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MISSION #0 PAGAN ISLANDS
16 January 1945

2-5239-80

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HEADQUARTERS 313TH
BOMBARDMENT WING
APO 247 % POSTMASTER
SAN FRANCISCO, CALIF.

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BY AUTHORITY OF THE
COMMANDING GENERAL
21 JAN '45

*H. L. ...
colbe*

TACTICAL MISSION REPORT

MISSION #~~Q~~ PAGAN I. ^A/_F

FIELD ORDER #~~Q~~

DATE OF MISSION 16 JAN '45

Copy #14

XXI Bomber Command.

Mission No. ~~Q~~

2-5239-80

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AUTH: C. G. XXI, DC

Initials: *RHS*

Date: 2-24-45

HEADQUARTERS XXI BOMBER COMMAND
Office of the Commanding General
APO 234, c/o Postmaster
San Francisco, California

24 February 1945

SUBJECT: Transmittal of Consolidated Mission Reports

TO: Commanding General, Twentieth Air Force, Wash-
ington, 25, D.C.

1. Forwarded herewith are consolidated mission reports for missions numbered sixteen (16) through twenty-eight (28) covering strikes flown between 27 December 1944 and 9 February 1945 inclusive with the exception of mission number twenty-six (26) which was flown 4 February 1945. Also included is consolidated mission report number Zero (0) which summarizes the first "shakedown" mission of the 313th Bombardment wing, 16 January 1945. These reports were prepared by the respective wing headquarters and apply only to single wing efforts.

2. Mission number twenty-six (26) was the first joint effort by two wings of this command. The consolidated mission report will be prepared by this headquarters as will all consolidated mission reports involving more than one wing. Thirty copies of all such reports will be forwarded to your headquarters.

3. Consolidated mission reports prepared by the wings for shakedown missions and single wing strikes will continue to be forwarded to your headquarters.

4. The following is a recapitulation of consolidated mission reports sent to your headquarters to date:

a. Missions seven (7) through fifteen (15) transmitted by air 15 January 1945.

b. Missions one (1) through six (6) were forwarded by 73rd Bombardment wing before the XXI Bomber Command was established in forward area.

13 Incls:
Incl 1 - Mission No. 0

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-1-

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Incl 2 - Mission No. 16
Incl 3 - Mission No. 17
Incl 4 - Mission No. 18
Incl 5 - Mission No. 19
Incl 6 - Mission No. 20
Incl 7 - Mission No. 21
Incl 8 - Mission No. 22
Incl 9 - Mission No. 23
Incl 10 - Mission No. 24
Incl 11 - Mission No. 25
Incl 12 - Mission No. 27
Incl 13 - Mission No. 28

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

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-2-

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By PT NARA Date 8/26/05

S E C R E T

Headquarters
913th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

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S E C R E T

2-52239-80

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By PT NARA Date 8/26/05

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Headquarters
313th Bombardment Wing
APO #247, XPM
San Francisco, Cal.

Field Order No. 0
Mission No. 0
16 January 1945

TACTICAL NARRATIVE

1. The Target

Field Order Number 0 of the 313th Bombardment Wing directed that maximum force (two (2) squadrons from 504th Bomb Group and three (3) squadrons from 505th Bomb Group) take off from base to bomb airstrip at Pagan Island.

2. Take-off

In compliance with this order, the first aircraft took off at 152200Z. The last aircraft took off at 160327Z. A total of 44 aircraft were airborne.

3. Bomb Loading

Airborne aircraft carried a total of nine hundred and thirty-five (935) 500-lb. GP bombs, AN-M103 nose fuze 1/10 sec. delay, and AN-M101A2 tail fuze set 1/40 and 1/100 sec. delay.

4. Route Out

The field order directed that approach be made on 352° true, using Alamagan Island (17°36'N - 145°50'E) as the I. P.

5. Bombing Data

Following assembly by Squadrons, proceeded to target. Thirty-three aircraft reached the target, 11 aircraft aborting. The first aircraft released its bombs at 160133Z and the last at 160754Z. One (1) aircraft over target did not carry bombs because of rack malfunction. Thirty-two (32) bombed visually.

6. Enemy Opposition

None

7. Enemy Attack Data

None

8. Anti-aircraft Fire

None

9. Route Back

In Squadron formation to 16°19'N - 142°47'E, thence to base. First aircraft landed at 160436Z and the last at 161045Z.

10. Damage Assessment

It is impossible to make an accurate assessment because of the overcast which prevailed while attack was in progress. Interpretation of those photographs which permit spotting discloses 17x500lb. bombs within target area and it is reasonable to suppose that quite a few bombs in excess of this were within area and not visible due to overcast.

11. Own Losses

None

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Tactical Narrative, Mission No. 0, page 2

12. Claims

None

13. Weather

Over target varied from 6/10 to 10/10 coverage

14. Observations

Bombardier in A/C #788 sighted yellow object at 15°08'N - 145°23'E at 160558Z from altitude of 1200'. Aircraft circled letting down to 800' and passed over area. Object appeared to be a yellow one-man dinghy surrounded by crates and floating debris. Visibility somewhat obscured by haze prevented positive identification. Reported to Saipan.

15. Landing data

All aircraft landed at home base.

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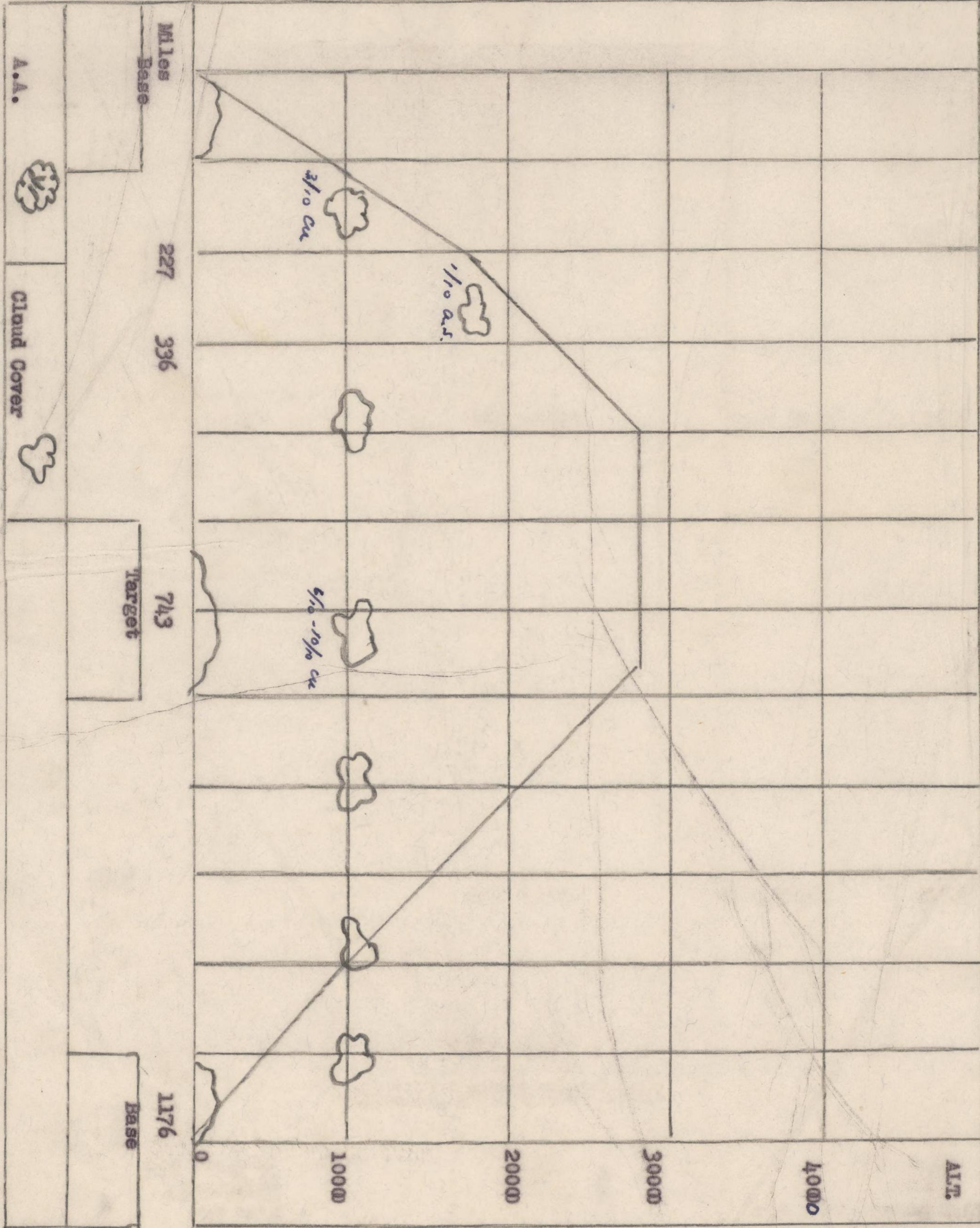
By PT NARA Date 8/26/05

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313 TH WING
20 Jan, 45

VERTICAL CHART
A. P.

F.O. # 0
Mission # 0
Date of Mission
16/1/45



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By PT NARA Date 8/26/05

313th Bombardment Wing

F.O. #0
Mission #0
16 Jan, 1945

CONSOLIDATED MISSION REPORT

FORMATIONS

| 504th Gp | 398th Sqdn | 421st Sqdn | |
|----------|------------|------------|------------|
| | T T T | T T T | |
| | T T T | T T | |
| | | T T | |
| | | T T T | |
| 505th Gp | 482nd Sqdn | 483rd Sqdn | 484th Sqdn |
| | T T T | T T T | T T T |
| | T T | T T | T T |
| T T | T T | T T | T T |
| T T | T T | T T | T T |
| T | T | T | T |

SAME FORMATIONS USED OUT AND BACK

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By PT NARA Date 8/26/05

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Headquarters
313th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

BASIC DATA

1. TIME OF TAKE-OFF:

- a. 504th Bomb Group: from North Field, Tinian
Time: First A/C - 152200Z
Last A/C - 152322Z
- b. 505th Bomb Group: from North Field, Tinian
Time: First A/C - 160025Z
Last A/C - 160327Z

2. TIME OF LANDING:

- a. 504th Bomb Group:
 - (1) Place: North Field, Tinian
Time: First A/C - 160436Z
Last A/C - 160639Z
 - (2) Deviations from landings ordered: None
- b. 505th Bomb Group:
 - (1) Place: North Field, Tinian
Time: First A/C - 160521Z
Last A/C - 161043Z
 - (2) Deviations from landings ordered: None

3. SQUADRON ASSEMBLY:

| Group | Place | Altitude | Time of arrival of 1st A/C of Sq. |
|-------|--------------------|----------|-----------------------------------|
| 504th | 14°57'N - 145°39'E | 1500' | 152219Z |
| 505th | 14°57'N - 145°39'E | 1500' | 160051Z |

4. GROUP ASSEMBLY:

None ordered.

5. WING ASSEMBLY:

None ordered.

6. AIRCRAFT RETURNING EARLY:

| A/C No. | Sq No | Place | Time | Reason |
|----------|-------|--------|---------|--|
| 42-63507 | 398 | Tinian | 160019Z | Excessive engine heating |
| 42-24837 | 398 | Tinian | 160020Z | Buddy |
| 42-63492 | 398 | Tinian | 160353Z | Could not keep up |
| 42-65253 | 482 | Tinian | 160409Z | Buddy |
| 42-24793 | 482 | Tinian | 160411Z | Excessive vibration |
| 42-24848 | 482 | Tinian | 160410Z | Buddy |
| 42-24845 | 483 | Tinian | 160259Z | Internal failure #1 engine |
| 42-63250 | 483 | Tinian | 160525Z | Excessive oil leak in rear sump plug due to defective gasket #3 engine |
| 42-24849 | 483 | Tinian | 160526Z | Buddy |
| 42-24827 | 484 | Tinian | 160701Z | Low oil pressure rear #2 engine |
| 42-63484 | 484 | Tinian | 160703Z | Buddy |
| 42-24867 | 484 | Tinian | 160710Z | Buddy |

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S E C R E T

Basic Data (cont'd)

7. ROUTE OUT:

a. First Group:

| From | Time | Altitude | I.A.S. |
|--------------------|---------|----------|--------|
| 14°57'N - 145°39'E | 152219Z | 1500' | 195 |
| To: | | | |
| 14°10'N - 141°53'E | 152321Z | 18,000' | 200 |
| 13°41'N - 140°07'E | 152346Z | 18,000' | 195 |
| Alamagan | 160122Z | 28,400' | 190 |
| Pagan | 160133Z | 28,000' | 190 |

b. Second Group:

| From | Time | Altitude | I.A.S. |
|--------------------|---------|----------|--------|
| 14°57'N - 145°39'E | 160051Z | 1500' | 195 |
| To: | | | |
| 13°40'N - 139°48'E | 160223Z | 18,000' | 200 |
| Guguan | 160402Z | 28,300' | 195 |
| Alamagan | 160410Z | 28,300' | 190 |
| Pagan | 160416Z | 28,000' | 190 |

8. ROUTE BACK:

a. First Group:

| From | Time | Altitude | I.A.S. |
|--------------------|---------|----------|--------|
| Pagan | 160233Z | 28,400' | 190 |
| To: | | | |
| 16°19'N - 142°47'E | 160329Z | 16,000' | 190 |
| 15°26'N - 144°47'E | 160417Z | 2000' | 190 |
| Base | 160436Z | 1500' | 190 |

b. Second Group

| From | Time | Altitude | I.A.S. |
|--------------------|---------|----------|--------|
| Pagan | 160639Z | 21,000' | 190 |
| To: | | | |
| 17°32'N - 144°20'E | 160710Z | 8000' | 190 |
| Base | 160754Z | 1500' | 190 |

9. INITIAL POINTS:

- a. First Group: Alamagan Island 160122Z, 28,400', I.P. selection O.K.
- b. Second Group: Alamagan Island 160410Z, 28,300', I.P. selection good.

10. TARGETS ATTACK DATA:

a. No. of A/C attacking target:

- (1) Primary 32
- (2) Secondary 0
- (3) Target of opportunity 0
- (4) Last Resort Target 0

b. Times over Target:

| Group | Target No. | First A/C | Last A/C |
|-------|------------|-----------|----------|
| 504th | 1 | 160133Z | 160408Z |
| 505th | 1 | 160416Z | 160754Z |

S E C R E T

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Basic Data, Par 10 (cont'd)

One A/C #492 could not keep up with formation and went over alone at 160140Z at 26,000' and returned to base after only one run.

c. Heading and altitude from I. P. to target:

| Group | Heading | Altitude |
|-------|-----------|----------|
| 504th | 352° T.O. | 28,400' |
| 505th | 355° T.O. | 28,300' |

d. Heading and altitude over target:
See No. 10e

e. Breakaway:

| GROUP | Heading | Altitude |
|-------|-----------|----------|
| 504th | 233° T.O. | 28,000' |
| 505th | none | |

f. Rally Point

None

g. Extra runs over target:

None except as briefed (3 runs)

h. Reasons for failure to attack

| A/C No. | Reason |
|---------|--|
| 834 | Carried no bombs due to rack malfunction before T.O. |

11. ESCORT DATA:

No escort ordered

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Headquarters
313th Bombardment Wing

Mission No. 3
Field Order No. 8
16 January 1945

CONSOLIDATED MISSION REPORT

LOSS AND DAMAGE

12. CASUALTIES -- PERSONNEL:

None

13. AIRCRAFT LOST:

None

14. AIRCRAFT MISSING:

None

15. TOTAL AIRCRAFT FAILING TO RETURN (by squadron):

None

16. DAMAGE TO AIRCRAFT

None

17. ENEMY A/A FIRE:

None

18. OUR TACTICS VERSUS A/A :

Does not apply

19. AIR TO AIR BOMBING AND ROCKETS:

None

20. - 28A. COMBAT DATA:

Does not apply

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By PT NARA Date 8/26/05

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Headquarters
313th Bombardment Wing

Field Order No. 0
Mission No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

OBSERVATIONS AND CREW COMMENTS

29. EXPENDITURE OF AMMUNITION:

See Table IV of Consolidated Statistical Summary

30. OUR OBSERVED LOSSES BY E/A:

None

31. OUR OBSERVED LOSSES BY A/A:

None

32. OBSERVATIONS:

Bombardier in A/C 788 sighted yellow object at 15°08'N - 145°23'E at 160558Z from 1200' A/C circled, let down to 800' and passed directly over the area. The object sighted appeared to be a yellow one-man dinghy surrounded by crates and other floating debris. Visibility was somewhat obscured by haze, which prevented positive identification. Reported to Saipan ground station.

