3. c. Final Course Correction Table:

<u>Measure Course Error at 11.0 NM Slant Range</u>	<u>Make Final Correction, Start Rate Motor at 8.0 NM Slant Range</u>
0°	0°
1	1
2	2
3	3
4	4
5	6
6	7
7	9
8	10
9	11
10	13
11	14
12	16
13	18
14	19
15	22
16	23
17	24
18	26
19	28
20	30
21	33
22	36
23	39
24	42

d. Bombardier's Sighting Angle Table:

<u>True Altitude</u>	<u>Preset Tel. Angle</u>
26,250	62.7°
500	62.4
750	62.1
27,000	61.8
250	61.5
500	61.2
750	60.9
28,000	60.6
250	60.3
500	60.0
750	59.7
29,000	59.4
250	59.1
500	58.8
750	58.5
30,000	58.2
250	57.9
500	57.6
750	57.3
31,000	57.0

<u>True Altitude</u>	<u>Preset Tel. Angle</u>
31,250	56.7
500	56.4
750	56.1
32,000	55.7
250	55.4
500	55.1
750	54.8
33,000	54.5
250	54.2
500	53.9
750	53.6
34,000	53.3

4. ALTERNATE ROUTE B (Additional Bombing Information required if Alternate Route B is flown).

a. Primary Target

Axis of Attack: 293° T

Initial Point: OHAMI AIRFIELD, $35^{\circ}30'$ N - $140^{\circ}26'$ E

b. Secondary Target

Axis of Attack: 293° T

Initial Point: OHAMI AIRFIELD

Offset Aiming Point: Bridge at mouth of ARA RIVER,
 $35^{\circ}40'$ N - $139^{\circ}51'$ E

Radar Tables are the same.

By command of Brigadier General O'DONNELL:

BRUGGE
DC/S, O & T

OFFICIAL:

Hewitt
HEWITT
Asst A-3

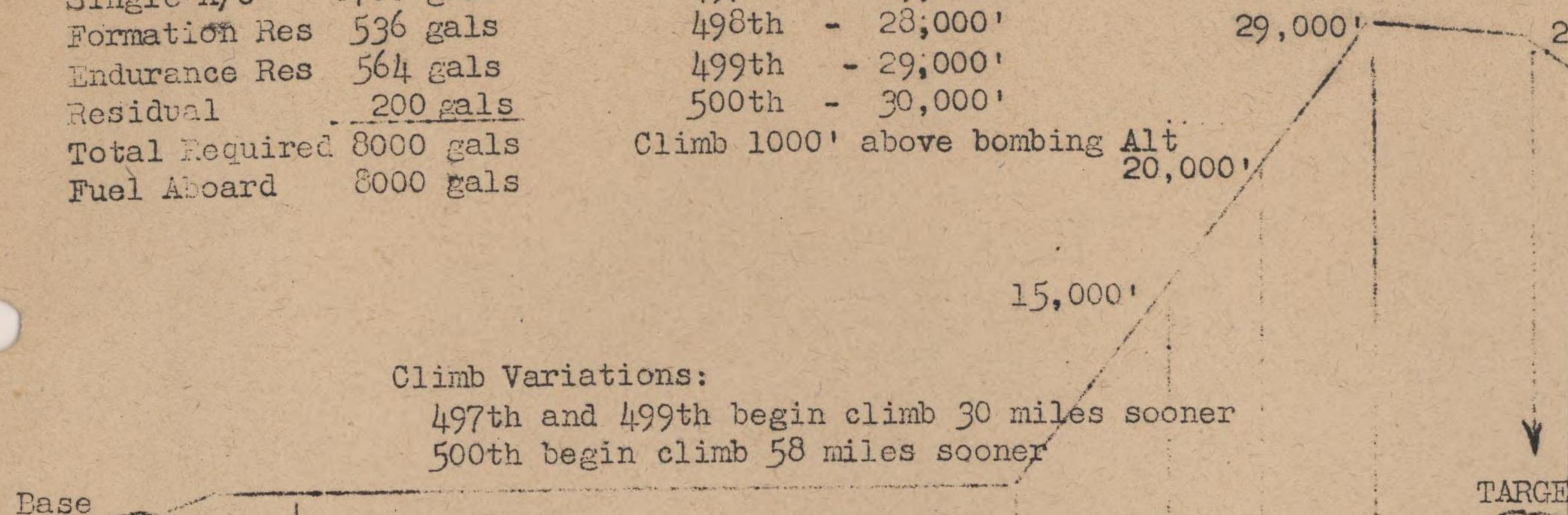
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 ANNEX NO 2 TO FO 22, 73D BOMB
 CRUISE PLAN (No Wind Plan) ROUTE

