

Folder No. 9

MISSION #25 IWO JIMA "STARLIT 2"
29 January 1945

2-5239-107

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Authority *MMJ/0063*
By *SP-NARA* Date *9/23*

8.C

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HEADQUARTERS 313th
BOMBARDMENT WING
APO # 247 c/o Postmaster
SAN FRANCISCO, CALIFORNIA

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BY AUTHORITY OF
THE COMMANDING GENERAL
2 FEBRUARY 1945
David A. Buehler Lt Col SAC
Dcls op and Tmg.

TACTICAL MISSION REPORT

MISSION NO. IWO JIMA II FIELD ORDER NO. C
29 JANUARY 1945

XXI Bomber Command.

Mission No. 25.

2-5239-107

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Headquarters
313th Bombardment Wing
Headquarters
XXI Bomber Command

Mission No. Iwo Jima II
Field Order No. C
29 January, 1945
Mission # 25

CONSOLIDATED MISSION REPORT

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Headquarters
313th Bombardment Wing
APO # 247, 7 PM
San Francisco, Calif.

Mission No. Iwo Jima II
Field Order No. C
29 January 1945

TACTICAL NARRATIVE

1. The Target:

Field Order G, 313th Bombardment Wing, dated 27 January 1945, directed that a normal force from the 504th and 505th Groups attack airfields and installations on Iwo Jima Island. Airfield # 1 and installations was assigned to the 505th Group and Airfield # 2 and installations to the 504th Group. No secondary or last resort targets were assigned.

2. Take-off

Time of take-off was changed from 0630K to 1000K by XXI Bomber Command. In compliance with this order, thirty-three (33) aircraft were airborne from 282400Z to 290036Z.

3. Bomb Loading

Airborne aircraft each carried 24 x 500 GP bombs, Typ AN - M43 fusing 1/10 sec. nose 1/40 sec. tail, modified vanes. A total of 792 bombs (198 short tons) was carried.

4. Route Out

Due to weather, formation as ordered was not achieved. Route as ordered was followed with slight variation.

5. Bombing Data

Of the thirty-three (33) aircraft airborne, three (3) returned early, two (2) failed to bomb because of rack malfunction, and twenty-eight (28) dropped a total of 665 x 500 lb. bombs.

The three aircraft returning early, two failing to bomb, one on which 6 bombs hung up and one on which one hung, jettisoned a total of 127 x 500 GP bombs.

All aircraft bombing released visually from altitudes 23000' to 25,200'. Bombing was from 290421Z to 290472Z.

6. Enemy Air Opposition

Three (3) unseager passes were made by either Zeke or Oscar which did not open fire. Three phosphorous bombs were observed, two burst 2500' above formation and one burst below and behind. A total of four e/a were seen.

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Tactical Narrative (cont'd.)

7. Enemy Tactics

Insufficient attacks for any analysis.

8. Antiaircraft Fire

Heavy, moderate and inaccurate, the majority appearing to be small concentrations or box barrages. One aircraft sustained minor damage.

9. Route Back

The 504th Group aircraft returned direct to Base, the 505th by way of Maug Island and Pagan Island to Base.

10. Damage Assessment

Approximately 665 X 500 lb GP bombs were dropped on the target and about 14% fell within the target area. There was no visible damage to the target set except severe cratering of the South end of Airfield #1 and moderate cratering at the intersection of runways at Airfield # 2.

11. Own Losses

None

12. Claims

None

13. Weather

Target area had from 0/10 to 3/10 cumulous clouds. Wind changed nearly 90° from forecast increasing drift.

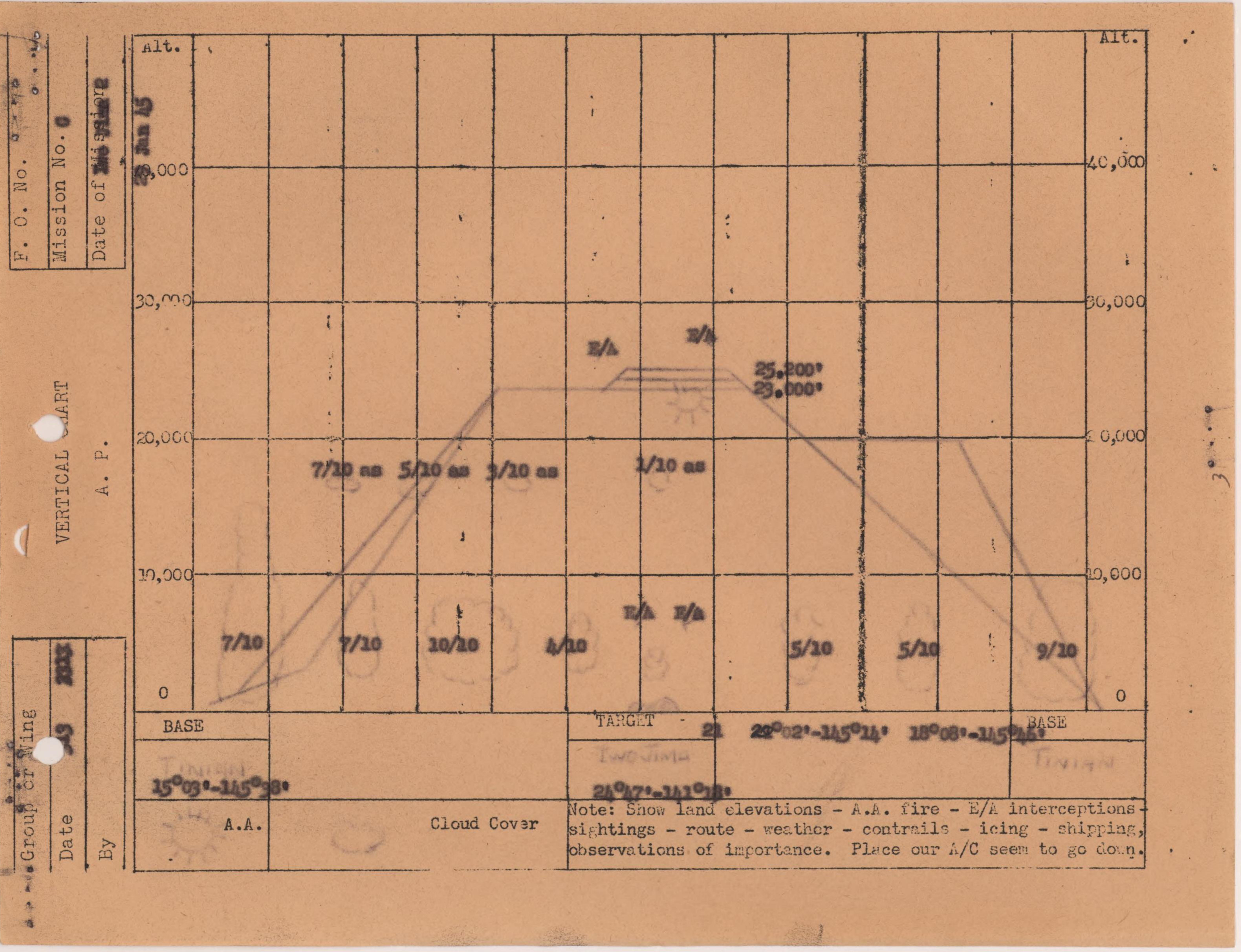
14. Observations

Apparent AA gun flashes West of NE - SW runway, Airfield # 2.

15. Landing

All aircraft landed at base from 290724Z to 290805Z.

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Group of Wing 23 2003
 Date
 By

RESTRICTED
Group or Wings

Date

By

505th Group
FORMATIONS

C

F. O. No.

Iwo Jima II

Mission No.

29 January 1945

Date of Mission

OUT

Time Heading Distance

T T T
T T T
T T T
T T T

OUT

Time Heading Distance

T T T
T T T
T T T
T T T

FP

Time Heading Distance

T T T
T T T
T T T
T T T

OVER TARGET NO. 1

Time Heading Distance

T T T
T T T
T T T
T T T

OVER TARGET NO. 2

Time Heading Distance

BY THREE, TWO
AND SINGLE
AIRCRAFT

RESTRICTED
 Group or Wings
 Date
 By

504th Group
 FORMATIONS

F. O. No. C
 Iwo Jima II
 Mission No.
 29 January 1945
 Date of Mission

OUT		OUT	IP
Time	Heading	Distance	Time Heading Distance
T	T		T T
T	T		T T
(T) SOSIA A/C	T		T (T)
T			T
T			T T

NOTE: 3 A/C JOINED SOSIA

OVER TARGET NO. 1
 Time Heading Distance

SAME AS IP

OVER TARGET NO. 2
 Time Heading Distance

BY THREE
 AIRCRAFT
 ELEMENTS

Headquarters
313th Bombardment Wing

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Mission No. Iwo Jima II
Field Order No. C
29 January 1945

CONSOLIDATED MISSION REPORT

BASIC DATA

1. TIME OF TAKE-OFF:

- a. 505th Bomb Gp: from North Field, Tinian
Time: First A/C - 282400Z
Last A/C - 290024Z
- b. 504th Bomb Gp: from North Field, Tinian
Time: First A/C - 290025Z
Last A/C - 290036Z

2. TIME OF LANDING:

- a. 505th Bomb Gp:
(1) Place: North Field, Tinian
Time: First A/C - 290728Z
Last A/C - 290605Z
(2) Deviations from landings ordered: None
- b. 504th Bomb Gp:
(1) Place: North Field, Tinian
Time: First A/C - 290724Z
Last A/C - 290755Z
(2) Deviations from landings ordered: None

3. SQUADRON ASSEMBLY:

Group	Place	Altitude	Time arrival first A/C
505th	Assembled on course due to bad weather		
504th	15°17'N - 145°50'E	1500'	290051Z

4. GROUP ASSEMBLY:

Group	Place	Altitude	Time arrival first A/C
505th	Assembled on course due to bad weather		
504th	Same as Squadron		

5. WING ASSEMBLY:

Group: None.

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Basic Data (Cont'd.)

6. AIRCRAFT RETURNING EARLY:

A/C No.	Sqdn. No.	Place	Time	Reason
508	482	Tinian	290449Z	Prop. Governor # 3 engine
255	483	Tinian	290043Z	Oil leak # 1 engine
867	484	Tinian	290046Z	Runaway Prod.

7. ROUTE OUT:

a. Lead Group:

From	Time	Altitude	I. A. S.
Base	290048Z	1500'	195
To:			
23°30'N - 144°23'E	290313Z	24000'	200
23°32'N - 141°55'E	290351Z	24000'	195
24°15'N - 140°59'E	290432Z	24000'	195
Target	290439Z	23500'	190

b. Second Group:

From	Time	Altitude	I. A. S.
Base	290051Z	1500'	195
To:			
23°30'N - 144°04'E	290313Z	23500'	200
23°30'N - 142°00'E	290347Z	23500'	195
24°20'N - 140°55'E	290412Z	23500'	195
Target	290421Z	23000'	190

8. ROUTE BACK:

a. Lead Group:

From	Time	Altitude	I. A. S.
Target	290459Z	24500'	190
To:			
Maug Island	290600Z	20000'	210
Agrigan Island	290605Z	20000'	190
Pagan Island	290616Z	20000'	190
Base	290737Z	1500'	190

b. Second Group:

From	Time	Altitude	I. A. S.
Target	290421Z	23000'	190
To:			
Base	290724Z	1500'	190

9. INITIAL POINTS:

- a. Ordered.
 - (1) 24°21'N - 140°56'E
- b. Flown:
 - (1) As ordered with slight deviation by each Squadron.

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Basic Data (Cont'd.)

10. TARGET ATTACK DATA:

- a. No. of A/G attacking target: 28
(1) Primary
(2) Secondary None
(3) Target of opportunity None
(4) Last Resort None

b. Times over Target:

Group	Target No.	First A/G	Last A/G
505th	Airfield # 1	290428Z	290440Z
504th	Airfield # 2	290421Z	290447Z

c. Heading and Altitude from I.P. to Target:

Group	Heading	Altitude
505th	15° - 17°	23000' - 25200'
504th	15° average	23000' - 23400'

d. Heading and altitude over Target:

Group	Heading	Altitude
505th	15° - 17°	23000' - 25200'
504th	15° average	23000' - 23400'

e. Breakaway:

Group	Heading	Altitude
505th	Maintain heading for 50 seconds, losing 500/min. then slow right turn	
504th	Left turn on course of 150°	

f. Rally Point: None

g. Extra runs over target: None

h. Reasons for failure to attack:

A/G No.	Reasons
484	Rack malfunction over target
823	Rack malfunction over target

11. ESCORT DATA:

None ordered

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Headquarters
319th Bombardment Wing

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Mission No. Iwo Jima II
Field Order No. C
29 January 1945

CONSOLIDATED MISSION REPORT

LOSS AND DAMAGE

12. CASUALTIES -- PERSONNEL:

None

13. AIRCRAFT LOST; by plane #

None

14. AIRCRAFT MISSING:

None

15. TOTAL AIRCRAFT FAILING TO RETURN; by Sqdn.

None

16. DAMAGE TO AIRCRAFT:

398th Sqdn. - 42-24837 approaching target, received hit in unpressurized area causing slight damage to escape hatch door.

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Headquarters
313th Bombardment wing

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Mission No. Iwo Jima II
Field Order No. C
29 January 1945

CONSOLIDATED MISSION REPORT

AA AND AIR TO AIR BOMBING

17. ENEMY ANTI-AIRCRAFT FIRE:

Anti-aircraft fire was encountered by both Groups; the first Group over target reported meager and inaccurate fire and the following Group moderate and accurate. The bursts (black) were generally level and ahead for the first Group to level and trailing (approximately 200 yards) by the following Group. Both Groups came in between 23000' and 26000' and observed predicted concentrations. The second Group noted that the lower element of each Squadron seemed to receive the brunt of the flak. The initial Group over the target suffered minor damage to one A/C. A curious observation was recorded by the second Group. They encountered "Balls of Fire" flak concentrations, generally white, about 500' in diameter about 40 bursts, perhaps indicating phosphorous projectiles.

18. OUR TACTICS VERSUS AA:

None necessary

19. AIR TO AIR BOMBING AND ROCKETS:

Three white phosphorous bursts were observed during bomb run, one 1000' below and behind formation and two from 2000' - 3000' above formation. Bursts were 60' to 75' in diameter with streamers.

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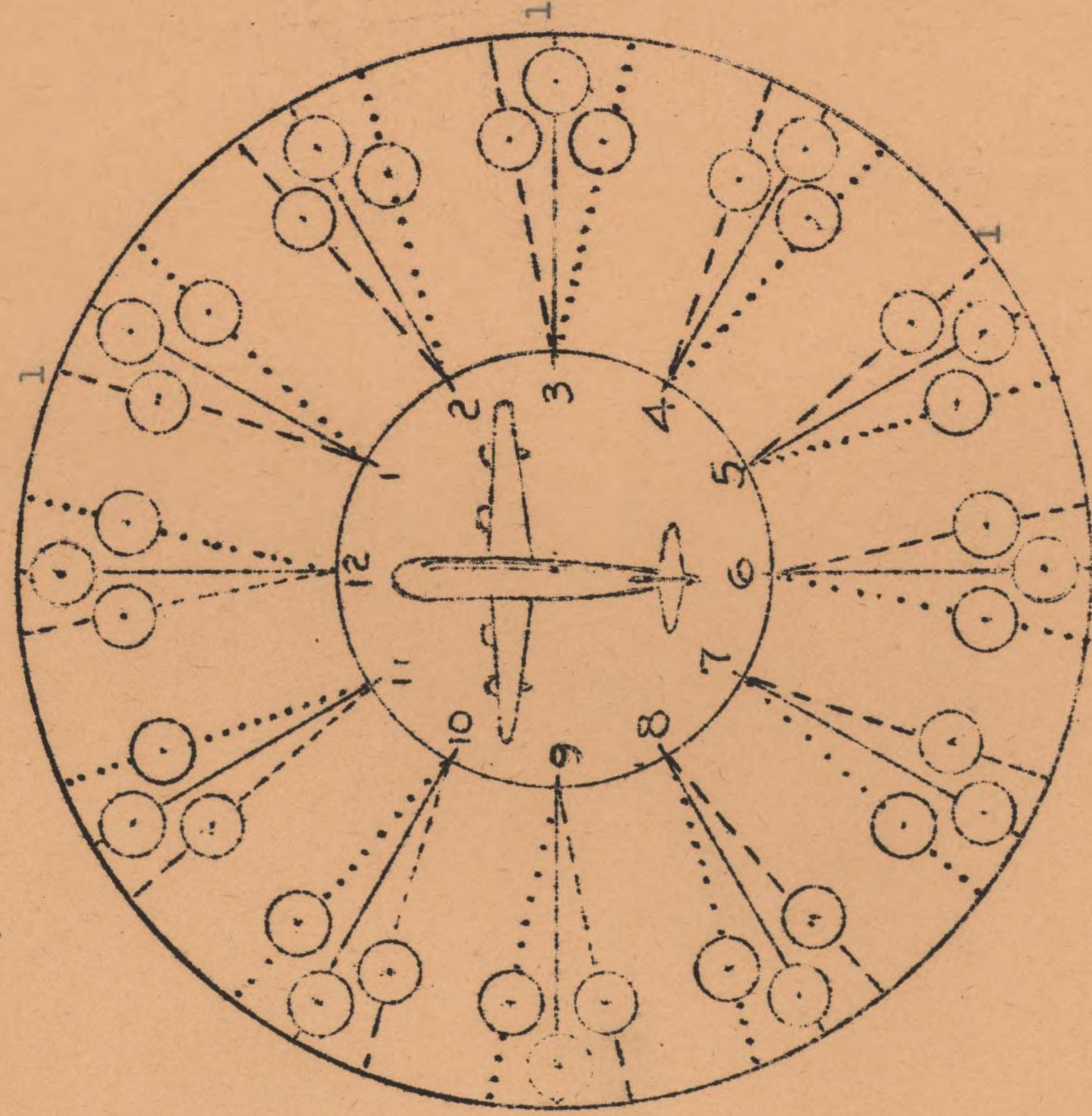
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CONSOLIDATED MISSION REPORT

COMBAT DATA

20. ANALYSIS OF ATTACKS BY ENEMY A/C.



<u>LEGEND</u>	
<u>Attacks:</u>	
Level	_____
From Above	_____
From Below	_____
.....
<u>Enemy A/C:</u>	
Destroyed	X
Probably Destroyed	Δ
Damaged	□
<u>TOTALS:</u>	3
Level	1
From Above	_____
From Below	_____
High	1
Low	1
E/A Destroyed	0
E/A Prob Dest.	0
E/A Damaged	0

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 numbers within the "0" interruption in attack line.

