- 7. <u>Distress</u>: Ground Stations received 5 distress messages. Bearings were obtained on all aircraft. Four planes landed at Iwo Jima, while the fifth stated it might ditch 100 miles from base. D/F station was immediately notified and obtained bearings as long as ditching was imminent. Position, bearing, and altitude were obtained from the radio operator and this information was forwarded to ADCC (Air Defense Control Center) which immediately picked it up on the radar scope. This aircraft did not ditch and was able to land safely.
- 8. Equipment Malfunctions: AN/ART-13: 1 dynamotor caused static in BC-384; 1 dynamotor inoperative. BC-348 Receiver: 1 off calibration; 1 with no sidetone. AN/ARN-7 Radio Compass: 1 indicator hunting; 1 inoperative completely; 1 inoperative on "Compass" position. SCR-522 Command: 2 inoperative. RC-36: 1 amplifier and 1 microphone switch inoperative. Antennaes: 31 RL-42 reels inoperative; 4 RL-42 reels sticking; 6 compass sense antennaes broken.

* * * * * *

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ANNEX

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INTELLIGENCE

Part I - Enemy Air Opposition

Part II - Enemy Antiaircraft and Air-to-Air Bombing

Part III - Bombing Results and Damage Assessment

Exhibit - Photo

Exhibit - Photo

Mission No 43

S. Sample Attractive Diction To a Non-Astronomy Conference of garden

-31-



PART I - ENEMY AIR OPPOSITION

1. General:

- a. Enemy air opposition was weak on this mission. Two hundred eighty Jap fighters were sighted; 96 made 104 attacks. Previous experience at the target together with intelligence on fighter aircraft based in the area lead to the belief that the reported number of sightings is excessive. No B-29 was known lost due to enemy aircraft action. Two B-29's (.6% of our force) were damaged due to enemy aircraft and three B-29's (1% of our force) were damaged by enemy aircraft and anti-aircraft fire. Claims are 1 unidentified single-engine aircraft destroyed and 1 unidentified fighter damaged.
- b. The majority (62 of the 104 attacks) of attacks was made the tail, as was the case on the 3 previous night missions.
- c. Enemy fighters used the glow of fires to silhouette the B-29's. One fighter pressed his attack with the aid of landing lights. Two B-29's were followed 200-300 miles out to sea by the enemy.
- d. Enemy fighter reaction on this mission indicates the continued inability of the enemy to intercept with other than negligible opposition. It is to be observed, however, that the number of enemy aircraft sighted and attacking on this mission is the highest yet experienced on night missions.

2. Type of Enemy Aircraft Attacking:

a. It is estimated that 96 fighters made 104 attacks. Seventy-three of the 104 attacks were made by aircraft unidentified as to name; 38 attacks by wholly unidentified aircraft; 24 by single-engine; and 11 by twin-engine aircraft.

b. The breakdown:

Enemy Aircraft	No. of Attacks
Unidentified	38
S/E U/I	24
Irving	11
T/E U/I	11
Tony	8
Zeke	7
Tojo	2
Zeke 32	1
Nick	1
Oscar	_1
TOTAL	104

3. Enemy Aircraft Sighted But Not Attacking: One hundred eightyfour enemy aircraft that did not attack were sighted as follows: 86
unidentified, 60 single-engine unidentified, 16 twin-engine unidentified,
6 Zekes, 6 Tonys, 6 Oscars, 2 Tojos, 1 Nick, and 1 Dinah III.

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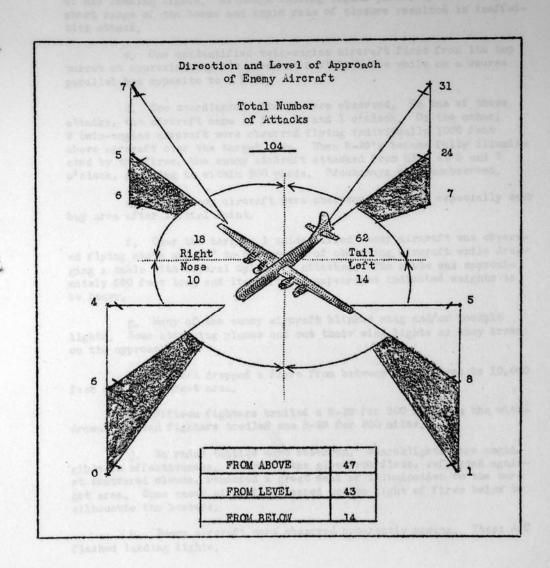
4. Direction and Level of Attack:

a. A total of 104 attacks was made by enemy fighters as compared to 39, 47, and 40 made on the three previous night missions, respectively.

