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27-28 February 1945

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Chief of Staff	
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Deputy C. of S. Op.	
Deputy C. of S. T.M. & E.	

XX Bomber Command



B

Tactical Mission Report

No. 40

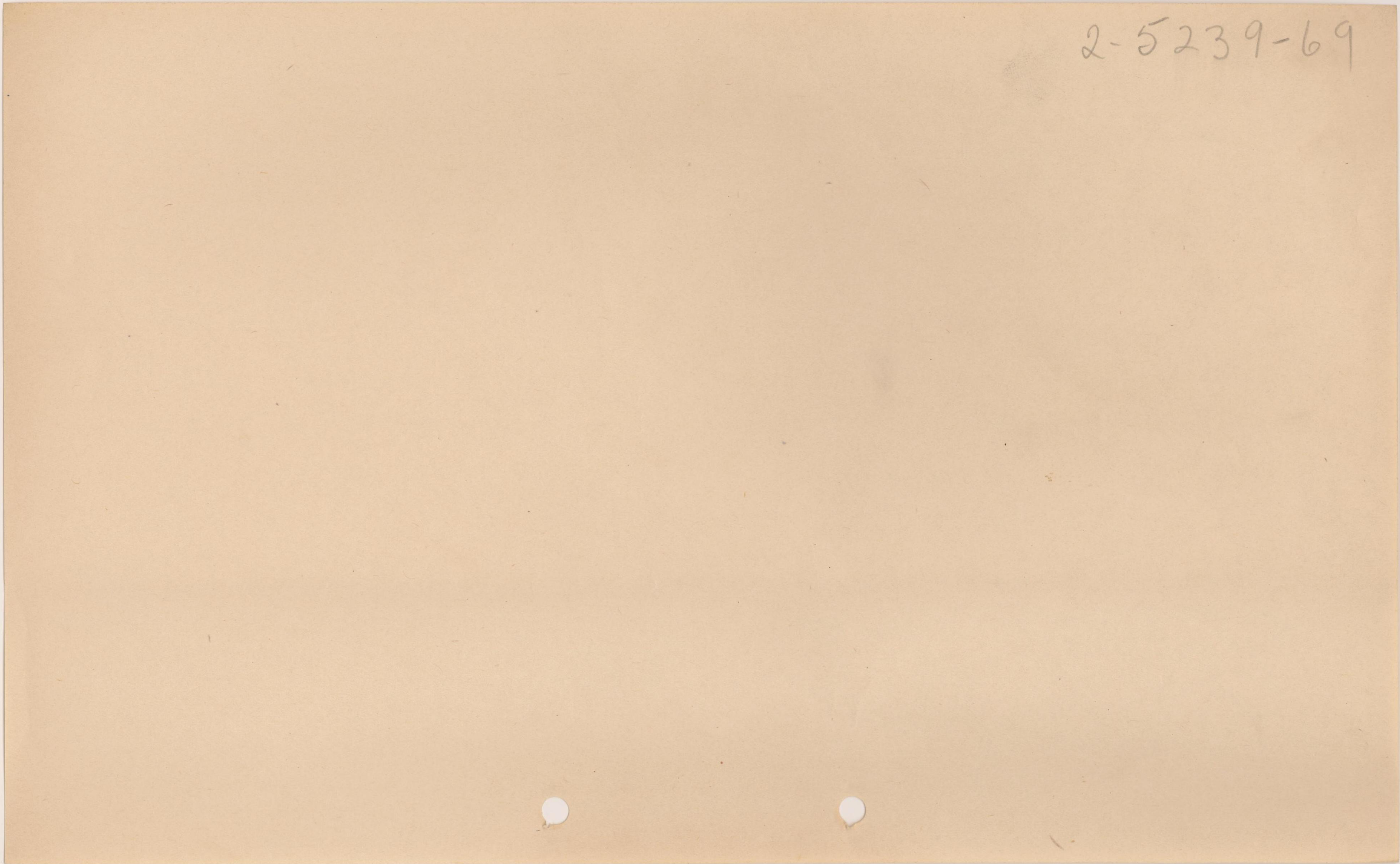
DATE 27-28 FEBRUARY 1945

GENERAL OF THE ARMY H. H. ARNOLD

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TWENTIETH AIR FORCE
Office of the Deputy Commander, IB and C
APO 493

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* DEPCOM 20 A.F. *
* 19 Mar 45 *
* Date Initials *
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TACTICAL MISSION

REPORT

Field Order No. 40

Mission No. 40

MINING AREA: JOHORE STRAIT FIELD, SINGAPORE,
MALAYA

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Prepared by;

Intelligence Section

XX Bomber Command

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TWENTIETH AIR FORCE
Office of the Deputy Commander, IB and C
APO 493

19 March 1945

SUBJECT: Report of Operations, 27-28 February 1945.

TO : Commanding General, Twentieth Air Force, Washington, 25, D.C.

1. UNITS PARTICIPATING: Only one of the four Bombardment Groups of the XX Bomber Command was directed by Field Order 40 to conduct a mine-laying operation at night against a specified area of strategic importance in the war of attrition against Japanese shipping. The participating Group, its location, and its Commanding Officer were as follows:

<u>Group</u>	<u>Base</u>	<u>Commanding Officer</u>
444th	Dudhkundi	Colonel A.L. Harvey

2. IDENTIFICATION OF MISSION:

a. Attack No. 40.

b. Mining Targets Specified:

(1) Primary Area:

(a) Singapore Area: Johore Strait Field.

(2) Secondary Areas:

(a) Penang Harbor (05°25'N - 100°21'E)

(b) Pakehan River (10°00'N - 98°35'E)

(c) Mergui Harbor (12°25'N - 98°35'E)

3. STRATEGY AND PLAN OF OPERATIONS:

a. Importance of Targets:

(1) Singapore is one of the most important shipping centers in the Japanese "Outer Zone." It is of considerable significance both militarily and economically. Southern Headquarters for both the Army and Navy are located at Singapore and the area includes major docking facilities for the repair of damaged war and cargo vessels available in few places outside of Japan itself. Major units of the Japanese fleet frequently repair to Singapore for fuel and refuge, being found most often in the Johore Strait area. Much merchant shipping, including oil tankers en route to Japan from Sumatra, pass thru this port. Many of the supplies for use in Burma arrive in Singapore by ship and are moved north by rail and small coastal vessels. Consequently, as a mining target, Singapore is one of the most important and suitable available. Several Singapore harbor channels, including Johore Strait, have been previously mined by aircraft of this Command.

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(2) Penang: Penang harbor is the most important harbor available to the Japanese along the west coast of the Malayan peninsula. It serves as a port of call and transshipment port for vessels operating northward from Singapore bringing supplies to Burma, and as a base for Japanese and German submarines operating in the Indian Ocean. The harbor has previously been mined by aircraft and submarine. It is desirable to keep the area mined to interfere with submarine activity and to discourage enemy shipping along the coast.

(3) Pakehan River: The Pakehan River is now one of the most important staging points for Japanese supplies moving to the Burma area. Large ships arrive at the river harbor and discharge their cargo for further shipment to the north by smaller coastal vessel. These smaller coastal vessels also pick up cargo brought in by rail via the trans-Kra Isthmus Railroad from Singapore or Bangkok. To interfere with this coastal shipping, the Pakehan River has been kept under constant aerial mining attack.

(4) Mergui: Mergui serves as a final port for water shipment from the south, cargo being moved by rail from this port into Burma. Continuous mining of this harbor has discouraged the use of larger vessels, and reduced traffic to smaller ships. It is desirable to keep this port under mining attack to prevent resumption of use of the harbor by larger vessels and to interfere with the use of the harbor by smaller vessels.

b. Details of Planning:

(1) Operational Planning:

(a) On 25-26 January 1945, this Command heavily mined six fields covering all of the principal approaches to the port at Singapore. Of the several approaches mined, the approach via Johore Strait to the Naval Base was of greatest concern to the Japanese. Photographic cover of this area since 26 January indicates that concentrated sweeping activity has taken place in this area, as shipping traffic appears to have been resumed over the Johore Strait Field after 10 to 14 days from the date of the mining attack.

(b) Although the original field remained dangerous because of delayed arming mechanism in the mines laid during the original attack, it was decided to renew the field, using a large percentage of delayed arming mechanism and PDM's in order to create a mine field which would insure continued danger to enemy shipping in the important Johore Strait area for an additional month.

(c) The laying of the field was planned for the full moon period in late February, this timing making the area dangerous during the greater part of March.

(d) Selection of the approach and time over the target were largely influenced by predicted weather, position of the moon, and known enemy defenses.

(e) To accomplish the mission as planned, the 444th Group was called upon to furnish 12 aircraft, each aircraft to carry 6 MK-26-1 aerial mines.

(2) Determination of Mine Load:

(a) Mine loading was prescribed fully in Mining Instructions provided by Naval Representatives prior to loading.

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(b) Naval representatives were present at the Group to provide technical aid. Aerial mines were delivered from the Aerial Mine Depot at Ondal to the Group Ordnance Officer, technical personnel accompanying the mines for the purpose of servicing and preparation.

(3) Other Planning Information:

<u>Group</u>	(a) <u>Field</u>	<u>No. A/C</u>	<u>Altitude</u>	<u>Heading</u>	<u>Time over Area</u>
444th	Johore Strait	12	4000'	150°M	271530Z

(b) Mine plots: All mines released, including those released in case of emergency, were to be accurately plotted.

(c) Routes: The route to be flown including initial point and pin point was fully prescribed in the field order.

(d) Mining Instructions: Mines required, arming of wires, and a detailed plan for laying mines were fully specified in Mining Instructions, provided by Naval Representatives prior to loading.

4. EXECUTION OF THE MISSION See Annexes A and K):

a. Take-off:

(1) Take-off time was not specified in the field order, but was to be scheduled by the Group so as to place the aircraft over the target at 1530Z on D-day.

(2) Take-off was accomplished on D-day as follows:

<u>Group</u>	<u>A/C Airborne</u>	<u>First A/C Off</u>	<u>Last A/C Off</u>
444th	12	270621Z	270643Z

(3) Weather at the 444th Group's base at take-off was clear with 10 mile visibility. There was a cross-wind of 8-10 miles per hour.

b. Route Out:

(1) The route to the mining area was prescribed. It included two check points, the initial point and a pin point.

(2) There were only two deviations from the briefed route. One aircraft flew the briefed route to 02°31'N - 103°15'E, then proceeded to mine the secondary target at Penang Harbor, thence returning by direct route to its home base. The second aircraft returned to base a little more than an hour after take-off.

c. Primary Area:

(1) Of the 12 aircraft airborne, 10 mined the primary area. A total of 55 MK26-1 aerial mines were dropped in the Johore Strait Field. Nine of the ten aircraft dropped 6 mines each in the target area, while the 10th aircraft dropped one mine in the primary area, and later jettisoned the remaining 5 mines, having experienced rack trouble over the primary target.

(2) Weather in the Singapore area was as follows: There were thin scattered cirrus above 20,000' and a few patches of altostratus less than 1/10 at 8000'.

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d. Secondary Area:

(1) One aircraft mined Penang Harbor dropping all 6 of its MK-26-1 mines in the harbor area at 271531Z

e. Mines Jettisoned:

(1) One aircraft returned to base early because of engine trouble and jettisoned its mines one mile SE of its home base just before landing.

(2) One of the 10 aircraft over the primary, being able to release only one mine at the primary target, jettisoned its remaining 5 mines at 04°49'N - 100°06'E.

f. Route Back:

(1) Two aircraft deviated from the planned return route. One returned direct to base from the secondary target at Penang Harbor. The second returned to base about one hour after take-off.

5. ENEMY ANTI-AIRCRAFT (See Annex B):

a. No heavy anti-aircraft or automatic weapons fire was reported by any of the aircraft participating in this mission, either over the primary or secondary targets.

b. A single searchlight beam located in the Singapore Naval Base area was reported by one aircraft to be sweeping horizontally. It was never elevated to aircraft altitude.

c. The second of our aircraft over the target reported that lights were on in the city of Singapore as it approached the target at 271537, but that black out was well under way when the aircraft left the area. All aircraft subsequently over the target reported that the city was completely blacked out. Lights were observed at 271545Z on the airfield on the eastern tip of Singapore Island.

6. ENEMY AIR OPPOSITION (See Annex C):

There was no enemy air opposition on this mission.

7. WEATHER (See Annex D):

The weather was suitable in all respects for this type of mission.

8. COMMUNICATIONS (See Annex E):

a. The Group ground station having been closed down, the Command air ground station at Hijli Base was utilized for this mission. Communications were excellent, and only one minor infraction of cryptographic security was noted.

b. The use of radio homing beacons was reported by 10 aircraft with extreme initial range at 600 miles from Kharagpur. No radio ranges were utilized, and only one D/F bearing was requested and given. Air-to-air homing was not used on this mission.

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9. RADAR (See Annex F):

a. Radar equipment was used primarily on this mining mission in selecting the initial and pin points from which to start the mining operations. The use of radar in this manner was reported as being a great aid.

b. Scope photographs indicated this mine field could have been set entirely by radar if conditions prevented visual mining. Photographic results were satisfactory and many useable pictures were returned.

c. Combat crew coordination was excellent, and the results obtained may be directly attributed to this factor.

d. Radar systems were one hundred (100) per cent operational over the mining areas.