21. YARDS AT WHICH E/A OPENED FIRE: Did not fire

YARDS	100	200	300	400	500	600	700	800	900	1000 or more
NO. A/C FIRING										

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Combat Data (Cont'd)

22. TYPES OF E/A ATTACKING:

One A/C either Zeke or Oscar. Made 3 passes but did not open fire.

23.a TYPES OF E/A SIGHTED:

Two other radial engine fighters were observed circling formation at approximately 5000' altitude.

29. TYPE AND ACCURACY OF ENEMY FIRE AND TYPE PROJECTILES:

No firing by E/A

24. ENEMY AIRCRAFT MARKINGS:

Unobserved

25. ENEMY TACTICS:

Single attacks, breaking away at from 700 - 1000 yards without opening fire. One A/C was observed flying level with formation, out of range, apparently clocking speed and altitude of formation.

26. ENEMY FORMATIONS:

None

27. OUR TACTICS AND FIREPOWER VS. ENEMY A/C:

B-29's countered e/a by opening fire at 1000 yards.

28. RESULTS OF HITS ON E/A:

No hits were scored.

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S E C R E T

Headquarters
313th Bombardment Wing

Mission No. Iwo Jima II
Field Order C
29 January 1945

CONSOLIDATED MISSION REPORT

OBSERVATIONS AND CREW COMMENTS

29. EXPENDITURE OF AMMUNITION:
See Consolidated Statistical Summary.
30. OUR OBSERVED LOSSES BY E/A:
None
31. OUR OBSERVED LOSSES BY AA:
None
32. OBSERVATIONS:
None
33. COMMENTS ON MAPS, CHARTS & PHOTOS USED:
None
34. CREW SUGGESTIONS:
None

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Headquarters
313th Bombardment Wing

Mission No. Iwo Jima II
Field Order No. C
29 January 1945

CONSOLIDATED MISSION REPORT

GENERAL TECHNICAL DATA

35. FUNCTIONING OF OXYGEN SYSTEM:

Depressurization of one A/C took place during bomb run. Reason as yet undetermined.

36. FUNCTIONING OF CLOTHING AND PERSONAL EQUIPMENT:

No comment.

37. CAMERAS:

See Photo Report

38. TECHNICAL FAILURES:

See Engineer Specialist Report.

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RESTRICTED
GROUP OR WING

DATE

BY

CONSOLIDATED MISSION REPORT

BOMBING DATA

F.O. NO.

MISSION NO.

DATE OF MISSION

BOMB DATA (NO. TYPE BY A/C)

A/C NO.	SQ. NO.	BOMB LOAD H.E.				BOMB LOAD I.B.				NO. BOMBS DROPPED			NO. BOMBS JETTISONED	NO. BOMBS BROUGHT BACK
		NO.	SIZE	FUSE		NO.	SIZE LB.	FUSE		H.E.	I.B.	TARGET NO.		
				NOSE	TAIL			NOSE	TAIL					
780	370	25	500	1	1/0	2	100 sky marker			2	1	1	0	0
790	•	•	•	•	•	•	•	•	•	•	•	•	•	•
800	•	•	•	•	•	•	•	•	•	•	•	•	•	•
810	•	•	•	•	•	•	•	•	•	•	•	•	•	•
820	•	•	•	•	•	•	•	•	•	•	•	•	•	•
830	•	•	•	•	•	•	•	•	•	•	•	•	•	•
840	•	•	•	•	•	•	•	•	•	•	•	•	•	•
850	•	•	•	•	•	•	•	•	•	•	•	•	•	•
860	422	25	500	1	1/0	1	100 sky marker			1	1	1	0	0
870	•	•	•	•	•	•	•	•	•	•	•	•	•	•
880	•	•	•	•	•	•	•	•	•	•	•	•	•	•
890	•	•	•	•	•	•	•	•	•	•	•	•	•	•
900	•	•	•	•	•	•	•	•	•	•	•	•	•	•
910	•	•	•	•	•	•	•	•	•	•	•	•	•	•
920	•	•	•	•	•	•	•	•	•	•	•	•	•	•
930	•	•	•	•	•	•	•	•	•	•	•	•	•	•
940	•	•	•	•	•	•	•	•	•	•	•	•	•	•
950	•	•	•	•	•	•	•	•	•	•	•	•	•	•
960	•	•	•	•	•	•	•	•	•	•	•	•	•	•
970	•	•	•	•	•	•	•	•	•	•	•	•	•	•
980	•	•	•	•	•	•	•	•	•	•	•	•	•	•
990	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10	200	200								200	2		6	

TOTALS 5 5

COMMENT: T

15

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CONSOLIDATED MISSION DATA
 BOMBING DATA
 (continued)

GROUP OR WING
 DATE
 BY

F.O. NO.
 MISSION NO.
 DATE OF MISSION

TARGET ATTACK DATA

TARGET NO.	A/C NO.	TIME	ALT.	HDG.	LAS	WIND VELOC.	WIND DIRECT	BOMB SPACING	LENGTH OF RUN IN TIME	SIGHTED		MAN.	RELEASE METHOD		HOW TOGGLED.
										RANGE	DEFL.		CI	ELEC.	
1	700	Dropped on ship	266												on 266
1	730	"	"	"											on 266
1	866	21:17	23,000	22°	190	67K	294	350'	4 1/2 min	-	-				on 266
1	864	Dropped on ship	266												on 266
1	854	Dropped on ship	266												on 266
1	506	21:30	23,000	39°	190	60K	255	350'	5 min	-	-				on 266
1	266	21:21	23,000	12°	190	75K	294	350'	65 sec	-	-				on 266
1	837	Dropped on ship	266												on 266
1	779	"	"	"											on 266
1	824	"	"	"											on 266
1	834	21:40	23,100	25°	190	56	270	350'	4 1/2 min	-	-				on 266
1	852	21:33	Dropped bombs with 505th Bomb Group												
TOTAL		→													
COMMENTS															

RESTRICTED

GROUP OR WING

DATE 30 Jan 45

BY Capt JOHN A RYAN

CONSOLIDATED MISSION REPORT

BOMBING DATA

F.O. NO.
MISSION NO.
DATE OF MISSION

BOMB DATA (NO. TYPE BY A/C)

A/C NO.	SQ. NO.	BOMB LOAD H.E.				BOMB LOAD I.B.				NO. BOMBS DROPPED			NO. BOMBS JETTISONED	NO. BOMB BROUGHT BACK
		NO.	SIZE	FUUSE		NO.	SIZE LB.	FUUSE		H.E.	I.B.	TARGET NO.		
				NOSE	TAIL			NOSE	TAIL					
778	482	24	500	.2	.085					24		1	0	0
809
802
799
517
525
850
508
250	483	.	.	.	.					24		.	.	.
882
815
824
823
255					24		.	.	.
839					24		.	.	.
784
482	484	.	.	.	.					.		.	.	.
484
813					23		1	1	0
867
797					24		1	0	0
TOTALS	24	24	504							303			121	

COMMENTS: T 792

665 127

DECLASSIFIED
 Authority NM 760063
 By SP-NARA Date 9/23

RESTRICTED
 GROUP OR WING
31ST BOMB WING
 DATE
31 Jan 45
 BY
Capt JOHN A RYAN

CONSOLIDATED MISSION DATA
 BOMBING DATA
 (continued)

F.O. NO.
 MISSION NO.
31 JAN 45
 DATE OF MISSION
31 JAN 45

TARGET ATTACK DATA

TARGET NO.	A/C NO.	TIME	ALT.	HDG.	LAS	'WIND VELOC.	'WIND DIRECT	BOMB SPACING	LENGTH OF RUN IN TIME	SIGHTED		RELEASE METHOD		HOW TOGGLED	
										RANGE	DEFL	MAN.	CI		
•	778	1431	24,500	15°	190	90K	290°	110	210°					On loader	
•	809	1433	23,500	•	•	•	•	•	50°	•				•	
•	802	1432	24,000	•	•	•	•	•	110					On loader	
•	799	1432	23,500	•	•	•	•	•	150°					On loader	
•	517	1432	25,200	•	•	•	•	•	60°					•	
•	525	1433	24,000	•	•	•	•	•	120°					•	
•	850	1432	23,000	•	•	•	•	•	120°					•	
•	508	Engine failure													
•	250	1440	24,000	•	•	•	•	•	360°	•	•			Load	
•	882	•	24,500	•	•	•	•	•	•					On load	
•	815	•	23,700	•	•	•	•	•	•					On load	
•	824	•	24,000	Rack malfunction				•	•	•					On load
•	823	•	24,000	Engine failure Rack malfunction				•	•	•					On load
•	255	•	24,500	Engine trouble				•	•	•					On load
•	899	•	23,800	15°	190	90K	290°	110	360°					On load	
•	784	1428	23,000	•	•	•	•	•	300°					On load	
•	482	1432	24,700	17°	•	•	•	•	90	•	•			Load	
•	484	Rack malfunction													
•	849	1440	24,900	17°	190	90K	290°	110	180	•	•			On loader	
•	867	Engine failure													
•	797	1440	24,000	17°	190	90K	290	110	180					On loader	

TOTAL →

COMMENTS **ships 508, 867, 255 had engine trouble; 484, 823 had rack malfunction.**

RESTRICTED
GROUP OR WING
313th Bomb Wg
DATE
1 February 1945
BY
Capt John A. Ryan

CONSOLIDATED MISSION REPORT

F.O. NO.
"C"
MISSION NO.
DATA OF MISSION

BOMBING DATA
(Continued)

CONDITIONS OVER TARGET:

(Narrative for each target - to include weather A.A., visibility, smoke, camouflage, enemy A/C and other observations and conditions.)

1. Weather 1/10 to 2/10
 2. AA - light but accurate
 3. Visibility - unlimited
 4. Smoke - None
 5. Camouflage - None
- I.P. & A.P.: (Comments on selection of I.P., A.P., turn at I.P., etc.)

1. Request a visual IP

REASONS FOR FAILURE TO BOMB:

1. Engine trouble on 3 ships
2. Rack failure on 2 ships. Bombs were jettisoned over target area

RESULTS OF BOMBING OBSERVED: (Own and others)

1. One squadron of the 505th Bomb Gp (Sq #1) showed poor hits.
2. One squadron of the 505th Bomb Gp (Sq #2) showed very good hits.
3. Bombs of a 6 ship formation hit left of the target but not in the target area.
4. Bombs of a 2 ship formation hit the target area.

POSSIBLE SOURCES OF ERROR IN BOMBING:

~~XX~~

1. IP too close to AP
2. Change of formation leader too close to target
3. Lead ship made too abrupt a turn onto target.

USE OF RADAR & EFFICIENCY:

Not used.

SUMMARY OF BOMB DAMAGE:

See paragraph 50 & 51 consolidated Mission Report

COMMENTS & SUGGESTIONS:

1. Make I.P. further from target.
2. Make runs close to downwind as possible

DESCRIPTION, DIMENSIONS, & AREA (IN SQ. FT. OF TARGET)

6000,000 Sq Ft target #1 - Runway and adjacent building

AIMING POINT & DESCRIPTION

Target #1 AP #1 Southern end of triangle formed by runways
" #4 AP #2 Southern end of longest runway SW-M5-2184, AF
Target #2 South East corner of triangle in lower half of runway

41.

42.

43.

44.

45.

46.

47.

48.

49.

Group or Wing 505th
Date 1 Feb 45
By

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F.O.No. 0 170 JIMA 2
Mission No. 29 Jan 45
Date of Mission

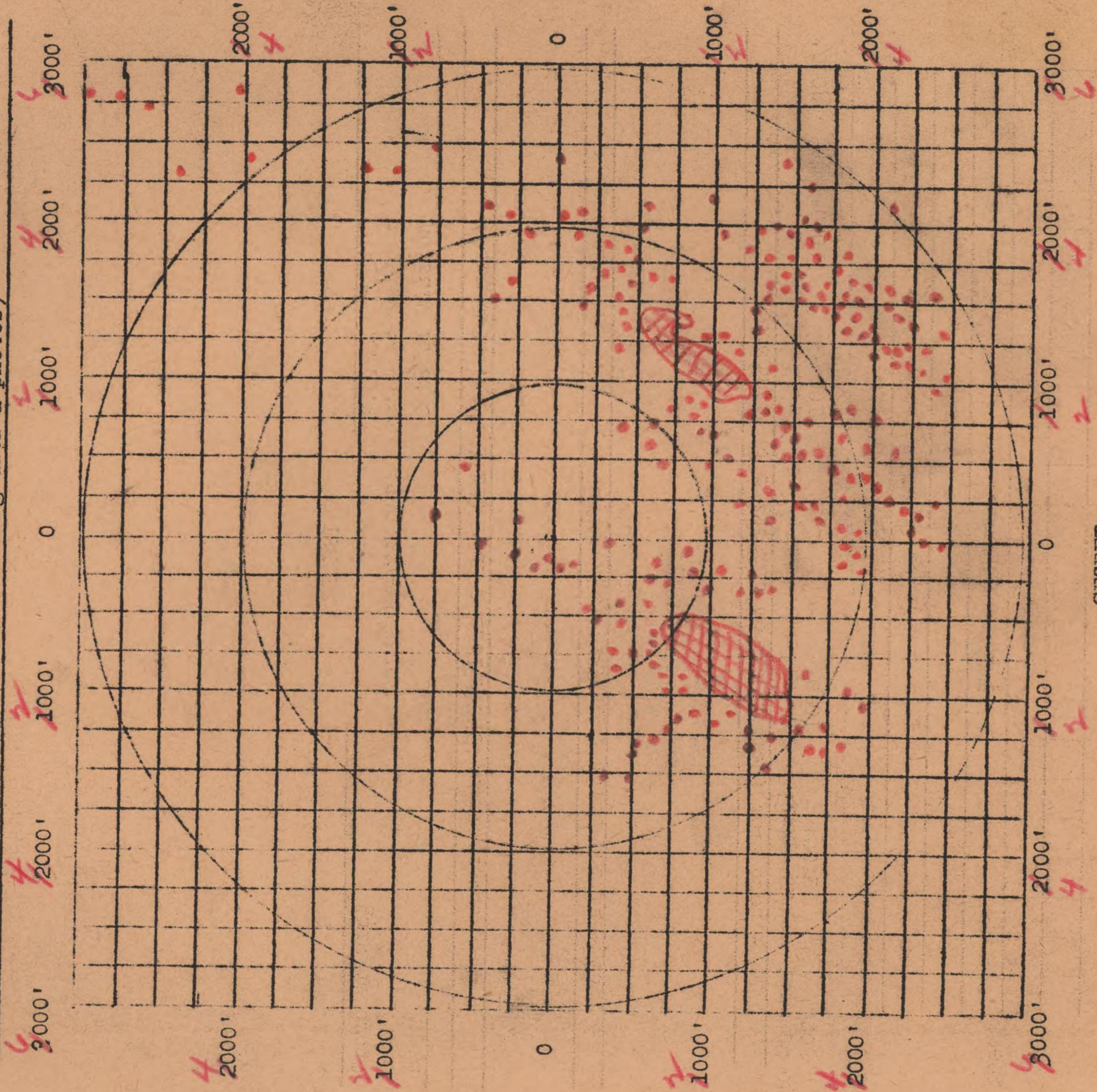
BOMB IMPACT DATA

48 - Description, Dimensions & Area (in sq. ft. of target)

49 - Aiming Point & Description

M.P.I. - Northern corner of first large triangle formed by the joining of the three runways.