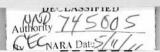
b. Tail attacks again were most numerous, 62 of the 104 attacks being made from the rear quarter. On this mission the greater number of these attacks, 31, were made from high tail, 24 having been made at level.

c. Of the remainder of attacks, right quarter attacks were slightly favored over nose and left, having sustained 18,10, and 14 respectively.

d. Distribution of Attacks on direction and level basis appears on the following chart.



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- 5. Accuracy of Enemy Fighters: As far as is known, no B-29 was destroyed by enemy aircraft. Five A/C (1.6%) were damaged by Jap fighters as compared to 0%, .7%, 0%, 0%, 0%, 16.5%, 4.7%, 22.8%, 13.1%, and 53.9%, respectively, of B-29's damaged and/or destroyed by enemy aircraft on the 10 previous missions.
- 6. Types of Projectile: Machine-gun fire was observed as were 7.7-mm and 20-mm. Some enemy fighters were reported using tracer ammunition.

7. Enemy Tactics:

- a. Some tendency was observed toward closer approaches on attacks than experienced on previous night missions. Irvings and Tonys were observed to be making more aggressive attacks.
- b. In one instance, an enemy aircraft attacked with the aid of his landing lights. Although landing lights picked up the B-29, short range of the beams and rapid rate of closure resulted in ineffective attack.
- c. One unidentified twin-engine aircraft fired from its top turret at approximately 300 yards at 3 o'clock low while on a course parallel but opposite to a B-29.
- d. Two coordinated attacks were observed. On one of these attacks, the aircraft came in from 11 and 1 o'clock. On the other, 2 twin-engine aircraft were observed flying individually 1000 feet above aircraft over the target area. When B-29's became fully illuminated by the fires, the enemy aircraft attacked from high at 5 and 7 o'clock, pressing to within 300 yards. Breakaways were unobserved.
- e. Some enemy aircraft were observed in pairs, especially over bay area after Initial Point.
- f. Over the target, I unidentified enemy aircraft was observed flying above and 90° to the course of observing aircraft while dragging a cable with several cylinders attached. The cable was approximately 500 feet long and its vertical appearance indicated weights to be heavy.
- g. Many of the enemy aircraft blinked wing and/or cockpit lights. Some attacking planes cut cut their wing lights as they broke on the approach.
- h. One E/A dropped a flare from between 15,000 feet to 10,000 feet over the target area.
- i. Fifteen fighters trailed a B-29 for 300 miles on the withdrawal. Seven fighters trailed one B-29 for 200 miles.
- j. No radar tactics were observed. Searchlights were negligible in effectiveness. However, the glow from fires, reflected against scattered clouds, rendered a great deal of illumination to the target area. Some enemy aircraft appeared to use light of fires below to silhouette the bombers.
- k. Enemy aircraft were observed apparently pacing. These A/C flashed landing lights.

-34-



8. B-29 Tactics and Firepewer vs. Enemy Aircraft: Evasive action was accomplished by some aircraft, by making right and left turns and changing altitude. One B-29 changed course, altitude and airspeed to shake off enemy aircraft. One B-29 dived, picked up airspeed, and turned. Some aircraft took evasive action by making sharp turns to thwart attacks. A few aircraft took advantage of clouds to lose enemy fighters while another B-29 successfully evaded an attack by entering heavy smoke rising from the target.