10. RCM (See Annex G):

a. One search aircraft equipped with a bottom mount D/F antenna participated in this mission. The RCM Observer monitored the early warning band en route to and from the target and the 200 MC. gun laying band while in the target area.

b. The Penang early warning radar and the two early warning radar sites in the Singapore area were in operation and should have provided adequate warning, however the first two aircraft over the target reported the town still lit up, with the town beginning to black out upon the departure of the aircraft.

c. The following radar sites were D/F'ed: Port Blair; Penang; Singapore (two); Alorstar. Two additional radar sites were intercepted in the target area.

11. CENTRAL STATION FIRE CONTROL AND GUNNERY (See Annex H):

No fighters were encountered on the entire mission.

12. CAMERAS AND PHOTOGRAPHS (See Annex I):

Cameras carried on this mission were exclusively K-24 and K-35 radar scope cameras. Details of photographic results may be found in Annex F, Radar.

13. LOSSES AND DAMAGE (See Annex J):

There were no losses or damage on this mission.

14. FUNCTIONING OF EQUIPMENT (See Annexes K and M):

a. Of the 12 aircraft airborne, only 2 failed to mine the primary target area for mechanical reasons. Of these, one mined the secondary target and one jettisoned its mines. In addition, one aircraft dropped 1 mine at the primary and later jettisoned the remaining five mines.

b. Exclusive of the engineering malfunctions related to failure to mine the primary, there were 3 engineering malfunctions in flight, all 3 being instrument malfunctions.

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c. The over-all average for fuel consumption was 6885 gallons, the maximum being 7250, and the minimum being 6650 gallons.

R.M. Ramsey
R.M. RAMSEY,
Brigadier General, U.S.A.,
Deputy Commander.

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By VAN NARA Date 12-8

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ANNEX

A

EXECUTION OF THE MISSION

- I - Take-Offs and Route
- II - Track and Vertical Flight Path*
- III - Navigation Report*
- IV - Staff Bombing Officer's Report
- V - Mining Chart - Johore Strait Field
- VI - Disposition of Mines
- VII - Method of Laying of Mines

* Prepared by Staff Navigator

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By **VAN** NARA Date **12-8**

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I - TAKE-OFFS AND ROUTES

Mission No. 40

27 - 28 February 1945

A. Take-Offs

<u>Group</u>	<u>First A/C Off</u>	<u>Last A/C Off</u>	<u>Elapsed Time</u>	<u>No. of A/C Taking-off</u>	<u>Average Take-off Interval</u>
444th	270621Z	270643Z	22 min.	12	120 sec.

B. Details of Routes

1. Route Planned

<u>Route Out</u>	<u>444th</u>	
Base	Dudhkundi	(22°20'N - 87°07'E)
1st Check Point	Preparis Island	(14°52'N - 93°40'E)
2nd Check Point	Tenggol Island	(04°47'N - 103°40'E)
Initial Point	Penyabang Point	(02°38'N - 103°46'E)
Pin Point	Northwest tip of Tekong Island	(01°26'N - 104°03'E)
Target	Johore Strait, Singapore	(01°15'N - 104°09'E)
<u>Route Back</u>		
1st Check Point	Pemping Island	(01°05'N - 103°49'E)
2nd Check Point	Bengalis Island	(01°36'N - 101°59'E)
3rd Check Point	Puket Island	(08°00'N - 98°20'E)
Base	Dudhkundi	

2. Deviation from Planned Route

- a. A/C 273 flew briefed route to 05°31'N - 103°15'E, then on a 270° heading to the Secondary Target at Penang Harbor and direct from the Secondary Target to base at Dudhkundi.
- b. A/C 277 taking off at 270621Z, flew briefed route for approximately 30 minutes at which time engine trouble was encountered. A/C 277 returned direct to base, landing at 270732Z, jettisoning its mines 1 mile SE of its home field immediately prior to landing.

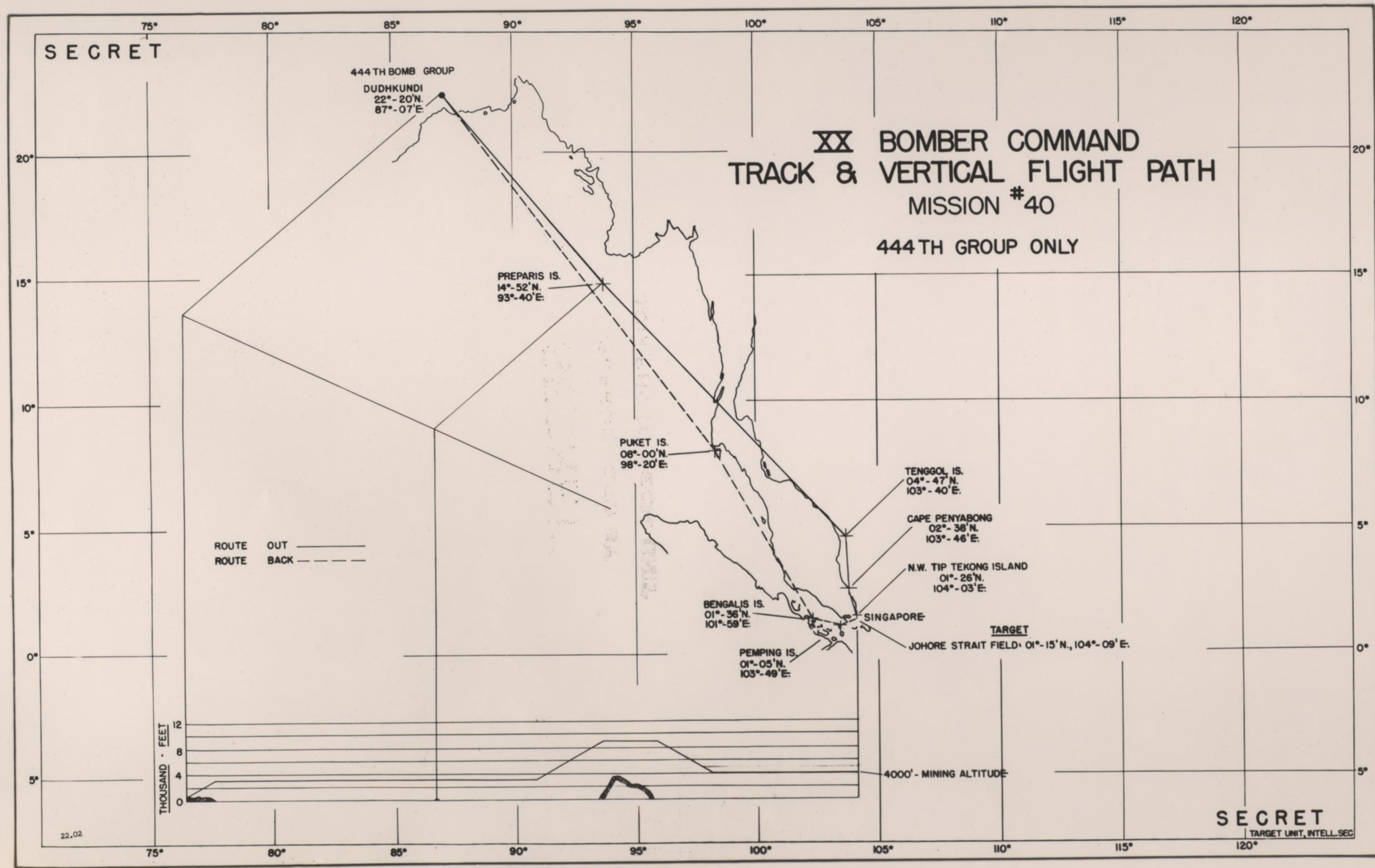
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HEADQUARTERS
XX BOMBER COMMAND
APO 493

Auth: CG, XX BC
Initials:
Date: 4 March 45

CONSOLIDATED
SPECIALIST MISSION REPORT
OF STAFF NAVIGATION OFFICER

Date Prepared: 1 March 1945

Field Order No. 40
Date of Mission: 27 Feb 45

1. Navigation on the mine laying operation conducted by the 444th Group in the Singapore area, was excellent. Bad weather apparently prohibited extensive use of celestial aids.

a. Average navigation times out and back were as follows:

<u>NAV. TIME OUT</u>	<u>NAV. TIME BACK</u>
9 hours 17 minutes	9 hours 01 minutes

b. The following supplemental aid work was reported:

<u>CEL LOP'S</u>	<u>CEL FIXES</u>	<u>RADIO FIXES</u>	<u>QDMS</u>
58	10	0	0

c. Actual average winds reported were:

<u>ONE HALF WAY OUT</u>	<u>TARGET</u>	<u>ONE HALF WAY BACK</u>
8,000'	4,000'	4,000'
126°24K	78°18K	94°14K

d. Radar cooperation was excellent on this mission.

2. It was recommended that a longer distance between check point and target area be employed since the run would be too short if it would be necessary to resort to radar.

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By VAN NARA Date 12-8

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HEADQUARTERS
XX BOMBER COMMAND
APO 493

Specialist Mission Report
of Staff Bombing Officer

Date of Mission: 27 - 28 February 1945
Date prepared : 12 March 1945

Mission No. 40
Field Order No. 40

1. On the night of 27-28 February fifty-five (55) MK-26-1 aerial mines were dropped in Johore Strait, Singapore in the area indicated in the Mining Chart attached hereto. In addition six (6) mines were laid at the secondary target at Penang Harbor in an area northeast of the city of Gerogetown.

2. Five mines were jettisoned at $04^{\circ}49'N - 100^{\circ}06'E$, the position being verified by radar. Six mines were jettisoned one mile Southeast of the home base by an aircraft returning early because of engine trouble. One of these mines exploded on hitting the ground.

3. All mines were obtained from the Aerial Mine Depot at Ondal, India, and were serviced by officer and enlisted personnel from that station. Each of the 12 aircraft carried 6 MK-26-1 mines with arming planned as follows: 24 to arm immediately, 12 to arm in 15 days, 24 to arm in 20 days, and 12 to arm in 30 days. All mines were fitted with 82 day sterilizers and contained reverse two lock M9-1 mechanisms. Interlock settings were 3, 5.5, and 8 seconds.

4. Disposition of mines with details of PDM settings and arming, and details of the method of laying of the mines will be found in Section VI and VII of Annex A following the Mining Chart.

5. The following malfunctions were noted:

- a. One and possibly two parachutes failed to open.
- b. One aircraft had rack release failure and in three runs over the primary target succeeded in dropping only one mine. The others were jettisoned later.