50 - Bomb Plot (Compiled from bombing data & photos)



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51 - Bomb Damage Assessment

The 505th Bomb Group dropped 383 bombs of which approximately 332 or 86.5% were recorded photographically. Only 34 of these bombs fell within the target area and caused no visible damage except severe cratering of the southern end of the runways.

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SECRET

Group or Wing 504th
Date 1 Feb 45
By

BOMB IMPACT DATA

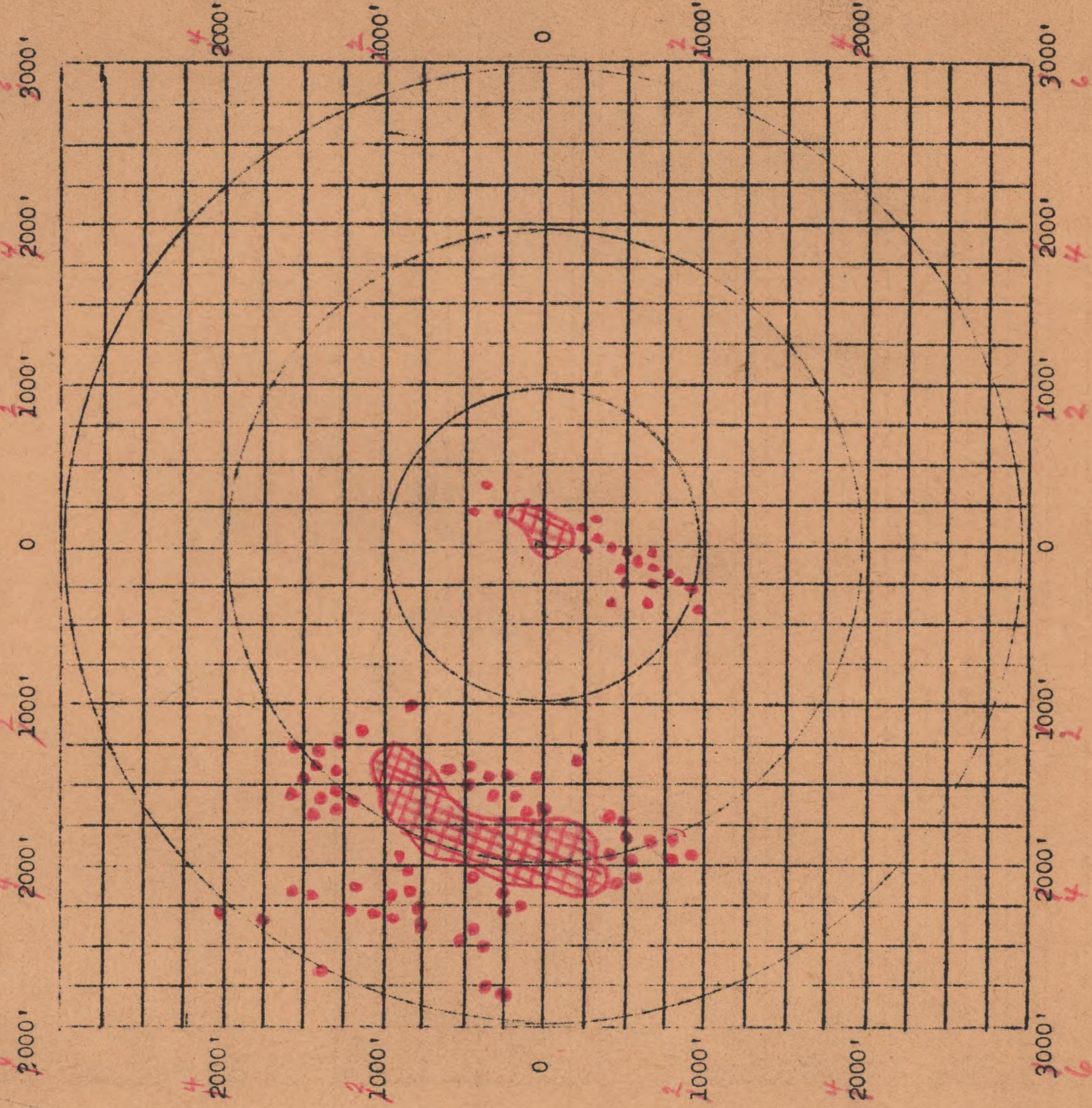
F.O.No. 0
Mission No. 170 JMB 2
Date of Mission 29 Feb 45

48 - Description, Dimensions & Area (in sq. ft. of target)

49 - Aiming Point & Description

M.P.I. - **Northeast corner of junction between East-West and North-South runways.**

50 - Bomb Plot (Compiled from bombing data & photos)



SECRET

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SECRET

51 - Bomb Damage Assessment

The 504th Bomb Group dropped 282 bombs of which approximately 152 bombs or 53.9% were recorded on photographs. Thirty-three of these bombs fell within the briefed target area and caused craters at the intersection of the two runways. The principal concentration of bombs from this group fell some 3,000-4,000 feet to the left of the target.

SECRET

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SECRET

Headquarters
313th Bombardment Wing

Field Order "C"
Mission: IWO JIMA #2
29 January 1945

NAVIGATION SPECIALISTS REPORT

1. Chronological account of mission - See paragraphs 1-10, Basic Data.
2. Comment on selection of route, IP and AP; Axis of attack gave too much cross wind; one group thought IP too close to target.
3. Comment on maps, charts, photos, and other navigational aids; Satisfactory.
4. Difficulties in navigation encountered; Need modified antenna system to permit use of Loren in formation; some trouble with both B-3 and B-5 drift-meters fogging up at altitude.
5. Suggested changes in navigational equipment, procedure, and training: None.
6. Comments of Group navigators on quality of navigation: Good to excellent; follow-the-pilot very good in wing-ships; one failure was to obtain accurate wind in target area.

M. C. ROWEN, JR.,
Major, Air Corps,
Wing Navigation Officer.

SECRET

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HEADQUARTERS

315TH BOMB WING

MISSION # IVO JIMA 2

FIELD ORDER #0

29 JANUARY 1945

BOMBARDING SPECIALIST REPORT

Summary of mission:

1. Target bombed and number of aircraft bombing, see Tactical Narrative para. 1, 3 and 5.
2. Method of bombing.
 - a. Bombing was done with leadship sighting for range and deflection and deputy leader sighting for range. All other airplanes dropped on leader.
3. Bombing was not done exactly according to plan. Due to malfunctions of equipment squadrons were unable to fly courses as briefed, thus they encountered unpredicted drift and had very short runs.
4. See para 43, Consolidated Mission Report.
5. See para 45, Consolidated Mission Report.
6. See para 50 and 51, Consolidated Mission Report.
7. See weather section.
8. See para 43, Consolidated Mission Report.

JOHN A. RYAN,
Capt., Air Corps,
Bombardier Officer.

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BOMBING PARTIAL, 31ST BOMBARDMENT WING

W/O NO. 107

CONSOLIDATED MISSION REPORT FOR 29 JANUARY, 1945.

1. TARGET: Iwo Jima.

2. BASE AT TAKE-OFF:

Seven tenths Cumulus with bases at 1,700 feet were observed. The ceiling lowered in showers to 500 feet. Visibility was 5 to 8 miles lowering in showers to less than 2 miles. Seven tenths Altostratus were also observed. Surface wind was East-northeast at 18 knots. As 4/15 Cumulus and 2/20 Altostratus and showers were forecast, dissatisfaction was expressed. Surface winds verified well.

3. ROUTE OUTGOING:

From base decreasing cloudiness to 20 degrees north where there was 5/10 Cumulus bases 2,000 feet and tops 7,000 feet and 3/20 Altostratus at 16,000 feet. Scattered Stratocumulus and Altostratus were observed on the remainder of the route. Clouds and showers interfered with assembly to the extent that formations were not completed as planned. Light rime icing was reported in the Altostratus between 16,000 and 17,000 feet. Turbulence in clouds was light.

4. TARGET:

Two to three tenths Cumulus at 2,000 to 5,000 feet were in the target area. Few Cumulus were over the island during the bombing period but none obscured the target. Most navigators reported winds close to that forecast but a few reported a 22 degree drift which could not be correlated with the forecast wind and which, while possible, is not logically explained by saying the winds were much higher than forecast.

5. ROUTE ON RETURN:

Undercast below 5,000 feet with few breaks. Scattered light showers.

6. BASE ON RETURN:

Seven tenths to overcast Stratocumulus and Cumulus bases 2,000 to 6,000 feet. Scattered showers in area. Visibility 8 miles. In showers ceilings lowered to 1,200 feet and visibility to one mile. Part of the time surface wind at 40 degrees and 20 knots gave cross-wind landing conditions.

7. REMARKS:

Base weather generally worse than forecast, particularly at time of take-off. Otherwise the forecast is believed to have verified well.