Fuel Estimates
 Single A/C - 6700 gals
 Formation Res 536 gals
 Endurance Res 564 gals
 Residual 200 gals
 Total Required 8000 gals
 Fuel Aboard 8000 gals

Bombing Altitudes
 497th - 29,000'
 498th - 28,000'
 499th - 29,000'
 500th - 30,000'

Climb 1000' above bombing Alt
 20,000'



Climb Variations:

497th and 499th begin climb 30 miles sooner
 500th begin climb 58 miles sooner

C.A.S	205	200	205	200	195	195
TIME	:57	4:00	:35	:17	:60	:24
DISTANCE	175	718	119	66	255	104
Lead A/C	35"MP	34"MP	33" MP	41" MP	41"	39"
Power Set	2200 RPM	2150 RPM	2100 RPM	2350 RPM	2350	2300
Wing A/C						
Power Set						
Fuel L	750 gal	1720 gal	490	240	850	380
Fuel W						
Total Fuel L	750 gal	2470 gal	2960	3200	4050	4430
Total Fuel W						
Gross Weight L	137000	132500	122780			
Gross Weight W						
Total Distance		1437				

NOTE: 1. Rates of climb used for planning
 1000' - 15000' - 400'/min
 15000' - 20000' - 300'/min
 20000' - 29000' - 150'/min

Distance traveled in climb calculated for T.A.S. at 2/3 Alt.

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49.

OFF

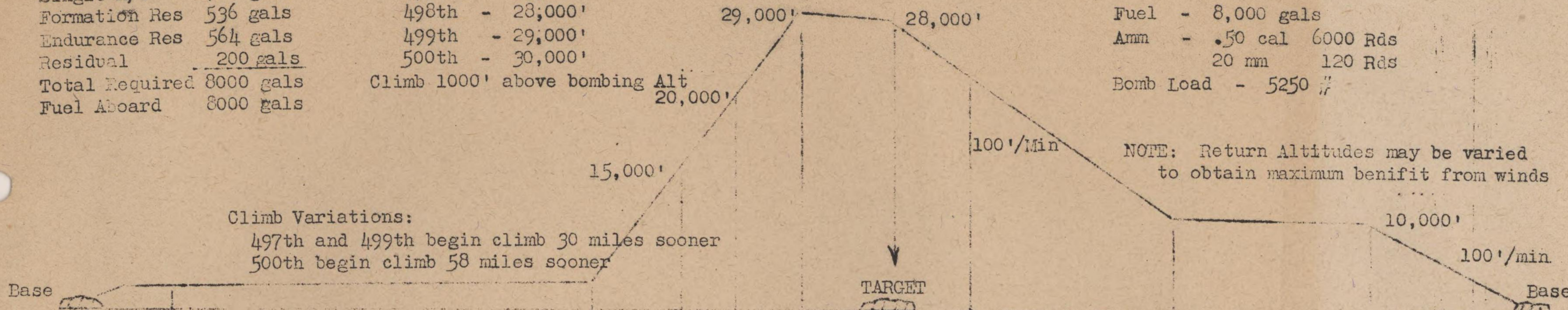
DECLASSIFIED
 Authority NND 760003
 By MNA/PA Date 8/3/05