9. Enemy Aircraft Markings:

- a. Markings were, for the most part, unobserved except for wing lights. However, 1 Irving was reported as silver-colored, and 1 Tony as olive drab.
- b. Enemy aircraft were reported with wing lights, some red and green, others merely red. Some had wing lights reversed to those of B-29's. Some had 2 lights on 1 wing; 1 was seen with 2 orange-colored lights on wings; another had blue lights.
- 10. Results of Hits on Enemy Aircraft: One unidentified singleengine enemy aircraft exploded when hit by tail gunner. One unidentified aircraft, after being hit by a tail gunner, went into a dive,
 throwing out a cloud of smoke.

11. Claims by Type Enemy Aircraft and Gun Position:

Destroyed	Damaged	Gun Position
1 S/E U/I	1 0/1	Tail

NOTE: The foregoing analysis is based on later information than that presented in the Consolidated Statistical Summary.

PART II - ANTIAIRCRAFT AND AIR-TO-AIR BOMBING

1. Enemy Antiaircraft:

- a. En route to target flak was reported as follows:
- (1) Aircraft of the 73rd Wing met meager flak between landfall and IP. It was mostly heavy, continously pointed, and barrage and fairly accurate.
- (2) Scattered bursts from automatic weapons and 3 guns on the peninsula south of Kushimoto, near Shion-Misaki Seaplane Base, were first met by the aircraft of the 313th Wing. Location of the guns was estimated at 33/27N 134/45E. Three more guns were spotted at Shimosato. Scattered flak from automatic weapons was seen from Susami and Tanabe just south of Wakayama, where both guns and A/W were encountered. A/W fire was also met at the IP and from craft in the bay.
- (3) The 314th Wing aricraft met meager and inaccurate flak in the vicinity of Wakayama and Sana, the fire being described as "sporadic and poorly controlled."

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b. Over the Target:

- (1) Aircraft of the 73rd Wing attacked the target through undercast varying from 1/10 to 8/10 using axes from 346 to 36 degrees; planes of the 313th dropped their bombs through 2/10 to 9/10 undercast on an axis of approximately 10 degrees; the 314th Wing encountered undercast from 0/10 to 10/10 and used axes from 356 to 3 degrees. The wind was from 240 to 320 degrees at 23 to 46 miles per hour.
- (2) A/A fire was described as *sporadic and erratic, *
 mainly barrage, with some predicted concentrations and continously pointed fire. Both heavy and medium flak were reported. It was meager to
 intense and generally inaccurate.
- c. Two aircraft of the 313th Wing were lost to unknown causes and one aircraft of the 73rd Wing failed to return. At least a part of this loss was due to flak, since, on interrogation crews reported seeing 1 B-29 under intense A/A fire going down in a flat spin over the target.
- d. Four aircraft of the 73rd, 3 of the 313th, and 2 of the 314th Wing were damaged by flak.
- 2. B-29 Tactics Against A/A? Some aircraft employed changes in course and altitude to evade flak. Others found no evasive action necessary.

3. Air-To-Air Bombing and Rockets:

- a. The 73rd Wing reported no rocket attacks. A few enemy aircraft dropped flares. One aircraft observed rockets in the target area.
 - b. The 313th Wing reported:
- (1) At least 3 air-to-air projectiles launched with negative results.
- (2) A pair of projectiles with trailing tails of flame crossing in front of a B-29 in the target area.
 - (3) A rocket fired from a single-engine fighter.
- (4) A rocket battery of 6 to 10 launchers firing from near the aiming point. The projectiles reached an altitude of 9000 feet, giving the appearence of Roman candles.

PART III - DAMAGE ASSESSMENT *

Mission No.: 3PR5M 88

Date Flown: 17-18 March 1945

Altitude: 34,000 feet.

SUMMARY

This report assesses damage to Kobe City resulting from XXI Bomber Command Mission 43 of 16-17 March 1945. Area destroyed totaled about 79,630,000 square feet (2,86 square miles, 1,830 acres).

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Kobe City covers an area of about 14 square miles. About 20.5 percent of the city was destroyed. Forty-six per cent of Incendiary Zone No. 1 was destroyed.

Industries damaged include Targets 34, 169, and 171.

Total damage to Kobe City from XXI Bomber Command Missions 26 and 43 is 82,281,000 square feet or 2,95 square miles, representing about 21.1 per cent of the entire city.