SECRET

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DECLASSIFIED

Authority

NM 760063

By

NARA

Date

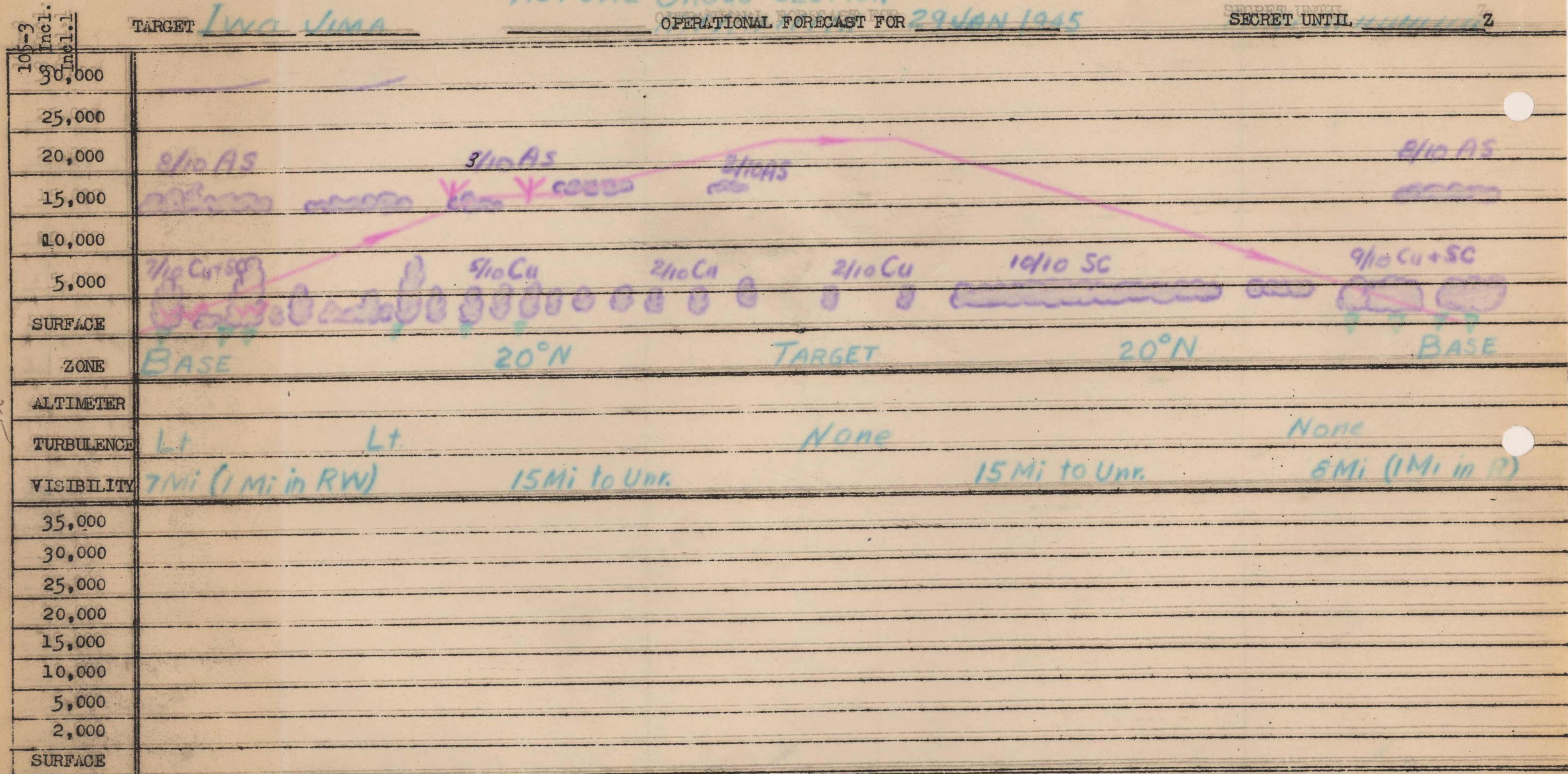
9/23

SECRET

ACTUAL CROSS-SECTION

OPERATIONAL FORECAST FOR 29 JAN 1945

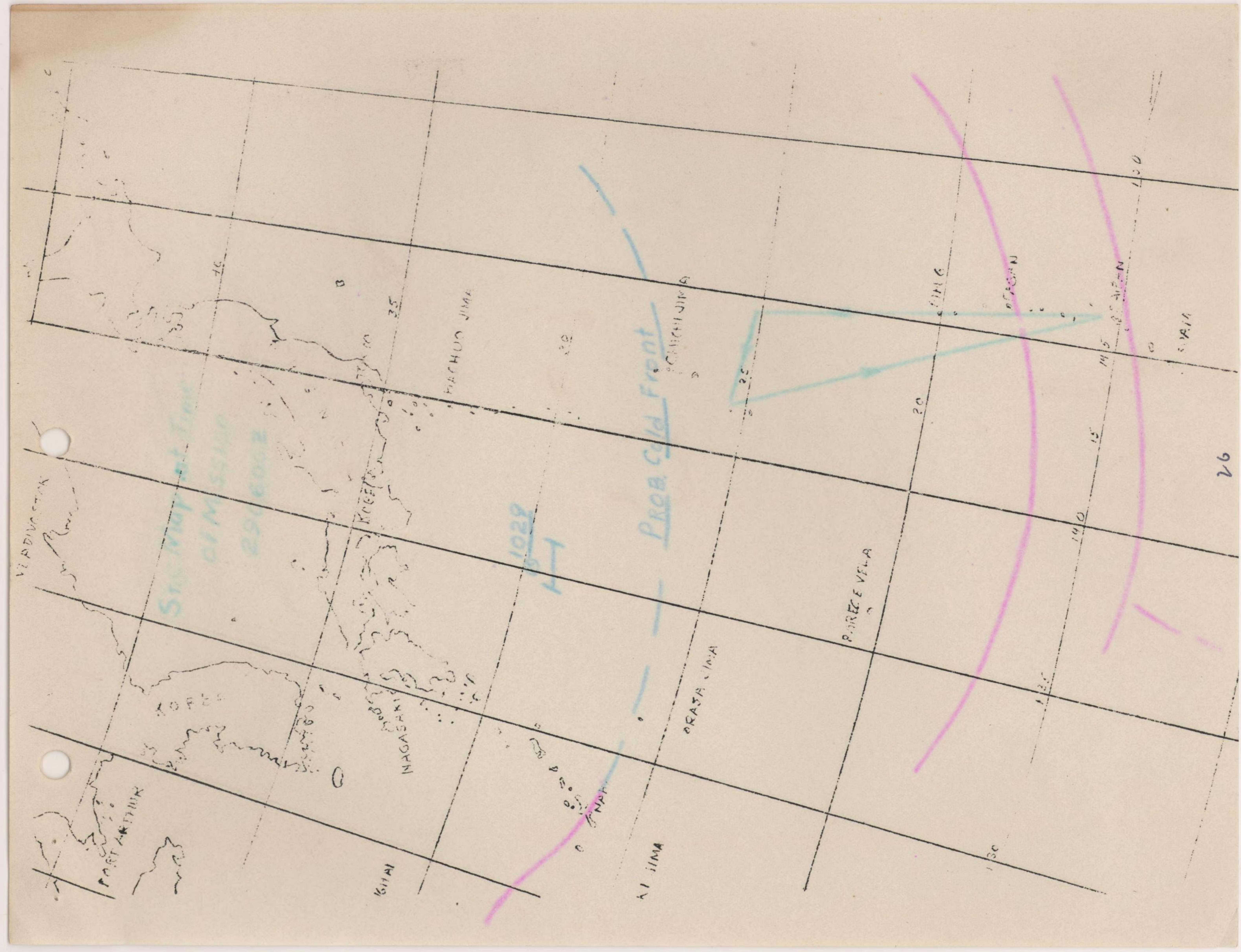
SECRET UNTIL 11/11/11 2

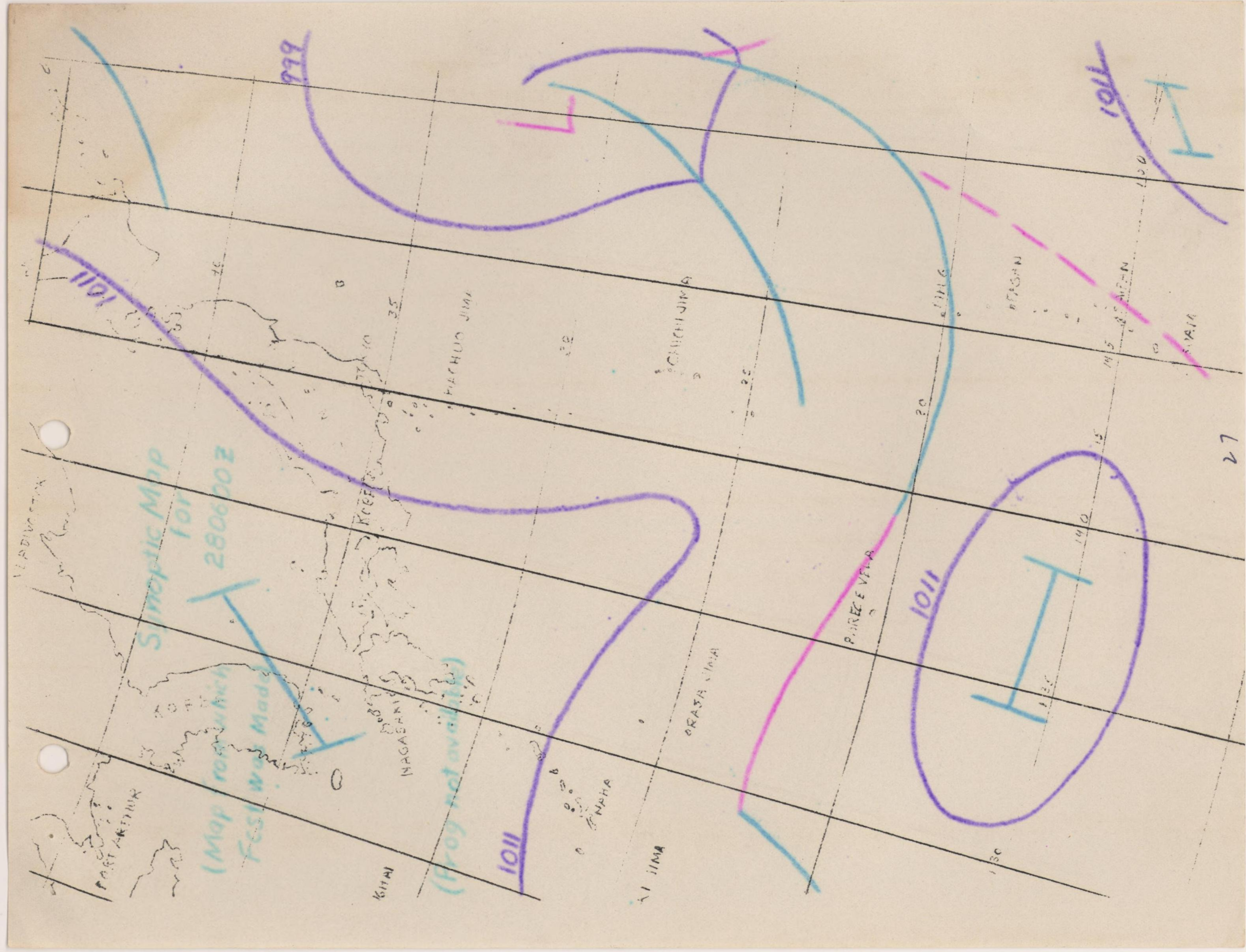


NOTE: WIND VEL. IN KNOTS AND TEMP. IN DEG. CENTIGRADE. WINDS AND TEMPS. ARE FOR PRESSURE ALTITUDE WITH SETTING OF 29.92 INCHES.

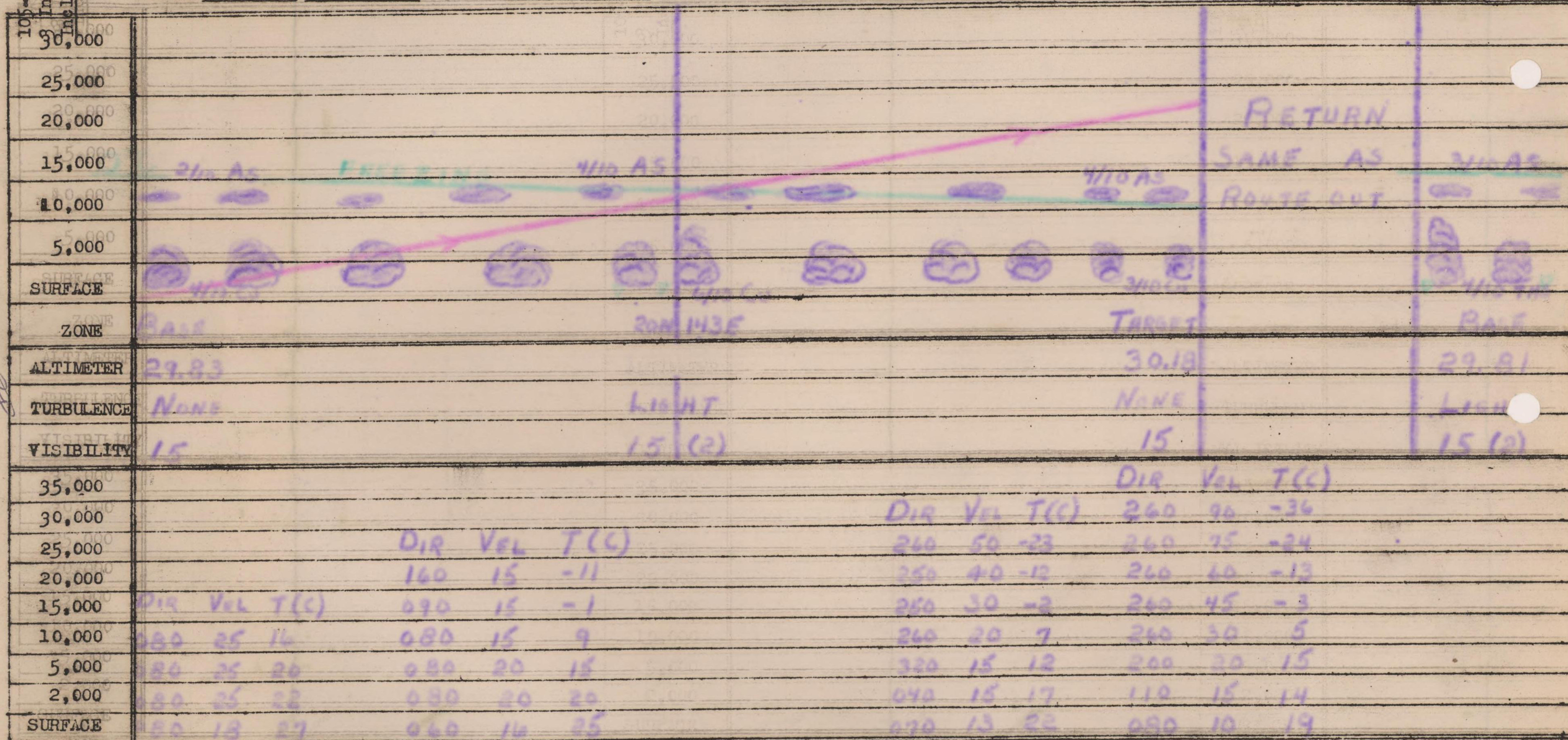
SECRET RETURN FORMS TO GROUP STAFF WEATHER OFFICER AT INTERROGATION. SECRET

SECRET





TARGET IWO JIMA FINAL OPERATIONAL FORECAST FOR 29 JAN 45 SECRET UNTIL 290800 Z



NOTE: WIND VEL. IN KNOTS AND TEMP. IN DEG. CENTIGRADE. WINDS AND TEMPS. ARE FOR PRESSURE ALTITUDE WITH SETTING OF 29.92 INCHES.
 RETURN FORMS TO GROUP STAFF WEATHER OFFICER AT INTERROGATION.

SECRET SECRET SECRET

105-3
3 Incl.
Incl. 3

FINAL OPERATIONAL FORECAST FOR 29 JAN 45

SECRET
UNTIL 29 JAN 45 Z

DATE AND TIME OF FGST PD 0000 Z TO 0900 Z

TARGET Iwo Jima DATE AND TIME ISSUED 1400 Z

BOMBING DATA

I P A	20 000	23 000	25 000	30 000
BOMB. ALT.	20 700	23 800	25 910	31 050
WIND DIR.	260	260	260	260
WIND VEL.	60	70	75	70
TEMP.	-13	-20	-24	-36
MEAN TEMP.		0		-8

NOTE: WIND VEL. IN KNOTS AND TEMP. IN DEGREES CENTIGRADE. WINDS AND TEMP'S. ARE FOR PRESSURE ALTITUDE WITH SETTING OF 29.92 IN.

TARGET ALTITUDE _____ FT

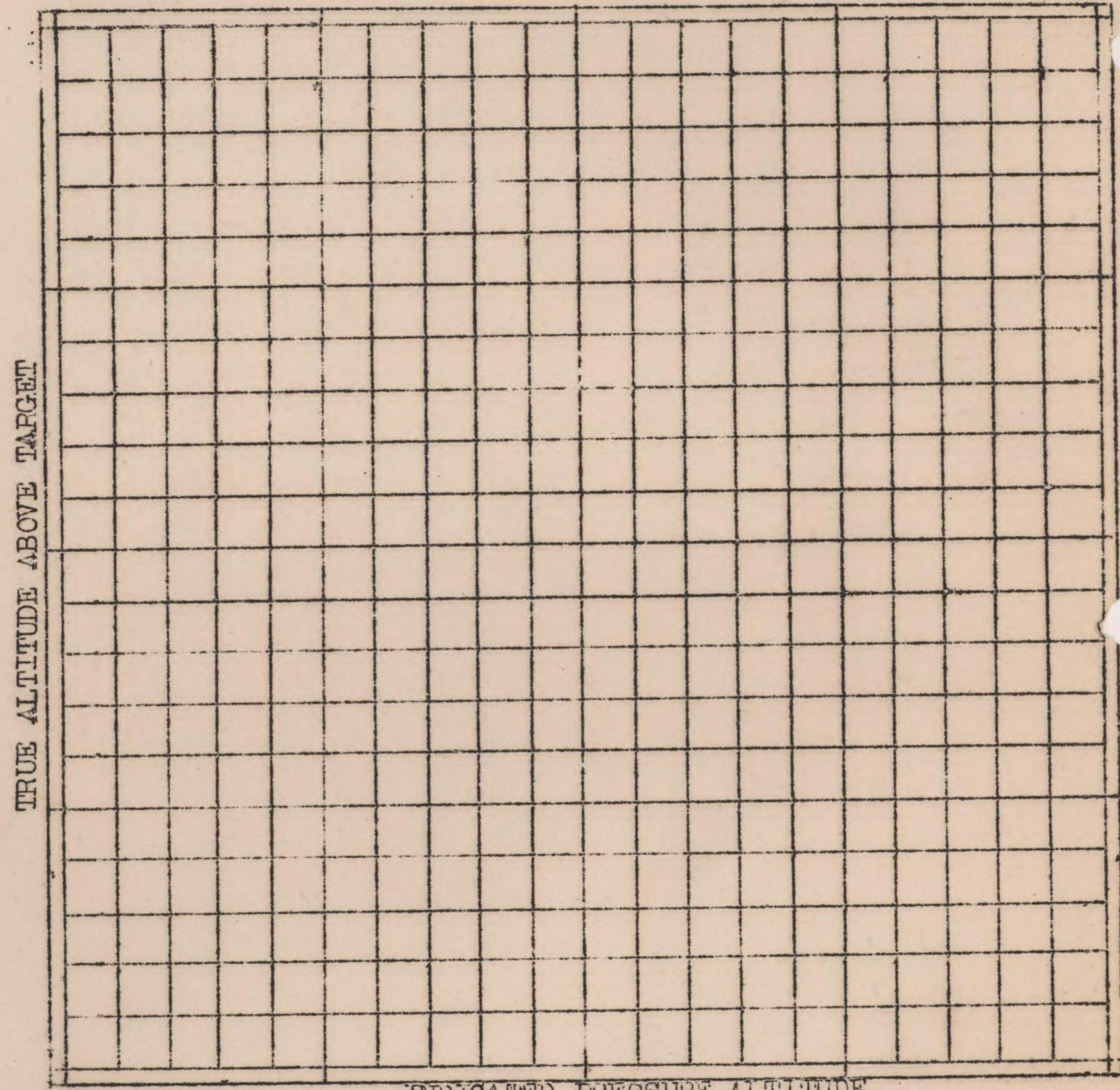
TARGET ALTIMETER 30.18 IN

PRESSURE ALTITUDE OF TARGET -240 FT

TURN IN TO GROUP BOMBARDIER

HEADING _____ GS _____ ALTITUDE _____

DRIFT _____ R _____ OR L _____



RETURN FORMS TO GROUP STAFF WEATHER OFFICER AT INT ERROGATION.

SECRET

29

DECLASSIFIED
Authority NM 76003
By SP-NARA Date 9/23

SECRET

Headquarters

Field Order #8
Mission IWO JIMA #2
29 January 1945

313th Bombardment Wing

GUNNERY SPECIALIST REPORT

1. The mission from the Gunnery side of the picture was highly successful. A total of three (3) enemy aircraft were observed giving the gunners their first view of enemy aircraft. Flack was also encountered. These two incidents more or less gave the gunners their first taste of combat and is excellent preparation for Major Strikes.

a. A total of thirty (30) aircraft participated on this mission. Twelve (12) aircraft were furnished by the 504th Group. Eighteen (18) aircraft were furnished by the 505th Group. These aircraft flew (11) ship formation with modifications suggested by Major General Lecky. The search and fire areas were the same as used by the old eleven (11) ship formation as was the gun assignments.

b. The guns for this mission were loaded hot. This procedure is S.O.P. in this wing. It is found that the guns being hot when take off eliminates the majority of malfunctions caused by faulty gun chargers.

c. The gun turrets and CPU system as a whole functioned 100%. One of the sights developed a little parallax due to use but did not effect the operation of the sight. Up to the time of this report this wing has never had any major malfunctions of the CPU equipment.

d. One radial single engine fighter dropped one phosphorus bomb from above and slightly ahead of the formation. No damage done. One Zeke, the same plane dropping the bomb attacked another part of the formation a few moments later. The attack began at three o'clock high (in sun), closed to about 700 yards and then broke away down and towards six o'clock. One aircraft fired at the attacker with unobserved results. Aircraft never reappeared. Two other enemy aircraft were observed and identified as Oscars or Zekes. These aircraft made no attempts to attack the formation.

e. It was recommended to the Group Gunnery Officers that they impress upon the gunners the importance of a thorough pre-flight. This pre-flight will cut down the number of miscellaneous malfunctions.

f. The mission was successful as far as gunnery is concerned. New lessons were learned, enemy aircraft were encountered, also flak was present. All these served to initiate the gunners for a Major Strike.

MATTHEW A. LARNEY,
Capt., Air Corps.,
Wing Gunnery Off.

SECRET

Field Order No.
Mission 250 25th Div. B
19 January 1945

SECRET

Headquarters
50th Parachute Wing

ENGINE OPERATIONAL RESULTS

1. The flight plan for this mission was similar to the first mission to 250 71st, the assembly period being the major change.
 2. Weather conditions at take-off were almost identical to assembly in the 50th group only and (b) this formation can be considered for analysis purposes. (c) comparisons from the 50th group made up the first formation which landed the target at 1430 hours and also (7) comparisons from the 50th group the second formation which landed the target at 1440 hours.
 3. The climb was made in one step and considering the high starting gross weights average 127,000 lbs to 129,000 lbs, the rate of climb was also good and low, 205' / minute for the 50th group and 180' / minute for the 50th group. The gross or spread which gave the best results was 2700-2750' for the leader and from 2550' to 2400-2500' for the wingmen. Leaders reported spinners had temperatures of from 205 to 245° F in the climb.
 4. No difficulty was experienced during the lead runs prior to the engine start-up 2200-2300 for the leader in the 50th group and 2250-2300 for the 50th group. The callouts/aborted was the same for both groups, the 50th wingman had a power surge from 2200 to 2300 and while the 50th group was nearly between 2200 and 2300.
 5. The variation in densities was so great that little of value can be considered, the wingman in element 3 of the 50th first squadron followed their leader from down to 5,000 on the return to report his loss, he had engine trouble and returned part way on three engines and part way on two engines. An aircraft of the 50th squadron of the 50th group returned on 3 engines. In conclusion was down from the densities.
6. Summary
- (a) In the initial planning the mission had a step and used 2 climbs, when the late change came and the landing altitude was lowered, the mission plan was changed to just one climb.
 - (b) Weather conditions at take-off made the assembly and first part of the climb different than planned.
 - (c) During the climb one leader used emergency and flap settings and nearly all of the wing aircraft were able to keep in formation using the same power setting or even less, this still requires the improvement of maintaining the minimum spinners had temperature allowable in the climb with the good flaps well closed.