6. Mining results at both the primary and secondary target areas were believed to have been excellent.

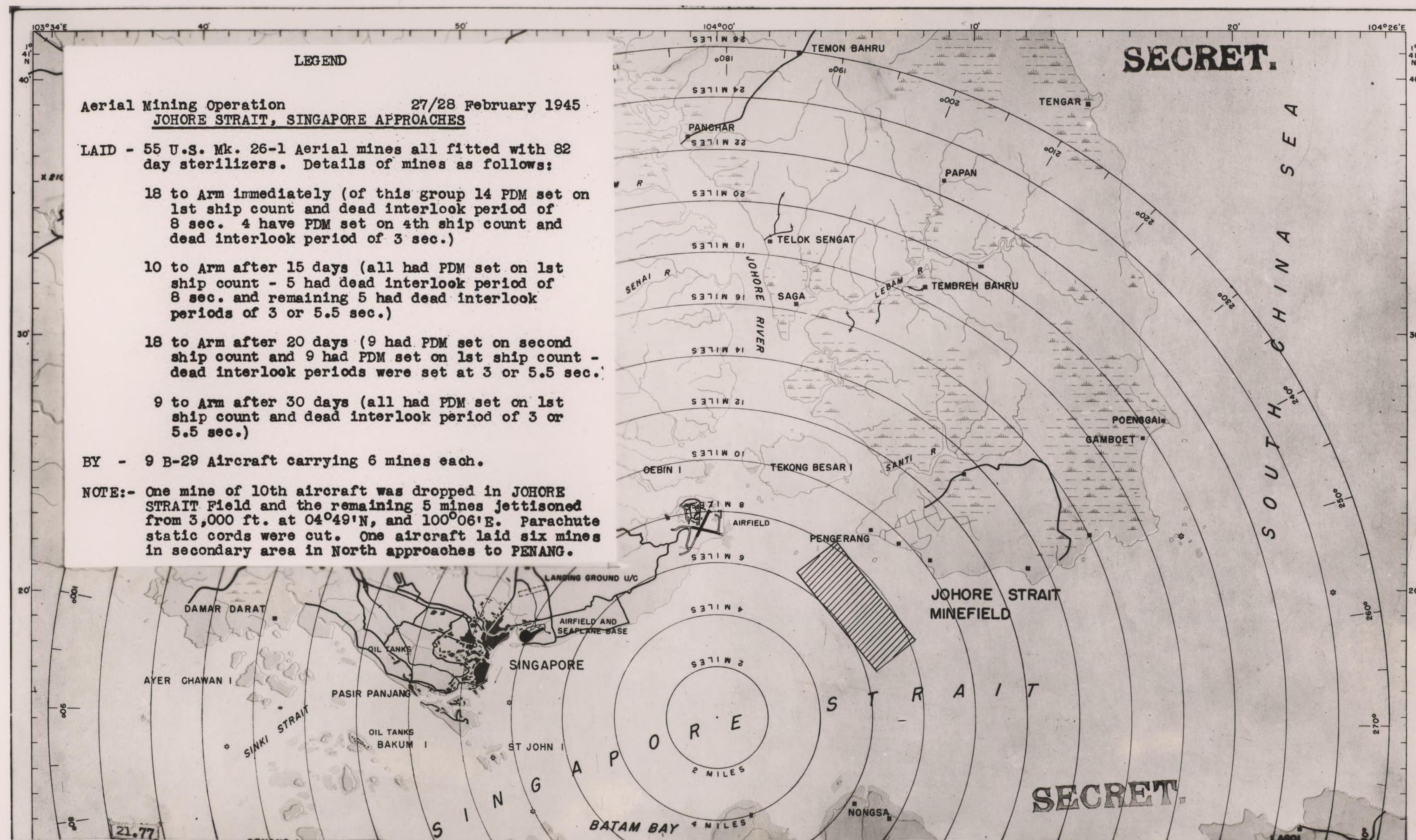
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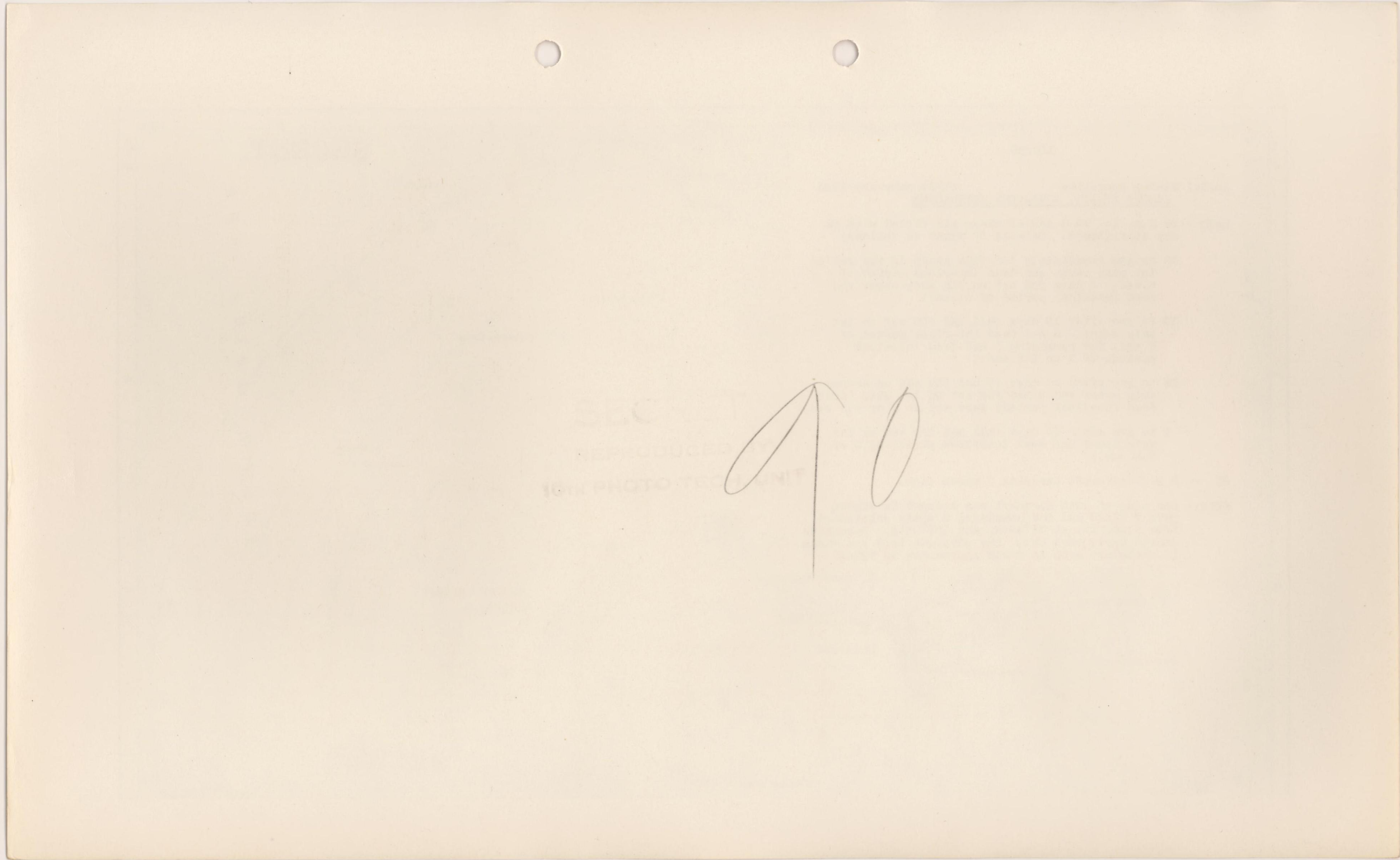
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By VAN NARA Date 12-8



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VI - DISPOSITION OF MINES

Mission No. 40

27 - 28 February 1945

Disposition of Mines was as follows:

Area	No. A/C	MK26-1 Mines	PDM*			Arming (Days)			
			1	2	4	0	15	20	30
Johore Strait	10**	55	42	9	4	18	10	18	9
Penang Harbor	1	6	4	1	1	2	1	2	1
Jettisoned	1**	11**	8	2	1	4	1	4	2
Totals	12	72	54	12	6	24	12	24	12

* PDM -- Prior Delay Mechanism - ship count.

** One A/C dropped only one mine at the PT and jettisoned the remaining 5 mines later. It is counted as having mined the PT. One other A/C jettisoned its mines on land.

Note: Interlock settings varied being set at 3, 5.5 or 8 seconds.

VII - METHOD OF LAYING MINES

On this night mission, mining was by individual aircraft. No formations were planned and none were flown. Details as to each aircraft were as follows:

1. Primary Target

444th Group - Aircraft Mining Johore Strait, Singapore

	A/C	Release	Method	Altitude	Heading	IAS	No. Mines
1	538	1535Z	Visual	4000'	140°M	180	6 MK-26
2	273	1537Z	Visual	4000'	140°M	188	6 MK-26
3	861	1544Z	Visual	4000'	140°M	187	6 MK-26
4	857	1545Z	Visual	4000'	140°M	190	6 MK-26
5	507	1552Z	Visual	4000'	140°M	185	6 MK-26
6	731	1554Z	Visual	4000'	140°M	186	6 MK-26
7	524	1557Z	Visual	4000'	140°M	190	6 MK-26
8	451	1558Z	Visual	4000'	140°M	190	6 MK-26
9	533	1603Z	Visual	4000'	140°M	190	6 MK-26
10	557	1650Z	Visual	4000'	140°M	190	1 MK-26*

* This aircraft jettisoned 5 MK-26 mines at 04°49'N - 100°06'E.

2. Secondary Target

444th Group - Aircraft Mining Penang Harbor

1	273	1531Z	Visual	10,800'	358°M	190	6 MK-26
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3. Jettisoned Mines

1. A/C 277 jettisoned its 6 mines 1 mile SE of its base. One mine exploded on contact with the ground.

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By VAN NARA Date 12-8

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ANNEX

B

ENEMY ANTI-AIRCRAFT

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* Prepared by: *
* * * * *
* Flak Officer *
* * * * *
* XX Bomber Command *
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* By Auth of the C.G. *
* XX Bomber Command *
* 6 Mar 45 *
* Date Initials *
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HEADQUARTERS
XX BOMBER COMMAND
Intelligence Section
APO 493

3 March 1945

PRELIMINARY REPORT

ANTI-AIRCRAFT OPPOSITION

MISSION NUMBER 40. (NIGHT-MINING), 27/28 FEBRUARY 1945

Primary Target - JOHORE STRAITS, Secondary Target - PENANG HARBOR,
PAKCHAN RIVER, or MERGUI HARBOR, Target of Last Resort - NONE.

A. ANTI-AIRCRAFT FIRE ENCOUNTERED

1. SINGAPORE AREA (01°20'N - 104°05'E)

Ten aircraft mined the JOHORE STRAITS on an approximate course of 01°42'N - 104°00'E to 01°00'N - 104°13'E (Course #4; AA Opposition Report #30-31) from 4,000 feet altitude from 1535Z to 1650Z under CAVU conditions but no anti-aircraft opposition was encountered.

2. PENANG HARBOR (05°25'N - 100°21'E)

One aircraft mined this area from 10,000 feet altitude at 1531Z under CAVU conditions but no anti-aircraft opposition was encountered.

B. SEARCHLIGHTS ENCOUNTERED

One white beam was reported by one aircraft at 1648Z (2 minutes before mine release) from 4,000 feet altitude under CAVU conditions as originating from the NAVAL BASE AREA, SINGAPORE Island (01°28'N - 103°50'E). This searchlight never located the aircraft although it remained on for approximately 3 minutes. The searchlight was "sweeping horizontally" and was never elevated to the altitude of the aircraft.

C. GROUND-TO-AIR ROCKETS, BARRAGE OR HIGH-ALTITUDE BALLOONS, AND SMOKE SCREENS

None reported.

D. BLACKOUT

The city of SINGAPORE was still lit when the second aircraft approached the area at 1537Z, "but had started to blackout as the aircraft left the area. The balance of the crews reported complete blackout."

Lights were observed, however, by the fourth aircraft over the target at 1545Z at the Airfield on the easternmost tip of SINGAPORE Island.

E. DAMAGE FROM ANTI-AIRCRAFT FIRE

None.

F. WARNING NETS

Although aircraft were tracked by PENANG and SINGAPORE (2 units) early warning radars, as determined from R.C.M. Intercepts, it is evident that the enemy did not utilize the available information. Blackout of the SINGAPORE Area went into effect as the second aircraft over the target was leaving the area, and no enemy fighter attacks were experienced.

Frank L. Scott, Jr.
FRANK L. SCOTT, JR.,
Colonel, Air Corps,
Chief, Intelligence Section.

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ANNEX

C

ENEMY AIR OPPOSITION

* * * * *
* Prepared by: *
* Operational Intelligence Unit *
* XX Bomber Command *
* * * * *

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JAPANESE FIGHTER TACTICS

Mission No. 40

27 - 28 February 1945

In the course of this night mine-laying mission, our aircraft met no air opposition, and no enemy aircraft were sighted at any time during the mission.

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By VAN NARA Date 12-8

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ANNEX

D

WEATHER INFORMATION

- I - Weather Information
- II - Chart - Weather as Forecast and as Encountered
- III - Synoptic Map

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* Prepared by: *  
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*   Weather Section *  
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I - WEATHER INFORMATION

Mission No. 40

27 - 28 February 1945

SINGAPORE

	<u>As Forecast</u>	<u>As Encountered</u>
Base at Take-Off	Clear. Visibility 10 miles.	Clear. Visibility 10 miles.
Route Out	<p><u>BASE TO 16°N:</u> Clear to few stratocumulus at 3000'.</p> <p><u>16° TO COAST:</u> Scattered building cumulus with few cumulonimbus, base 2000' tops 20,000'. Moderate turbulence at flight level.</p> <p><u>10° TO TARGET:</u> Many towering cumulus and thunderstorms over land and along the east coast with the greatest coverage along mountain range inland. Base clouds 2000', tops generally 20,000' with some tops above 35,000'. Moderate to severe turbulence at flight level. Broken layers of altostratus-altocumulus surrounding towering cumulus between 10,000' and 20,000'. Cumulus activity decreasing on approach of target area.</p>	<p><u>BASE TO 15°N:</u> Clear. Visibility 15 miles in haze.</p> <p><u>15° TO 08°N:</u> Scattered cumulus in Andaman Sea becoming 6/10 near the coast and over the peninsula at 10°N. Base of cumulus at 2000' tops 6000' and 8000'.</p> <p><u>08° TO 06°N:</u> Scattered to broken stratocumulus tops 4000' scattered to broken patches of altostratus at 8000'.</p> <p><u>06° TO 02°N:</u> Broken cumulus base 2000' tops 8000'. Broken to overcast altostratus at 8000'. Light to moderate turbulence at 5000'. Rain showers in clouds.</p> <p><u>02° TO TARGET:</u> High thin scattered cirrus above 20,000'. Few patches of altostratus at 8000' less than 1/10.</p>
Target Area	Broken altostratus at 16,000'. 6/10 stratocumulus tops 4000'. Broken cirrostratus at 25,000'. Few building cumulus in area with tops to 15,000'.	High thin scattered cirrus above 20,000'. Few patches of altostratus at 8000', less than 1/10.
Return Route	<p>Much decrease in cumulus activity with layer clouds predominating.</p> <p><u>TARGET TO 06°N:</u> Few towering cumulus base 2000' tops 20,000'. Overcast altostratus base 10,000' tops 14,000'. Broken stratocumulus tops 5000'.</p> <p><u>06° TO 12°N:</u> Few early morning cumulonimbus base 2000' tops 20,000'. Broken layers of thin altostratus between 10 - 15,000'. Broken stratocumulus top 5000'.</p>	<p><u>TARGET TO 10°N:</u> High scattered to broken thin cirrostratus above 20,000'. Scattered to broken patches of altostratus at 10,000'. Scattered patches of low stratocumulus tops 3000'.</p> <p><u>10° TO BASE:</u> Few scattered stratocumulus between 10 and 16°N, tops 3000'.</p>

D-I-1

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By VAN NARA Date 12-8

S E C R E T

	As Forecast	As Encountered
Return Route (Contd)	12° TO 15°N: Scattered to broken altostratus at 12,000'. Scattered stratocumulus tops 5000'. 15° TO BASE: Clear.	
Base on Return	Clear. Visibility 7 miles.	Clear. Visibility 10 miles.