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

None

34. CREW SUGGESTIONS:

None

35.

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Headquarters
313th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

GENERAL TECHNICAL DATA

35. FUNCTIONING OF OXYGEN SYSTEM:

O.K.

36. FUNCTIONING OF CLOTHING AND PERSONAL EQUIPMENT:

O.K.

37. CAMERAS:

See Photo Specialist Report

38. TECHNICAL FAILURES:

See flight Engineer's Report

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By PT NARA Date 8/26/05

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RESTRICTED
GROUP OR WING
DATE 21 Jun 45
BY Capt. John A. Ryan

CONSOLIDATED MISSION REPORT
BOMBING DATA

F.O. NO.
MISSION NO.
DATE OF MISSION 16 Jun 45

39440

| BOMB DATA (NO. & TYPE BY A/C) | | | | | | BOMB LOAD I.B. | | | |
|-------------------------------|---------|----------------|------|------|------|----------------|----------|------|------|
| A/C NO. | SQ. NO. | BOMB LOAD H.E. | | FUSE | | NO. | SIZE LB. | FUSE | |
| | | NO. | SIZE | NOSE | TAIL | | | NOSE | TAIL |
| 506 | 378 | 21 | 500 | .1 | .01 | | | | |
| 854 | " | 21 | 500 | .1 | .01 | | | | |
| 119 | " | 21 | 500 | .1 | .01 | | | | |
| 192 | " | 21 | 500 | .1 | .01 | | | | |
| 837 | " | 21 | 500 | .1 | .01 | | | | |
| 507 | " | 21 | 500 | .1 | .01 | | | | |
| 882 | 421 | 21 | 500 | .1 | .01 | | | | |
| 811 | " | 21 | 500 | .1 | .01 | | | | |
| 856 | " | 21 | 500 | .1 | .01 | | | | |
| 865 | " | 21 | 500 | .1 | .01 | | | | |
| 779 | " | 21 | 500 | .1 | .01 | | | | |
| 770 | " | 21 | 500 | .1 | .01 | | | | |
| 778 | " | 21 | 500 | .1 | .01 | | | | |
| 824 | " | 0 | 0 | 0 | .01 | | | | |
| 585 | 482 | 23 | 500 | .1 | .025 | | | | |
| 503 | " | 21 | 500 | .1 | .025 | | | | |
| 787 | " | 13 | 500 | .1 | .025 | | | | |
| 724 | " | 21 | 500 | .1 | .025 | | | | |
| 517 | " | 21 | 500 | .1 | .025 | | | | |
| 850 | " | 21 | 500 | .1 | .025 | | | | |
| 778 | " | 6 | 500 | .1 | .025 | | | | |
| 882 | " | 21 | 500 | .1 | .025 | | | | |
| 889 | " | 13 | 500 | .1 | .025 | | | | |
| 793 | " | 9 | 500 | .1 | .025 | | | | |
| 833 | " | 8 | 500 | .1 | .025 | | | | |
| TOTALS → | | | | | | | | | |
| COMMENTS | | | | | | | | | |

SECRET

C5-2184, AF

SECRET

| |
|---------------|
| RESTRICTED |
| GROUP OR WING |
| DATE |
| BY |

CONSOLIDATED MISSION REPORT

BOMBING DATA
(Continued)

| |
|-----------------|
| F.O. NO. |
| MISSION NO. |
| DATE OF MISSION |

| bomb Data (No. & Type by A/C) | | | | Target Attack Data | | | |
|-------------------------------|------|------------|----------------------|------------------------|------------|---------|------|
| NO. BOMBS DROPPED | | | NO. BOMBS JETTISONED | NO. BOMBS BROUGHT BACK | TARGET NO. | A/C NO. | TIME |
| H.F. | I.B. | TARGET NO. | | | | | |
| | | 1 | | | 1 | 506 | 1200 |
| | | 1 | | | 1 | 564 | 1200 |
| | | 1 | | | 1 | 519 | 1200 |
| | | 1 | | | 1 | 592 | 1200 |
| | | 1 | | | 1 | 537 | 1200 |
| | | 1 | | | 1 | 507 | |
| | | 1 | | | 1 | 522 | 1308 |
| | | 1 | | | 1 | 514 | 1409 |
| | | 1 | | | 1 | 555 | 1409 |
| | | 1 | | | 1 | 565 | 1409 |
| | | 1 | | | 1 | 777 | 1409 |
| | | 1 | | | 1 | 779 | 1409 |
| | | 1 | | | 1 | 783 | 1409 |
| | | 1 | | | 1 | 824 | 1409 |
| | | 1 | | | 1 | 505 | 1451 |
| | | 1 | | | 1 | 508 | 1452 |
| | | 1 | | | 1 | 797 | 1452 |
| | | 1 | | | 1 | 774 | 1452 |
| | | 1 | | | 1 | 517 | 1452 |
| | | 1 | | | 1 | 850 | 1452 |
| | | 1 | | | 1 | 778 | 1452 |
| | | 1 | | | 1 | 882 | 1452 |
| | | 1 | | | 1 | 899 | 1452 |
| | | 1 | | | 1 | 793 | 1452 |
| | | 1 | | | 0 | 850 | 1452 |
| TOTAL | → | | | | | | |

COMMENTS

SECRET

SECRET

RESTRICTED
GROUP OR WING
DATE 21 Jun 45
BY Capt J. A. [unclear]

CONSOLIDATED MISSION REPORT
BOMBING DATA

F.O. NO.
MISSION NO.
DATE OF MISSION 25 Jun 45

| BOMB DATA (NO. & TYPE BY A/C) | | | | | | BOMB LOAD I.B. | | | |
|-------------------------------|-----------|----------------|------|-----------|-----------|----------------|----------|------|------|
| A/C NO. | SQ. NO. | BOMB LOAD H.E. | | | | NO. | SIZE LB. | FUSE | |
| | | NO. | SIZE | NOSE | TAIL | | | NOSE | TAIL |
| 3940 [unclear] | 43 | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | [unclear] | [unclear] | 500 | [unclear] | [unclear] | | | | |
| | TOTAL | | 935 | | | | | | |
| TOTALS → | | | | | | | | | |
| COMMENTS | | | | | | | | | |

SECRET

C5-2184, AF

SECRET

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|---------------|
| RESTRICTED |
| GROUP OR WING |
| DATE |
| BY |

CONSOLIDATED MISSION REPORT

BOMBING DATA
(Continued)

| |
|-----------------|
| F.O. NO. |
| MISSION NO. |
| DATE OF MISSION |

TARGET ATTACK DATA

| | ALT | HDG. | LAS | WIND VELOC. | WIND DIRECT | BOMB SPACING | LENGTH OF RUN IN TIME |
|-------|---------------------------|------|-----|-------------|-------------|--------------|-----------------------|
| | | | | 421st Sq | | | |
| 502 | 28,000 | 355 | 190 | 27 | 198 | 100 | 3 min |
| | 1. wing | | | | | | |
| | 2. wing | | | | | | |
| | 3. wing | | | | | | |
| 811 | 28,000 | 350 | 190 | 27 | 198 | 100 | 6 min |
| 856 | Jettisoned bombs | | | | | | |
| 865 | Dropped on leader | | | | | | |
| 770 | Dropped on leader | | | | | | |
| 770 | Dropped on leader | | | | | | |
| 783 | Dropped on leader | | | | | | |
| 834 | Didn't have bombs in ship | | | | | | |
| | | | | 998th Sq | | | |
| 506 | 28,000 | 352 | 190 | 15 | 260 | 100 | 8 min |
| | 27,000 | 353 | 190 | 15 | 260 | 100 | 8 min |
| | 27,500 | 355 | 190 | 15 | 260 | 100 | 4 min |
| 861 | 28,000 | 360 | 190 | 15 | 210 | 100 | 8 min |
| | 27,000 | 357 | 190 | 15 | 210 | 100 | 4 min |
| | 28,000 | 352 | 190 | 15 | 210 | 100 | 8 min |
| 449 | 28,000 | 360 | 190 | 15 | 210 | 100 | 8 min |
| | 27,000 | 357 | 190 | 15 | 210 | 100 | 4 min |
| | 28,000 | 352 | 190 | 15 | 210 | 100 | 8 min |
| 492 | 26,500 | 360 | 185 | 15 | 260 | 351 | 5 min |
| | | | 190 | 15 | 210 | 100 | 6 min |
| TOTAL | → | | | | | | |

COMMENTS

SECRET

C5-2184, AF

SECRET

RESTRICTED
GROUP OR WING
319th Bomb Wing
DATE
22 Jan 45
BY
Capt JOHN A. HIGGS

CONSOLIDATED MISSION REPORT

BOMBING DATA
(Continued)

F.O. NO.
0
MISSION NO.
0
DATE OF MISSION
16 Jan 45

TARGET ATTACK DATA

4/8 20

| | SIGHTED | | RELEASE METHOD | | | HOW TOGGLED |
|----------|---------------------------|-------|----------------|----|-------|-------------------------|
| | RANGE | DEFL. | MAN. | CI | ELEC. | |
| | | | 421st Sq | | | |
| 802 | * | * | | * | * | on leader twice |
| 811 | * | * | | * | * | " " " |
| 866 | Jettisoned bombs | | | | | |
| 865 | * | * | * | | * | two times |
| 779 | Dropped on leader | | | | | two times |
| 778 | * | * | | | | two times |
| 788 | * | * | | | | two times |
| 834 | Didn't have bombs in ship | | | | | |
| | | | 390th Sq | | | |
| 506 | * | * | * | | * | Dropped on leader twice |
| 867 | * | * | * | | * | " " " " |
| 449 | * | * | * | | * | on leader three times |
| 492 | * | * | * | | * | |
| TOTAL | → | | | | | |
| COMMENTS | | | | | | |

SECRET

SECRET

RESTRICTED

| |
|--------------------------------|
| GROUP OR WING 313TH BOMB SQ |
| DATE 21 Jun 45 |
| BY Capt. JOHN A. REAR |

CONSOLIDATED MISSION REPORT

BOMBING DATA
(Continued)

| |
|------------------------------|
| F.O. NO. 0 |
| MISSION NO. 0 |
| DATE OF MISSION 16 Jun 45 |

TARGET ATTACK DATA

| | ALT | HDG. | LAS | WIND VELOC. | WIND DIRECT | BOMB SPACING | LENGTH OF RUN IN TIME |
|--------|--------|------|-----|-------------|-------------|--------------|-----------------------|
| | | | | 482nd Sq | | | |
| A/O No | 27,000 | 355 | 190 | 15k | 90° | 100 | 120 sec |
| 525 | 28,000 | 352 | " | " | " | " | 120 sec |
| 508 | 29,000 | 359 | " | " | " | " | 120 " |
| 787 | 29,500 | 352 | " | " | " | " | 120 " |
| 794 | 29,000 | 356 | " | " | " | " | 120 " |
| 517 | abort | | | | | | 120 " |
| 850 | 28,000 | 253 | 190 | 15k | 90° | 100 | 300 sec |
| 778 | 28,000 | 352 | 190 | " | " | " | " |
| 802 | 28,000 | 004 | " | " | " | " | 100 sec |
| 809 | abort | | | | | | |
| 799 | abort | | | | | | |
| 813 | abort | | | | | | |
| | | | | 483rd Sq | | | |
| 509 | 18,000 | 60 | 0 | 0 | 0 | 0 | 0 |
| 520 | 28,000 | 354 | 190 | 15k | 90° | 100 | 90 sec |
| 815 | 28,000 | 352 | " | " | " | " | " |
| 855 | 28,000 | 352 | " | " | " | " | " |
| 813 | 28,000 | 260 | " | " | " | " | " |
| 883 | 28,000 | 352 | " | " | " | " | 150 sec |
| 850 | 28,000 | 352 | " | " | " | " | 0 |
| 842 | abort | | | | | | |
| 845 | abort | | | | | | |
| 836 | 28,000 | 352 | 190 | 15k | 90° | 100 | 90 sec |
| | | | | 484th Sq | | | |
| 867 | abort | | | | | | |
| 777 | 28,000 | 348 | 190 | 15k | 90° | 100 | 300 sec |
| 814 | 30,000 | 352 | 190 | " | " | " | 120 sec |
| 484 | abort | | | | | | |
| 77 | abort | | | | | | |
| 523 | 29,100 | 355 | 190 | 15k | 90° | 100 | 300 sec |
| 526 | 28,000 | 350 | " | " | " | " | 300 " |
| 520 | 28,000 | 354 | " | " | " | " | 120 " |
| 812 | 28,000 | 351 | " | " | " | " | 300 " |
| TOTAL | | | 190 | 15k | 90° | 100 | |

COMMENTS

SECRET

RESTRICTED
 GROUP OR WING
 DATE 21 Jan 45
 BY JAMES A. HEARN

SECRET
 CONSOLIDATED MISSION REPORT

F.O. NO.
 MISSION NO.
 16 Jan 45
 DATE OF MISSION

BOMBING DATA
 (Continued)

TARGET ATTACK DATA

N/C NO
 585
 588
 787
 794
 517
 850
 770
 802
 809
 793
 853
 859
 886
 815
 855
 883
 889
 849
 845
 886
 859
 867
 777
 864
 884
 887
 888
 826
 810
 818

| SIGHTED | RELEASE METHOD | | | | | |
|---------|----------------|-------|------|----|-------|-------------|
| | RANGE | DEFL. | MAN. | CI | ELEC. | HOW TOGGLED |
| - | - | - | X | X | - | On leader |
| - | - | - | X | X | - | On leader |
| X | X | X | - | X | X | Loading |
| - | - | - | X | - | - | On leader |
| - | - | - | X | - | - | " |
| Aborted | - | - | X | - | - | " |
| - | - | - | X | - | - | On leader |
| - | - | - | X | - | - | " |
| X | X | X | - | X | X | " |
| X | X | X | - | X | X | " |
| X | X | X | - | X | X | " |
| - | - | - | X | - | - | On leader |
| - | - | - | X | - | - | " |
| Abort | - | - | X | - | - | On leader |
| aborted | - | - | X | - | - | " |
| - | - | - | X | - | - | " |
| X | X | X | - | X | X | On leader |
| aborted | X | X | - | X | X | " |
| X | X | X | - | X | X | Loading |
| X | X | X | - | X | X | " |
| aborted | - | - | X | - | - | On leader |
| aborted | - | - | X | - | - | " |
| - | - | - | X | - | - | On leader |
| - | - | - | X | - | - | " |
| X | X | X | - | X | X | Loading |
| - | - | - | X | - | - | On leader |

TOTAL → 65, 73, 83, 84, 85, 86, 87, 88, 87 } aborted.
 COMMENTS 266, 834, 823

SECRET

SECRET

| |
|-----------------|
| RESTRICTED |
| GROUP OR WING |
| DATE OF BOMBING |
| BY 21 Jan 45 |

Capt JOHN A RYAN

CONSOLIDATED MISSION REPORT

BOMBING DATA
(Continued)

See Page 22

504th Gp

| |
|-----------------|
| F.O. NO. |
| MISSION NO. |
| DATA OF MISSION |

16 Jan 45

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

There were clouds over target majority of time obscuring bomb results

- 42 I.P. & A.P.: (Comments on selection of I.P., A.P., turn at I.P., etc.)