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Techniques such as this probably accounts partially for presently low rates of climb, high gross weights used in this mission also decreased performance in climb.

(d) The first squadron of the 505th Group exceeded the brief bomb run OAS by 6 miles per hour indicated; their power settings were high. Leader power in the 505th Group was greater than the average wing power in both squadrons, this has not been explained and is hard to understand.

(e) The aircraft that set up constant rates of descent on the return ~~used~~ used less gasoline, but since practice radar bombing and escorting malfunctioning aircraft caused a number of irregularities, no conclusions are drawn.

(f) One aircraft in the 504th Group made a three (3) engine return and its fuel consumption compared very favorably with the four engine returns, being only slightly higher. Aircraft #802 returning on three engines from the target used 1955 gallons (computed) as compared to ~~the~~ a squadron return average of 1249 gallons. The operation was on two (2) engines and part on three (3) engines, airplane #802 came back on 2300 RPM.

(g) The fuel consumption values shown on the analysis form are calculated values and are the only ones obtainable soon enough for this report. In the past when servicing values become available they tend to run approximately 200 gallons less than calculated.

(h) Squadron Engineers appointed at the present time often have numerous other duties and extracting these reports conflicts with their normal duties. A Staff Squadron Engineer could aid a great deal in gathering material for reports of this nature, in critiques and in all reporting and training functions of this organization.

HERBERT B. BRICKS ON
Captain, Air Corps
Ass't A-3
Wing Engineering Officer

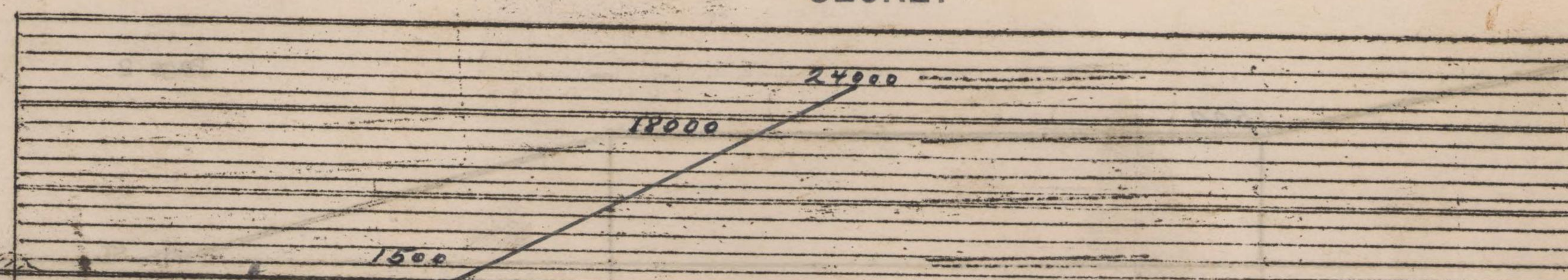
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DECLASSIFIED
 Authority NM 76003
 By SP-NARA Date 9/23

XXI B. C. 30,000
 FORMATION
 CRUISE CONTROL
 ANALYSIS 20,000
 FORM
 Page 1 10,000
 SL BASE

30,000
 20,000
 10,000
 1st
 SQUADRON
 29 JAN.
 DATE
 Iwo JIMA
 MISSION
 DIRECT
 ROUTE



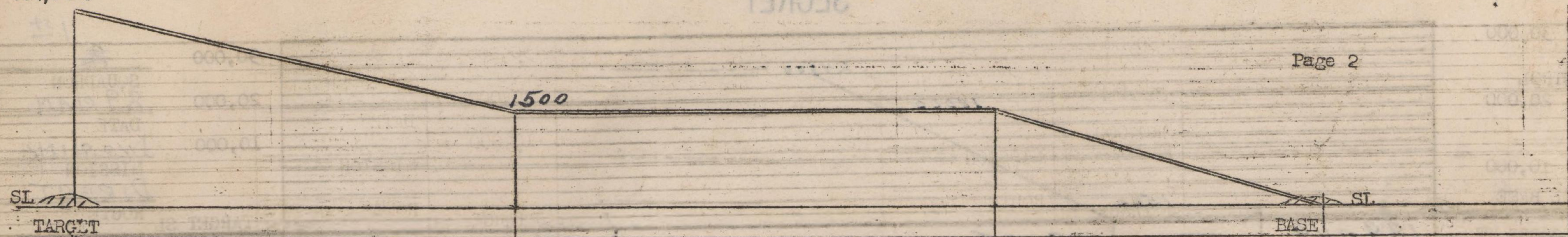
AV. START GROSS WT.	129,049		128,035		116,587		TARGET SL	TOTALS		
C. A. S.	PLANNED	195	195	200 TO 195		190				
	ACTUAL	195	—	195		196				
GND. MI NAUTICAL	PLANNED	11	24	268 + 234		206	743			
	ACTUAL	25	—	360		400	785			
TIME	PLANNED	0:07	0:44	2:27		0:57	4:15			
	ACTUAL	0:15	—	2:17		2:00	4:32			
AVERAGE R/C FT./MIN.	PLANNED	215'/MIN		153'/MIN		—				
	ACTUAL	100'/MIN		164'/MIN		—				
PRED. LEAD POWER		2400-43	2200-35	2300-39	2350-41	2250-37	3197	4643		
ACTUAL LEAD POWER		2300-39	—	2300-39	2300-39	2250-37	2581	3800		
PRED. WING POWER		2400-43	2250-37	2350-41	2400-43	2300-39	4447	5145		
ACTUAL POWER	A/C	ELEM.	POS.							
	482	A	2	2400-43	—	2300-39 - 2350-41	2300-39	2225-36	3188	4364
	517	A	3	2400-43	—	2300-39	2300-39	2275-38	3050	4420
	802	B	1	2350-40	—	2350-41	2375-42	2300-39	3491	5446
	525	B	2	2400-43	—	2300-39	2300-39	2250-37	3158	4365
	493	B	3	2300-39	—	2350-41	2400-43	2350-41	3376	4588
	850	C	1	2300-39	—	2350-41	2300-39	2300-37	3545	4644
	778	C	3	504 BOMB GROUP SHIP	—	2300-39	2300-39	2250-36	3376	4625

NOTE: DUE TO WEATHER, NO CRUISE AT 1500

SECRET

24000

SECRET



A/C #	Start GR. WT.	TIME	AV		AV POWER	START GR. WT.	TIME	AV		AV POWER	TIME	AV		AV POWER	TO RETURN		
			C.A.S.	R/D				C.A.S.	ALTITUDE			C.A.S.	R/D		END. MI.	FUEL USED	
	97818	2:52	190	130	1800-29										665	1446	
809	97651	2:25	212	155	1900-29											1219	
482	96192	2:15	205	167	1800-28											1176	
517	97980	2:25	214	155	1950-30											1370	
802	95992	2:10	-	173	2300-43	(PLANE RETURNED ON 2 ENGINES)											1955
525	97100	2:18	208	162	1800-29											1207	
793	94965	2:26	190	154	1900-29											1212	
850	94471	2:40	210	140	1950-30											1099	
778	95363	2:55	200	130	1850-29											1249	

INSTRUCTIONS:

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 - b. Actual values for START GR. WT., GROUND MILES, TIME and R/D will be the average for the formation.
 - c. ACTUAL POWER entries will be the average for the particular aircraft during the phase of flight indicated on the vertical plot.
 - d. Under TIME RICH will be entered the total time of rich operation prior to start of the climb.
 - e. FUEL TO TARGET and TOTAL FUEL USED on page 1, and FUEL TO RETURN on page 2 may be calculated values if service values unavailable.
 - f. All entries on page 2 will be the average experienced during each phase of return flight.
2. A narrative report of results of CRITIQUE will accompany this form, giving most probably reason for conditions represented by entries in sizeable variance with average, i.e. excessive power settings etc., as well as any recommendations that might aid in planning future missions.

SECRET

XXI B. C. 30,000
 FORMATION
 CRUISE CONTROL
 ANALYSIS 20,000
 FORM
 Page 1 10,000
 SL BASE

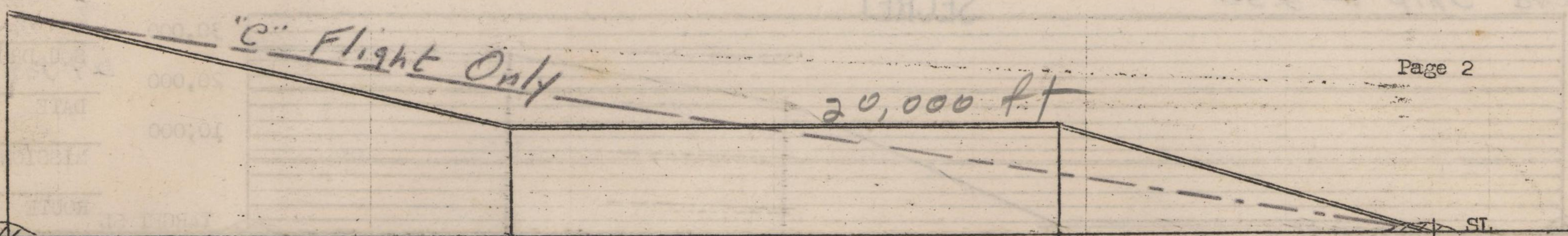
Lead ship # 250

SECRET

30,000
 20,000
 10,000
 SQUADRON
 27 Jan 45
 DATE
 MISSION
 ROUTE

AV. START GROSS WT.						TOTALS					
C. A. S.	PLANNED	195	195	200	195	190					
	ACTUAL	195	195	195	193	190					
GND. MI NAUTICAL	PLANNED										
	ACTUAL										
TIME	PLANNED	05	1:37	1:22	1:05	1:04	4:15				
	ACTUAL	06	1:35	1:40	1:14	1:25	4:24				
AVERAGE R/C FT./MIN.	PLANNED	300	0	200	145		FUEL USED TO TARGET	TOTAL FUEL USED			
	ACTUAL	250	0	165	130			34			
PRED. LEAD POWER		42 24-43.5	22-35	23-39	2350-41	2250-37	3235	5145			
ACTUAL LEAD POWER		41 24-43.5	2250-37	23-39	2350-40	2300-39	3810	5215			
PRED. WING POWER											
ACTUAL POWER	A/C	ELEM.	POS.								
	843	H	2	H	24-43.5	2250-37	23-37	2350-41	2150-37	2856	4257
	824	H	3	L	24-43.5	2350-40	23-39	2300-39	2250-37	3362	5061
	484	B	1	L	24-43.5	2350-41	23-39	2350-39	2250-35	3280	4755
	797	B	2		24-43.5	2300-39	23-39	2300-39	2250-37	3329	4833
	882	B	3	R	24-43.5	2300-39	23-39	2350-40	2275-38	3555	4748
	839	C	1	I	24-43.5	2275-38	23-39	2300-39	2250-37	3399	4426
	823	C	2	C	24-43.5	2250-37	2325-40	2300-39	2250-37	3471	4774
815	C	3	H	24-43.5	2200-35	2350-38	2350-38	2300-39	3642	5318	

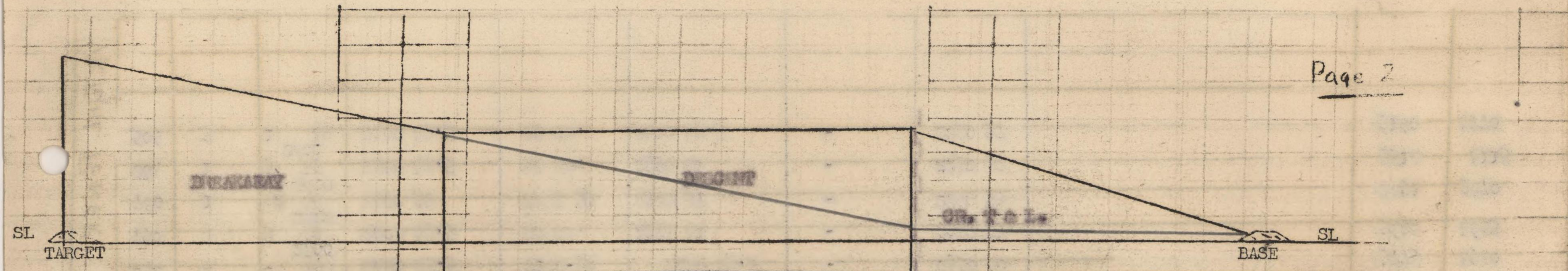
SECRET



A/C #	Start GR. WT.	TIME	AV		AV POWER	START GR. WT.	TIME	AV		AV POWER	TIME	AV		TO RETURN	
			C.A.S.	R/D				C.A.S.	ALTITUDE			C.A.S.	R/D	GND. MI.	FUEL USED
250	97,500	10	200	500	1850-28	97,219	1:25	190	20,000	21-31	1:25	200	235	19-28	1405
843	100,069	15	200	300	2000-29	99,598	1:27	187	"	21-31	1:34	202	207	18-28	1401
824	98,993	06	200	666	21-31	98,291	1:35	198	"	21-31	1:17	198	300	20-28	1679
484	98,860	10	195	500	20-29	98,667	1:25	205	"	22-35	1:15	215	266	20-29	1475
797	98,001	15	190	200	20-30	92,611	1:40	205	"	22-35	1:19	197	253	19-29	1504
882	99,589	15	195	200	20-30	99,298	1:03	202	"	2250-31	1:37	210	205	18-29	1193
"C" Flight Only															
839	100,196	3:09	180	105	1800-28										1082
823	97,993	3:15	183	103	1800-28										1303
815	95,726	3:15	182	103	2150-31										1676
3 Eng Return on this plane															