A. Winds Aloft - Forecast

Altitude	Base to 18 Deg	18 To 12 Deg	12 To 06 Deg	06 Deg To Target
3,000'	350/10K	20/08K	60/08K	70/08K
5,000'	340/12K	20/10K	60/10K	90/10K
10,000'	300/25K	250/20K	180/15K	120/18K

B. Winds Aloft - Encountered

Altitude	10 Deg N	Target	Target To 10 Deg N
4,000'		45/10K	60/10K
8,000'	140/12K		

C. Temperatures

As Forecast

Altitude	Target
3,000'	20 Deg C.
5,000'	17 Deg C.
10,000'	10 Deg C.

As Encountered

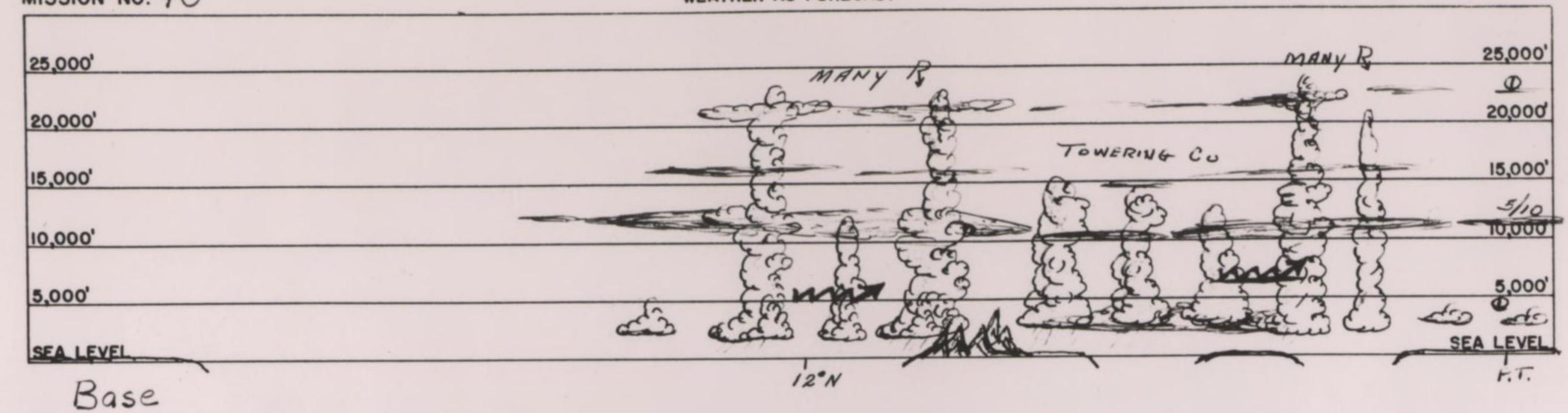
Altitude	10 Deg N	Target	Target to 10 Deg N	20 Deg N
4,000'		18 Deg C	19 Deg C	
5,000'				17 Deg C
8,000'	14 Deg C			

D-I-2

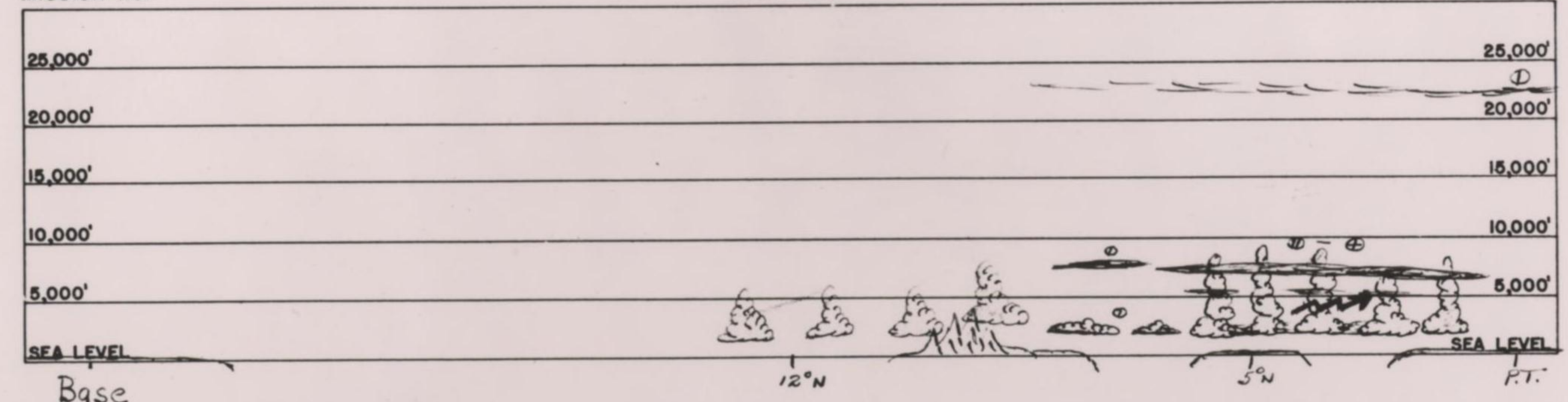
S E C R E T

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 XX BOMBER COMMAND
 WEATHER AS FORECAST