SECRET
 ANNEX NO 2 TO FO 22, 73D BOMB WG
 CRUISE PLAN (No Wind Plan) ROUTE "A"

Fuel Estimates
 Single A/C - 6700 gals
 Formation Res 536 gals
 Endurance Res 564 gals
 Residual 200 gals
 Total Required 8000 gals
 Fuel Aboard 8000 gals

Bombing Altitudes
 497th - 29,000'
 498th - 28,000'
 499th - 29,000'
 500th - 30,000'

Loading
 Fuel - 8,000 gals
 Amm - .50 cal 6000 Rds
 20 mm 120 Rds
 Bomb Load - 5250 #



Climb Variations:
 497th and 499th begin climb 30 miles sooner
 500th begin climb 58 miles sooner

C.A.S	205	200	205	200	195	195	190	190	190	190	185
TIME	:57	4:00	:35	:17	:60	:24	1:00	2:10	2:00	1:24	
DISTANCE	175	718	119	66	255	104	710	390	250		
Lead A/C	35"MP	34"MP	33" MP	41" MP	41"	39"	31"	30"	29.5"	29.5"MP	30" MP
Power Set	2200 RPM	2150 RPM	2100 RPM	2350 RPM	2350	2300	2150	2000	1700	1800 RPM	1650 RPM
Wing A/C											
Power Set											
Fuel L	750 gal	1720 gal	490	240	850	380	440	750	640	440	
Fuel W											
Total Fuel L	750 gal	2470 gal	2960	3200	4050	4430	4870	5620	6260	6700	
Gross Weight L	137000	132500	122780				105170			96800	
Total Distance		1437							1350		

NOTE: 1. Rates of climb used for planning
 1000' - 15000' - 400'/min
 15000' - 20000' - 300'/min
 20000' - 29000' - 150'/min

Distance traveled in climb calculated for T.A.S. at 2/3 Alt.

No wind time to target - 7 hr 13 min
 By command of Brigadier General O'DONNELL:
 No wind time to base - 5 hr 30 min
 OFFICIAL: *[Signature]* 13 hr 43 min
 GIBSON
 Wg Staff Engr
 SWEENEY
 C of S

SECRET

SECRET

ANNEX 3 TO F.O. # 22. 73BW

COMMUNICATIONS

1. Radio Frequencies:

a. Liaison AN/ART 13

1. 3145	73BW Ground Station	(CW)
2. 7310	73BW Ground Station	(CW)
3. 11160	73 BW Ground station	(CW)
4. 4475	Primary Dumbo Lifeguard	(Voice and CW)
5. 4420	Secondary Dumbo Lifeguard	(Voice and CW)
6. 4595	AACS Ground Station	(CW)
7. 8200	AACS Ground Station	(CW)
8. 4495	Saipan Tower (Emergency only)	(Voice)
9. 7362.5	30th Bomb Group Primary	(CW)
10. 7590	30th Bomb Group Secondary	(CW)
Low-500	Int'l Distress (CW) guarded by all stations 15-18 min and 45-48 min after the hour.	

Guarded continuously by Lifeguard during strike

b. VHF Command:

Channel A - Bomber to Fighter
Channel B - Bomber to Bomber
Channel C - Tower, Dumbo and Lifeguard
Channel D - Homing

c. SCR 274-N

4495kc } TOWER -
6500kc }
(10 MIN. ...)

2. Radio Call Signs and Call Words:

V531 - 497th Bomb Group
V532 - 498th Bomb Group
V533 - 499th Bomb Group
V534 - 500th Bomb Group
OOV530 - 73rd Bomb wing. Ground Station
OOV550 - 30th Bomb Group Ground Station (Emerg. Alternate)

3. Codes, Ciphers, and Recognition.

- a. Air-Ground - CSP 1270 (CX)
b. Authentication - Voice and CW - CSP 1270 (CX)
c. Recognition signals:

(1) SP 02440 - Key List
(02442 - Recognition Signals, Surface Vessels
02443 - Recognition Signals, Submarines
02312 - Air-Sea Recognition Procedure

S E C R E T

4. Contact and Strike Reports:

- a. Contact Reports - No contact Report will be made by radio.
- b. Strike Reports - SOP Communications XXI Bomber Command dtd 15 November 1944.