1. I.P. was too far back causing too long bomb runs.

- 43 REASONS FOR FAILURE TO BOMB: 2. A.P. was hard to see. It is believed a better A.P. could have been

1. No bombs were ~~released~~ on one run due to personnel error
released

- 44 RESULTS OF BOMBING OBSERVED: (Own and others)

Results of first two runs were unobserved due to cloud cover. Third run the A.P. was protruding tip S. E. of island. Hits were observed on tip.

- 45 POSSIBLE SOURCES OF ERROR IN BOMBING:

- 46 USE OF RADAR & EFFICIENCY:

Was not used

- 228
51 SUMMARY OF BOMB DAMAGE:

None

- 47 COMMENTS & SUGGESTIONS:

None

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

- 49 AIMING POINT & DESCRIPTION

Burnt out hangar S.E. side of hangar

SECRET

C5-2184, AF

-5-
17

DECLASSIFIED

Authority UND760063

By PT NARA Date 8/26/05

SECRET

| |
|---------------|
| RESTRICTED |
| GROUP OR WING |
| DATE |
| BY |

CONSOLIDATED MISSION REPORT

| |
|-----------------|
| F.O. NO. |
| MISSION NO. |
| DATA OF MISSION |

BOMBING DATA

(Continued)

SEE PAGE 22.

505th Cp.

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

overcast until 1530 then 6/10th coverage

42 I.P. & A.P.: (Comments on selection of I.P., A.P., turn at I.P., etc.)

I.P. - good

A.P. too small to see from 20,000'

43 REASONS FOR FAILURE TO BOMB:

Abortions due to engine trouble and accompanying ships have 1 each malfunction

44 RESULTS OF BOMBING OBSERVED: (Own and others)

1. 43rd found target overcast
2. 43rd observed their 2nd run only - bombs falling in target area
3. 43rd observed hits on target and also hits in water

45 POSSIBLE SOURCES OF ERROR IN BOMBING:

1. Leader had malfunction - deputy leader hesitated and bombs fell over
2. Lack of pictures for radar operator
3. Loose formation

46 USE OF RADAR & EFFICIENCY: visual bombing

radar operators complained of lack of photos

47 SUMMARY OF BOMB DAMAGE:

Each hit burned-out hangar and surrounding area

48 COMMENTS & SUGGESTIONS:

Have photos for specialist on crew

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

3000 x 1500
AIMING POINT & DESCRIPTION - Burned out hangar just off runway and north of cliff.

SECRET C5-2184, AF

18
-5-

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Authority UND760063

By PT NARA Date 8/26/05

SECRET

GROUP OR WING 313th
DATE 20 Jan 45
BY

BOMB IMPACT DATA

F.O. No. 0
MISSION No. 0
DATE OF MISSION 16 Jan 45

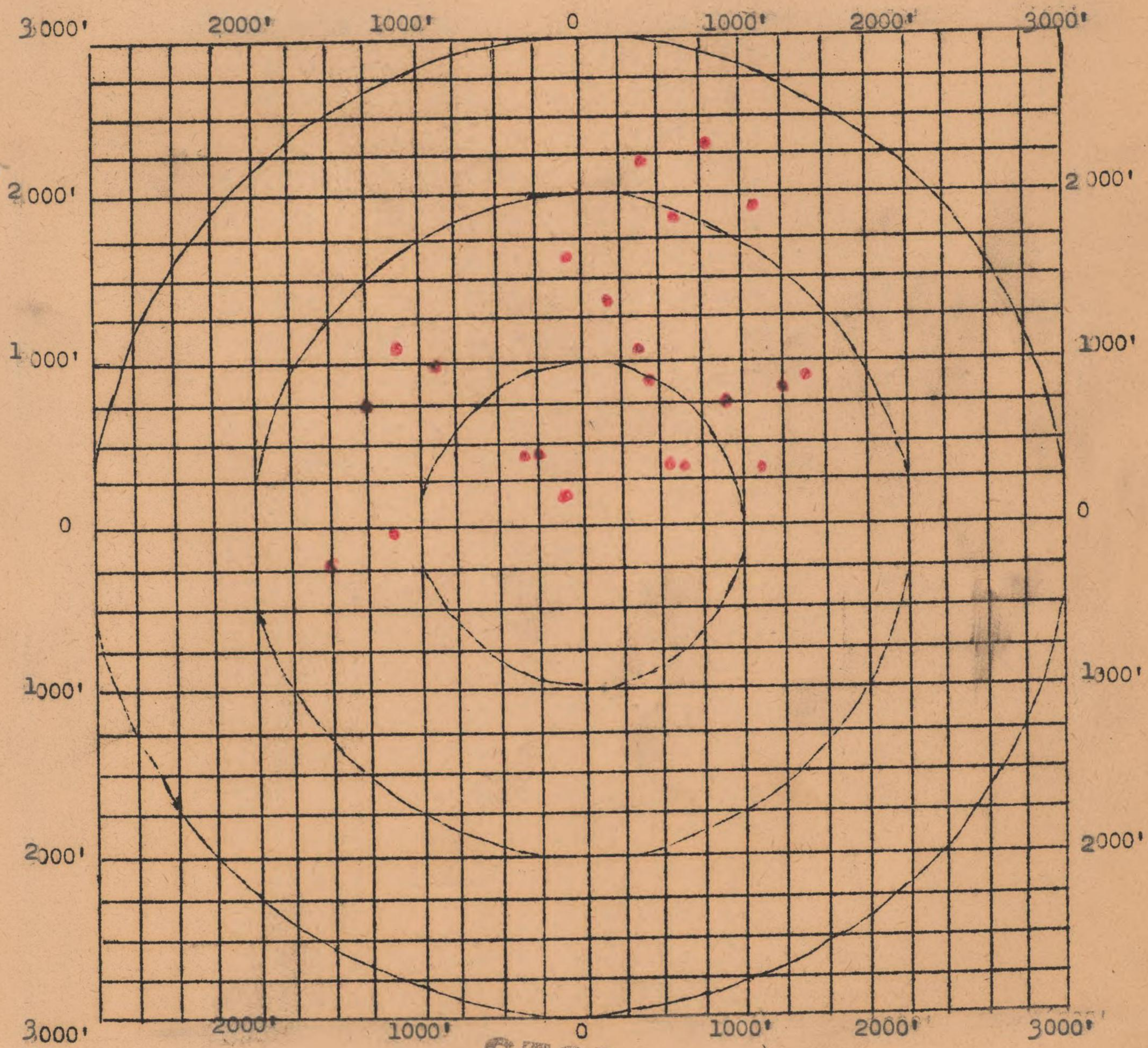
48 - DESCRIPTION, DIMENSIONS & AREA (IN SQ FT OF TARGET)

The target area consisted of runway, parking and building area surrounding the strip. The area is approximately 4,500,000 sq. ft..

49 - AIMING POINT & DESCRIPTION

The aiming point was the burned-out hangar on south side of runway. BRIEFED

50 - BOMB PLOT (COMPILED FROM BOMBING DATA & PHOTOS)



SECRET

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Authority UND760063

By PT NARA Date 8/26/05

GROUP OR WING 319
DATE 20 Jan 45
BY

SECRET
BOMB IMPACT DATA

F.O. No. 0
MISSION No. 0
DATE OF MISSION 16 Jan 45

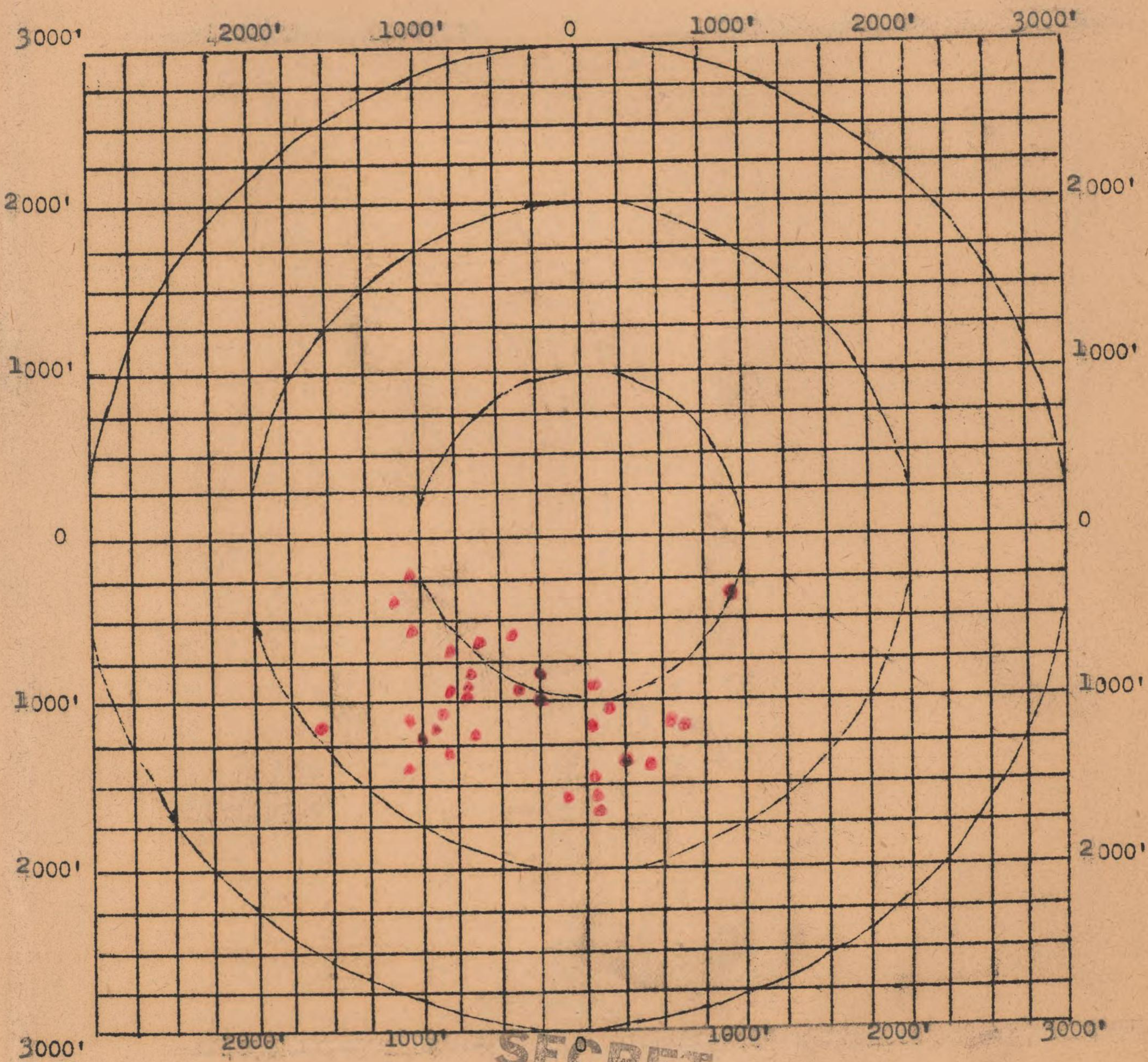
48 - DESCRIPTION, DIMENSIONS & AREA (IN SQ FT OF TARGET)

Target area consisted of the hooked peninsula WNW of the strip. Area approximately 700,000 sq. ft.

49 - AIMING POINT & DESCRIPTION

Aiming point was the geometric center of the peninsula which lies 675' south of the north tip of the peninsula. This aiming point was used by one flight since the briefed aiming point was completely obscured by cloud. There was no damage to the target. There was some cloud and some of the bomb bursts are probably obscured.

50 - BOMB PLCT (COMPILED FROM BOMBING DATA & PHOTOS)



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By PT NARA Date 8/26/05

SECRET

Headquarters
313th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

BOMB IMPACT DATA

Paragraph 51.

SUMMARY

A total of 935 - 500lb GP bombs were released on the target. Of this number the point of impact is proven by photography for only 77 bombs. Cloud cover varying from 6/10 to 10/10 obscures the remainder of the bursts.

Of the 77 bomb bursts recorded by photography; 17 bursts are within the target area. The bomb plot, paragraph 50 of this report indicates the impact data on all bombs which were within 3000' of the aiming point. Only 9.09% of all bursts recorded by photos are within 1000 ft. of the aiming point. Ten copies of all strike photographs were forwarded 17 January 1945.

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Authority UND760063

By PT NARA Date 8/26/05

SECRET

Headquarters
313th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

NAVIGATION NARRATIVE

1. Chronological Account of Mission - (see paragraphs 1-10, Basic Data)
2. Selection of route, and IP generally agreeable.
3. Need maps, scale 1:500,000, for better identification of islands, coast lines, bays, peninsulas, etc.
4. Some A.P.Q. 13 sets inoperative at high altitude due to lack of pressurization. Loran generally satisfactory but need modification of antenna system to permit use of Loran in formation.
5. a. Type A-6 navigation case too large to carry to and from airplane. Suggest authorization of A-4 type in addition to A-6.
b. B-5 driftmeter fogs at altitude, and is hard to use. Suggest B-3.
6. Quality of navigation fair to good.

M. C. ROWAN,
Major, Air Corps,
Wing Navigator.

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Authority UND760063

By PT NARA Date 8/26/05

SECRET

BOMBARDIERS SPECIALIST REPORT

F.O. #0
Mission #0

1. Conditions over Target.

Due to clouds over the target area it was impossible to obtain photos of many bomb impacts on the target. Bombardiers claimed to have been able to pick up the Aiming Point and were able to follow through with Synchronization up to about the last 5 degrees of travel of their bombsight indices. Upon orders in one flight another aiming point was used, as the briefed aiming point was obscured.

2. Initial point and Aiming Point.

The I.P. was considered to be good. Aiming point was said to be too small. However, those believing the Aiming Point too small were in the minority.

3. Reasons for Failure to Bomb.

Failure to Bomb was due to engine trouble of aborting aircraft. One abortion was due to rack failure, another to personnel error.

4. Results of Bombing Observed.

Most runs were unobserved due to cloud coverage. Many hits were observed hitting the target area and falling into the water.

5. Possible Sources of Error in Bombing.

One source for error was attributed to flying loose formation. Partial cloud cover for visual bombing and lack of pictures for radar operator were other possible sources of error.

6. Use of Radar & Efficiency:

None.

7. Summary of Bomb Damage.

See Paragraphs 48 to 51 of Tactical Mission Report.

8. Comments & Suggestions.

More photos for specialists on crew.

9. Description, Dimensions & Area.

4,500,000 sq. ft. of runway, building and dispersal area.

10. Aiming Point and Description.

Burned out hanger just off runway and north of cliff. Surrounding the hanger are five white "I" shaped personnel buildings used to identify aiming point.

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22

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By PT NARA Date 8/26/05

HEADQUARTERS
3-3TH BOMBARDMENT WING

SECRET

F/O No. 0.

CONSOLIDATED MISSION REPORT FOR 16 JANUARY, 1945.

1. Target: Pagan.
2. Complete vertical cross-section showing actual weather conditions encountered is attached (Incl. No.1).
3. A narrative account of the weather and its effect on the mission follows: in taking off 3/10 to 4/10 Cumulus clouds prevailed, bases being at 2,000 feet. Visibility was more than 15 miles. Surface wind was 90° at 15 knots. Actual conditions compared very favourably to forecast, except that there were no middle clouds. Enroute 3/10 to 4/10 Cumulus clouds were encountered, bases at 2,000 feet, tops at 8,000 feet. Near 14° N. - 140° E. 1/10 to 2/10 Altostratus at 16,000 feet was observed. Also 4/10 thin Cirrus at 30,000 feet prevailed the entire route. The visibility was greater than 15 miles. Winds observed checked very well with forecast winds. A few widely scattered light showers were seen at 14° N. - 140° E. which were not forecast. 5/10 Altostratus was forecast, but only a few patches were present. Navigation was successful using forecast winds. In the target area 2/10 to 3/10 Cumulus, bases 2,000, tops 6,000 feet prevailed; 4/10 to 5/10 thin Cirrus at 30,000 feet. Visibility 12 miles. Winds at bombing level were 250° at 20 knots compared to forecast of 210° at 15 knots. Target itself was obscured by clouds during the morning, clear in the afternoon. Temperatures observed were on the average 10° higher than forecast. On the return route weather was the same as route out except that no showers were seen and Cirrus clouds increased to about 7/10.