Photo quality is good except for cloud cover which may conceal damaged portions of dock area.

STATISTICAL SUMMARY OF DAMAGE

Total Area of Kobe - 14 square miles

Total Area destroyed - 2.86 square miles

Per cent destroyed - 20.5 per cent

Area of Incendiary Zone No. 1 - 3.88 square miles Area of Incendiary Zone No. 1 destroyed - 1.80 square miles Per cent of Incendiary Zone No. 1 destroyed - 46.4 per cent

SUMMARY OF DAMAGE

Ann	otations	Square Feet
1.	Residential area destroyed	1,350,000
2.	Two residential areas destroyed	6,110,000
3.	Residential area - RR Yard buildings destroyed - Target 171, Kawasaki Heavy	
	Industry damaged.	8,310,000
4.	Residential, light industry and business area destroyed. RR Station in center of	44,400,000
	area not destroyed.	44,400,000
5.	Target 34, Kobe Horbor District No. 2., warehouses destroyed.	830,000
6.	Target 169, Mitsubishi Heavy Industry ground area around slipways and industrial buildings	
	destroyed.	360,000
7.	Three residential areas destroyed	5,710,000
8.	Residential area destroyed	4,830,000
9.	Three residential areas destroyed	570,000
10.	Two residential areas destroyed	1,040,000
11.	Five residential areas and light industry	
	destroyed.	2,030,000
12.	Two residential areas destroyed	1,750,000
13.	Two residential areas and light insudtry	
	destroyed.	2,340,000

Reference photogrophy: Pre-strike 3PR5M 36 - 1V: 11, 12 Post-strike 3PR5M 84, 85, 86, 87, 88-1V.

Reference: AAF Air Objective Folder 90.25 M-9.
All references to numbered damaged areas are keyed to the mosaic that follows this page.

* CIU. XXI B C. DA REPORT 23

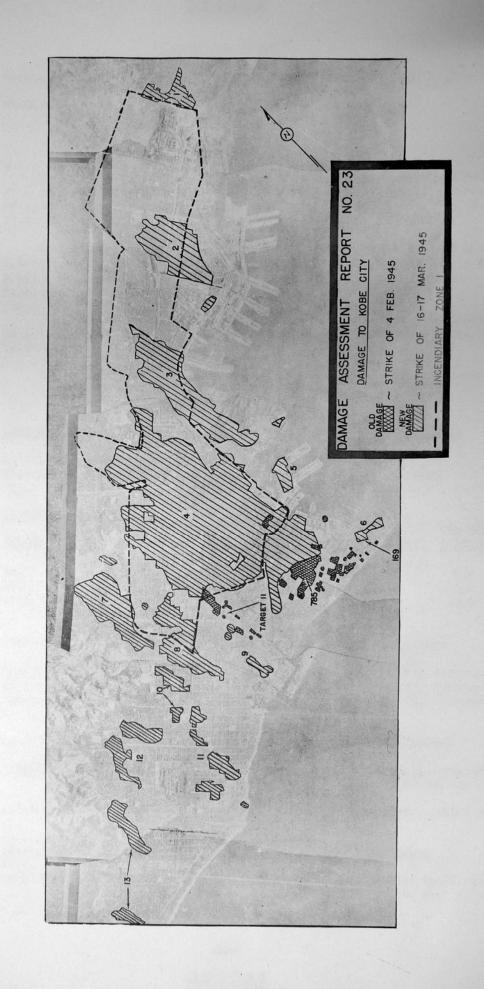
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DAMAGE ASSESSMENT *

Mission No.: 3PR5M 88 Date Flown: 18 March 1945

Mission No.: 3PR5M 96 Date Flown: 24 March 1945

SUMMARY

This report supplemets CIU Damage Assessment Report No. 23, assessing additional damage to Kobe City and giving a more detailed assessment of industrial damage resulting from XXI Bomber Command Mission No. 43, 16 March 1945.

Recent coverage showed approximately 3,177,000 square feet of additional destruction to residential areas and revealed Target 169 to be 8 per cent destroyed. Target 171 was 13 per cent destroyed, and the Arata Shipyard was 21 per cent destroyed.