5. Radio Aids to Navigation:

- a. Extracts of NATAPOA covering Saipan, Tinian and Guam.
- b. Radio Buoys on 1700kc coded "K" at 21-38N 144-51E and on 1450kc coded "Y" at 18-22N 145-15E, "K" approximately 400 miles from Saipan, "Y" approximately 200 miles from Saipan.

6. Tower:

- a. Assignment of Primary tower Frequencies:

<u>GROUP</u>	<u>PRIMARY</u>	<u>1ST ALT.</u>	<u>2ND ALT.</u>
497th	Channel C (VHF)	4495kc	any other
498th	4495kc	6500kc	any other
499th	6500kc	Channel C (VHF)	any other
500th	Channel C (VHF)	4495kc	any other

- b. Squadron leaders will call tower for Take-off instructions in regular manner as for an individual airplane. No other airplane will call on take off.
- c. Use assigned frequencies for requesting landing instructions on return to base.

7. Rescue Procedure and Facilities:

- a. See Annex 1 to Annex 3 to FO# 22.

8. IFF:

- a. Turn on at take off. Turn off when 300 miles out from base.
- b. Turn on again when leaving enemy coastline on route home from target. Leave on until landing at home base.
- c. EMERGENCY code in distress.

9. Distress Procedure:

- a. SOP Communications XXI Bomber Command dtd 15 November 1944.

SECRET

b. Lost and Distress Procedures: Airplane Commander, Navigator
Radio and Radar Operator.

By Command of Brigadier General O'DONNELL:

BYRON E. BRUGGE
Colonel, Air Corps
Dep C/S Op. and Tng.

OFFICIAL:

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

SECRET 51

S E C R E T

Effective 261800Z

ANNEX 1 TO ANNEX 3 FO #22 73 BW

AIR-SEA RESCUE

(This supersedes all previous information on this subject)

1. See Lost and Distress Procedure, A/C Commander, Navigator, Radio and Radar Operator.

<u>TYPE</u>	<u>STATION</u>	<u>REFERENCE PT.</u>	<u>CODE NAME</u> <u>REF. PT.</u>	<u>CALL</u>
Sub.	35-20N 141-00E	Suno Saki Light	Delovely	Delovely
Sub.	34-00N 138-00E	Suno Saki Light	Delovely	Delovely
Sub.	33-00N 141-45E	Hachijo Shima	Fallen Angel	Fallen Angel
Sub.	30-00N 142-50E *	Hachijo Shima	Fallen Angel	Fallen Angel
Sub.	25-00N 144-10E	Iwo Jima	Pickled Eel	Pickled Eel
Dumbo	23-15N 140-18E **	Iwo Jima	Pickled Eel	Pickled Eel (CW 24V213)
Destyr.	21-00N 144-00E	Iwo Jima	Pickled Eel	Whiphand (CW 8W0)

* until sunset 27 Nov 44

**0845I

(Ref. Pt. Code names and calls may be carried in A/C)
(COORDINATES NOT TO BE MARKED ON MAPS OR CARRIED IN A/C)

2. Radio Frequencies Guarded:

- Submarine - 4475 KC, 500 KC, and 140.58 MC.
- Destroyer - 4475 KC, 500 KC, 140.58 MC, and Strike Frequencies.
- Dumbo - 4475 KC, 500 KC, 140.58 MC, and Primary Strike Frequency. (7310 KC) on station at 270045Z)

By Command of Brigadier General O'DONNELL:

BYRON E. BRUGGE
Colonel, Air Corps
Dep C/S Op and Tng

H. L. Hotchkiss
EDWIN L. HOTCHKISS
Lt. Colonel, Air Corps
Communications

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ANNEX NO 4 TO FO 22 73D BOMB WG

RADAR COUNTERMEASURES

1. Each Gp will equip two (2) A/C with search receivers and will provide two (2) Radar Observers (7888) to operate the equipment.
2. The spectrum from 40 to 1000 M.C. will be fully monitored. In the target area particular attention will be paid to the high end of the spectrum.
3. A log will be maintained and submitted to this Headquarters accompanied with a track overlay annotated to show position at times enemy signals were intercepted.