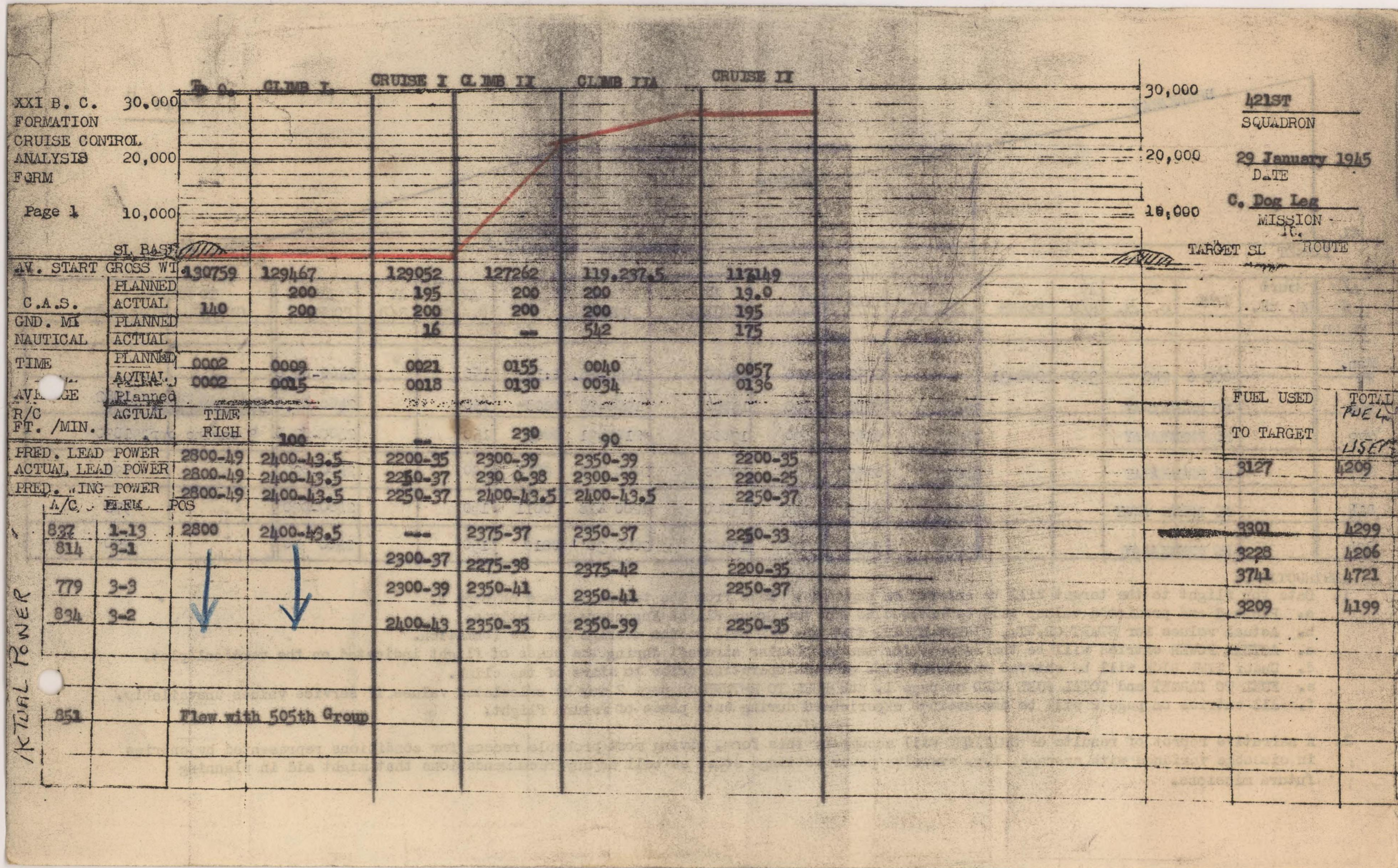
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XXI B. C. FORMATION		30,000					II CLA	II CR		
CRUISE CONTROL ANALYSIS FORM		20,000							SQUADRON	
Page 1		10,000	T.O	I CL	ICR	II CL			DATE	
SL. BASE									MISSION	
AV. START GROSS WT.									TARGET SL ROUTE	
C.A.S.	PLANNED	170,770	170,770	177,630	177,330		177,330			
	ACTUAL		170	195	200	200	190			
GND. MI NAUTICAL	PLANNED		199		190		199			
	ACTUAL			14	19		175			735
TIME	PLANNED	0000	0000	0000	0000	0000	0000			
	ACTUAL	0000	0000	0007	0000	0000	0007			0000
AVERAGE R/C FT. /MIN.	PLANNED									
	ACTUAL		100	100	100	100	100			
PRED. LEAD POWER		2800 10	2800 13-5	2800 35	2800 39	2850 39	2800 35			
ACTUAL LEAD POWER		2800 10	2800 13-5	2800 35	2800 39	2850 39	2800 35	2875	1271	
PRED. WING POWER		2800 39	2800 13-5	2850 37	2800 13-5	2800 13-5	2850 37			
ACTUAL WING POWER		2800 39	2800 13-5	2850 37	2800 13-5	2800 13-5	2850 37	2800	1253	
ACTUAL POWER	A/C	MEM	POS							
	806	2	1	2800						
	850	2	2	2800	2800 13-5	2800 31	2800 13-5			
	799	2	3	2800	2800 13-5	10 01.	2875 11			2775 10-0
	788	1	2	2800	2800 39	2800 39	2800 39			2800 2655
	864	1	3	2800	2800 13-5	10 01.	2850 11			2804 3070
	506	3	1	2800	2800 13-5	10 01.	2800 13-5			2850 1125



A/C #	Start GR. WT.	TIME	AV C.A.S.	AV R/D	AV POWER	START GR. WT.	TIME	AV C.A.S.	AV ALTITUDE	AV POWER	TIME	AV C.A.S.	AV R/D	AV POWER	TO RETURN GND MI.	TOTAL FUEL USED	TOTAL FUEL USED
PLAND	97,000	0005	210	300	2000 28	98,000	0030	230	205	2000 28	0035	207	200	2000 28	1099		
							0035	206	205	2000 28					1650		
				TREK		96,600	0300		210	2000 28	0300				1015		1720
				WET JONTS		97,000	0035	210	207	2000 28	0035	207	200	2000 28	976		1720
						97,000	0035	205	208	2000 28	0035		200		1015		
						96,100	0045	200	206	2000 28	0045	200	200	2000 28	603		
						98,100	0030	205		2000 28							

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 - Planned and predicted values will be entered as per the Group Flight Engineers predictions.
 - Actual values for START GR. WT., GROUND MILES, TIME and R/D will be the average for the formation.
 - ACTUAL POWER entries will be the average for the particular aircraft during the phase of flight indicated on the vertical plot.
 - Under TIME RICH will be entered the total time of rich operation prior to start of the climb.
 - FUEL TO TARGET and TOTAL FUEL USED on page 1, and FUEL TO RETURN on page 2 may be calculated values if service values unavailable.
 - All entries on page 2 will be the average experienced during each phase of return flight.
 - A narrative report of results of CRITIQUE will accompany this form, giving most probable reason for conditions represented by entries in sizeable variance with average, i.g. excessive power settings etc., as well as any recommendations that might aid in planning future missions.



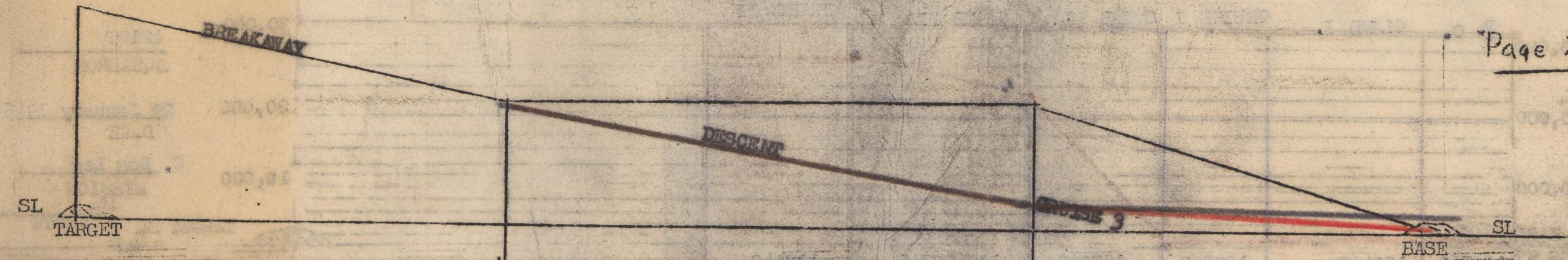
XXI B. C. 30,000
 FORMATION
 CRUISE CONTROL
 ANALYSIS 20,000
 FORM
 Page 1 10,000

30,000
 20,000
 10,000
421ST
 SQUADRON
29 January 1945
 DATE
C. Dog Leg
 MISSION
 ROUTE

SL BASE		CLMB I	CRUISE I	CLMB II	CLMB III	CRUISE II	
AV. START GROSS WT	130759	129167	129052	127262	119,237.5	117149	
C.A.S.	PLANNED	200	195	200	200	19.0	
	ACTUAL	140	200	200	200	195	
GND. MI NAUTICAL	PLANNED		16		542	175	
	ACTUAL						
TIME	PLANNED	0002	0009	0021	0155	0040	
	ACTUAL	0002	0015	0018	0130	0034	
AVERAGE R/C FT. /MIN.	PLANNED						
	ACTUAL		100		230	90	
PRED. LEAD POWER	2800-49	2400-43.5	2200-35	2300-39	2350-39	2200-35	
ACTUAL LEAD POWER	2800-49	2400-43.5	2250-37	2300-38	2300-39	2200-25	
PRED. LING POWER	2800-49	2400-43.5	2250-37	2400-43.5	2400-43.5	2250-37	
A/C	ELM	POS					
832	1-13	2800	2400-43.5		2375-37	2350-37	2250-33
814	3-1			2300-37	2275-38	2375-42	2200-35
779	3-3			2300-39	2350-41	2350-41	2250-37
834	3-2			2400-43	2350-35	2350-39	2250-35
851	Flew with 505th Group						

FUEL USED TO TARGET	TOTAL FUEL
3127	4209
3301	4299
3228	4206
3741	4721
3209	4199

ACTUAL POWER



A/C #	Start GR. WT.	TIME	AV C.A.S.	AV R/D	AV POWER	START GR. WT.	TIME	AV C.A.S.	AV ALTITUDE	AV POWER	TIME	AV C.A.S.	AV R/D	AV POWER	TO RETURN GND MI.	FUEL USED
Man. PLAND																
266		0006	240	300	2200-31	9190	0252	190	13000	1950-28	0010	150		2400-22.0		
779		NO BREAKAWAY				96454	0253	190	13000	2100-31	0009	150		2400-22.0	3 engine cpr.	1030
837		NO BREAKAWAY				98854	0255	200	13000	2000-28	0010	150		2400-22.0		998
814		NO BREAK AWAY				98433	0305	125	13000	1200-28	0011	150		2400-22.0		978
834		NO BREAKAWAY				99000	0230	215	13000	2000-30	0020	150		2400-20		990

INSTRUCTIONS:

1. Data for flight to the target will be entered on page one. Data from the target to base on page 2.
 - a. Planned and predicted values will be entered as per the Group Flight Engineers predictions.
 - b. Actual values for START GR.WT., GROUND MILES, TIME and R/D will be the average for the formation.
 - c. ACTUAL POWER entries will be the average for the particular aircraft during the phase of flight indicated on the vertical plot.
 - d. Under TIME RICH will be entered the total time of rich operation prior to start of the climb.
 - e. FUEL TO TARGET and TOTAL FUEL USED on page 1, and FUEL TO RETURN on page 2 may be calculated values if service values unavailable.
 - f. All entries on page 2 will be the average experienced during each phase of return flight.

2. A narrative report of results of CRITIQUE will accompany this form, giving most probable reason for conditions represented by entries in sizeable variance with average, i.g. excessive power settings etc., as well as any recommendations that might aid in planning future missions.

HEADQUARTERS
319TH BOMB WING

SECRET

PO # 808
Mission Two Five # 2
29 Jan 1945.

JOINT REPORT OF THE AND THE JR. - TWO FIVE MISSION 29 JAN 1945

1. Report of Scheduled A/S Failings to Take off with Reasons:
 - 42-24227 No. 1 and 2 engines had loss of RPM on take-off.
 - 42-24244 Crew sickness.
 - 42-24218 Crew sickness.
2. Aircraft Malfunctioning (those returning early):
 - 42-24267 # 2 prop ran away on take-off to 3500 RPM. # 2 engine had loss of RPM on take-off. Condensation on plugs caused loss of RPM.
 - 42-65235 No. 1 engine throwing oil on take off, and cylinder head temperature 16° high. Oil being thrown from engine at propeller feathering line, due to loose propeller feathering line connection at propeller governor.
 - 42-65500 # 3 prop. stuck at 2650 RPM. Inoperative Governor Electric Head.
3. Aircraft Malfunctioning (those aircraft completing mission):
 - 42-24215 No. 2 engine propeller was feathered over target due to loss of RPM and manifold pressure.
 - 42-24724 Fuel gauge compass does not operate properly.
 - 42-24299 Left brake weak on landing.
 - 42-24223 No. 1 inboard generator out.
 - 42-24790 C.E.
 - 42-24780 C.E.
 - 42-65266 Bomb doors failed to operate. Emergency release used.
 - 42-24297 C.E.
 - 42-24251 C.E.
 - 42-24779 # 1 engine feathered for low nose oil pressure. Leak at propeller governor head. Propeller gasket replaced.
 - 42-24294 # 3 propeller governor ran away on take-off.
 - 42-24244 C.E.
 - 42-24206 C.E.
 - 42-65506 C.E.
 - 42-24264 Left blister cracked.
 - 42-24254 # 3 propeller governor over-speeding.
- b. Suggested Changes in Equipment or Practice:

None

SECRET

- 1 -

37

444444

FORM NO. 100 (REV. 10-1-50) + 100 FORM NO. 100 (REV. 10-1-50)

4. Investigation

a. 12-20-57 This includes a copy of your estimate form, two (2) full page diagrams and two full pages of aircraft damage, four drawings, show what type amount of damage flight.

b. Many witnesses

c. None

d. None

e. See section 10 (a)

5. Analysis of evidence

See form and attached reports

6. Examination of communication records

See communication officer's reports

7. Witnesses interviewed

None

8. Testimony

9. Testimony

Barney D. ...
Captain Air Corps
1000 Flight Engineers

444444

313th Bombardment Wing
Headquarters

SECRET

Field Order 2
Mission 130 JFM #2
29 January 1945

PHOTOGRAPHIC SPECIALISTS REPORT

1. Target 130 JFM. ABORTIVE 2. Number of wing aircraft scheduled for mission 51

Camera Installed	K-22				Total	
	K-16	K-19	K-20	K-21		
Cameras in Abortive Aircraft	2	6	2	2	0	11
Malfunctions	0	1	2	1	0	4
In Operating Condition Not Taking Photos	0	9	0	1	0	12
Cameras Lost	0	0	0	0	0	0
Cameras taking Photos	2	15	3	2	4	28

4. Reasons for malfunctions

- a. Insufficient vacuum on two cameras
- b. Sheared pin on shutter curtain shaft.

5. Remarks: Photo coverage of bomb strikes was incomplete due to the installation of too many long focal length lens cones. The 12" lens cones is best suited for strike attack photos at the altitudes being flown by these units.

06
1718 JFM 130 JFM
130 JFM 130 JFM
130 JFM 130 JFM
130 JFM 130 JFM

SECRET

SECRET

CONSOLIDATED MISSION REPORT

COMMUNICATIONS

1. Groups ----- 504th and 505th.
2. Date Flown ----- 29 January 1945.
3. Field Order ----- C
4. Equipment Malfunctions ----- 1 - Pilot light out
 4 - Mike switch sticking
 3 - Sense antenna broken (AN/ARN-7)
 1 - Channel C weak SCR-522
 1 - FC-36 Foot switch sticks.
5. "Y" message ----- Weather and Time.
6. Average Signal Strength ----- Miles ----- 3410 ----- 7310 ----- 11160 ----- Time

300	S-1	S-5	S-1	S-1	903/2
600	S-1	S-5	S-1	S-3-4	924/2
7. Number D/F contacts attempted ----- 0.
 Number D/F contacts completed ----- 0.
8. Strips Report ----- 3410 ----- 7310 ----- 11160 ----- CALL ----- MILES

2	2IV536	600
2	8V536	600
2	5V536	600
2	2IV536	600

(No reports available from 505th Group.)
9. Enemy transmissions intercepted ----- None.

ERHARD H. MITYANSKI,
Lt. Col., Signal Corps,
Communications Officer.

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

By NM 740160 NARS, Date 07/21/95
By 660103

SECRET

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HEADQUARTERS 313TH BOMBARDMENT WING