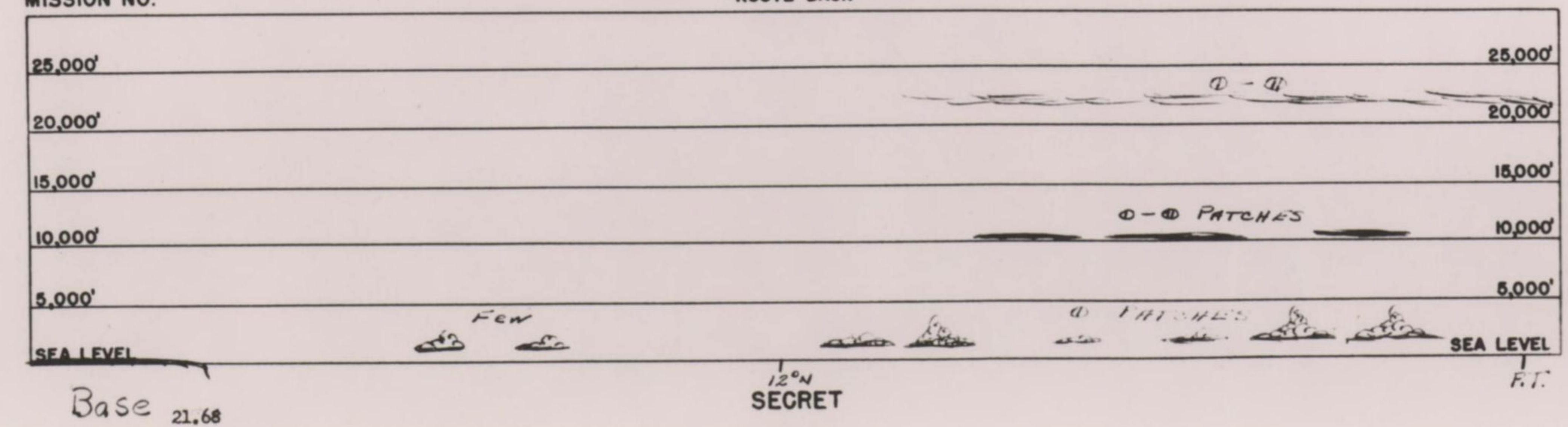
MISSION NO. 40



MISSION NO.
 WEATHER AS ENCOUNTERED
 ROUTE OUT

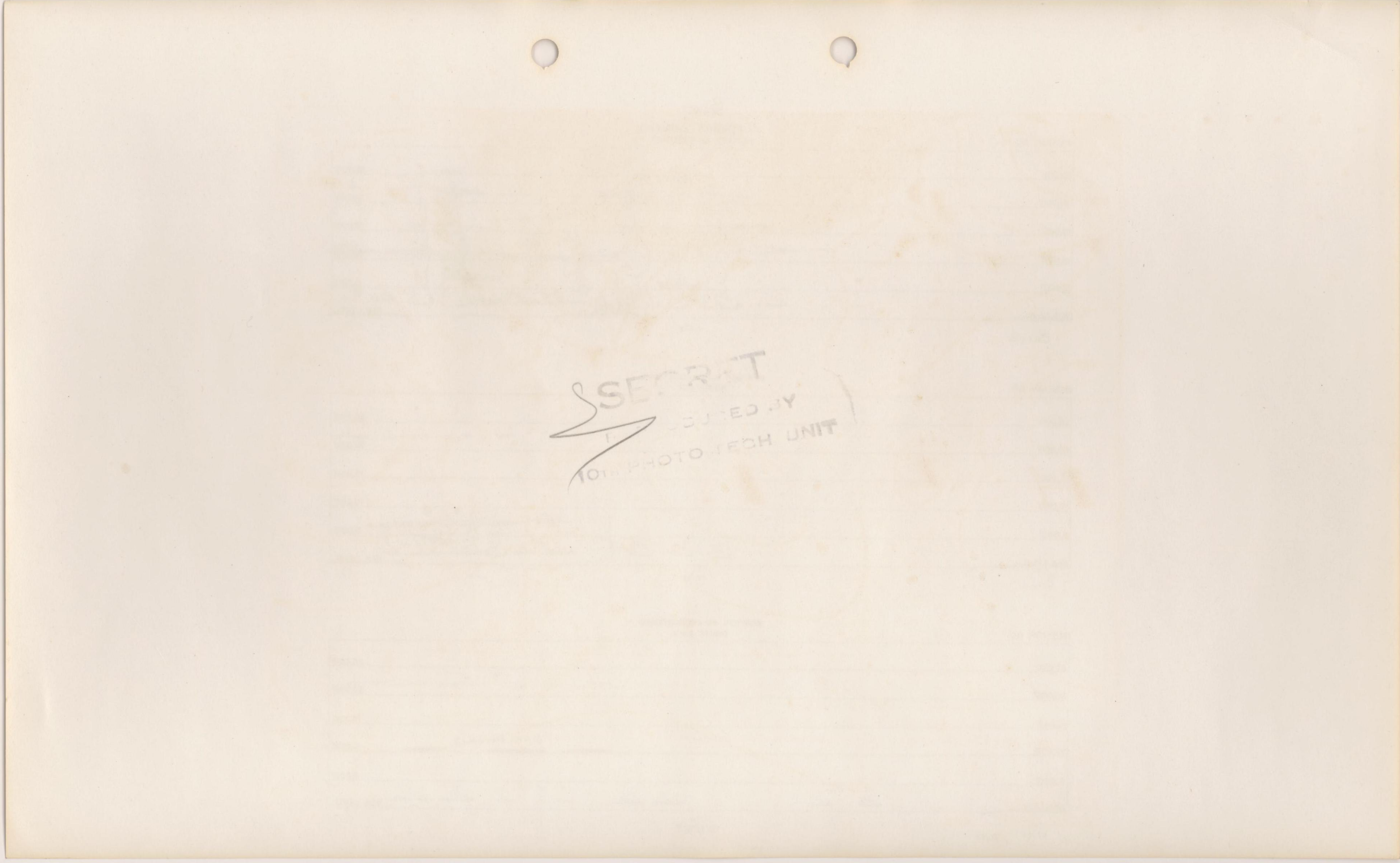


MISSION NO.
 WEATHER AS ENCOUNTERED
 ROUTE BACK

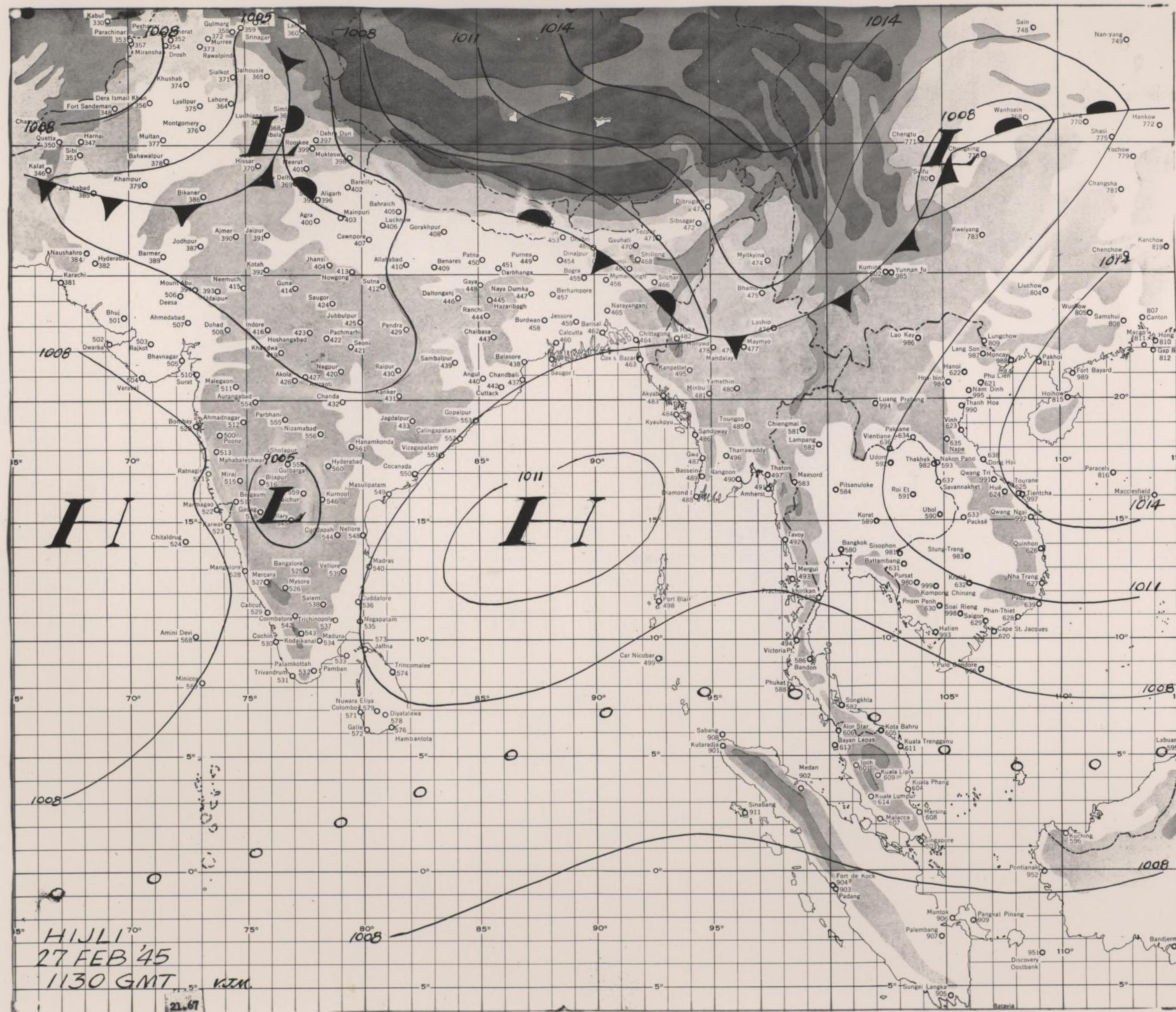


Base 21.68

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10TH PHOTO TECH UNIT



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REPRODUCED BY
JOHN F. O'NEILL UNIT

S E C R E T

ANNEX

E

COMMUNICATIONS INFORMATION

* * * * *
* Prepared by: *
* * * * *
* Communications Section *
* * * * *
* XX Bomber Command *
* * * * *

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) of (E)
NND 740120
By CS/mt NARS, Date OCT. 21 1975

S E C R E T

DECLASSIFIED
Authority NND 760063
By VAN NARA Date 12-8

SECRET
:Auth: CG, XX BC:
:Initials: Jm4:
:Date: 3 Mar 45:

SECRET

HEADQUARTERS
XX BOMBER COMMAND
APO 493

CONSOLIDATED
SPECIALISTS MISSION
REPORT OF

XX BOMBER COMMAND COMMUNICATIONS (RADIO) OFFICER

Date Prepared: 3 March 1945.

Field Orders No: 40

Date of Mission: 27 February 1945.

I - TRAFFIC STATISTICS

1. Mission number forty (40) was accomplished by the 444th Group only. Due to the contemplated move of the bombardment groups with the 58th Wing it was necessary to close down the group air ground stations and reestablish the command air ground station at Hijli Base. The latter station was utilized for this mission and will continue to be utilized for all future mission from India.

2. Based upon the greatest number of such messages which could be received (i.e., one per aircraft), the following percentage figures indicate the number of aircraft accounted for by bombs away and 400 miles from base position report messages:

a. Bombs away:

	<u>444th Group Total</u>
No of a/c from which msgs could be expected:	11
No of msgs received:	11
No of a/c accounted for by msgs:	11
Percentage of aircraft accounted for by msgs:	100%

b. 400 miles from base position reports:

No of a/c from which msgs could be expected:	11
No of msgs received:	8
No of a/c accounted for by msgs:	8
Percentage of aircraft accounted for by msgs:	72.8%

- 1 -

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Authority NND 760063

By VAN NARA Date 12-8

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NOTE: Three a/c sent position report messages in the "Blind" as contact was not established with the air-ground station at the time and they were not received by the ground station.

c. Abort, attack, and convoy sighting messages handled:

Abort : 1
Attack : 0
Convoy sighting: 2 (By Radar)

II - DISTRESS TRAFFIC

1. The following emergency traffic was handled over the assigned distress frequency:

a. A/C 557 was still in the air over water after all other aircraft had landed and the ETA indicated that the a/c would be in the air considerably longer than the other a/c of the group. Although it was determined at the time that the a/c was not in distress it was deemed necessary to follow distress measures. Clear text traffic was carried out regarding the supply of gasoline in the a/c, requesting a/c for five minute contacts, requesting changes in ETA and requesting a/c to monitor the Common Guard VHF frequency. The command ground station at Hijli provided D/F assistance to the a/c giving a very reliable bearing when a/c was 120 miles from home base.

b. After notifying the command ground station that the a/c IFF equipment had failed a/c 731 conducted the following emergency traffic with a/c 451. A/C 451 contacted a/c 731 and conducted clear text traffic in an effort to accomplish a rendezvous in order that a/c 451 could escort a/c 731 across the IFF boundry. Rendezvous was not accomplished because of the distance between aircraft.

III - VIOLATIONS

1. The following is a summary of the violations of transmission and cryptographic security:

a. There were no violations of transmission security reported.

b. The radio operator of a/c 731 committed a violation of cryptographic security by transmitting the last word of an encoded message in the clear, thereby mixing clear text and coded text in the same message.

IV - FREQUENCIES

1. Takeoff was at approximately 0604Z. Frequencies used were 2955, 8495 and 12285 Kcs. with the majority of the traffic handled on 8495 kcs. The static level was very low, never higher than W-2 level on any of the assigned frequencies. Some fading was reported by all aircraft on the inbound leg of the mission between 0030Z and 0230Z. This was noted as having the most effect on the eight megacycle frequency.

2. Interference caused by allied ground stations on or near our assigned frequency of 8495 kcs was again encountered.

V - RADIO AIDS TO NAVIGATION

1. Statistical data on radio aids to navigation is as follows:

SECRET

a. Radio Homing Beacons:

<u>Location</u>	<u>No of a/c reporting</u>	<u>Average Initial contact</u>	<u>Extrem Initial contact</u>
Kharagpur (GK)	5	340	600
Dudhkundi (FN)	4	121	200
Calcutta (CM)	1	150	150

b. Radio Ranges: No radio ranges were utilized.

c. D/F Facilities:

- (1) A/C 731 was given one bearing on frequency 8495 kcs when approximately 120 miles from the home base. This bearing was reported as accurate to one (1) degree.

d. Air-to-air homing was not used on this mission.

VI - MALFUNCTIONS

1. The following malfunctions were reported:

a. A/C 451. Had malfunction of radio compass. The "compass" and "loop" were inoperative. Was not repaired in flight.

b. A/C 273. Radio sense antenna lead-in broken. A jumper wire connection to the command set antenna was used as a substitute.

c. A/C 731. Radio compass forward fixed antenna mast broke off during flight. A jumper wire connection to the command set antenna was used as a substitute.

d. A/C 731. IFF failed to operate. Not repaired in flight.

e. A/C 524. There was no sidetone on AN/ART-13 transmitter. Not repaired in flight.

S E C R E T

ANNEX

F

RADAR

I - Radar Information *

Section A - Navigation and Bombing
Section B - Scope Photography
Section C - Serviceability

II - Radar Tables *

Table A - Bombing Data
Table B - Photographic Results
Table C - Serviceability
Table D - Malfunctions

III - Radar Photograph Analysis Charts **

* Prepared by Radar Section, XX Bomber Command

** Prepared by Target Intelligence Unit,
XX Bomber Command

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Authority NND 760063

By VA NARA Date 12-8

SECRET

HEADQUARTERS
XX BOMBER COMMAND
APO 493

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SECRET
.Auth: CG, XX BC.
.Initials:
.Date: 5 Mar 45.
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CONSOLIDATED
SPECIALIST MISSION
REPORT OF

XX BOMBER COMMAND RADAR OFFICER

Date Prepared: 5 March 1945 Field Orders No. 40
Date of Mission: 27-28 Feb 1945

I - RADAR INFORMATION

A - Navigation and Bombing

1. Only one group, the 444th Bomb Group, participated in this mining mission. A total of ten (10) aircraft mined the primary field, Johore Strait, near Singapore. One (1) aircraft mined the secondary field, Penang Harbor at Georgetown, while one (1) other aircraft jettisoned the mines.

2. Moonlight and CAVU weather conditions prevailed over the mining areas, thus permitting visual mining. Radar equipment was used, however, in the selection and identification of the initial and pin points from which to start the mining runs. The direction of the aircraft both in navigation and mining was also greatly aided by radar.

3. Johore Strait was readily identifiable on the radar scope as well as the initial point, Penyabong Point, and the Pin Point, Tekong Island. Operations were conducted much in the same manner as previous missions.

B - Scope Photography

1. A total of six (6) cameras were installed, returning four (4) sets of useable pictures. All four (4) sets traced the mining runs.

2. The photographic results were satisfactory; however, more cameras should have been installed for the mission. Since radar scope photographs are the only evidence obtainable on night missions, it is believed all ships, if possible, should have radar scope cameras of one kind or another installed for obtaining pictures of the mined fields.

3. Many of the navigational check points and mining points were clearly identifiable on the radar scope photographs obtained.

C - Serviceability

1. Only one (1) partially inoperative malfunction occurred during the mission. This failure was slight, and therefore the equipment could be used for mining operations.

2. The radar systems were one hundred (100) per cent operational over the mining areas. There were no auxiliary equipment malfunctions.

S E C R E T

II - RADAR TABLES

A - Bombing Data

Total A/C Mining - - - - - 11 -
 Total A/C Mining Primary - - 10 - 91%
 Total A/C Mining Secondary - 1 - 9%

Mining combination of radar and visual means, bombardier released visually in all cases.

B - Photographic Results

DATA	No.	%
No. Cameras Installed	6	-
K-35 Cameras	3	-
K-24 Cameras	3	-
No. Cameras in Abort, Early Ret & Miss. A/C*	1	17
No. Cameras Completing Mission*	5	83
No. Cameras in Radar & Camera Malfunc. A/C#	1	20
Sets of Pictures Returned #	4	80
No. of Negatives Returned	86	-
Sets of Pictures Useable **	4	100
Sets of Pictures Tracing Mining Run **	4	100

*,% based on cameras installed. #, % on cameras completing mission. **, % on sets of pictures returned.