The base on return was the same as on take off, except that Cirrus clouds had increased to 8/10.

mission

Remarks: The only way the weather was adversely affected by the weather was the fact that the target was obscured during the morning runs, although the forecast of 2/10 to 3/10 Cumulus was correct.

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By PT NARA Date 8/26/05



SECRET

SECRET

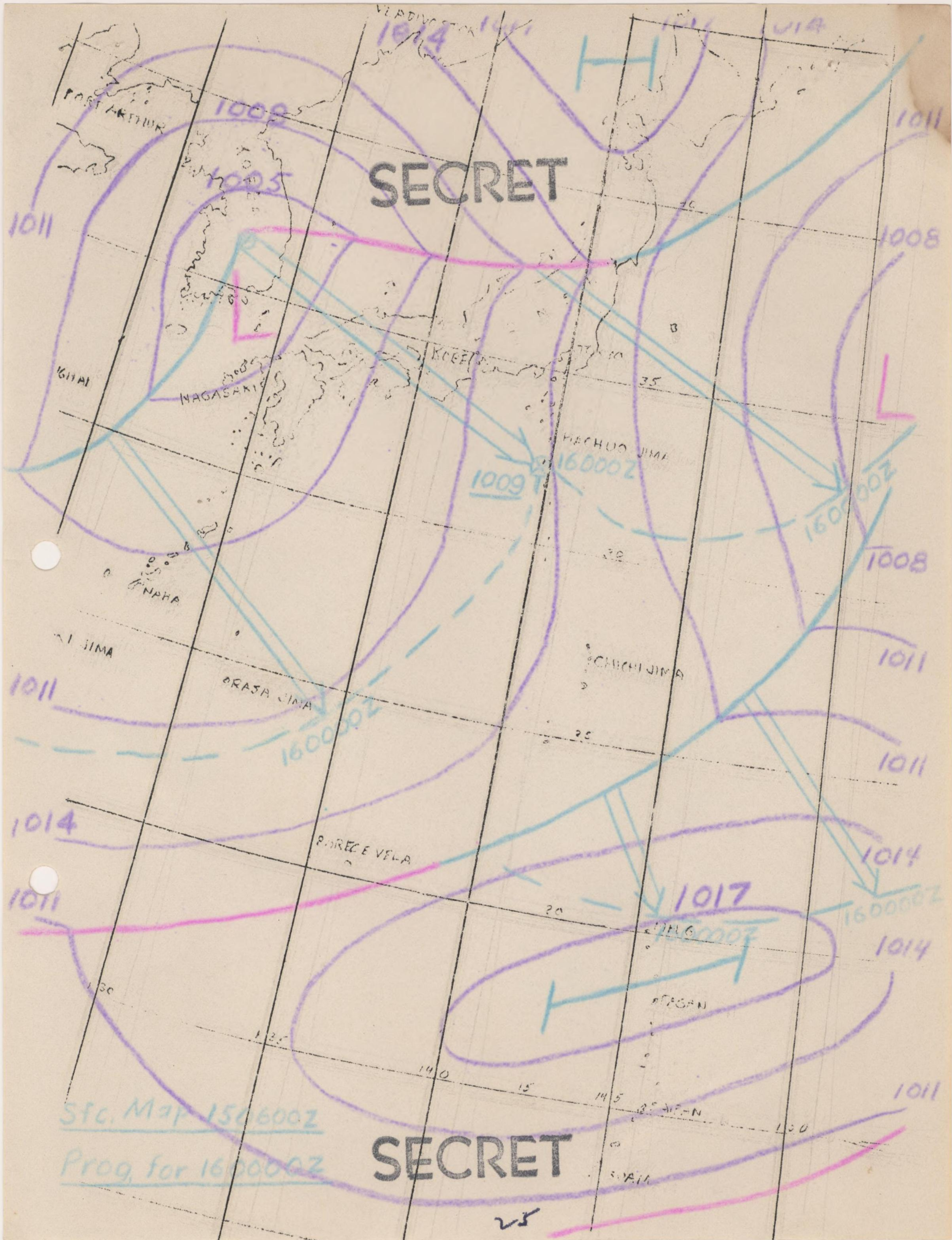
SURFACE MAP
Jan 16 0600Z

24

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Authority UND760063

By PT NARA Date 8/26/05



SECRET

SECRET

Stc. Map 151600Z
Prog. for 160000Z

25

OBSERVED CONDITIONS FOR PAGAN MISSION

SECRET

BASE

TURN

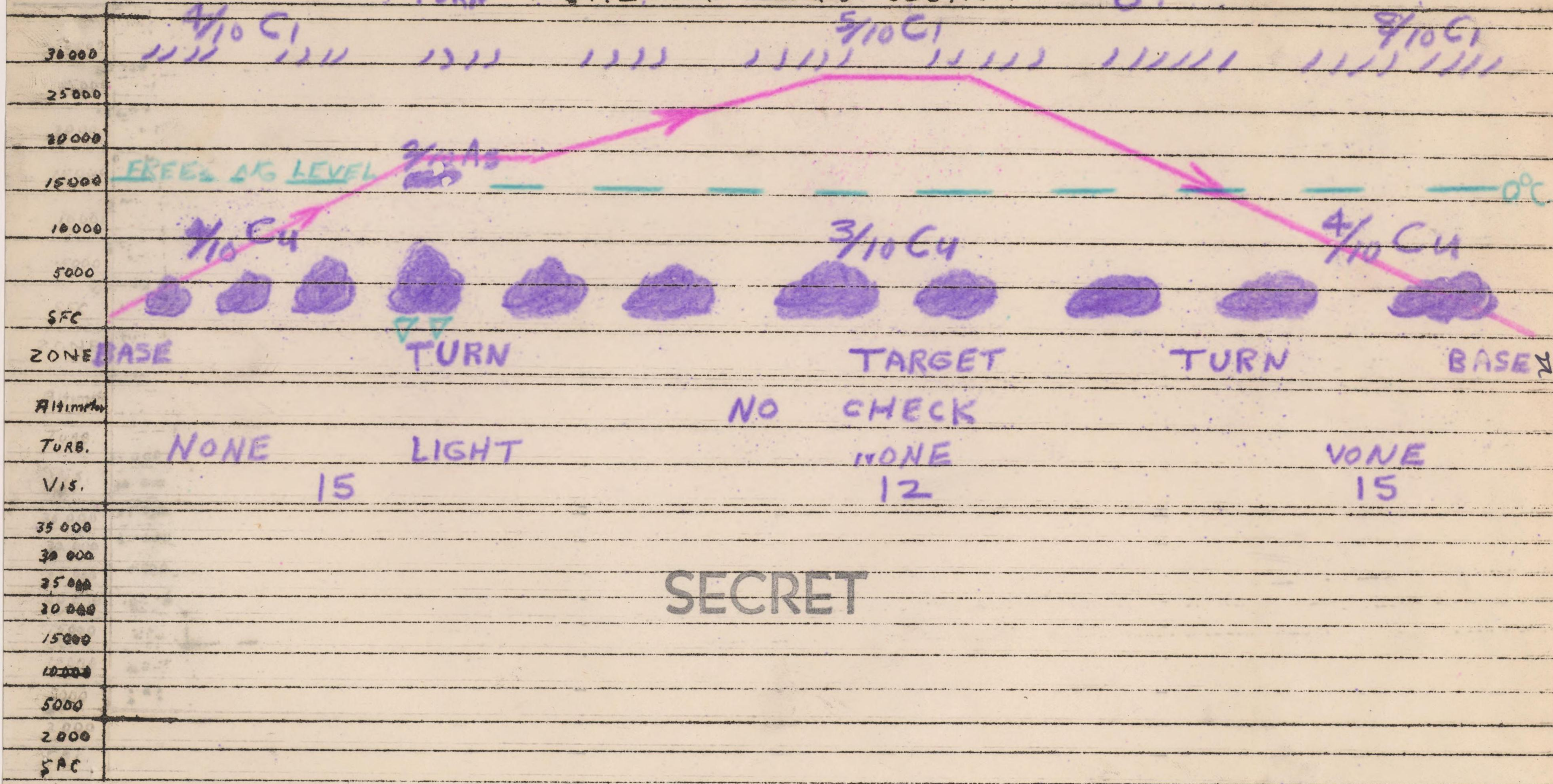
FORECAST

CROSS-SECTION

TARGET

FO No. 16 Jan

1945



SECRET

FINAL OPERATIONAL FORECAST FOR PAGAN 10 JAN

| ZONES | BASE | TURN | TARGET | BASE |
|-------------|----------|---------|----------|---------|
| 30° | 4/10 CI | | 4/10 | 2/10 CI |
| 25 | | | | |
| 20 | | | | |
| 15 | 4/10 AS | 4/10 AS | 3/10 AS | 4/10 AS |
| 10 | 3/10 CU | 4/10 CU | 4/10 CU | 3/10 CU |
| 05 | | | | |
| SFC | | | | |
| ALTIM | 29.84 | | 29.86 | 29.84 |
| TURB | NONE | | NONE | NONE |
| VIS | 14 MILES | | 14 MILES | 14 MILE |
| WINDS ALOFT | | | | |
| 35 | | | | |
| 30 | | | | |
| 25 | | | | |
| 20 | | | | |
| 15 | | | | |
| 10 | | | | |
| 05 | | | | |
| 00 | | | | |

SECRET

SECRET

TILL 162000K

SECRET UNTIL 162000K.

OPERATIONAL FORECAST

DATE-TIME ISSUED: 160237K.
FORECAST PERIOD: 160700K.

ISSUED TO: 319TH WING.
TARGET: PAGAN.

| ZONE: HEIGHT | BASE TO 17 | | | TARGET | | |
|-----------------|------------|------|-------|--------|------|-------|
| | DIR. | VEL. | TEMP. | DIR. | VEL. | TEMP. |
| 35000 | | | | 220 | 20 | -43 |
| 30000 | | | | 210 | 15 | -29 |
| 25000 | | | | 200 | 15 | -18 |
| 20000 | 110 | 15 | 21 | 170 | 15 | 00 |
| 15000 | 110 | 15 | 24 | 150 | 20 | 22 |
| 10000 | 100 | 15 | 12 | 130 | 20 | 10 |
| 5000 | 090 | 15 | 10 | 120 | 15 | 17 |
| 2000 | 090 | 15 | 23 | 100 | 15 | 22 |
| SURFACE | 090 | 15 | 20 | 090 | 15 | 27 |

TARGET SEA LEVEL PRESSURE: 29.86

PRESSURE ALT VARIATION (SEA LEVEL): PLUS 60

MEAN TEMP TO 30000 FT: 29 DEGREE.

INDICATED ALT

TRUE ALT ABOVE SEA LEVEL

25000 FT
30000 FT

26500 FT
31050 FT

NOTE: ALL WIND VEL IN KNOTS AND TEMPS IN DEG. CENTIGRADE.

SECRET

BOMBING DATA

SECRET

| | | | |
|-----------|-------|-------|--------|
| IPA | 25000 | 30000 | 32000- |
| BOMB ALT | 26500 | 31850 | |
| WIND DIR | 200° | 210 | 31000- |
| WIND VEL | 15 | 15 | |
| TEMP | -18 | -29 | 30000- |
| MEAN TEMP | 3 | -1 | |

* MPH

TARGET ALTITUDE _____ FT. 29000 -

TARGET ALTIMETER 29.86 IN.

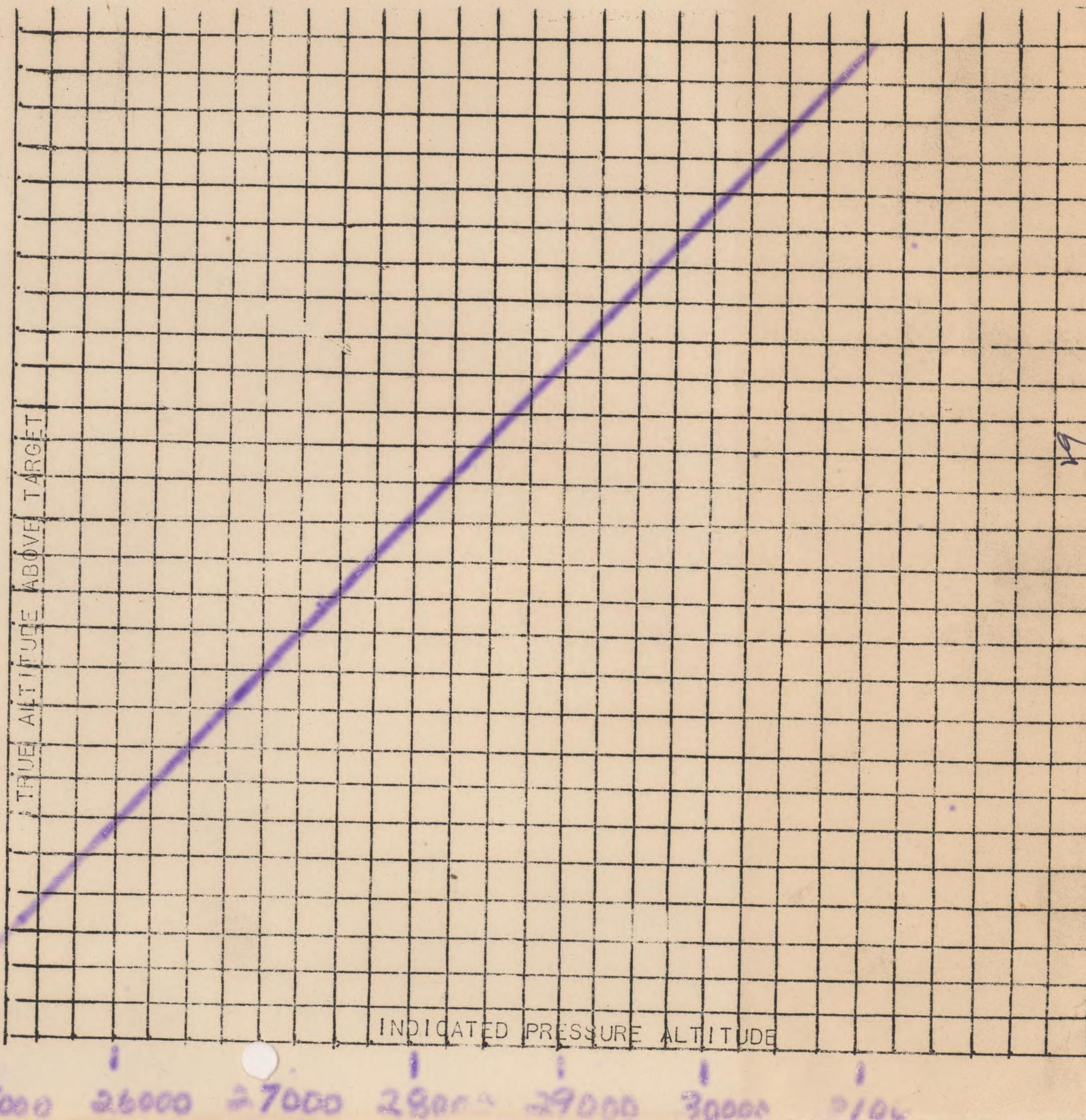
PRESSURE ALTITUDE OF TARGET +60 FT.