Total damage to Kobe City resulting from XXI Bomber Command Missions 26 and 43 amounted to about 85,458,000 square feet, 3.0 square miles, 1,920 acres or 21.4 per cent of the city destroyed.

Interpretation of the dock area is limited because of cloud coverage.

STATISTICAL SUMMARY OF DAMAGE

AREA DAMAGE	SQ. FT	ACRES	SQ. MILES
Additional damage Previously reported damage	3,177,000 82,281,000	32 1.888	.005 2.95
Total damage observed	85,458,000	1,920	3.0

INDUSTRIAL DAMAGE

TARGET	TOTAL AREA_SQ. FT_	AREA DESTROYED-SQ.FT.	PER CENT DESTROYED
169	5,300,000	429,000	8.0
171	4,050,000	510,000	13.0
Arata Shipyard	700,000	140,000	20.0

SUMMARY OF DAMAGE-RESIDENTIAL

(See Print 34 following this report for annotation listed below)

Annotation I	1,147,000 sq. ft. destroyed
Annotation 2	700,000 sq. ft. destroyed
Annotation 3	1,330,000 sq. ft. destroyed

ITEMIZATION OF DAMAGE-INDUSTRIAL

(See Print 90 following this report for annotations listed below)

TARGET 171 (34/40N - 135/11E) Kawasaki Heavy Industries, Ltd., occupying rectangular area of about 4,050,000 sq. ft.

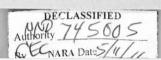
Annotation 1. 2 large and several small buildings destroyed. 60,000 sq. ft. of roof area destroyed.

Annotation 2. 2 buildings occupying 17,000 sq. ft. - destroyed.

Annotation 3. Casting shop 30 per cent destroyed - 6 smaller buildings destroyed - total destruction of about 190,000 sq. ft.

* XXI B.C. C.I.U. D/A Report #26

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Annotation 4. 3 buildings totalling about 80,000 sq. ft. destroyed.

Annotation 5. 11 small buildings destroyed - 1 large building gutted - total destruction of about 40,000 sq. ft.

Annotation 6. 5 small buildings destroyed - about 31,000 sq. ft.

Annotation 7. 7 small buildings destroyed - about 48,000 sq. ft.

Annotation 8. 6 small buildings destroyed - about 44,000 sq. ft.

ARATA SHIPYARD AND ENGINE WORKS (34/40N - 135/11E)

Annotation 9. 1 building destroyed - 3 buildings gutted - about 65,000 sq. ft. of destruction.

Annotation 10. 6 buildings destroyed - about 64,000 sq. ft.

Annotation 11. 1 building destroyed - 9,000 sq. ft.

TARGET 169 (34/39N - 135/11E) Mitsubishi Heavy Industries, Ltd.

Annotation 1 Fitting shop and area adjacent to slipways destroyed, totals approximately 35,000 sq. ft.

Annotation 2 1 building destroyed, 1 gutted. Sheds and small dock building destroyed - destruction totals approximately 113,000 sq. ft.

Annotation 3 20 buildings destroyed - about 281,000 sq. ft.

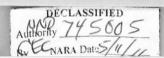
Reference Photography:

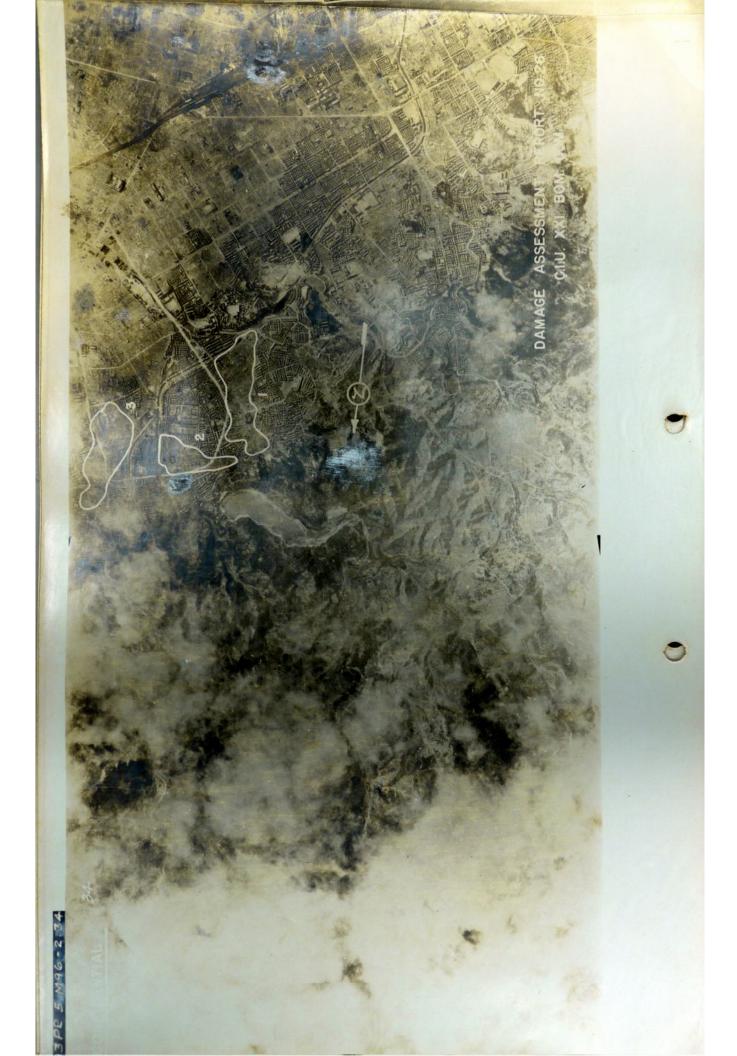
Pre-strike: 3PR5M 19-4R: 106 and 4L: 108 Post-strike: 3PR5M 88-3L: 29 and 3R: 28 3PR5M 96-2: 34

Reference Material:

CIU Damage Assessment Report No. 23 CIU Harbor Report No. 1

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ANNEX

E

CONSOLIDATED STATISTICAL SUMMARY

Mission No. 43

16 March 1945

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XXI BOMBER COMMAND

CONSOLIDATED STATISTICAL SUMMARY OF COMBAT OPERATIONS

FORM 34

MISSION NO. 43

16 Lerch 1945

Primary Target - Urban Area, Lobe

Fombing Results - Danage assessment photos reveal 2.5 sq. miles of city area destroyed.	Enemy Aircraft Destrojed 1	Bombs Propped On Other Targets 27 Tons	Bombs Tropped on Primary Target 2328 Tons	Aircraft Dombing Primary	percent Of Aircraft Cn Fend 88%	HEF CTIVE ESS OF LISSION
Aircraft Landing At Iwo Jima 15			Crew Lember Casualties 36 Percent Of Total Participating 11.1%	Aircraft Pamaged 11 Percent Of Aircraft Airborne 3.3%	Aircreft Lost	COST OF LISSION

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33RD STATISTICAL CONTROL UNIT

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Aulthority 74505

Command Date 5/11/1/

AIR **多年0月**里里

PARTICIPAT

MISSION

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101010 Includes 1 spare.
Excludes 3 super-dumbo aircraft.
Excludes 15 aircraft landing at 1wo Jima and returning late.

NOTE: Aircraft Landing At Iwo Jima:
500th Gp - 1 A/C - Refueling
6th Gp - 6 A/C - Refueling
9th Gp - 5 A/C - Refueling
504th Gp - 1 A/C - Refueling
505th Gp - 1 A/C - Refueling
29th Gp - 1 A/C - Minor Maintenance

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EVENARA Date 5/11/1/

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BREAKDOWN OF ALL AIRCRAFT FAILING TO BOMB PRIMARY TARGET

MISSION 13

DATE 16 Parch 1945

	MEC	MECHANICAL FAILURE	LURE	PERSO	PERSONNEL ERROR		FLIC	FLIGHT CONDITIONS	SNO	EN	ENEMY ACTION			oruge	
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Control Date 5/11/1/

DATE 16 March 1945

BOMBING RUN

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CV CNARA Date 5/11/1/