By command of Brigadier General O'DONNELL:

BRUGGE
DC/S, O & T

OFFICIAL:

C. J.
JOHNSON
Radar Obsr, RCM

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By *MM* NARA Date *8/30/05*

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ANNEX NO 5 TO FO 22, 73D BOMB WG

RECONNAISSANCE

1. Aerial Photography.

a. 497th and 498th - Cameras will be started at the coastline on the route in and stopped after bomb impact.

b. 499th and 500th - Cameras will be started prior to bomb impact and will remain on until reaching the coastline on the return route.

2. Radar Scope Photography. Number 4 A/C in each Sq will be the radar reconnaissance A/C. In no case will the taking of radar photographs interfere with normal execution of the radar bombing procedure. Radar reconnaissance missions are assigned as follows:

a. 497th Bomb Gp: 30, 50 and 100-mi range photographs of TOKYO BAY area taken on the Primary Target bomb run.

b. 498th Bomb Gp: 20-mi range photographs approaching the Primary Target I.P.

c. 499th Bomb Gp and 500th Bomb Gp: 20-mi range photographs leaving Primary Target or on bomb run to Secondary Target.

By command of Brigadier General O'DONNELL:

BRUGGE
DC/S, O & T

OFFICIAL:

Wilkinson
WILKINSON
Asst A-3

S E C R E T

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S E C R E T

ANNEX NO 6 TO FO 22 73D BOMB V G

FLIGHT PLAN "A"

	True Crse	Dist	Alt	Temp	IAS	TAS	Time	ETA	Remarks
Base		175	1000	26	205	184	57		Assembly
16° 27'N - 144° 34'E									
16° 27'N - 144° 34'E	331	521	1000	25	200	180	2:53	3:50	Level
24° 00'N - 140° 00'E									
24° 00'N - 140° 00'E	349	200	1000	25	200	180	1:07	4:57	Level
27° 16'N - 139° 17'E									
27° 16'N - 139° 17'E	349	119	9000	2	205	204	35	5:32	400 ft/min Climb to 15000 ft
29° 14'N - 138° 51'E									
29° 14'N - 138° 51'E	349	66	18300	-16	200	232	17	5:49	Climb to 20000 ft 300 ft/min
30° 20'N - 138° 36'E									
30° 20'N - 138° 36'E	349	163	26000	-33	195	255	38	6:27	Climb to 29000 ft 150 ft/min
33° 00'N - 138° 00'E									
33° 00'N - 138° 00'E	14	92	26000	-33	195	255	22	6:49	Climb continued
34° 29'N - 138° 28'E									
34° 29'N - 138° 28'E	14	57	29000	-41	195	267	13	7:02	Level
35° 22'N - 138° 44'E									
35° 22'N - 138° 44'E	63	47	29000	-41	195	267	11	7:13	1440 N.M.
Target									
Back									
Target									
35° 51'N - 141° 27'E	90	82	20000	-17	190	226	22		Descend to 10000ft 100 ft/min
35° 51'N - 141° 27'E									

S E C R E T

ANNEX NO 6 TO FO 22 73D BOMB WING

FLIGHT PLAN "A"