TURN IN TO GP BOMBARDIER

HEADING _____ GS _____ ALTITUDE 28000 -

DRIFT _____ R _____ OR L _____

SECRET 27000 -



SECRET

CONSOLIDATED MISSION REPORT FIELD ORDER "O" MISSION "O"

1. The completed interrogation forms for each crew member have been filled out and filed by the Group Gunnery Officers for their use:
2. Following is a summary of the mission:
 - a. A total of 36 aircraft participated in the mission; 13 aircraft from the 504th Group and 23 aircraft from the 505th Group.
 - b. The guns for the mission were loaded with a live round up against the cartridge stops. After the aircraft was airborne, the airplane commander gave signal to test fire guns. At this time the gun charges were activated and a live round fed into the chamber. A total of 20,780 rounds of ammunition was expended by the 504th Group and a total of 56,304 rounds of ammunition was expended by the 505th Group.
 - c. In the 504th Group the gunnery equipment, guns and gun charges were 84% effective. In the 505th Group, the gunnery equipment, guns, and gun charges were 87% effective. The CFC system, turrets and sights were 95% effective for the 504th and 93% effective for the 505th Group.
 - d. The CFC system as a unit functioned perfectly. The sighting equipment was excellent with the exception that one elevation control went out in one Ring Sighting Station. No comments on the secondary control of the stations is being made because the secondary control was not used on this mission.
 - e. It is recommended that the guns be loaded hot, round in chamber, on the following missions: The gun chargers are not very dependable and it has been noted that the majority of guns that fail to fire are due to the gun chargers failure to operate when the firing switch is closed. It is also recommended that the link ejection chutes in the turrets be enlarged to permit easier passage of links.
 - f. For this particular mission simulated fighter attacks were used. These attacks were designed to give the gunner some actual firing from formation. Firing was the best to date (the largest number of airplanes participating in a single mission to date). These simulated attacks did not materialize as well as anticipated because the aldis lamps used to designate the attack were hard to receive.

MATTHEW A. LANDRY,
Captain, Air Corps,
Wing Gunnery Officer.

-1-

SECRET

30

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By PT NARA Date 8/26/05

SECRET

Headquarters
313th Bombardment Wing

Mission No. 0
Field Order No. 0
16 January 1945

CONSOLIDATED MISSION REPORT

JOINT REPORT BY WING ENGINEERING OFFICER AND WING FLIGHT ENGINEER

1. Report of scheduled aircraft failing to take-off with reasons. See Consolidated Statistical Summary.
2. Aircraft malfunctioning. See Consolidated Statistical Summary
3. Aircraft malfunction completing mission. Spark plug change needed in four A/G.
4. Damage to aircraft
None
5. Cruise control analysis attached

SECRET

31

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By PT NARA Date 8/26/05

SECRET

SECRET:
AUTH: CG 313 BW
INIT: _____
DATE _____

313TH BOMBARDMENT WING
A-3 Section
APO #247 c/o Postmaster
San Francisco, California

21 January 1945

SUBJECT: Consolidated 313th Wing Formation Cruise Control Analysis for Mission #8 by the 504th Group.

TO : Commanding General 21st Bomber Command, APO #247

1. The gross weight on all phases of this mission was larger than anticipated on subsequent missions.
2. It is felt that the log will be very adequate when flight engineers have used it and become familiar with it. It will be the responsibility of Squadron and Group Flight Engineers to impress the importance of proper keeping of the log on their flight engineers so that the logs will be an accurate record of what has happened and will be readable by those getting material from it.
3. This mission was abnormal and is not representative of a Tokyo mission, it is planned to make subsequent training missions more representative of Tokyo missions at least as far as the climbs and target run is concerned. The continuous high power operation in auto rich shown by the logs will cause excessive wear to the engines, but due to the nearness of the target and the base altitude required this will be a necessary evil.
4. It is planned to make the recess period or break in the climb a minimum of 20 minutes and a maximum of 30 minutes wherever possible.

SECRET

31a

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Authority UND760063

By PT NARA Date 8/26/05

SECRET

421ST BOMBARDMENT SQUADRON
504TH BOMBARDMENT GROUP
APO 247-San Francisco, California

January 19 1945

SUBJECT: Flight Engineer Mission Analysis Report - Pagan
Mission. 16 January 1945.

TO : Commanding Officer, 504th Bombardment Group.
(Attention: Group Flight Engineer.)

1. The gross weights that existed during the climbs necessitated operating the engines at rated power for longer periods than desirable.

2. All Flight Engineers in this squadron requested that a more convenient log be made up. It is believed that a log could be constructed that would better facilitate taking readings down and making analysis.

3. Flight Engineers evidently do not realize the importance that their logs be accurate and readable so that higher echelons can have the advantage of their experiences.

4. This squadron had one abortive caused by ignition trouble. The same trouble had existed in this plane previously.

WALTER B. FARNSWORTH, Jr.
1st Lt., Air Corps,
421 Sqn. Flight Engineer.

1st Ind. LG/HFH/gb
Hqs. 504th Bomb Gp, O of the Ops O, APO 247, S.F. Calif. 19 Jan. 45.
TO: CG, 313th Bomb Wing (Attn: A-3 Officer)

1. Concur in the excessive wear and tear on our aircraft engines caused by climbing at such heavy gross weights and feel it very costly to us in terms of decreasing the normal life of the equipment and of crew moral.

SECRET

-1-

3/lb

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Authority UND760063

By PT NARA Date 8/26/05

(1st Ind, Cont)-Pagan Mission)

SECRET

(A) Believe climb data for heavy gross weights can be requested from the Proving Ground Command.

2. The break in the climb to altitude is not long enough to allow all air craft, (particularly the rear element ships), to cool cylinder heads and get all set for the second and final part of the climb to altitude.

3. Too many bomb runs over the target are causing excessive time at extreme altitude with consequent wear and tear on the engines.

4. Suggest practice missions be made to simulate major strike missions more closely in terms of gross weights in climbs, navigational approach to target, time at high altitude, and break-away at target.

For the Group Commander:

L. GWATHMEY,
Capt., Air Corps,
Group Flight Engineer.

SECRET

-2-

31c

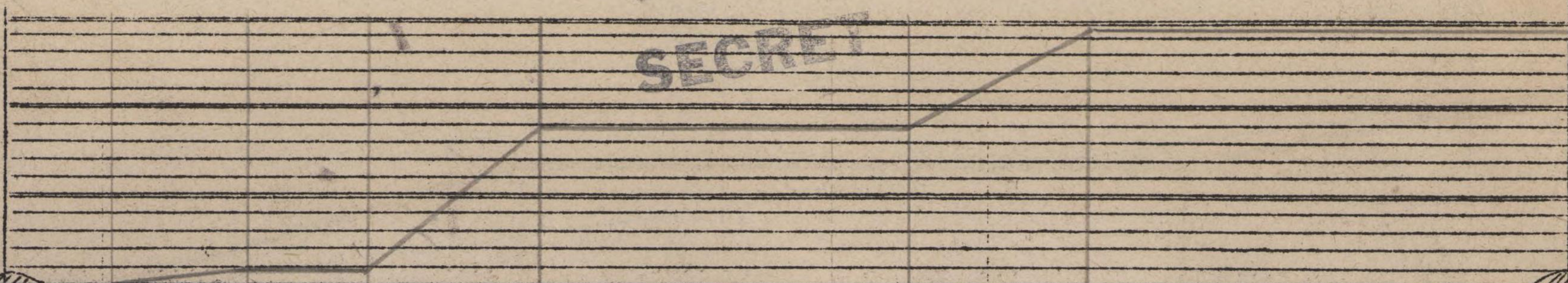
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Authority UND760063

By PT NARA Date 8/26/05

SECRET

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



30,000
20,000
10,000
421st
SQUADRON
16 Jan 45
DATE
BOMB
MISSION
DOGLEG
ROUTE
TARGET SL

| AV. START GROSS WT. | | 131000 | 130000 | 129300 | 129000 | 129500 | 122500 | 111000 | TOTALS | | | |
|-----------------------------|---------|-------------|--------------|------------|--------------|------------|--------------|---------|-----------|-----------|------|------|
| C. A. S. | PLANNED | - | 195 | 200 | 200 | 195 | 195 | 190 | | | | |
| | ACTUAL | - | 200 | 200 | 200 | 200 | 200 | 190 | | | | |
| GND. LI NAUTICAL | PLANNED | - | | | 203 | 85 | 336 | 105 | | | | |
| | ACTUAL | - | | | 227 | 109 | 407 | 34 | | | | |
| TIME | PLANNED | 0002 | 0006 | 0024 | 0100 | 0038 | 0113 | 0110 | 0433 | | | |
| | ACTUAL | 0002 | 0008 | 0005 | 0100 | 0010 | 0155 | 0130 | 0450 | | | |
| AVERAGE R/C FT. /MIN. | PLANNED | | | | | | | | FUEL USED | TOTAL | | |
| | ACTUAL | | | | | | | | TO TARGET | FUEL USED | | |
| PRED. LEAD POWER | | 2800 49 | 2400 43.5 | 2150 32 | 2350 41.5 | 2150-32 | 2450-41 | 2250-37 | 3339 | 4442 | | |
| ACTUAL LEAD POWER | | 2800 49 | 2400 43.5 | 2150 35 | 2350-41 | 2150-32 | 2375-42 | 2350-39 | 3705 | 4735 | | |
| PRED. WING POWER | | 2800- 49 | 2400 43.5 | 2200 35 | 2400-43.5 | 2200-35 | 2400-43.5 | 2300-39 | 3908 | 4838 | | |
| ACTUAL POWER | A/C | ELEM. | POS. | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2200-35 | 2400-43.5 | 2300-39 | 4018 | 4905 |
| | 814 | B | 1 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2200-35 | 2400-38 | 2350-39 | 4281 | 5050 |
| | 266 | A | 2 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2400-40 | 2400-43 | 2400-40 | 4677 | 5366 |
| | 865 | C | 2 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2200-34 | 2400-41 | 2350-37 | 4143 | 4750 |
| | 770 | A | 3 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2200-35 | 2350-35 | 2300-36 | 3287 | 4440 |
| | 788 | B | 2 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | 2200-35 | 2400-43 | 2300-39 | 3828 | 5495 |
| | 799 | C | 1 | 2800 49 | 2400 43.5 | 2200 35 | 2400 43.5 | | | | | |

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Authority VMD760063
By NARA Date 8/26/05

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SL
TARGET

SL
BASE

| A/C # | start GR. WT. | TIME | AV C.A.S. | AV P/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 | |
|-------|---------------|------|-----------|--------|----------|---------------|------|-----------|-------------|----------|------|-----------|--------|----------|-----------|-----------|
| | | | | | | | | | | | | | | | GRND. MI. | FUEL USED |
| | | | 190 | | | | | 190 | | | | | | | | |
| 882 | 92879 | 2:00 | 190 | | 1800-28 | | | | | | | | | | | 1020 |
| 814 | 99292 | 2:00 | 190 | | 1800-28 | | | | | | | | | | | 887 |
| 266 | 102256 | 2:00 | 190 | | 1900-28 | | | | | | | | | | | 769 |
| 865 | 90404 | 2:00 | 190 | | 1800-28 | | | | | | | | | | | 689 |
| 770 | 99028 | 2:00 | 190 | | 1900-28 | | | | | | | | | | | 607 |
| 788 | 94211 | 2:00 | 190 | | 1900-28 | | | | | | | | | | | 1159 |
| 779 | 103400 | 2:00 | 190 | | 1800-28 | | | | | | | | | | | 1667 |

INSTRUCTIONS:

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 - b/ Actual values for START GR. WT., GROUND MILES, TIME and P/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.

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398th BOMBARDMENT SQUADRON
504th BOMBARDMENT GROUP
APO 247-San Francisco, California.

January 19, 1945

SUBJECT : Flight Engineer Mission Analysis Report. Pagan Mission.
16 January 1945.

TO : Commanding Officer, 504th Bombardment Group.
(Attention: Group Flight Engineer).

1. Climb to altitude was made at high gross weights putting heavy load on engines for excessive periods of time and causing extremely high cylinder head temperatures.

2. Five abortives caused by:

- (1) Bad Spark Plugs. (2 Ships)
- (2) Engine back-fire on take-off.
- (3) High cylinder head temperature (258 deg. C)
- (4) "Buddy Ship" returning with aborted ship. One ship bombed from 26000 feet because of high CHT's encountered.

3. Average of actual calibrated air speeds appears higher than planned calibrated air speeds although actual time to target was longer. Could have been caused by winds but more likely caused by Engineers reading indicated air speeds rather than calibrated air speeds as powers used were higher than planned and logs disagreed.

4. More time could have been used to advantage in Cruise #2 for the purpose of cooling engines.

5. More convenient leg would allow easier analysis and more accurate entries.

ALFRED F. LARKIN,
2nd Lt, Air Corps,
398 Sqn. Flt. Engineer.

1st Ind.

LG/HFH/gb

Hqs. 504th Bomb Gp, 0 of the Ops O, APO 247, S. F. Calif.,
19 Jan 45. TO: CG, 313th Bomb Wing, (Attn: A-3 Officer)

- 1 -

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312

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Authority UND760063

By PT NARA Date 8/26/05

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(1st Ind Cent - Pagan Mission)

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1. Concur in the excessive wear and tear on our aircraft engines caused by climbing at such heavy gross weights and feel it very costly to us in terms of decreasing the normal life of the equipment and of crew moral.

(A) Believe climb data for heavy gross weights can be requested from the Proving Ground Command.

2. The break in the climb altitude is not long enough to allow all aircraft (particularly the rear element ships) to cool cylinder heads and get all set for the second and final part of the climb to altitude.

3. Too many bomb runs over the target are causing extreme altitude with consequent wear and tear on the engines.

4. Suggest practice missions be made to simulate major strike missions more closely in terms of gross weight in climbs, navigational approach to target, time at high altitude, and break-away at target.

For the Group Commander:

L. GWATHMEY,
Capt., Air Corps,
Group Flt. Engineer.

- 2 -

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318

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Authority UND760063

By PT NARA Date 8/26/05



| 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 |
| FLAND | - | 0144 | 190 | 264 | 1800,28" | - | 0045 | 190 | 1500' | 2050,29" | - | - | - | - | - | 700 |
| 864 | 94,700 | 0135 | 201 | 290 | 1950,29" | 92,332 | 0031 | 196 | 1500' | 2100,31" | - | - | - | - | - | 565 |
| 499 | 94,676 | 0102 | 213 | 450 | 1900,28" | 92986 | - | - | 1500' | 2200,35" | - | - | - | - | - | 715 |
| 506 | 102,216 | 0100 | 215 | 450 | 2000,30 | 100,116 | 0100 | 205 | 1500' | 1900,28" | - | - | - | - | - | 837 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

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 - 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.

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S E C R E T

CONSOLIDATED CRUISE CONTROL ANALYSIS

FOR MISSION #3 ON 505TH GROUP

21 January 1945

1. A search mission was run by the 505th Group on its return from the target, so the descent and return data will have little value.
2. On this mission three (3) bombing runs were made over the target to give the personnel practice on the bombing run, high altitude and power settings resulting from this, make the mission very different from others that will be run.
3. Few of the power settings were different from those recommended, but attention is invited to the power charts that have been sent to the groups and to the fact that reduction in manifold pressure below that recommended during normal operation results in wasting fuel.
4. Lead crews did not set power for the climb in some cases sufficiently high for the wingmen to use 2400 and 43", so that maximum efficient climb could be made good. Results seem to indicate that about 300 feet per minute can be made good in the climb from 1500 feet to 18,000 feet, and about 150 feet per minute in the next climb from 18,000 feet to the bombing altitude.
5. Results indicate necessity of study on the advisability of reducing the CAS for assembly.
6. CAS at the recess period during the break in the climb at 18,000 feet will be carefully watched to see if a slight reduction in CAS by the leader might result in the highest power setting being about 2250 rpm.
7. Climb data indicates that the true air speed made good will be about an average of the starting TAS and the ending TAS instead of the TAS at the 2/3 point of the climb. This will help in planning.
8. It is planned to complete the preflight and engine runup before taxiing, as soon as the hardstand is blacktopped. It is desirable from the standpoint of dust and also probable reduction in cylinder head temperature before take-off. Runup has been done on the strip because it was felt that less dusting would be caused since the strip had been rolled and sprinkled.
9. Some of the deficiencies are:
 - a. Fuel used to return did not appear on the 484th Squadron report.
 - b. Calibrated air speeds from the field order were not flown by the 482nd Squadron and their power settings showed abnormal variations.