RADAR SPECIALIST REPORT

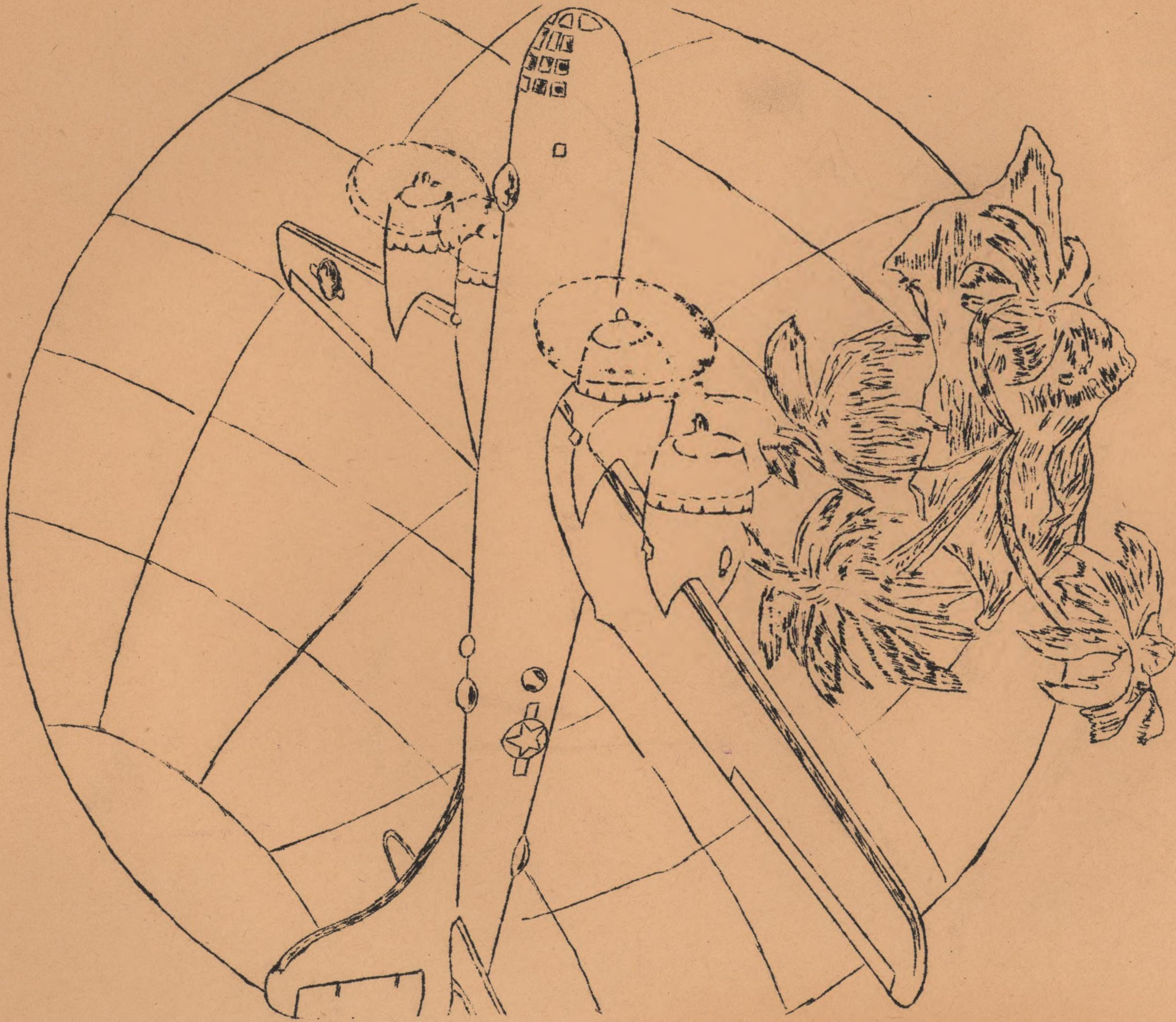
1. One (1) aircraft took off with inoperative AN/APQ-13. Twenty-six (26) AN/APQ-13 equipments were operative over the target, and twenty-four (24) were operative on landing.
2. Thirty-two (32) radar wind runs were taken on this mission, and an average of approximately four (4) radar fixes were taken per aircraft equipped with operative AN/APQ-13. All the Mariana Islands were used as targets for fixes at ranges varying between twenty and ninety miles.
3. Crews made no comments other than those regarding equipment malfunction.
4. All bombing was visual on this mission.
5. Approximately three (3) LORAN fixes were taken per airplane with operative AN/APN-4 at an average range of approximately two hundred fifty (250) miles.
6. Malfunctions:
 - a. AN/APQ-13:
 - (1) Two (2): No targets, although all voltages, currents, and fuses all right.
 - (2) Two (2): Pressure leaks
 - (3) Two (2): Weak signals
 - (4) One (1): Antenna would not tilt
 - (5) One (1): Targets vague above 7,000 feet.
 - (6) One (1): No targets on 100 mile range.
 - b. AN/APN-4:
 - (1) Two (2): Receive master station only.
 - (2) Two (2): No signals.
 - (3) One (1): Could set only one station
 - (4) Inverter voltage fluctuating.
 - c. SCR-695:
 - (1) Antenna reported cut off
 - (2) IFF out.

ERHARD H. MITTANCK,
Lt. Col., Signal Corps,
Communications Officer.

SECRET 41

100-0-30000-7

THE 315TH BOMB WING



—CONSOLIDATED STATISTICAL SUMMARY—

—FORM 34—

FIELD ORDER NO. G

MISSION NO. 100 JAMA 2

29 JANUARY 1945

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S-E-C-R-E-T

313TH BOMBARDMENT WING

FIELD ORDER NO.

MISSION NO. Two Jima 2

DATE 29 January 1945.

CONSOLIDATED STATISTICAL SUMMARY

PRIMARY TARGET TWO JIMA

TABLE 1 AIRCRAFT PARTICIPATING

	NUMBER OF AIRCRAFT				
	TOTAL WING	6	9	504	505
A/C SCHEDULED TO TAKE-OFF	36			12	24
A/C FAILING TO TAKE-OFF	3a			0	3
A/C AIRBORNE	33			12	21
A/C AIRBORNE FAILING TO BOMB DESIGNATED TARGETS	5b			0	5
A/C BOMBING PRIMARY TARGET	28			12	16
% OF AIRBORNE A/C BOMBING PRIMARY TARGET	85			100	76
A/C FAILING TO RETURN TO HOME BASE	0			0	0
TIME OF TAKE-OFF:					
EARLIEST	282400Z			290025Z	2902400Z
LATEST	290036Z			290036Z	290024Z
TIME OF RETURN:					
EARLIEST	290724Z			290724Z	290728Z
LATEST	290805Z			290755Z	290805Z

a. A/C 42-24827 A1 & 3 Engine Mis. drop.
42-24844 Crew Sickness.
42-24618 Crew Sickness.

b. See table two for reasons.

AIRCRAFT ON HAND 29 January:

504th Gp: 30

505th Gp: 44

TOTAL 74

S-E-C-R-E-T

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313TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO. 0
MISSION NO. IWO-JIMA # 2
DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
AIRCRAFT FAILING TO BOMB PRIMARY TARGET

TABLE II BREAKDOWN OF ABORTING AIRCRAFT BY CAUSE

C A U S E	TOTAL WING	NUMBER OF AIRCRAFT GROUPS			
		6	9	504	505
MECHANICAL FAILURE	5			0	5
PERSONNEL FAILURE					
FLIGHT CONDITIONS					
ENEMY ACTION					
UNKNOWN					
OTHER					
TOTAL	5				5

DETAILED EXPLANATION BY A/C SERIAL NO.

- 42-63255 #1 Engine throwing oil - cause - loose connection on prop feathering line
- 42-24867 #2 Engine had runway prop and RPM drop
- 42-63508 #3 Engine lost prop governor
- 42-24823 Bomb rack malfunction. (Completed Bombing Run)
- 42-63484 Bomb rack malfunction. (Completed Bombing Run)

S-E-C-R-E-T

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313TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO. C

MISSION NO. IWO-JIMA 2

DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY

TABLE III AIRCRAFT LOST AND DAMAGED

C A U S E	AIRCRAFT LOST			AIRCRAFT DAMAGED						
	TOTAL WING	6	9	504	505	TOTAL WING	6	9	504	505
ENEMY A/C										
ENEMY FLAK						1			1	
ENEMY A/C & FLAK										
ACCIDENT										
SELF-INFLICTED										
UNKNOWN										
OTHER										
TOTAL						1			1	WOW5

DETAILED EXPLANATION OF AIRCRAFT LOST BY SERIAL NUMBER

42-24837 - Minor damage. Small Flak holes near aft door.

TABLE IV REPAIR OF DAMAGED AIRCRAFT

AIRCRAFT TO BE REPAIRED BY:	G R O U P S				TOTAL
	6	9	504	505	
TACTICAL GROUP			1		1
SERVICE GROUP					
DEPOT GROUP					
TOTAL			1		1
NOT REPARABLE					

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45

313TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO. C

MISSION NO. IWO-JIMA 2

DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
TABLE V ATTACKS & PASSES BY ENEMY AIRCRAFT

DIRECTION	HIGH			A L T I T U D E						TOTAL			
	6	9	504	LEVEL			LOW			9	504	505	Total Wing
				6	9	504	505	6	9					504	505
1800			1									1	1
2800													
3800				1							1		1
4800													
5800			1								1		1
6800													
7800													
8800													
9800													
10800													
11800													
12800													
TOTAL	1	1	1			1						2	3

TABLE VI ENEMY AIRCRAFT DESTROYED & DAMAGED

GROUP	DESTROYED	PROBABLY DESTROYED	DAMAGED
6			
9			
504	none	none	none
505	none	none	none
WING TOTAL	NONE	NONE	NONE

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313TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO. 0
MISSION NO. IMO -JIMA 2
DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
VII PERSONNEL CASUALTIES

	Total	PC	P	N	B	FE	ROM	CFC	IG	RG	SG	TG	APG	Other
Killed:														
6th														
9th														
504th														
505th														
Total Wing														
Missing:														
6th														
9th														
504th														
505th														
Total Wing														
Seriously Injured:														
6th														
9th														
504th														
505th														
Total Wing														
Slightly Injured:														
6th														
9th														
504th														
505th														
Total Wing														
Casualties:														
6th														
9th														
504th														
505th														
Total Wing														
Number Participating														
6th														
9th														
504th	298	12	10	12	12	12	12	12	12	12	12	12	12	6
505th	299	21	21	21	21	21	21	21	21	21	21	21	21	6
Total Wing	597	33	33	33	33	33	33	33	33	33	33	33	33	12

S-E-C-R-E-T

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S E C R E T

313TH BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. C

DATE 1-29-45

Table VIII Bombing Run

MISSION NUMBER Iwo Jima 2

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 & DRANGE	DROP ON LEADER	A/C SIGHTING	A/C DROPPING ON LEADER	C-1	MANUAL	
504	Iwo Jima	12	11	1	12	0428Z	0447Z	23000	23400	4	3(a)	8			3	9
505	Iwo Jima	18	16	-	16	0428Z	0440Z	23000	25200	2	-	14	-	-	2	14
TOTAL		30	27	1	28	0428Z	0447Z	23000	25200	6	3	22			5	23

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(*) 3 A/C DROPPING ON LEADER ALSO SIGHTED FOR RANGE.

S E C R E T

S E C R E T

313TH BOMB WING

Consolidated Statistical Summary

FIELD ORDER NO. C

Table IX Loading & Disposal of Bombs

MISSION NO. Two Jins 2

GROUP	TYPE & WEIGHT OF BOMBS	FUSE SETTING		LOADED ON				RELEASED ON TARGET				JETTED		UNKNOWN		RETURNED		% OF BOMBS ON TARGET		
		NOSE	TAIL	ALL AIRCRAFT		AIRBORNE AIRCRAFT						No.	Tons	No.	Tons	No.	Tons			
				No.	Tons	No.	Tons	No.	Tons	No.	Tons									
504	AN-M3 GP 500 LB	1/20	1/40	288	72	288	72	282	70.50					6	1.50					12
505	AN-M3 GP 500 LB	1/20	1/40	576	144	504	126	383	95.75					121	30.25	-	-	-	-	0
<i>67</i>																				
WIND TOTAL	AN-M3 GP 500 LB	1/10	1/40	864	216	792	198	665	166.25					127	31.75					10

S-E-C-R-E-T

313TH BOMBARDMENT WING

FIELD ORDER NO. 0
MISSION NO. TWO-JIMA 2
DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
TABLE X BOMBING ACCURACY
TARGET TWO JIMA

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.	TONS	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	
6													
9													
504	282	70.5	10	4%	48	17%	49	17%	107	38%			
505	383	95.7	14	4%	65	17%	49	13%	150	39%			
Wing Total	665	166.2	14	2%	103	15%	98	15%	257	39%			

NOTE: Percentages above represent % of total bombs released.

TABLE XI NUMBER OF HITS ON TARGET

GROUP	NO. OF HITS ON TARGET	% OF BOMBS RELEASED HITTING TARGET
6		
9		
504	35	12%
505	30	8%
TOTAL	65	10%

S-E-C-R-E-T

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313TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO. 0
 MISSION NO. Two Jims 2
 DATE 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
 TABLE ~~X~~ AMMUNITION CONSUMPTION DATA

AMMUNITION EXPENDED PER GROUP					
	6	9	504	505	TOTAL
20 MM FIRED					
ON LOST A/C					
TOTAL					
.50 CAL. FIRED			1762	23685	25447
ON LOST A/C					
TOTAL			1762	23685	25447

AMMUNITION EXPENDED PER PLANE					
	6	9	504	505	TOTAL
UPPER FRONT			48	369	240
LOWER FRONT			19	298	151
UPPER REAR			27	230	149
LOWER REAR			21	227	145
.50 CAL. TAIL			32	251	163
TOTAL .50 CAL.			147	1315	648
20 MM TAIL					

Note: Above figures based on 12 Aircraft for the 504th Group and 18 Aircraft for the 505th Group.

S-E-C-R-E-T

313TH BOMBARDMENT WING

S-E-C-R-R-T

FIELD ORDER NO: C

MISSION NO: IWO JIMA 2

DATE: 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
TABLE XIII FUEL CONSUMPTION DATA

<u>A/C COMPLETING MISSION</u>	50th GP	505th GP	Wing Totals
<u>WEIGHT DATA</u>			
AVG. Basic Wt. of A/C	5945	5900	5923
AVG. Fuel Loaded (Gals)	130.270#	129.642#	129.954#
AVG. Gross Wt. at Take-Off	29 Min	50 Min	40 Min
<u>FLIGHT DATA</u>			
AVG. Time at Low Altitude	2:20	2:36	2:28
AVG. Time of Climb to Bombing Altitude	1:33	1:43	1:38
AVG. Time at Bombing Altitude	7:06	7:29	7:18
AVG. Flying Time	1370	1438	1404
AVG. Distance Flown(Nautical Air Miles)	3399	3325	3352
<u>FUEL CONSUMPTION</u>			
Consumed to Target:	3820	3800	3820
Average	3127	2581	2581
Maximum	1072	1321	1303
Minimum	1650	1699	1699
Consumed From Target to Base (A/C without Malfunction)	603	1082	603
Average	1030(a)	1816(b)	1554
Maximum	1030	1955	1955
Minimum	1030	1676	1030
<u>Total Fuel Used:</u>			
Average	4236	4749	4543
Maximum	4655	5446	5446
Minimum	3870	4257	3870
	52		

315TH BOMBARDMENT WING

S-E-C-R-E-T

FIELD ORDER NO: C
MISSION NO: TWO JIMM 2
DATE: 1-29-45

CONSOLIDATED STATISTICAL SUMMARY
TABLE XIII FUEL CONSUMPTION DATA
(Continued)

FUEL CONSUMPTION (Continued)	504th Gp		505th Gp	Wing Totals
	Total Fuel Remaining, Average	1735	1151	1385
Maximum	2100	1643	2100	
Minimum	1200	454	454	
TOTAL FUEL CONSUMED AND LOST ON AIRBORNE AIRCRAFT	50,892	85,482	206,914	

REMARKS:

- (a) 1 Aircraft returned on 3 engines
- (b) 1 Aircraft returned on 3 engines
1 Aircraft returned on 2 engines

Computations based on 18 Aircraft for 505th Bomb Group and 12 Aircraft for 504th Bomb Group

S-E-C-R-E-T

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SECRET

SECRET
BY Auth of CG 313 WG

APL 26 Jan 45
Initials

313th Bomb Wing
APO 247
1800, 27 Jan 1945

FO "C"

Maps: (1) S-501 Navigation Chart 1:3,000,000
(2) Iwo Jima, Military Installations and Troop Disposition Scale 1"-620' (CINCPAC-CINCPAC, 14 Sept 1944)
(3) Bulletin 122-44 Vol I & 2.
(4) Fleet Air Photographic Interpretation on IWO JIMA

1. a. (1) (a) AA defenses (Int Annex)
(b) No Change
(2) No change.
b. (1) (a) Delete par 1. b. (1) (a) FO "B"
(b) No change
(2) (a) Delete par 1. b. (2) (b) FO "B"
(b) No change

2. 504th and 505th Gps ATK IWO JIMA Airstrip and Installations #1 and #2 with normal effort 28 Jan 1945

Primary Target: Airstrips and Installations #1 and #2 IWO JIMA

Secondary Target: None

IPT : None

Assembly & Rendezvous : See Annex 2.
Formation : Combat Gp - Sq route interval

Route Out : Departure Pt 15° 17' N 145° 50' E true course 348°
to 23° 30' N 144° 05' E true course 270° to 23° 30' N 142° 00' E true course 312° to 24° 21' N 140° 56' E true course 40° to Target

Base Alt : 26,000 ft

IP : 24° 21' N 140° 56' E

Axis of ATK : 40° True

Method of Bombing: Sqs complete approach by radar with final adjustments visually if possible.

Maneuver after ATK: Straight ahead losing 500/min for 50 sec right turn continuing descent for 6 min.

S E C R E T

313th BOMB WING
APO # 247

3. a. 505th Gp with normal # A/C takes off at 0630K and ATKS Airstrip #1 and installations between 1000 and 1100K.
- (1) Visual MPI : Northern corner of the first large triangle formed by the joining of the three runways (IWO JIMA Iap SULPHUR ISLAND 14 Sept 1944 Grids 9 & L)
- (2) AP Radar : Landfall SW tip IWO JIMA employing time delay set into slant range for MPI as slated in Visual MPI.
- (3) Alt of Target: 150 ft.
- b. 504th Gp with normal # A/C takes off at 0653K and ATKS Airstrip #2 and installations between 1000 and 1100K.
- (1) Visual MPI : North East Corner of junction between East West and North South runways. (IWO JIMA Map, SULPHUR ISLAND 14 Sept 1944, Grids 13.3 and 9.3)
- (2) AP Radar : Landfall SW tip IWO JIMA employing time delay set into slant range for MPI as stated in Visual MPI.
- (3) Alt of Target: 250 ft.
- x. (1) Bomb Load : 24 x 500 Gp Ea A/C
(2) Fuzing : 1/10 Sec Nose and 1/40 Sec Tail Modified Vances will be used.
(3) Fuel : 5900 U.S. gals.
(4) Ammunition : 500 rounds per gun
(5) Bombs will not be taken to A/C dispersal area earlier than seven (7) hours before scheduled takeoff.
4. Repeat as in FO "A" with following addition:
(3) Isley #1.
(4) Disabled A/C expecting crash landing use Runway #1.
5. a. Communications
(1) See Annex 6
(2) SOP Communications XXI Bom Com dated 15 Nov 1944
(3) Air - Sea Rescue : See Annex 7
(4) Channel B may be used within 10 minutes of landing - fall of enemy territory boundary "C" Channel V (140.58)
- b. Command Posts
(1) Air : Sq Leader, Deputy Leader and Alternate in turn.
(2) Ground : 313th Bomb Wing Air-Ground Station.