C - Serviceability

DATA	No.	%
A/C Airborne	12	-
A/C Reporting	12	-
APQ-13 Operative at Take-Off *	12	100
A/C Mining *	11	92
A/C Reporting Mining *	11	92
APQ-13 Operative over Target #	11	100
APQ-13 Unrepairable Failures #		
Completely Inoperative	0	0
Partially Inoperative	1	9
Total	1	9
APQ-13 Repaired in Flight	0	0
Auxilliary Equipment Failures	0	0

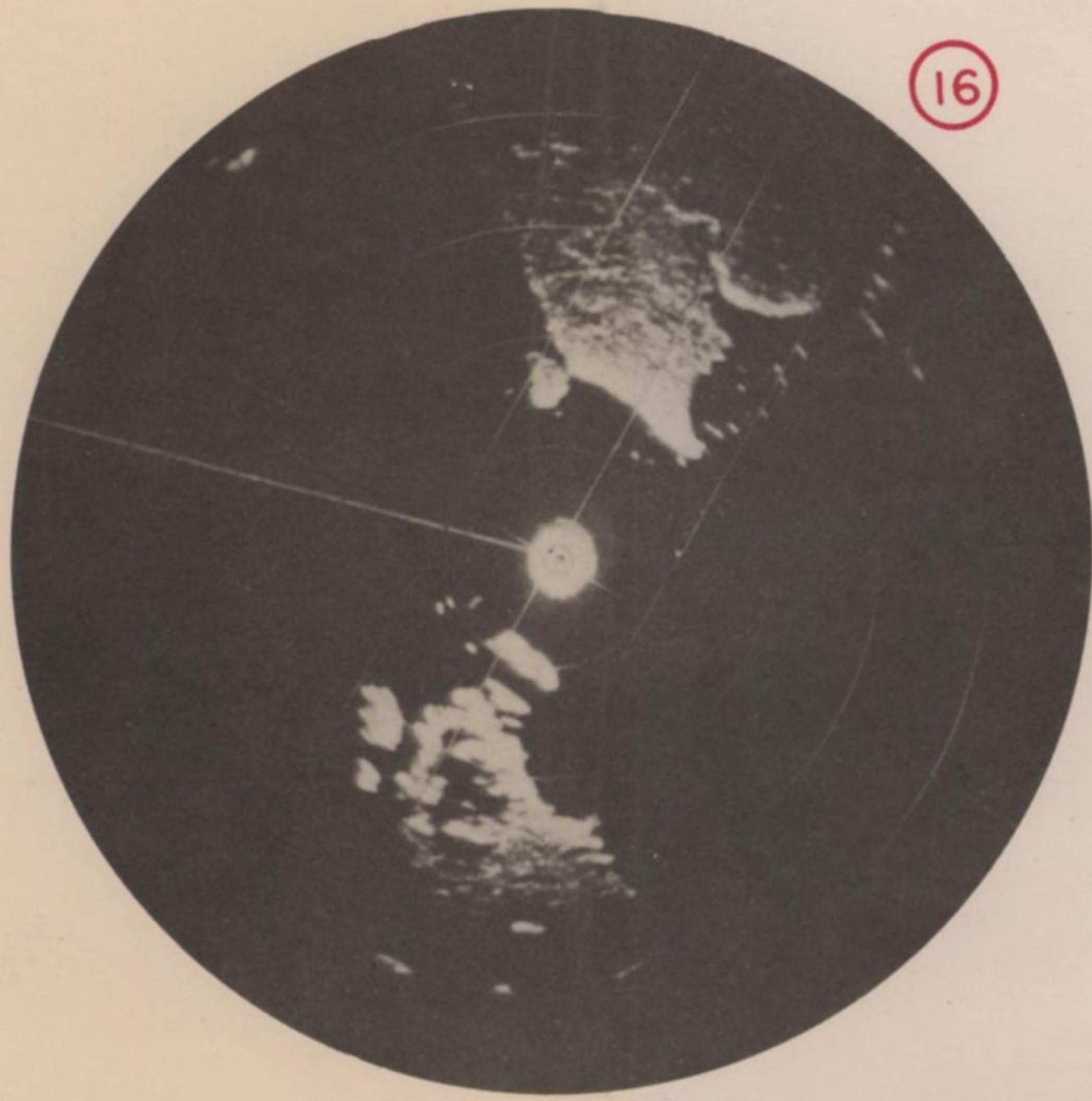
* Percentage based on A/C Reporting.
 # Percentage based on A/C Reporting Mining.

D - Malfunctions

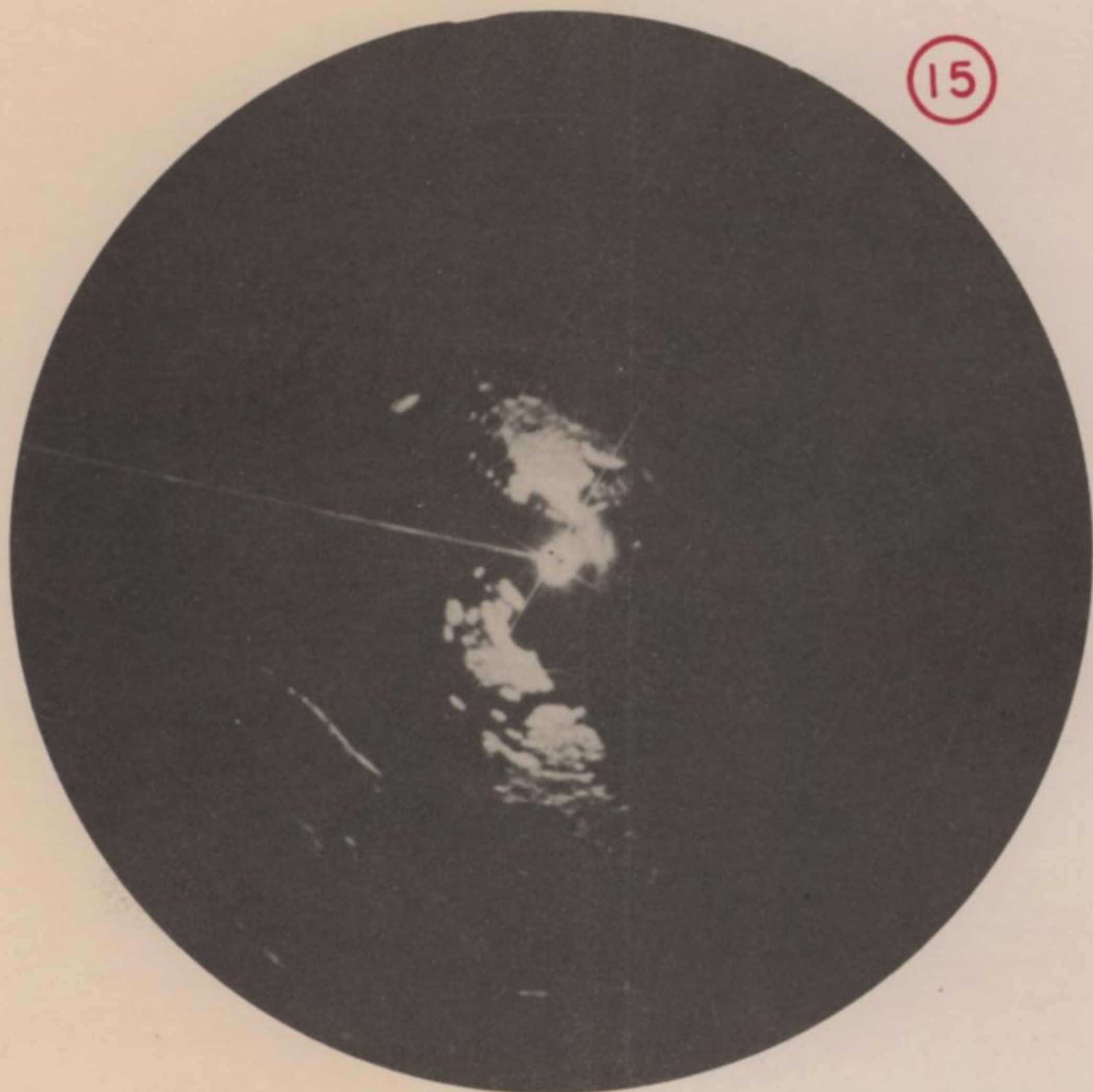
DATA	No. Malf.	A/C No.
<u>Between Take-Off & Target</u>		
Navigator's Scope Out - AFC Drift (Partial)	1	857

A/C 557 - 27/3/45

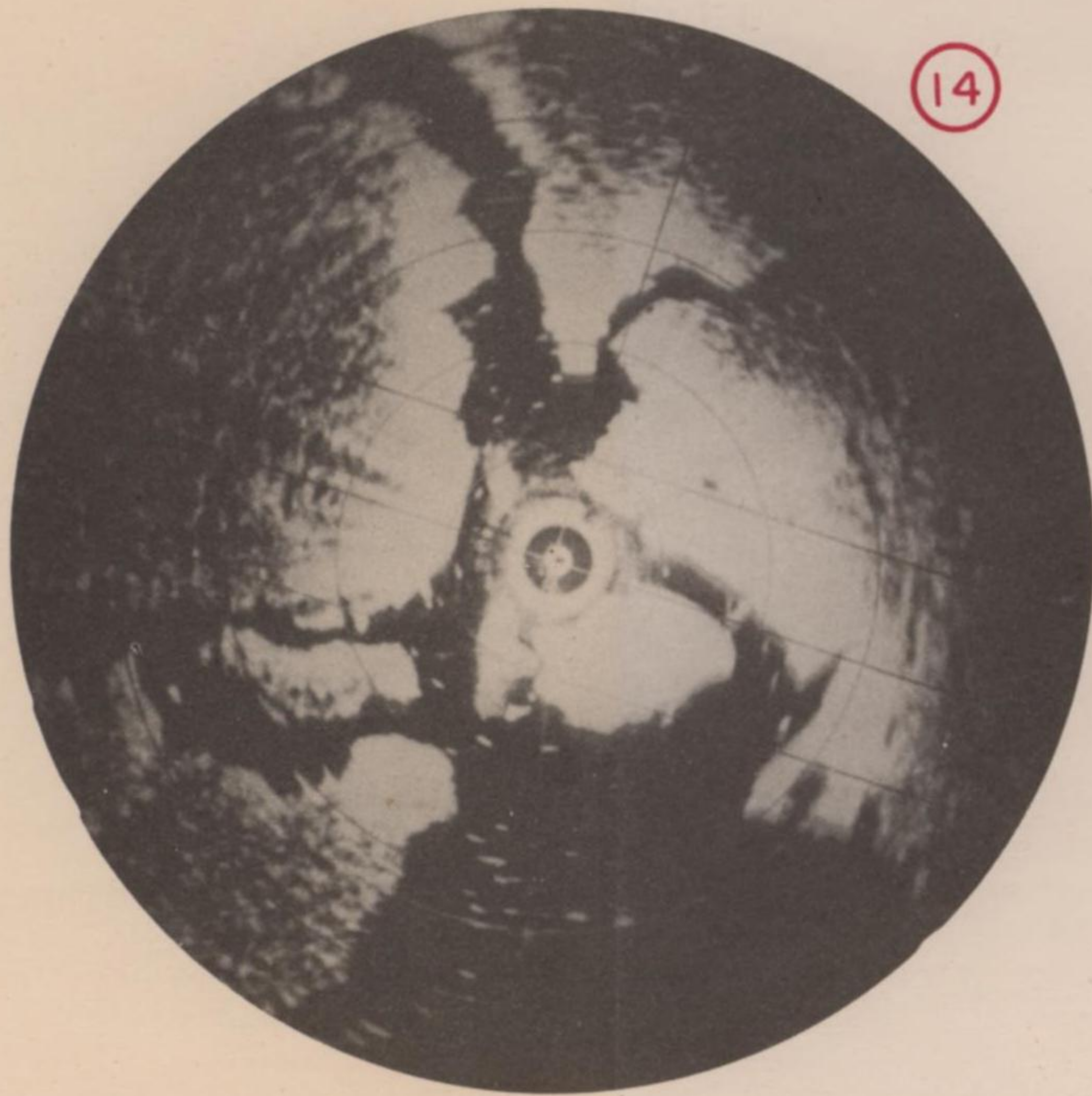
ALL ALTITUDES 4,000'