- 1 -

S E C R E T

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Authority UND760063

By PT NARA Date 8/26/05

S E C R E T

Consolidated Cruise Control Analysis (Cont'd)

- e. The 483rd Squadron should enter total fuel in the proper place on page Number 1 of the Cruise Control Analysis Form.
- d. Squadron engineers will put their squadron number with their signature on the Mission Analysis Report.
- e. The average starting gross weight should be shown in the column set aside for it, during each condition of the flight.
- f. Average power settings used in the descent seem quite high

- 2 -

S E C R E T

31-i

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By PT NARA Date 8/26/05

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505TH BOMBARDMENT GROUP
Office of the Operations Officer
APO #247, c/o Postmaster
San Francisco, California

18 January 1945

SUBJECT: Formation Cruise Control Analysis for Mission number 8.

TO : Commanding General, Headquarters 313th Bombardment Wing, APO
#247, c/o Postmaster, San Francisco, California. ATTN: Wing
Flight Engineer.

1. Attached hereto are the Formation Cruise Control Analysis returns
by Squadrons participating in the 8th Mission of the 505th Bombardment
Group.

2. The comments of the Squadron Flight Engineers based on results
the Analysis and points covered in the Critique following the Mission are
also attached.

3. It appears that a rate of climb of approximately 275 feet per
minute is satisfactory for the first climb. This rate of climb can be
best held at 200 CAS with the lead ship pulling 2300-39".

4. The cruise time at 18000 feet seemed sufficient for stabilizing
the formation, cooling the engines and making drift observations.

5. Results indicate that the most satisfactory rate of climb for
the climb to bombing altitude is 150 feet per minute at 195 CAS with the
lead ship pulling 2350-41".

For the Group Commander:

ROBERT G. LOVE,
1st Lt., AC.,
Gp. Flt. Engineer.

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By PT NARA Date 8/26/05

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483 Bombardment Squadron
505 Bombardment Group
A.P.O. 247

Squadron Engineer's Narrative Report of Mission-January 16, 1945

This report is based on Flight Engineer Logs, no actual servicing figures of fuel were available.

Airplane #65243 was forced to use excessive power at start of descent due to mother ship aborting which left a gap to fill. Also his position was affected by other planes in formation firing their guns.

Airplane #63520 did not go on search because the fuel reserve was in adequate.

Suggestions:

1. During assembly have lead ship pull power down to 2200-35" Hg. This will give wing ships a better opportunity to get into formation.
2. Full power check before plane taxis from hard stand.
 - a. Lower cylinder head temperature for take-off
 - b. Prevent blowing of dust on parked aircraft.
 - c. Less confusion at take-off in case planes abort.

Harley H. Hazelwood
2nd Lt. AG
483 Sqdn. Flight Engineer

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By PT NARA Date 8/26/05

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

30,000 483
SQUADRON
16 Jan. 45
DATE
MISSION
ROUTE
TARGET SL

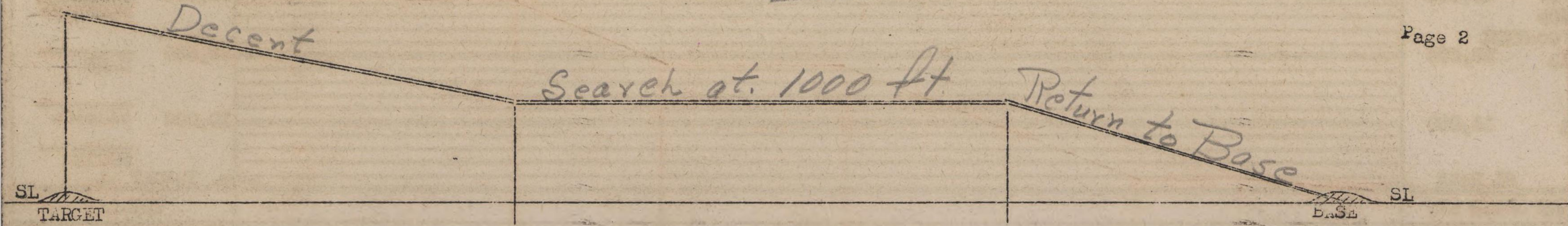
815
A Flight
#1

| SL BASE | | | | | | | | | TOTALS | | | |
|-----------------------------|---------|-----------------|--------------|--------------|--------------|--------------|-----------|-----------|---------|---------|------|------|
| AV. START GROSS WT. | | 133,363 | | | | | | | | | | |
| C. A. S. | PLANNED | 195 | 200 | 200 | 195 | 195 | 190 | | | | | |
| | ACTUAL | 210 | 201 | 191 | 196 | 190 | 193 | | | | | |
| GND. MI NAUTICAL | PLANNED | | | | | | | | | | | |
| | ACTUAL | 40 | 80 | 246 | 97 | 227 | 261 | | | | | |
| TIME | PLANNED | :12 | :24 | 1:08 | :22 | 1:13.5 | 1:10 | 4:30 | | | | |
| | ACTUAL | :10 | :21 | 1:11 | :25 | :54 | :58 | 4:00 | | | | |
| AVERAGE R/C FT. /MIN. | PLANNED | 125 | 250 | | 137 | | FUEL USED | | TOTAL | | | |
| | ACTUAL | 150 | 239 | | 185 | | TO TARGET | FUEL USED | | | | |
| PRED. LEAD POWER | | :14 | 2400 43.5 | 2300 39 | 2300-39 | 2200-35 | 2350-41 | 2200-35 | 3502 | 3502 | | |
| ACTUAL LEAD POWER | | :13 | 2400 43.5 | 2200 35 | 2250-37 | 2200-35 | 2350-41 | 2300-39 | 3232 | 3232 | | |
| PRED. WING POWER | | | | | | | | | | | | |
| ACTUAL POWER | A/C | Flight ELEM. | POS. | | | | | | | | | |
| | 243 | A | #2 | :11 | 2400 43.5 | 2400 43.5 | 2400-43.5 | 2300-39 | 2400-43 | 2375-41 | 3915 | 3915 |
| | 520 | A | #3 | :10 | 2400 43.5 | 2300 39 | 2300-39 | 2250-38 | 2400-43 | 2325-40 | 3530 | 3530 |
| | 839 | B | #1 | :09 | 2400 43.5 | 2200 35 | 2350-41 | 2200-35 | 2375-41 | 2350-40 | 3696 | 3696 |
| | 826 | B | #2 | :15 | 2400 43.5 | 2300 35 | 2300-39 | 2200-35 | 2400-43 | 2400-43 | 3321 | 3321 |
| 255 | B | #3 | :18 | 2400 43.5 | 2300 37 | 2350-41 | 2300-38 | 2400-42 | 2350-41 | 3811 | 3811 | |

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Authority VMD760063
By NARA Date 8/26/05

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| 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 | | GROUND MI. | FUEL USED |
| PLANNED | 101,585 | 1:39 | 190 | 292 | 1800-28 | | | Not Planned | | | | | | | | |
| 815 | 100,963 | 1:58 | 213 | 466 | 2000-28 | 95,036 | 2:36 | 190 | 1000 | 2000-28 | 2:27 | 210 | - | 2100-31 | | 19467 |
| 293 | 96,236 | 1:15 | 210 | 360 | 2200-35 | 93,366 | 1:01 | 184 | 1000 | 2100-31 | 2:07 | 205 | - | 2150-33 | | 1729 |
| 520 | Did Not Search | | Did Not Search | | | | | | | | 1:40 | 205 | - | 1900-28 | | 985 |
| 839 | 98,034 | 1:56 | 216 | 470 | 1800-28 | 93,890 | 1:43 | 190 | 1000 | 2050-29 | 2:21 | 190 | - | 2050-29 | | 1592 |
| 826 | 101,259 | 1:48 | 200 | 562 | 1800-28 | 93,313 | 1:01 | 185 | 1000 | 2100-31 | 1:12 | 190 | - | 2000-28 | | 1052 |
| 255 | 94,251 | 1:59 | 215 | 465 | 1800-28 | 87,085 | 1:25 | 189 | 1000 | 2050-29 | 2:21 | 190 | - | 2050-29 | | 1592 |

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ENGINEERING RESULTS
Pagan Mission

1. From the Cruise Control Analysis Chart, it is evident that the lead ship used slightly more power than other ships in the formation. This was probably due to the fact that it was carrying an approximately full bomb load as contrasted to lower loads in other ships. Likewise, on the basis of cruise control, the lead ship consumed more fuel.

2. It was suggested that the airplanes be run up, full power checked, and mags checked in their revetment before taxiing out for take-off.

Melvin G. Smith

MELVIN G. SMITH
2nd Lt, Air Corps
Flight Engineer
484th Squadron

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3/m

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Authority UND760063

By PT NARA Date 8/26/05

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

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30,000 484
 SQUADRON
 20,000 16 JAN - 45
 DATE
 10,000 PASAN
 MISSION
 DOOLEY
 ROUTE
 TARGET SL

| AV. START GROSS WT. | | TOTALS | | | | | | | |
|------------------------------|---------|----------|---------|----------|---|--------------------|---------------------------------------|---------------------------------------|------------------------------|
| C. A. S. | PLANNED | 195 | 200 | 200 | 195 | 195 | 190 | 190 | 312 |
| | ACTUAL | 195 | 198 | 198 | 195 | 192 | 190 | 196 | |
| GND. LI NAUTICAL | PLANNED | 35 | 70 | 230 | 80 | 290 | 293 | | 998 |
| | ACTUAL | 20 | 52 | 242 | 111 | 310 | 280 | | 955 |
| TIME | PLANNED | 0:12 | 0:24 | 1:08 | 0:22.5 | 1:13.5 | 0:12 | 0:58 | 4:32 |
| | ACTUAL | 0:07 | 0:18 | 1:14 | 0:30 | 1:25 | 0:13 | 0:56 | 4:43 |
| AVERAGE R/C FT. / MIN. | PLANNED | 125'/MIN | | 250'/MIN | | 140'/MIN | | | FUEL USED |
| | ACTUAL | 125'/MIN | | 295'/MIN | | 130'/MIN | | | TOTAL TO TARGET FUEL USED |
| PRED. LEAD POWER | | | 2300-39 | 2300-39 | 2200 ³⁵ | 2350 ⁴¹ | 2200-35 | | CALCULATED |
| ACTUAL LEAD POWER | | | 22-35 | 2350-41 | 2300 ³⁹ | 2400 ⁴³ | 2400-43 | | 3636 4650 |
| PRED. WING POWER | | | | | | | | | |
| ACTUAL POWER | A/C | ELEM. | POS. | | | | | | |
| | 510 | A | 2 | | 2350 ⁴¹ - 2400 ⁴³ | 2250 ³⁷ | 2350 ⁴¹ | 2350 ⁴¹ 2400 ⁴³ | 3581 4227 |
| | 818 | A | 3 | 2300-39 | 2350 ⁴¹ - 2400 ⁴³ | 2250 ³⁵ | 2350 ⁴¹ | 2300 ³⁷ 2400 ⁴³ | 3716 4368 |
| | 526 | B | 3 | 2300-39 | 2300 ³⁹ - 2350 ⁴¹ | 2325 ⁴⁰ | 2300 ³⁹ 2400 ⁴³ | 2400 ⁴³ 2300 ³⁹ | 3595 3991 |
| | 844 | C | 1 | 2300-39 | 2300 ³⁹ | 2300 ³⁹ | 2350 ⁴¹ | 2350 ⁴¹ | 3808 4196 |
| 828 | B | 1 | | | | | | | |

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| 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 | |
|-------|---------------|------|-----------|--------|--------------------|---------------|------|-----------|-------------|----------|------|-----------|--------|----------|-----------|-----------|
| | | | | | | | | | | | | | | | GRD. MI. | FUEL USED |
| 797 | 94129 | 1106 | 212 | 420 | 2100 31 | | | | | | | | | | | |
| 510 | 95114 | 1110 | 212 | 400 | 20030 | | | | | | | | | | | |
| 818 | 98000 | 1120 | 215 | 350 | 2100 31 | | | | | | | | | | | |
| 526 | 97827 | 1103 | 215 | 445 | 2100 31 | | | | | | | | | | | |
| 844 | 97262 | 1158 | - | 480 | 1900-28 1600-28 | | | | | | | | | | | |
| 828 | | | | | | | | | | | | | | | | |

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482ND BOMBARDMENT SQUADRON
Office of the Operations Officer
APO #247, c/o Postmaster
San Francisco, California

LJE/crt

18 January 1945

SUBJECT: Training Mission of 16 January 1945 to Pagan Island.

TO : Commanding Officer, 505th Bombardment Group, APO #247,
C/O Postmaster, San Francisco, California.
ATTN: Group Flight Engineer.

1. Thirteen planes from this squadron were scheduled to participate in this mission. Ship #513 aborted prior to takeoff due to a broken feathering line on #1 engine. Ship #848 aborted during takeoff due to engine failure. Ship #793 aborted after reaching an altitude of 18,000' due to vibration. It was accompanied home by ships #253 and #850.

2. The balance of the ships in this squadron bombed the target. Those ships which did not have to return to base due to mechanical difficulties proceeded from the target area to a searching area to conduct a search for a missing crew member. Because of this no data is available on descent or return to base for comparison with any preconceived flight plan.

3. Takeoffs were on schedule. Assembly was good though airspeeds were high for good assembly. No ships reported difficulty in maintaining assembly powers and airspeeds.

4. Climb No. 1 to 18,000:

a. The rate of climb maintained by the leader was in excess of predicted. Airspeeds and power settings as reported throughout the formation were also generally excessive. This is verified by the fact that altitude was reached twelve minutes ahead of predicted time (as calculated by either Wing or Group Flight Engineer).

5. Cruise at 18,000:

a. No criticism was brought up at critique regarding conditions during this cruise. However,

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It is to be noted that actual time exceeded predicted time by 22.5 minutes.

6. Climb to 28,000:

a. Airspeeds during this climb were lower than predicted, which can be accounted for by the rate of climb which was greater than predicted. It is to be noted that it was during this period that the greatest difficulty was experienced by wing men in maintaining position with the power available to them. The excessive rate of climb also accounts for the high GHT's and cowl flap settings. It is felt that more emphasis should be placed on maintaining a constant rate of climb with an airspeed sufficiently high to insure proper engine cooling. Altitude in this climb was reached 20 minutes prior to the predicted time.

7. Cruise at 28,000:

a. The only comments raised on this period of the mission were the inconsistent airspeeds flown by the lead airplane.

8. It is further recommended that planes complete their preflights prior to taxiing from their respective hardstands. Such a procedure would alleviate the present maintenance problem involving dust and dirt, with particular reference to those ships undergoing engine changes adjacent to the takeoff area.