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TOP SECRET

313th BCMB WING
APO #247

By Order of Colonel DAVIES:

CRUTCHER
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- Annex 1 - Intelligence
- Annex 2 - Assembly
- Annex 3 - Cruise Control
- Annex 4 - Medical
- Annex 5 - Photo
- Annex 6 - Communications
- Annex 7 - Air-Sea Rescue

TOP SECRET

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-- -- S E C R E T

313th Bomb Wing
APO 247

ANNEX 1 TO FO 6

INTELLIGENCE

1. AA Defenses.

a. Anti-aircraft opposition to our aircraft has been very vigorous in the past few weeks from Iwo Jima. The bulk of opposition has been in the automatic weapons fire at lower altitudes than our aircraft will operate. Nevertheless, heavy weapons are emplaced about the field capable of reaching up to our altitudes and delivering continuously pointed fire and/or barrage fire. It is suspected that certain batteries are equipped with radar for possible gun-laying fire direction control.

(1) The location of the anti-aircraft emplacements are noted on the included overlay. Principal recent additions to the A/A defenses of the islands have been in the area north of Airfield No. #2. The majority of additions have been auto A/A.

(2) There are also three radar units and one undamaged radio station present.

(3) The A/A defenses, implemented with additional firepower and improved fire control, will offer an opposition to be reckoned with. Altitude, speed, and wind-pushing will help minimize any possibility of losses, damage or casualties to our bombing Groups. And it follows that changes in altitude, speed, and course are the best means of confounding the gunners aground and constitute evasive action. It is not suggested nor contemplated that evasive tactics as such will be flown. However, in the event of intense and accurate barrages over the target, simple maneuvers in course and altitude will serve to alleviate the chance of A/A fire striking our aircraft or of coming even close to damaging any airplanes. The techniques of effective evasive action on the part of the airplane commanders should be known. The possibility of trying out simple to violent evasive tactics under fire, observing the pattern of fire caused thereby might be practical. It should be realized, however, that in the event of meager and/or inaccurate A/A fire, no evasive action would serve any purpose to protect the aircraft, much less to observe the confusion of fire resulting from certain types of maneuvers.

(4) Anti-Aircraft Defenses: Iwo Jima Island.

	HLA	IAA	S/L	RDR
Iwo Jima:	39	121	10	10
Haha Jima:	14	51	1	1
Chichi Jima:	34	93	8	3

S E C R E T

313th Bomb Wing
AFO 247

ANNEX 1 TO FO "C" (Cont'd)

- (5) The heavy weapons on (A) TMA are emplaced on a N-S line running the length of the island. Recommend Route of Approach: 10° - 100° and Route of Departure: 90° - 170°. Guns have been regularly pummeled by B-24's of 7AF and Navy. Consequently some of the positions probably neutralized. Those guns in action will throw-up a vigorous barrage of Flak, and will be alerted by radar. This is the latest information available as of 15 January 1945.

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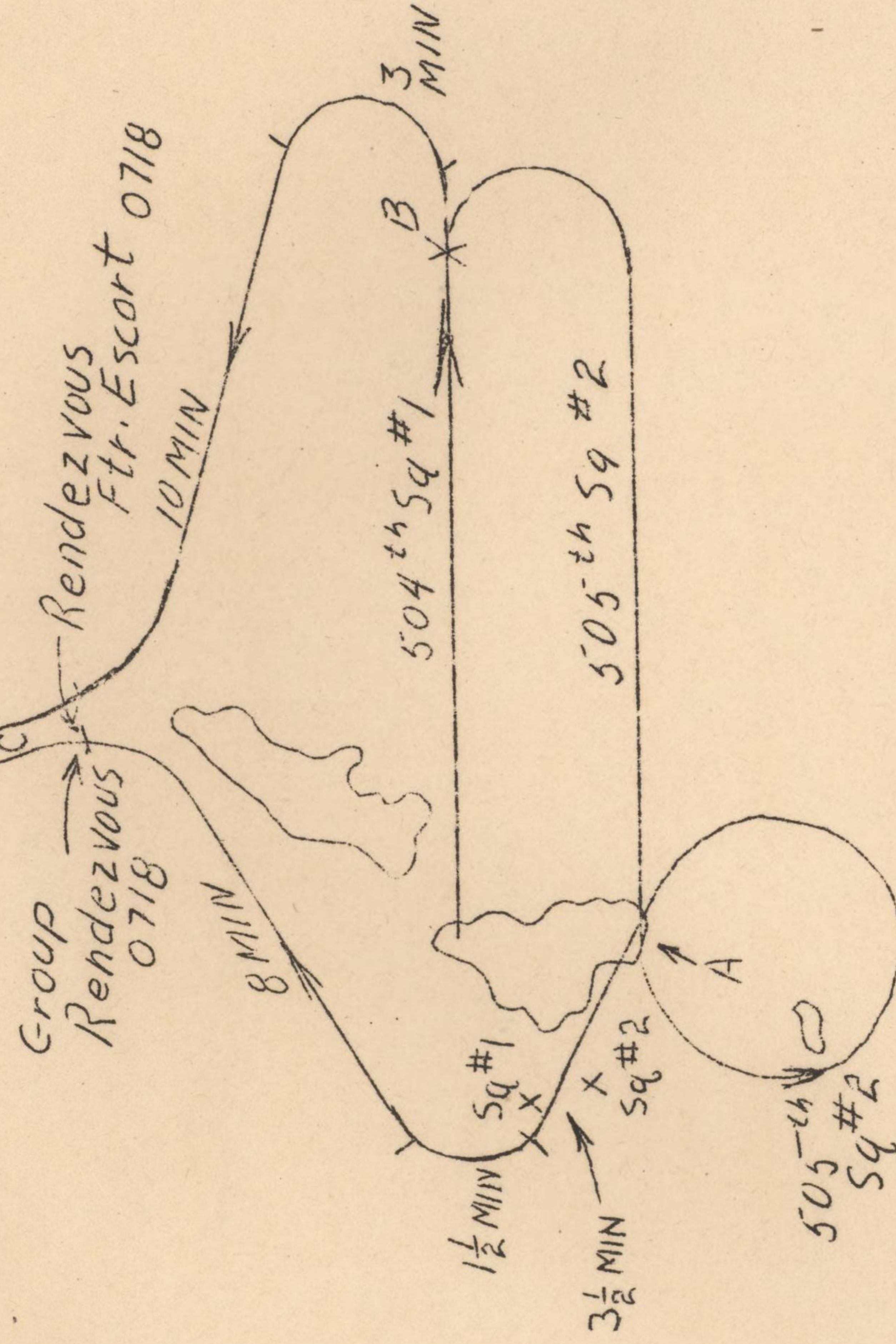
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A-2

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A S S E M B L Y313th Bomb Wing
APO 247

1. The rate of turn may be varied for the proper timing of the Squadrons join-up at pt "A"
2. When 505th Gp is at pt "A" in Combat Gp formation, 504th Gp is at pt "B". Distance of course AC equals distance of course BC.
3. The 504th Gp will lead. The formation will be stacked up 500' per Sq to the left.
4. Base alt for assembly is 1500' or on top of clouds.
5. Groups will rendezvous one mile north of Marpi Point at 0718 at 1500' or on top of clouds.
6. In event instrument take-off procedure is used bombing will be by Sqs.

By Order of Colonel DAVIES:

CRUTCHER,
D/CS of O & T

OFFICIAL:

1. *Crutcher*
A-3

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313TH BOMB WING
APO #247CRUISE CONTROL

1. Cruise Control Table

No	Condition	CAS	Time	Nauts. Distance	Ind. Altitude
0	W.U. & T.O.		:02		Base
1.	Climb	200	:05	15	To 1500
2.	Ass'y & Cruise #1	195	:33	97	1500
3.	Climb #2	200	:59	201	To 17,500
4.	Cruise #2	195	:25	93	17,000
5.	Climb #3	200	1:10	282	To 27,500
6.	Cruise #3	190	:28	119	27,000
7.	Drop Bombs		12,000#		
* 8.	Descent #1	210	:06	28	To 24,000
** 9.	Descent #2	190	3:01	615	To 1,500
10.	Landing		:12		Base

* Descent #1 will be made at 500'/minute reducing power to get a calibrated airspeed recommended at 210 mph.

**Descent #2 will be at approximately 125'/minute.

2. Summary.

a.	Total distance nautical miles	= 1450
b.	Total time	= 7:01 hours
c.	Fuel loaded	= 5900 gals.
	Available fuel	= 5790 gals.
	Fuel required	= 5061 gals.
	Reserve	= 729 gallons.
d.	Estimated loading	
	Approximate basic wt	75,000#
	oil	2,400#
	12 Men	3,000#
	Ammunition	1,830#
	Bombs	12,000#
	Fuel	35,400#
	Total gross weight	129,630#

3. Miscellaneous.

All phases of the flight will be flown at calibrated air speeds and power settings will be established by the Group Engineer for their respective groups.

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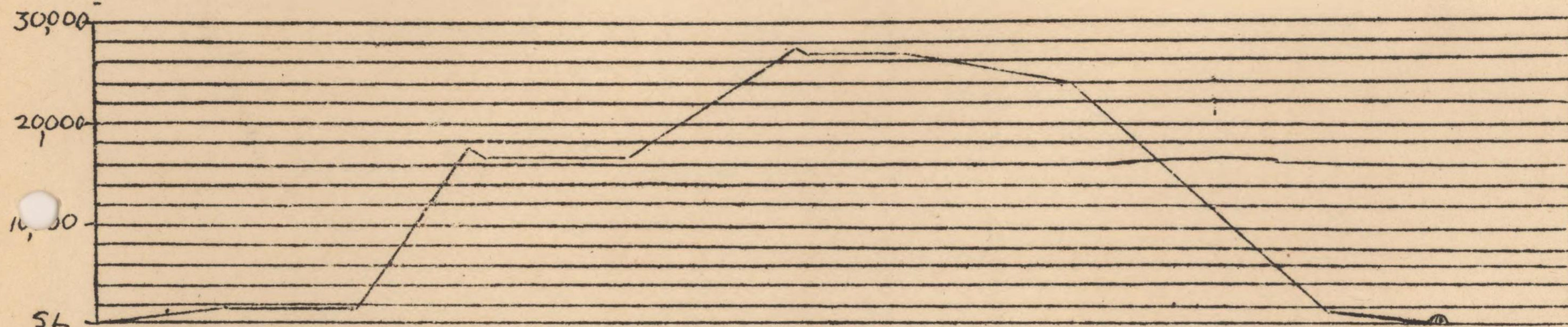
ANNEX # 3 TO FO 13"

SECRET
 CRUISE CONTROL

313TH BOMB WING
 FO # 247

DATE OF ESTIMATE	Jan 21, 1945
MISSION	Iwo Jima
BASIC WEIGHT	75,000#
ROUTE	
STRIKE FORCE	Normal Effort
REMARKS	

CONDITION	Jan Winds				
PRES BOMB ALT	27,000				
AMMUNITION	1,830#				
FUEL	5,900 gals				
BOMBS	12,000#				
GROSS WT.	129,630				



WU & TO	WU&TO	CL.	ASSY&CR ₁	CLIMB 2	CRUISE 2	CLIMB 3	CRUISE 3	DESCENT 1	DESCENT 2	LANDING	TOTALS
C.A.S.	--	200	195	200	195	200	190	210	190	--	
DISTANCE	--	15	97	201	93	282	119	28	615	--	1450 Naut Mil
TIME	:02	:05	:33	:59	2.5	1:10	:28	:06	3:01	:12	7:01
ALTITUDE		to 1500	1500	500 to 17500	17,000	17000 - 27,500	27,000	to 24,000	24,000	190.	

By order of Colonel DAVIES:

OFFICIAL: *Burchinal*
 BURCHINAL
 A-3

CRUTCHER
 DC/S O & T

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313th Bomb Wing
APO 247

ANNEX 4 TO FO C

CASUALTIES

1. 504th and 505th Gps will each supply two (2) ambulances with personnel and emergency Equip to stand by for T.O. and return of all A/C.
2. The ambulances will stand by for T.O. near Base Oper, and stand by for A/C returning at Serv Cen "C" apron, to which A/C returning with casualties aboard will be routed.
3. Emer treatment will be given in ambulances and patients evacuated to Naval Station Hospital No. 19.
4. The Gp Surgeon of the 505th Gp, under direction of the Wg Surgeon, will be Med Controller at North Field for all Med problems during this mission
5. One line ambulance, with personnel and Med Emer Equip, also supplied by 504th Gp will be on twenty-four (24) hours duty at or near Base Oper.

By Order of Colonel DAVIES:

CRUTCHER
D C/S, C & T

OFFICIAL:

Myers
MEYERS
Wg Surgeon

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SECRET313th Bomb Wing
APO 247PHOTOGRAPHY
Installation of Aerial Cameras

1. All squadrons will install vertical aerial cameras in at least 50% of aircraft to be employed in tactical missions. The cameras will be placed in the squadron formation and operated in such a manner as to secure photographs of the bombs from point of release to point of impact.
2. Each squadron will also install radar scope cameras in as many aircraft as the available number of scope cameras permit. Photographs will be made on the 50, 20, and 10 mile ranges of the initial point and target area.
3. All aircraft used in this mission will be equipped with one each type K-20 aircraft camera for the purpose of obtaining intelligence photographs.
4. One aircraft per squadron will be designated to obtain with Type K-20 camera once every half hour on route out and route back exposures of cloud formations. A log of such exposures will be maintained giving time of exposures, coordinates of aircraft at time of exposure, altitude of aircraft and heading at which axis of camera was pointing during exposure.

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313th Bomb Wing
APO 247

COMMUNICATIONS

1. Codes, Ciphers and Recognition
 - a. Air-Ground - CSP 1270 ()
 - b. Authentication - Voice and CW - CSP 1270 ()
Direct and Challenge type.
 - c. Recognition Signals:
 - (1) SP 02440 - Key list
 - (2) SP 02442 - Recognition Signals - Surface Vessels
 - (3) SP 02443 - Recognition Signals - Submarines
 - (4) SP 02312 - Air-Sea Recognition Procedure
 - d. All A/C maintain SOP for IFF

By Order of Colonel DAVIES:

CRUTCHER,
DC/S, O & T

OFFICIAL:

W. T. Mitanck
MITTANCK,
Wg Comm Off.

S E C R E T

S E C R E T

313th Bomb Wing
APO 247

ANNEX 7 TO FO "C"

AIR-SEA RESCUE

1. Dumbos.
 - a. 1 Dumbo will be on station 75 miles southeast of Iwo Jima from 1000-1300 ~~W~~ 28. Call 24V213.
2. Surface Craft.
 - a. 1 patrol craft will be on station at 16-50N 146-30E.
 - b. 1 DD will be on station at 20-00N 145-00E
3. Lifeguard Submarines.
 - a. There will be no submarines in the area.
4. Communications.
 - a. Primary Air-Sea Rescue frequency is 4475 Kcs (voice and CW). Alternate frequency is VHF Channel Charlie.
 - b. When searching, Dumbos and surface craft will also monitor 500 Kcs.
 - c. Use Iwo Jima & Pagan Island as reference points. See Supplement to Addendum 1 dd 11 November 1944 of SOP-2 for reference point code name.
 - d. If in distress contact Dumbos and surface craft using reference point code name for call signs, and give position in distance and bearing from reference point (see SOP-2). Send despatch to base on primary strike frequency including position, time, and trouble encountered. Encode in CSP 1270 ().
 - e. If about to ditch, follow procedure in C above including in despatch to base altitude, course, speed, position, time and trouble if time permits.
 - f. Upon receipt of ditching message by base, surface craft will be despatched to position
 - g. Authenticate all voice and CW transmissions, using CSP 1270 ().
 - h. See ditching procedure and Lost and Distress Procedures carried in Mission Folders.
 - i. Reference point code names may be carried in aircraft. Coordinates not to be marked on charts or carried in aircraft.

BY order of Colonel DAVIES:

CRUTCHER
D C/S, O & T.

OFFICIAL *COMGON Liaison* S E C R E T
Naval Liaison Off. - I -