HEADING 284° MAG. 20 MILE SWEEP



HEADING 281° MAG. 50 MILE SWEEP

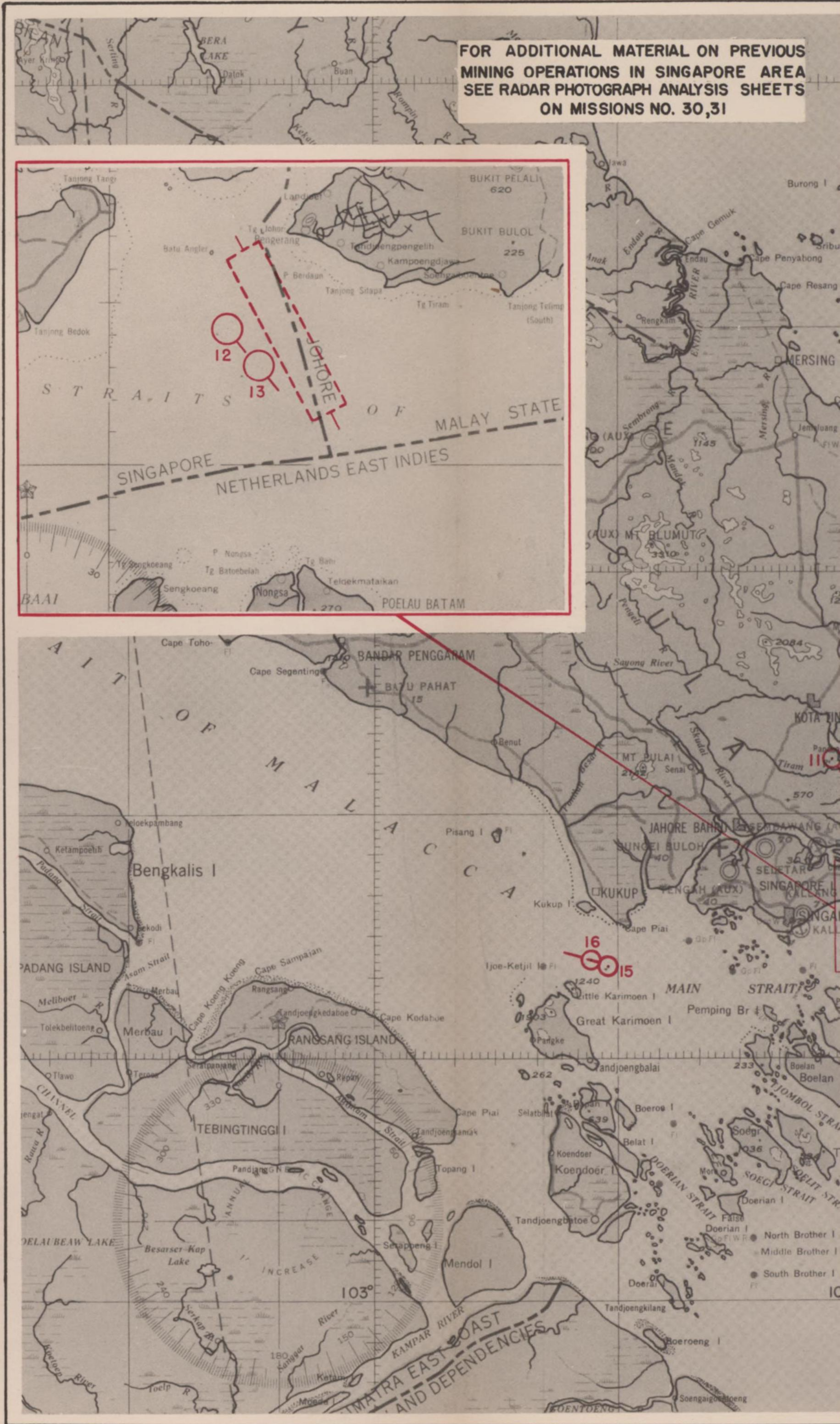


HEADING 184° MAG. 10 MILE SWEEP

SECRET

RADAR PHOTOGRAPH ANALYSIS
SINGAPORE AREA-MALAY STATES
MISSION NO. 40 MINING OF APPROACHES TO HARBOR

JOHORE STRAIT FIELD



PREPARED BY RADAR INTELLIGENCE, TARGET UNIT, INTELLIGENCE SECTION - XX
SECRET

DECLASSIFIED

Authority NND 760063

By VAN NARA Date 12-8

SECRET

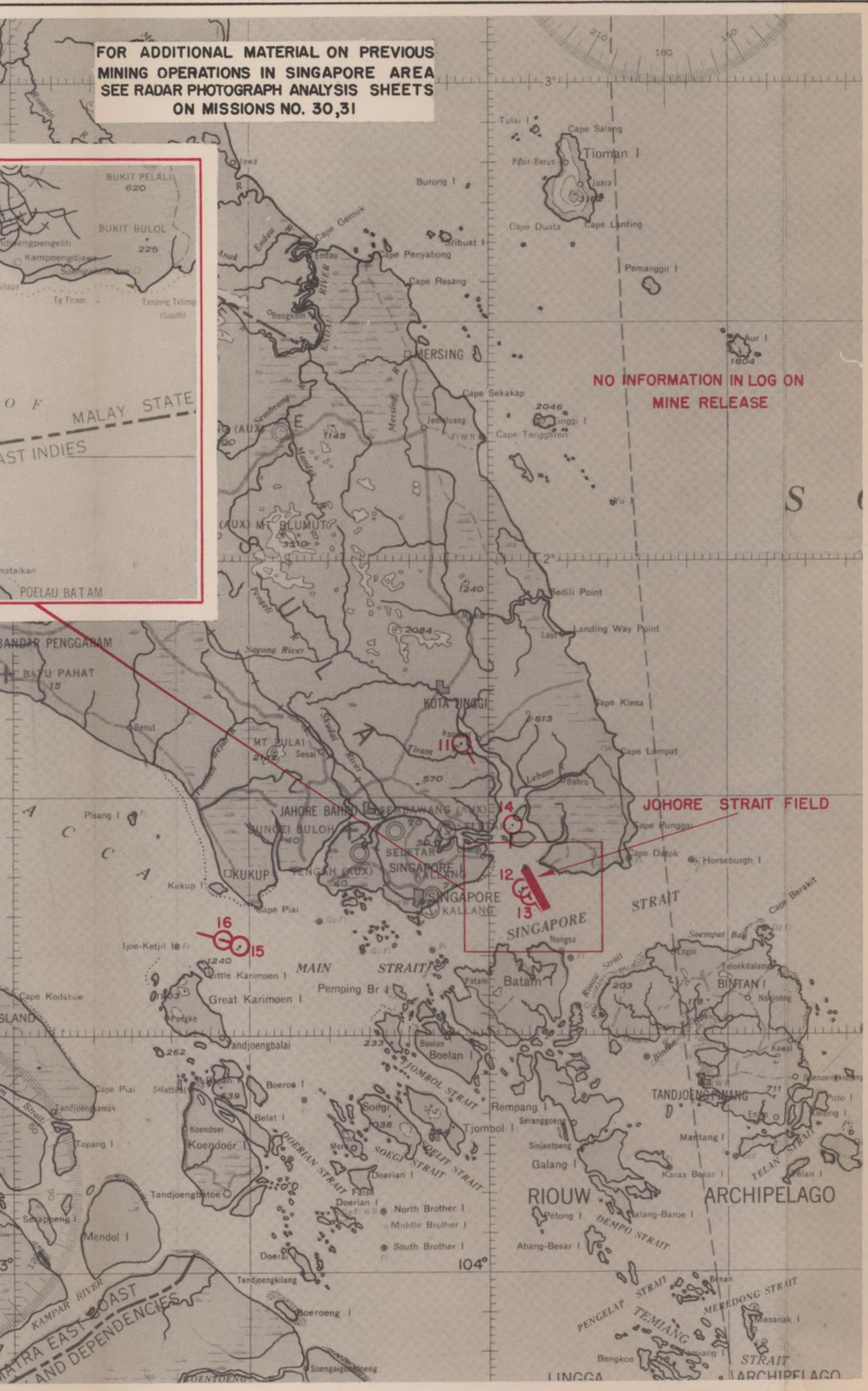
R 92.2 SHEET O

RADAR PHOTOGRAPH ANALYSIS SINGAPORE AREA-MALAY STATES

NO. 40 MINING OF APPROACHES TO HARBOR & NAVAL BASE

JOHORE STRAIT FIELD

FOR ADDITIONAL MATERIAL ON PREVIOUS
MINING OPERATIONS IN SINGAPORE AREA
SEE RADAR PHOTOGRAPH ANALYSIS SHEETS
ON MISSIONS NO. 30,31



NO INFORMATION IN LOG ON
MINE RELEASE

JOHORE STRAIT FIELD

SINGAPORE

RIOUW ARCHIPELAGO



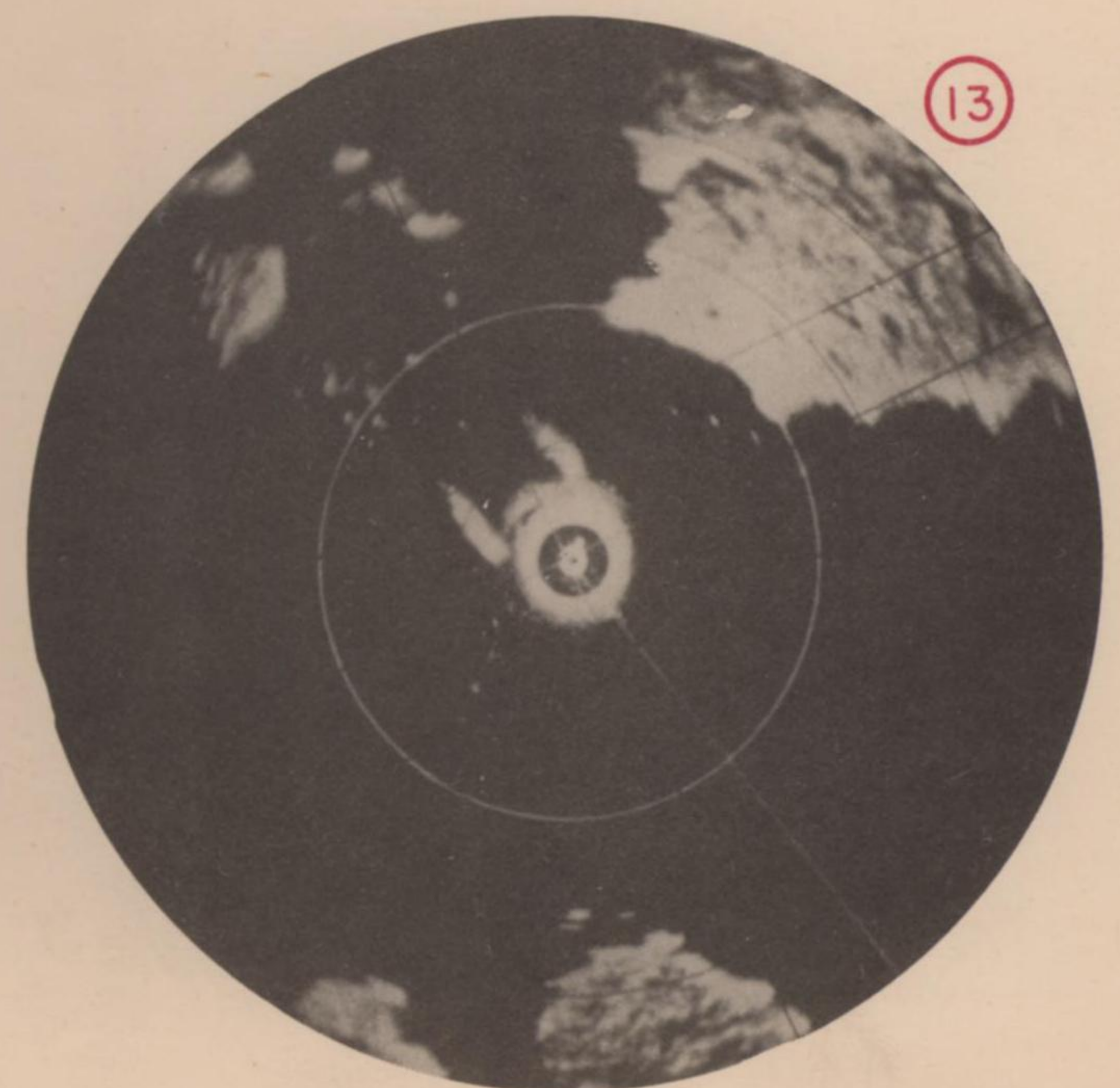
HEADING 147° MAG.

20 MILE SWEEP



HEADING 139° MAG.

10 MILE SWEEP



HEADING 141° MAG.