For the Squadron Commander:

L. J. EVANS,
2nd Lt, AC,
Sq Flt Engineer.

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By PT NARA Date 8/26/05

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

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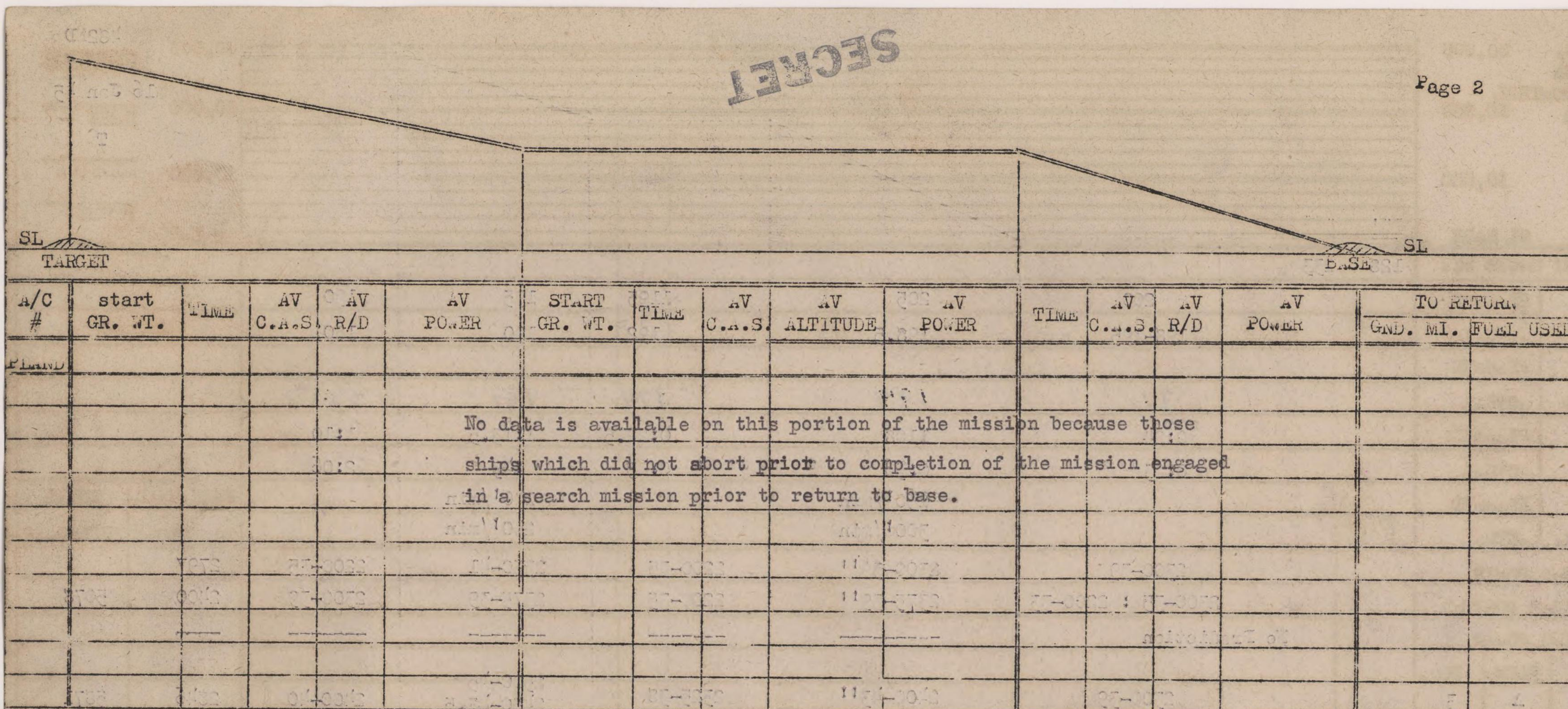
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 T
 MISSION
 ROUTE
 TARGET SET

| SL BASE | | AV. START GROSS WT. | | | | | | | | | TOTALS | | |
|-----------------------------|---------|---------------------|-------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|-------|----------------------|------------|------------|
| C. A. S. | PLANNED | | 200 | | 205 | | 1195 | | 195 | | 190 | | |
| | ACTUAL | | 198-195 | | 198.5 | | 192 | | 190 | | 180 | | |
| GND. LI NAUTICAL | PLANNED | | | | | | | | | | | | |
| | ACTUAL | | 77 | | 194 | | 174 | | 181 | | 565 | | |
| TIME | PLANNED | | 0:24 | | 1108 | | 0:22.5 | | 1:13.5 | | 1:10 | | |
| | ACTUAL | | 0:23 | | 0:56 | | 0:45 | | :43 | | 2:06 | | |
| AVERAGE R/C FT. /MIN. | PLANNED | | | | 250 [#] /min | | | | 140 [#] /min | | | FUEL USED | TOTAL |
| | ACTUAL | | | | 300 [#] /min | | | | 240 [#] /min | | | TO TARGET | FUEL USED |
| PRED. LEAD POWER | | | 2300-39 | | 2300-39 ¹¹ | | 2200-35 | | 2350-41 | | 2200-35 | 2797 | |
| ACTUAL LEAD POWER | | 0:23 | 2300-35 : 2200-33 | | 2375-39 ¹¹ | | 2200-35 | | 2375-39 | | 2300-39 | 2400 | 5078 |
| PRED. WING POWER | | | No Prediction | | ----- | | ----- | | ----- | | ----- | ----- | |
| ACTUAL POWER | A/C | ELEM. | POS. | | | | | | | | | | |
| | 802 | A | 3 | 0:23 | 2300-39 | | 2400-43 ¹¹ | | 2325-38 | | 2500-45 2450-43.5 | 2400-40 | 2846 5871 |
| | 794 | C | 4 | " | 2300-39 | | 2400-43 ¹¹ | | 2250-37 | | 2400-43 | 2300-39 | 2610 5260 |
| | 253 | C | 4 | " | 2200-35 | | 2300-39 | | 2225-35 | | ----- | ----- | ----- 2562 |
| | 787 | C | 1 | " | 2200-35 | | 2300-37 | | 2200-35 | | 2250-41 | 2300-39 | 2509 5078 |
| | 517 | C | 3 | " | 2200-35 | | 2400-43 | | 2500-39 2200-35 | | 2400-43 | 2350-40 | 2939 4681 |
| | 525 | A | 2 | " | 2200-35 | | 2400-43 | | 2150-32 | | 2300-39 | 2300-39 | 2342 4823 |
| | 793 | B | 1 | " | 2300-36 | | 2350-40 | | 2200-35 | | 2400-43 | ----- | ----- 2961 |
| | 508 | B | 2 | " | 2300-39 | | 2400-43 | | 2300-39 | | 2500-45 | 2400-43 | 2648 4776 |
| 850 | B | 3 | " | 2300-39 | | 2400-43 | | 2300-39 | | ----- | ----- | ----- 2934 | |

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| 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 |
| Planned | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

No data is available on this portion of the mission because those ships which did not abort prior to completion of the mission engaged in a search mission prior to return to base.

INSTRUCTIONS:

- Data for flight to the target will be entered on page one. Data from the target to base on page 2.
 - Planned and predicted values will be entered as per the Group Flight Engineer's 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.

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MISSION CAMERA REPORT
319TH BOMBARDMENT WING, XAFB #247
C/O Postmaster, San Francisco, California

MISSION NUMBER

MISSION DATE

Date: 16 January 1945

2. Mission No. 9) 3. Field Order 9 4. Target Pagan Island Airstrip
5. No. of wing aircraft on mission 51

| 6. | K-22 | | | | | | RADAR CAMERA | TOTAL |
|---|------|------|------|-----|-----|-----|-----------------|-------|
| | K-18 | K-19 | K-20 | 12" | 24" | 40" | | |
| Cameras installed | 1 | 0 | 23 | 5 | 9 | 5 | 5 | 48 |
| Cameras in abortive Aircraft | 0 | 0 | 10 | 2 | 6 | 0 | 3 | 21 |
| Malfunctions | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| In operating condition not taking photos | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| Cameras Lost | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cameras taking photos | 0 | 0 | 8 | 2 | 3 | 5 | 2 | 20 |

7. Reasons for malfunctions

- (a) 1 K-7C power circuit in aircraft out
- (b) 1 K-22 12" cone; magazine take up failed to operate

8. Remarks: Heavy cloud cover directly over target prevented a full evaluation of bomb impacts, however, general area covered shown.

10. ROBERT T. BAKER
Capt., A.O.
Wing Photo Officer

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By PT NARA Date 8/26/05

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

CONSOLIDATED MISSION REPORT
COMMUNICATIONS

1. Groups 504th and 505th
2. Date Flown 16 January 1945
3. Field Order No. D
4. Equipment malfunctions and/or operating difficulties: (Use back of Page if necessary).

| SET | | MAIFUNCTION |
|-----------|---|--------------------------------|
| BC-348 | 5 | 1 inoperative, 1 weak, 1 noisy |
| AN/ART-13 | 3 | Inoperative (1) |
| SCR-522 | 4 | 1 set C channel reception weak |
| RC-36 | 1 | Inoperative |
| AN/ARN-7 | 3 | Inoperative |
| SCR-269 | 3 | |

5. "F" messages successfully received from Wing Ground Station. (Sum of "F" messages received by all A/C participating in mission 505th-WX reports only
504th - 36)
6. Average strength of signal of ground station at approximate distance indicated below: (Time to the nearest 1/2 hour)

| Naut Miles | 3145 | 7310 | 11160 | Time (Z) |
|------------|------------|------|-------|------------------------------|
| From base | | | | |
| 300 | 505th-Good | | | 505th-Entire time of mission |
| 900 | 504th - 5 | | | three ships reported |
| 1200 | | | | weaker in search area. |
| 1500 | | | | 504th- 0800-1600 Z |

7. a. Number of D/F contacts attempted 24
- b. Number of D/F contacts completed 19

8. Strike report with frequency distance, and call sign indicated below.

| Naut Miles | Call Sign | 3145 | 7310 | 11160 | Time (Z) |
|------------|-----------|------|------|-------|---|
| From base | | | | | |
| 505th- 180 | All ships | Good | | | Other frequencies not used. Times ranged from 1130 K to 1830 K. |
| 504th- 180 | 3V536 | 2 | | | 0145-0150 |
| 180 | 11V536 | 2 | | | 0135-0136 |
| 180 | 11V536 | 2 | | | 0200-0202 |
| 180 | 16V536 | 2 | | | 0310-0320 |
| 180 | 24V536 | 2 | | | 0410-0417 |

9. Enemy transmissions: (Include frequency, call sign, type mission, etc. if known.)

504th - None

505th - None. Interference reported always starting during transmission of a message. Sounded like tuning a set.

Note: Ships reported unable to work authentication and wondered if wrong CSP was in use. This was a general complaint and not isolated cases.

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

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HEADQUARTERS 319TH BOMBARDMENT WING
APO 247, c/o Postmaster
San Francisco, California

RTH/rms

319.1 S

20 January 1945

SUBJECT: Radar Mission Report for 319th Bombardment Wing Mission A.

TO : Commanding General, 319th Bombardment Wing, APO 247, c/o Postmaster, San Francisco, California.

1. All aircraft took off with operative AN/APQ-13; there were no abortions due to radar failure. Twenty-seven (27) AN/APQ-13 equipments were operative over the target, twenty-eight (28) operative at landing.

2. No radar wind runs were taken on this mission but an average of 1.74 AN/APQ-13 radar fixes were taken per aircraft. Targets for fixes were picked up at average ranges as follows:

| | |
|---------|-------------------|
| Saipan | 57 nautical miles |
| Almagan | 50 nautical miles |
| Pagan | 50 nautical miles |
| Cuguan | 50 nautical miles |

3. Crew comments were as follows:

a. Four crews stated that briefing were inadequate; three because they were not told when to operate the APQ-13, one because he considered the required approach unsatisfactory for radar bombing.

b. APQ-13 operators want charts for use on mission.

c. APQ-13 operators want Hack watches to log times.

d. Several crews considered radar approach poor because there was no definite radar AP.

e. Crews complained that there were too many radar sets on over the target.

f. Three crews of the 504th Group complained of unsatisfactory radar maintenance. Four others made no comment, four said that APQ-13 worked well.

g. In the 504th Group, APQ-13 equipment of the 421st Squadron worked well at all altitudes; 998th Squadron malfunctions were primarily pressurization difficulties.

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Radar Mission Report for 313th Wing Mission O, 319.1 S, dd 20 Jan 45, cont'd.

4. All aircraft were assigned Pagan Island building area as the primary target with no alternate or last resort targets specified. Bombing was to be performed by visual means if possible. Formations followed the briefed course of 352 degrees to target. Releases of the 504th Group were visual, those of the 505th Group by radar. No evaluation of radar bombing results was possible because of overcast target except that one crew of the 505th Group saw that bombs from one run would fall about a mile beyond the target.

5. An average of 2.8 LORAN fixes were taken per airplane at an average range of 216 miles. Navigators were enthusiastic after their first operational use of LORAN.

6. Malfunctions:

a. AN/APQ-13

- (1) Three functioned imperfectly at altitude, one with fluctuating transmitter current around 11 ma.
- (2) One transmitter current went to 28 ma.
- (3) Set would not calibrate on 10 mile range.
- (4) One: Excessive width of heading marker.
- (5) One: Antenna stuck on azimuth and elevation.
- (6) One: Weak signals.
- (7) One: No sweep when BRL turned on.
- (8) One: Fluctuating crystal current.
- (9) Two: Targets disappeared; Possibly poor AFC operation.
- (10) One: Azimuth stabilization off.

b. AN/APQ-4

- (1) One: Sweep went crazy.
- (2) One: No signal.
- (3) One: Phasing L-R switch inoperative.

c. SUR-695

- (1) One: Circuit breaker cuts out repeatedly.

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

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HEADQUARTERS 935TH BOMBARDMENT WING

- FORM 34 -

---CONSOLIDATED STATISTICAL SUMMARY---

---Field Order Number 0. Mission Number 0.---

--16 January 1945--

- Pagan Island -

S-E-C-R-E-T

315TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE 16 January 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE I GENERAL DATA

| TARGET | GROUP | |
|---|---|---------|
| | 504th | 505th |
| | 10 Personnel Buildings North and South of air strip on Pagan Island | |
| A/C SCHEDULED TO TAKE OFF | 18 | 36 |
| A/C AIRBORNE | 14 | 30 |
| TOTAL EFFECTIVE | 11 | 21 |
| TOTAL NON-EFFECTIVE | 3 | 9 |
| BREAKDOWN OF NON-EFFECTIVE A/C BY CAUSE | | |
| a ENGINE FAILURE | (a) 2 | (c) 1 |
| OTHER MECHANICAL FAILURES | | (d) 3 |
| PERSONNEL ERROR | | (e) 2 |
| FLIGHT CONDITIONS | | |
| RETURNING SPARES | | |
| OTHER | (b) 2 | (e) 3 |
| TOTAL | 3 | 9 |
| TIME OF TAKE-OFF | | |
| EARLIEST | 152200Z | 160025Z |
| LATEST | 152322Z | 160327Z |
| TIME OF RETURN | | |
| EARLIEST | 160456Z | 160521Z |
| LATEST | 160639Z | 161045Z |

315TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE: JANUARY 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE I GENERAL DATA

(Continued)

EXPLANATION OF NON-EFFECTIVE AIRPLANES BY CAUSE & A/C SERIAL NO.