	True Crse	Dist	Alt	Temp	IAS	TAS	Time	ETA	Remarks
Base		175	1000	26	205	184	57		Assembly
16° 27'N - 144° 34'E									
16° 27'N - 144° 34'E	331	521	1000	25	200	180	2:53	3:50	Level
24° 00'N - 140° 00'E									
24° 00'N - 140° 00'E	349	200	1000	25	200	180	1:07	4:57	Level
27° 16'N - 139° 17'E									
27° 16'N - 139° 17'E	349	119	9000	2	205	204	35	5:32	400 ft/min Climb to 15000 ft
29° 14'N - 138° 51'E									
29° 14'N - 138° 51'E	349	66	18300	-16	200	232	17	5:49	Climb to 20000 ft 300 ft/min
30° 20'N - 138° 36'E									
30° 20'N - 138° 36'E	349	163	26000	-33	195	255	38	6:27	Climb to 29000 ft 150 ft/min
33° 00'N - 138° 00'E									
33° 00'N - 138° 00'E	14	92	26000	-33	195	255	22	6:49	Climb continued
34° 29'N - 138° 28'E									
34° 29'N - 138° 28'E	14	57	29000	-41	195	267	13	7:02	Level
35° 22'N - 138° 44'E									
35° 22'N - 138° 44'E	63	47	29000	-41	195	267	11	7:13	1440 N.M.
Target									
Back									
Target									
35° 51'N - 141° 27'E	90	82	20000	-17	190	226	22		Descend to 10000ft 100 ft/min
35° 51'N - 141° 27'E									
27° 00'N - 144° 00'E	166	550	20000	-17	190	226	2:26	2:46	
27° 00'N - 144° 00'E									
25° 42'N - 144° 12'E	173	78	20000	-17	190	226	21	3:07	
25° 42'N - 144° 12'E									
19° 14'N - 145° 08'E	173	390	10000	6	190	194	2:00	5:07	
19° 14'N - 145° 08'E									
Base	173	250	6000	16	185	180	1:23	6:30	Descend to 2000 ft 1350 N.M.

Groups will start climb at the following points:

- 498th Gp (27° 16'N - 139° 17'E)
- 499th Gp (26° 46'N - 139° 24'E)
- 500th Gp (26° 16'N - 139° 32'E)
- 497th Gp (26° 46'N - 139° 24'E)

By command of Brigadier General O'DONNELL:

BRUGGE
DC/S, O & T

OFFICIAL:

Reineck
REINECK
Wg Staff Nav

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Authority *NND 160023*
By *MW* NARA Date *8/30/05*

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ANNEX NO 6 TO FO 22 73D BOMB WING

FLIGHT PLAN "B"

	True Crse	Dist	Alt	Temp	IAS	TAS	Time	ETA	Remarks
Base		175	1000	+26	205	185	:52		Assemble
16 27 N - 144 34 E									
16 27 N - 144 34 E	356	458	1000	+25	205	185	2:28	3:20	
24 05 N - 144 00 E									
24 05 N - 144 00 E	356	165	10000	+2	205	211	:47	4:07	Climb to 20000 ft
26 50 N - 143 47 E									
26 50 N - 143 47 E	356	10	10000	+2	200	235	:02	4:09	Turn
27 00 N - 143 47 E									
27 00 N - 143 47 E	344	88	18300	-16	200	235	:23	4:32	End climb - two min dog-leg
28 24 N - 143 20 E									
28 24 N - 143 20 E	344	98	20000	-18	195	235	:25	4:57	Level
29 59 N - 142 48 E									
29 59 N - 142 48 E	344	290	26600	-33	195	260	1:07	6:04	Climb to 30000 ft
34 40 N - 141 12 E									
34 40 N - 141 12 E	344	43	30000	-43	195	275	1:10	6:14	End climb - 2 min dog-leg
35 18 N - 141 00 E									
35 18 N - 141 00 E	288	30	30000	-43	195	275	:06	6:20	I. P.
35 29 N - 140 28 E									
35 29 N - 140 28 E	288	44	30000	-43	195	275	:10	6:30	Target Dist 1404
35 42 N - 139 35 E									

By command of Brigadier General O'DONNELL:

OFFICIAL:

Reineck
REINECK
Wg Staff Nav

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By *MNARA* Date *8/30/05*