504th Group

(a) A/C 42-63507 Excessive Engine Heating (b) A/C 42-24897 returned as "Buddy" to
42-63507. A/C 42-63507 did not carry bombs
63492 Could not keep up with
formation

505th Group

(c) A/C 42-24845 - internal failure of No. 1 Engine
(d) A/C 42-63250 - Excessive Oil Leak in rear sump plug due to defective gasket - #3 Engine
(- A/C 42-24799 - Excessive vibration with 2300 RPM & 39" Hg. at 18,000'
A/C 42-24827 - Low oil pressure rear No. 2 engine - 35#
(-) A/C 42-65259 & 42-24848 followed A/C 42-24799 back to field
A/C 42-24849 - returned as buddy to 63250
A/C 42-24827 & 42-63484 escorted A/C 42-24827 back to field

TABLE II COMBAT LOSSES AND ENEMY OPPOSITION

| | GROUP | |
|--------------------------------|-------|-------|
| | 504th | 505th |
| AIRCRAFT LOST AND DAMAGED | None | None |
| PERSONNEL CASUALTIES | None | None |
| ENEMY AIRCRAFT ENCOUNTERED | None | None |
| ANTI-AIRCRAFT AND SEARCHLIGHTS | None | None |

327TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE 16 January 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE III BOMBING DATA

| | GROUP | |
|---------------------------------------|----------------------|-----------|
| | 504th | 505th |
| TARGETS ATTACHED | Pagan Is. | Pagan Is. |
| ALTITUDE OF RELEASE | 23,400 to 23,000' | 28,500' |
| A/C BOMBING | 11 | 21 |
| VISUAL BOMBING | | |
| A/C SIGHTING FOR RANGE AND DEFLECTION | 2 | 8 |
| A/C SIGHTING FOR RANGE | 0 | 0 |
| A/C DROPPING ON LEADER | 9 | 13 |
| RADAR BOMBING | | |
| A/C SIGHTING FOR RANGE | 0 | 0 |
| A/C DROPPING ON LEADER | 0 | 0 |
| NO. A/C OPERATED BY | | |
| C-1 AUTO PILOT | 2 | 9 |
| MANUAL | 9 | 12 |

S-E-C-R-E-T

S-E-C-R-E-T

11TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE 16 NOVEMBER 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE III. BOMBING DATA (Cont'd)

LOADING & DISPOSITION OF BOMBS

| | TOTAL WEIGHT | G R O U P | |
|---|---------------------|------------------------|------------------------|
| | | 504th | 505th |
| BOMBS LOADED BY TYPE AND WEIGHT | | | |
| NO. LOADED & TYPE | 935 500# AN M-43 | 312 500# OF AN M-43 | 623 500# OF AN M-43 |
| TONS | 233.75 | 78 | 155.75 |
| NUMBER RELEASED ON TARGET | 658 | 240 | 418 |
| TOTAL JETTISONED | 255 | 72 | 183 |
| TOTAL RETURNED | 22 | 0 | 22 |
| % OF BOMBS LOADED RELEASED ON TARGET (A-24 only) | 70% | 77% | 67% |

BOMBING ACCURACY

| GROUP | BOMBS RELEASED ON TARGET | NUMBER OF BOMBS AND DISTANCE FROM AIMING POINT | | | | | | | | | |
|-------|-----------------------------------|--|-----|-----------|------|-------------|----|-------------|----|-------|------|
| | | 0-500' | | 500-1000' | | 1000'-2000' | | 2000'-3000' | | TOTAL | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % |
| 504th | 312 78 | 2 | .6% | 4 | 1.3% | 20 | 6% | 23 | 7% | 49 | 15.7 |
| 505th | 623 156 | Heavy explosions observed but unsatisfactory photographs because of cloud cover over target makes accuracy difficult to determine. | | | | | | | | | |
| WING | 935 233 | | | | | | | | | | |

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913TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE 16 January 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE IV AMMUNITION AND FUEL CONSUMPTION DATA

AMMUNITION EXPENDED PER GROUP

| | 504th | 505th | TOTAL |
|-------------|--------|--------|--------|
| 20MM | | | |
| Fired | | | |
| On Lost A/C | | | |
| Total | | | |
| .50 CAL. | | | |
| Fired | 20,780 | 56,304 | 77,084 |
| On Lost A/C | None | None | None |
| Total | 20,780 | 56,304 | 77,084 |

AMMUNITION EXPENDED PER PLANE

| | 504th | 505th | TOTAL |
|----------------|-------|-------|-------|
| Upper Front | 597 | 826 | 752 |
| Lower Front | 340 | 418 | 399 |
| Upper Rear | 375 | 426 | 409 |
| Lower Rear | 335 | 428 | 398 |
| .50 Cal. Tail | 242 | 350 | 315 |
| Total .50 Cal. | 1889 | 2448 | 2267 |
| 20 MM Tail | None | None | None |

S-E-C-R-E-T

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313TH BOMBARDMENT WING

FIELD ORDER NO. 0

MISSION NO. 0

DATE 16 January 1945

CONSOLIDATED STATISTICAL SUMMARY

TABLE IV AMMUNITION AND FUEL CONSUMPTION DATA (Cont'd)

Fuel Consumption Data

| | TOTAL WING <i>NOT COMPUTED</i> | G R O U P | |
|------------------------------------|--------------------------------------|--------------|-----------------|
| | | 504th | 505th |
| AVERAGE FUEL ABOARD | 12,644 | 6244 | 6200 |
| AVERAGE FLYING TIME | | 7 Hours | 5 Hours 48 Min. |
| AVERAGE DISTANCE IN NAUTICAL MILES | | 1440 | 1220 |
| FUEL CONSUMED: | | | |
| AVERAGE | | 4526 | 4411 |
| MEDIAN | | Unknown | Unknown |
| MAXIMUM | | 5000 | 4650 |
| MINIMUM | | 4200 | 4196 |
| FUEL REMAINING: | | | |
| AVERAGE | | 1918 | 1789 |
| MEDIAN | | Unknown | Unknown |
| MAXIMUM | | Unknown | Unknown |
| AVERAGE GALLONS CONSUMED PER HR | | 647 | 761 |
| AVERAGE GALLONS CONSUMED PER MILE | | 3.14 | 3.62 |
| TOTAL GASOLINE CONSUMED AND LOST | | 49,788 Gals. | 92,630 Gals. |

Note - Above figures computed only on A/C completing Mission

S-E-C-R-E-T

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By PT NARA Date 8/26/05

S E C R E T

FO 1 (continued)

Bombing Altitude: 28,000'

Maneuver After Atk: Left turns with leader, deputy leader, and Alt. leader leading formation in turn. Total No of runs - three.

Route back: Direct from target to 16°19'N 142°47'E Course 238° True to base 15°05'N 145°39'E Course 114° True

3. a. 504th Bomb Gp Max No A/C takes off on runway #1.

- (1) 398 Sq Atks at 1145K.
- (2) 421 Sq Atks at 1300K.

b. 505th Bomb Gp Max No A/C takes off on runway #1

- (1) 482 Sqdn Atks target at 1415K
- (2) 483 Sqdn Atks target at 1530K
- (3) 484 Sqdn Atks target at 1700K

- x. (1) Fuel: 6200 gals, Annex 1
- (2) Bomb Load: Annex No. 2
- (3) One K-20 camera in each A/C. Annex No. 3
- (4) Alt. Airfield - Depot Field, Guam.

4. See Adm O #1

5. a. Communications

- (1) Annex 3
- (2) SOP Communications XXI Bom Com dated 15 Nov 1944.
- (3) Air Sea Rescue: Annex 4

b. Command Posts

- (1) Air - Squadron Leader, deputy leader and alternate in turn.
- (2) Ground - 73rd Bomb Wing Air-Ground Station.

By order of Colonel DAVIES:

CRUTCHER
D C/S, O & T.

OFFICIAL:

Burchinal

BURCHINAL
A-3

Annex 1 - Cruise Control
Annex 2 - Bomb and Ammo Loading
Annex 3 - Photo
Annex 4 - Communications
Annex 5 - Air Sea Rescue

S E C R E T
- 2 -

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By PT NARA Date 8/26/05

SECRET

313th BOMB WING
APO 247

ANNEX 1 TO FO 1

CRUISE CONTROL

1. Cruise Control Table

| <u>No</u> | <u>Condition</u> | <u>Alt.</u> | <u>CAS</u> | <u>Time</u> | <u>Distance</u> | <u>Gross Wt.</u> |
|-----------|---|-------------|------------|-------------|-----------------|------------------|
| 0 | Before Starting Engines | -- | -- | -- | --- | 130,030 |
| 1 | Warm-up and Takeoff | -- | -- | :02 | --- | |
| 2 | Climb 1 | To 1500 | 195 | :12 | 32 | |
| 3 | Assembly and Cruise 1 | 1500 | 200 | :24 | 78 | |
| 4 | Climb 2 | To 18,500 | 200 | 1:08 | 236 | |
| 5 | Cruise 2 | 18,500 | 195 | :22.5 | 78 | |
| 6 | Climb 2 | 29,000 | 195 | 1:13.5 | 347 | |
| 7 | Cruise 3 | 28,500 | 190 | :12 | 60 | |
| 8 | Cruise 4 | 28,000 | 190 | :58 | 215 | |
| | Cruise 3 and 4 make up the 3 bomb runs. | | | | | |
| 9 | Descent 1 | To 10,000 | 190 | 1:00 | 205 | |
| 10 | Descent 2 | To 1,500 | 190 | :34 | 145 | |
| 11 | Cruise 5 (to fld) | 1,500 | 190 | :14 | 37 | |
| 12 | Landing | 000 | -- | -- | -- | |

2. Summary.

- a. Total Distance = 1433 Nautical Miles
- b. Total Time = 06:20
- c. Fuel Loaded = 6200 gals.
Fuel Required = 5000 gals
Reserve = 1200 gals
- d. Estimated loading.
 - Approx basic wt. - 75,000#
 - oil - 2,240#
 - 12 men - 2,640#
 - Ammunition - 950#
 - Bombs - 12,000#
 - Fuel - 37,200#
 - 130,030#

3. Miscellaneous

All phases of the flight will be flown at calibrated air speeds, and power estimates will be established by Group Engineers for their respective aircraft.

By order of Colonel DAVIES:

OFFICIAL: *Burchinal*
BURCHINAL
A-3

- 1 -
SECRET

CRUTCHER
DC/S O & T

YJ

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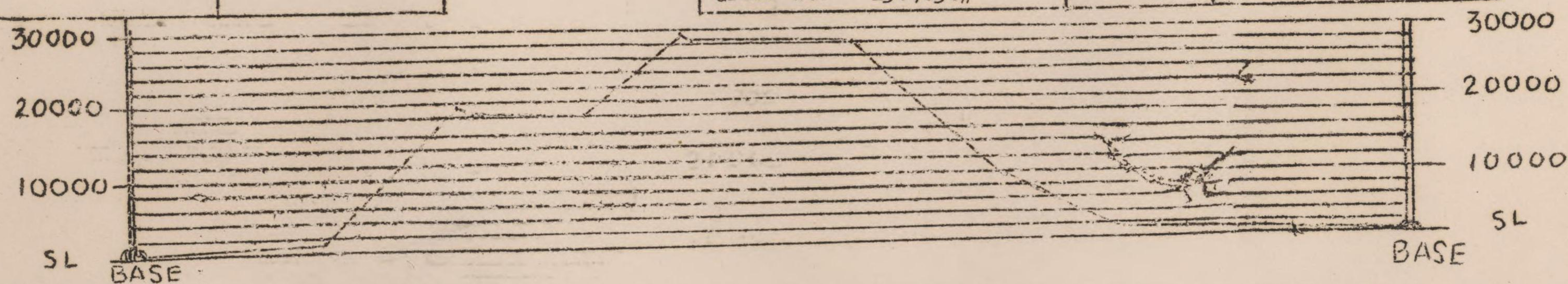
By PT NARA Date 8/26/05

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ANNEX 1 TO TO 1 313 BOMB WING
 CRUISE CONTROL

| | |
|------------------|------------------|
| Date of Estimate | 11 Jan. 1945 |
| Mission | 313th to PAGAN |
| Basic Wt. Est | 75,000 |
| Route | Dogleg |
| Strike Force | Flight Formation |

| | | | |
|------------|-------------|--|--|
| Condition | | | |
| Bomb Alt | 28,000 | | |
| Ammunition | 950# | | |
| Fuel | 6,200 gals. | | |
| Bombs | 12,000# | | |
| Gross Wt. | 130,030# | | |



| | Climb #1 | Assy & Cruise 1 | Climb 2 | Cruise 2 | Climb 2 | Cruise 3 | Cruise 4 | Descent 1 | Descent 2 | Cruise 5 | Base | Total |
|----------|----------|-----------------|-----------|----------|-----------|----------|----------|-----------|-----------|----------|------|-------|
| C A S | 195 | 200 | 200 | 195 | 195 | 190 | 190 | 190 | 190 | 190 | | |
| Distance | 32 | 78 | 236 | 78 | 347 | 60 | 215 | 205 | 145 | 37 | | 1433 |
| Time | :12 | :24 | 1:08 | :22.5 | 1:13.5 | :12 | :58 | 1:00 | :34 | :14 | | 06:20 |
| Alt. | To 1500 | 1500 | To 18,500 | 18,000 | To 29,000 | 28,500 | 28,000 | To 10,000 | To 1500 | 1500 | 000. | |

By order of Colonel DAVIES:

OFFICIAL:

Erickson
 ERICKSON
 Wg Staff Flt Engr

CRUTCHER
 DC/S O & T

76

S E C R E T

313th BOMB WING
APO 247

ANNEX 2 TO FO 1

BOMB and AMMO LOADING

1. Each Ap will load 24x500 GP bombs.
 - a. 482d and 483d Sqs, 505th Gp, will use AN-M103 nose fuze set 1/10 sec delay and AN-M101A2 tail fuze set 1/40 sec delay.
 - b. 484th Sq, 505th Gp, ^{398th Sq} and 421st Sq, 504th Gp, will use AN-M103 nose fuze set 1/10 sec delay and AN-M101A2 tail fuze set 1/100 sec delay.
2. Bombs will be delivered to Ap at the latest possible time to enable all loading and fuzing to be completed two hours before take-off.
3. No armed salvo or minimum train release will be employed. Arming wire swivel loops will be placed in the arming wire recess of bomb shackles.
4. Bombs will be fuzed after loading into bomb bays.
5. Each Ap will load 260 rds am per gun.

By order of Colonel DAVIES:

BREMER
D C/S S & M.

OFFICIAL:

Serkland
SERKLAND
Wg Staff Ord Off.

S E C R E T

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By PT NARA Date 8/26/05

SECRET

913th BOMB WING
APO 247

ANNEX 3 TO FO 1

PHOTOGRAPHY

1. All squadrons will install the maximum number of vertical and radar scope cameras that are available for operation in combat aircraft.
2. Strike attack photographs are desired of the target area for each of the three bombing runs made by each squadron. On the second and third bomb runs photographs will be made of the target area just prior to the bomb bursts in order to secure evaluations of the preceding bomb runs.
3. Radar scope photos are desired of the initial point and the target area on the 50, 25, and 10 mile ranges.
4. Efforts will be made to secure intelligence photographs on (K-20 cameras) of the area 3000' east of the target area in which activity has been previously noted.

By order of Colonel DAVIES:

CRUTCHER
D C/S, O & T.

OFFICIAL:

Burchinal
BURCHINAL
A-3

SECRET

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By PT NARA Date 8/26/05

S E C R E T

313th BOMB WING
APO 247

ANNEX 4 TO FO 1

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
 - SP 02442 - Recog Sigs - Surface Vessels.
 - SP 02443 - Recog Sigs - Submarines.
 - SP 02312 - Air-Sea Recog. Procedure.

By order of Colonel DAVIES:

CRUTCHER
D C/S, O & T.

OFFICIAL:

Burchinal
BURCHINAL
4-3

DECLASSIFIED
EO 11652, Sec. 3(E) and 5(D) ^(E)
NND 740120
By CD/MT NARS, Date OCT 21 1975

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By PT NARA Date 8/26/05

S E C R E T

313th BOMB WING
APO 247

ANNEX 5 TO FO 1

AIR-SEA RESCUE

1. Dumbos.

- a. 2 Dumbos will be on ground alert at Isely Field, Saipan.
- b. Dumbos will be available on ground alert at Tanapag Harbor through the Air-Sea Rescue Unit (CTU 94.4.2).

2. Surface Craft.

- a. Radar picket is on station at 16-56N 145-40E.
- b. Additional surface craft will be on call at Tanapag Harbor through CTG 94.7.

3. Communications.

- a. Primary Air-Sea Rescue frequency is 4475Kcs (voice and CW). Alternate frequency is VHF Channel Charlie.
- b. When searching, Dumbos and surface craft will also monitor 500 Kcs
- c. Use PAGAN Island reference point. See supplement to Addendum 1 dated 11 November 1944 of SOP-2 for reference point code name.
- d. If in distress call Picket Boat using reference point code name for ship's call, 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, Dumbo 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 codesnames may be carried in aircraft. Coordinates not to be marked on charts or carried in aircraft.

By order of Colonel DAVIES:

OFFICIAL:

J. Congdon
CONGDON
Naval Liaison Off

S E C R E T

- 1 -

CRUTCHER
D C/S, O & T.

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By PT NARA Date 8/26/05

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