10 MILE SWEEP

BY RADAR INTELLIGENCE, TARGET UNIT, INTELLIGENCE SECTION - XX Bomber Command

SECRET

DECLASSIFIED

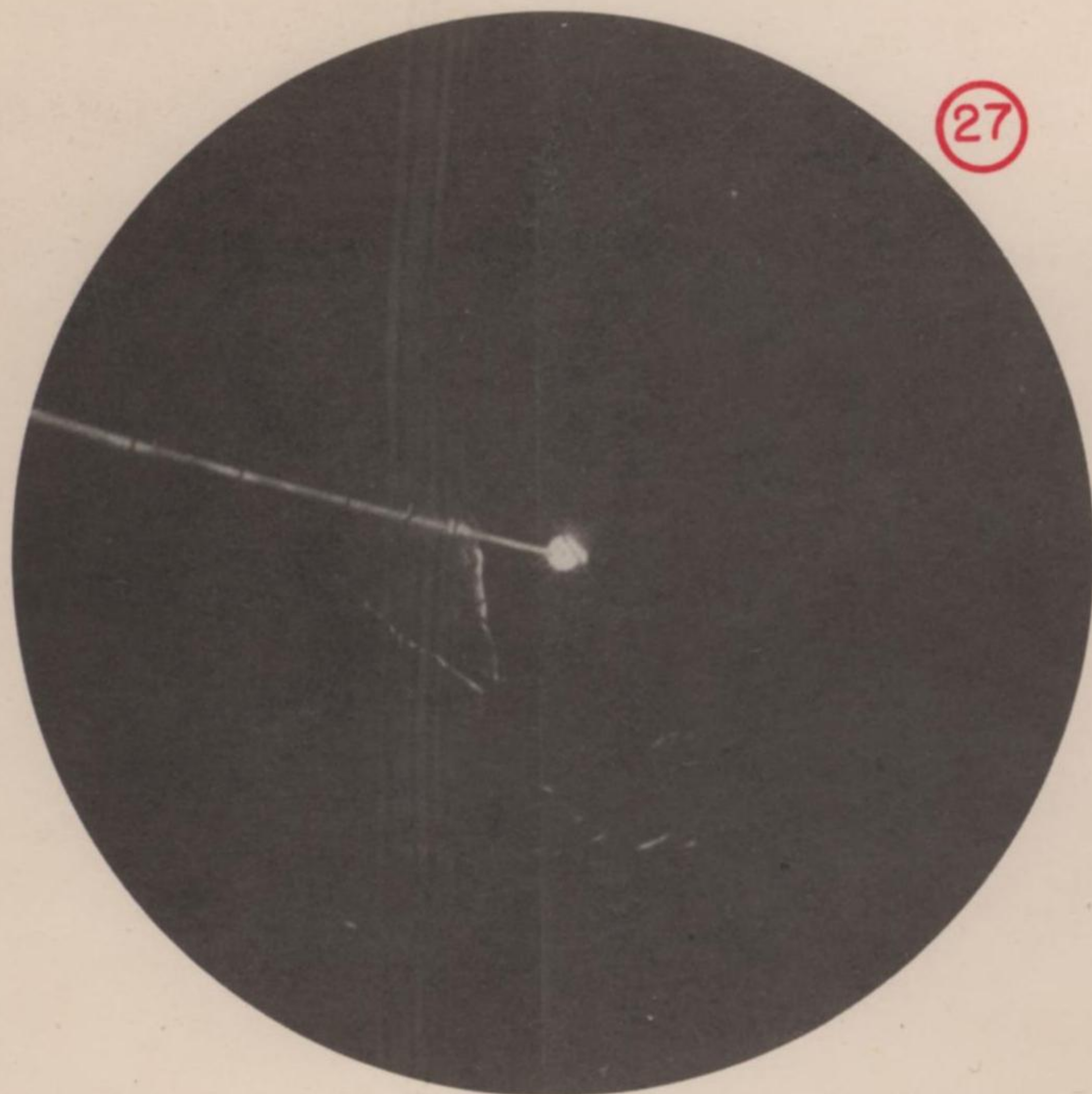
Authority NND 760063

By VAN NARA Date 12-8

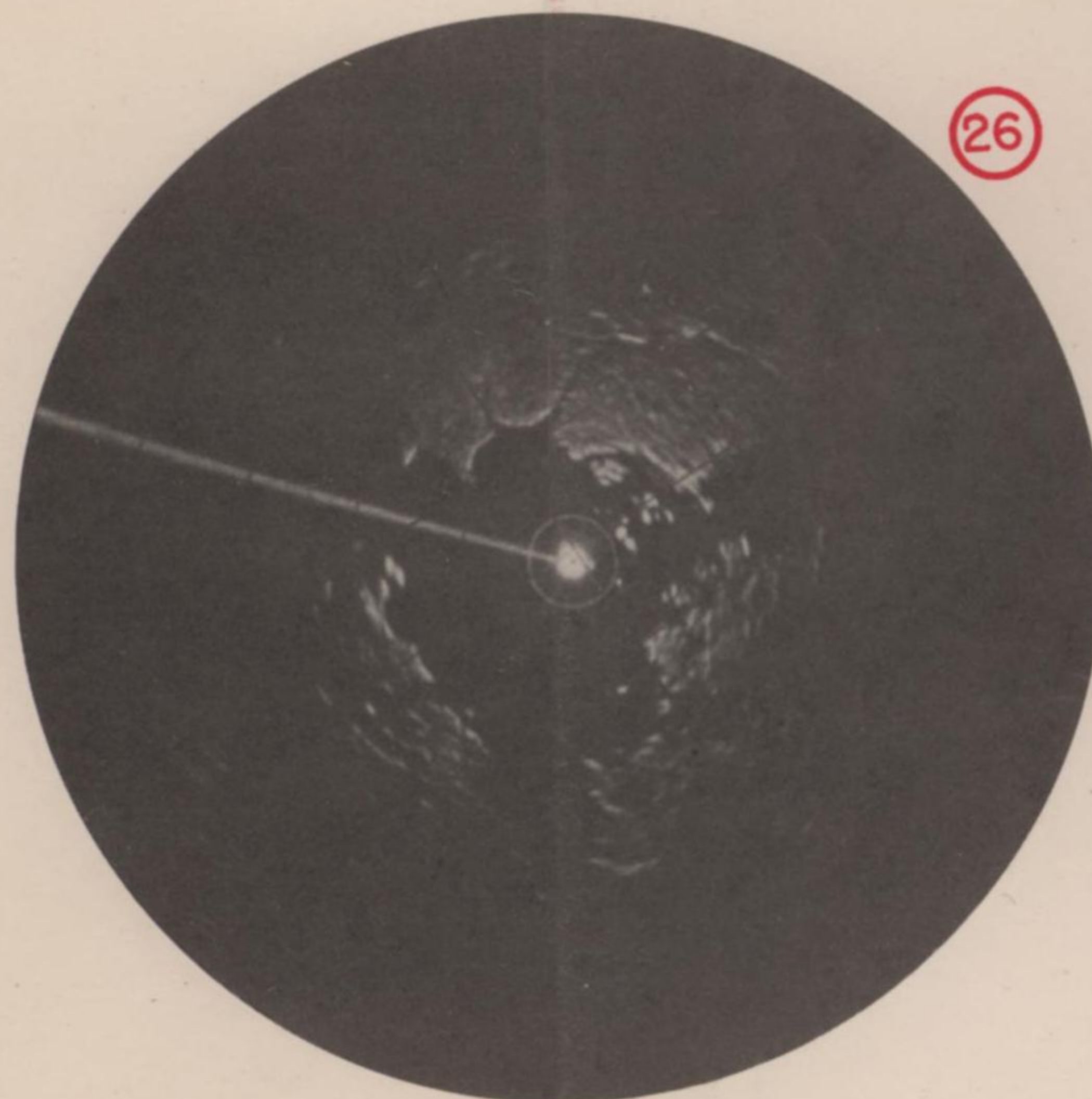
507-27/3/45
 ALL ALTITUDES 4,000 EXCEPT NO. 19 & 20 WHICH ARE 4,800.

SECRET
 RADAR PHOTOGRAPH ANALYSIS
 SINGAPORE AREA-MALAY STATES
 MISSION NO. 40 MINING OF APPROACHES TO HARBOR

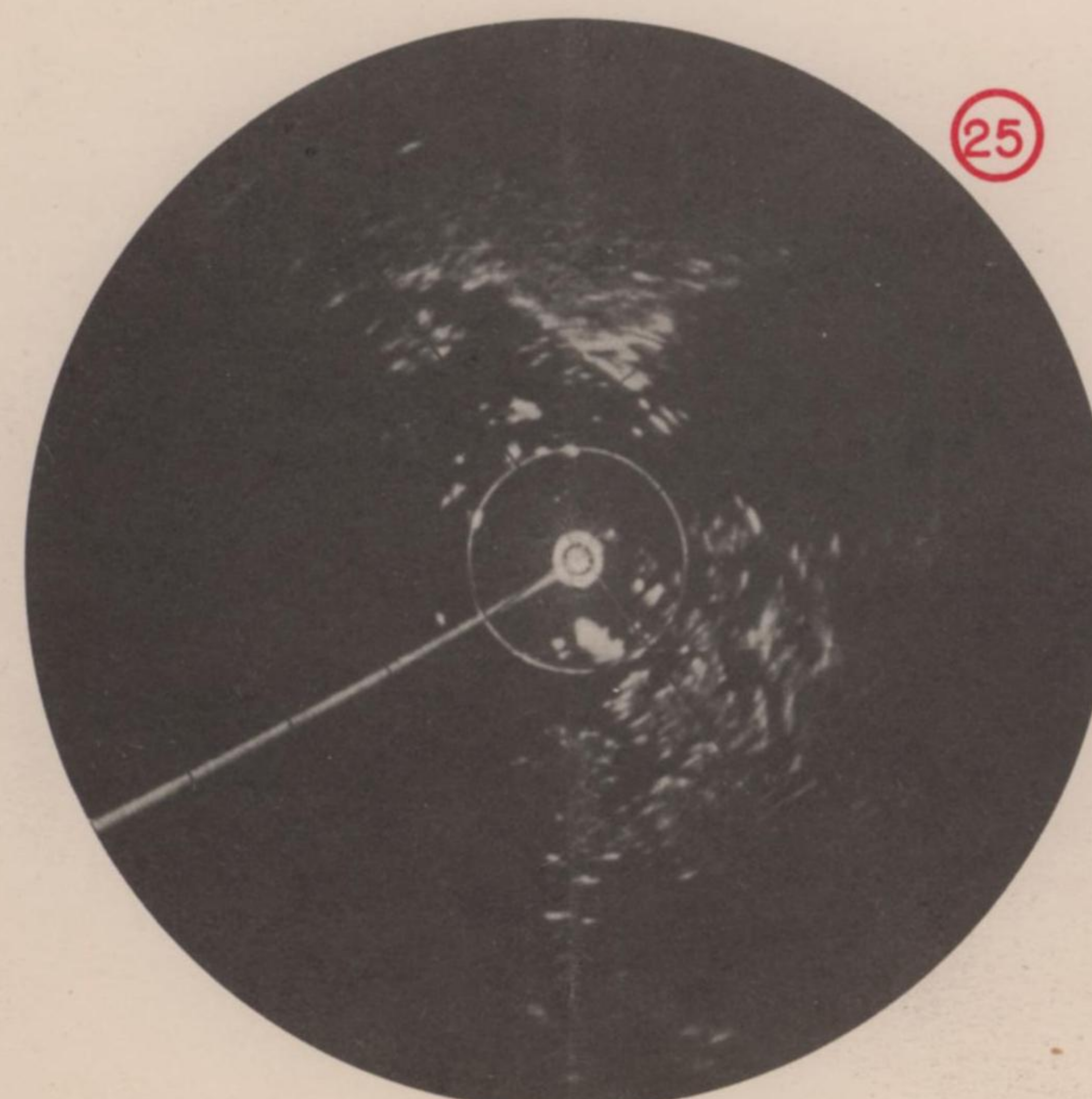
JOHORE STRAIT FIELD



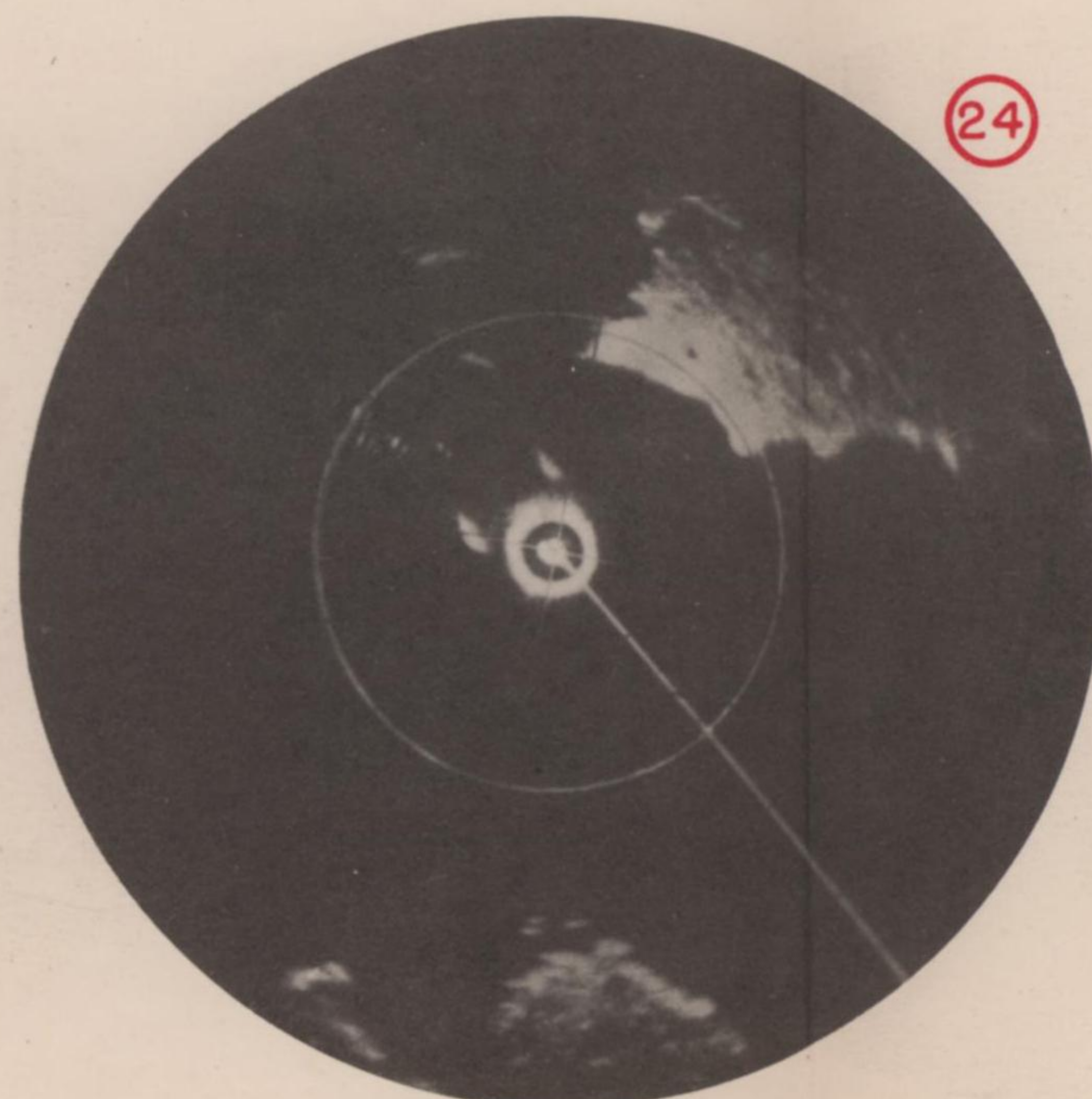
HEADING 285° MAG. 50 MILE SWEEP



HEADING 285° MAG. 50 MILE SWEEP



HEADING 241° MAG. 20 MILE SWEEP



HEADING 140° MAG. 10 MILE SWEEP



HEADING 140° MAG. 10 MILE SWEEP



PREPARED BY RADAR INTELLIGENCE, TARGET UNIT, INTELLIGENCE SECTION - X
 SECRET

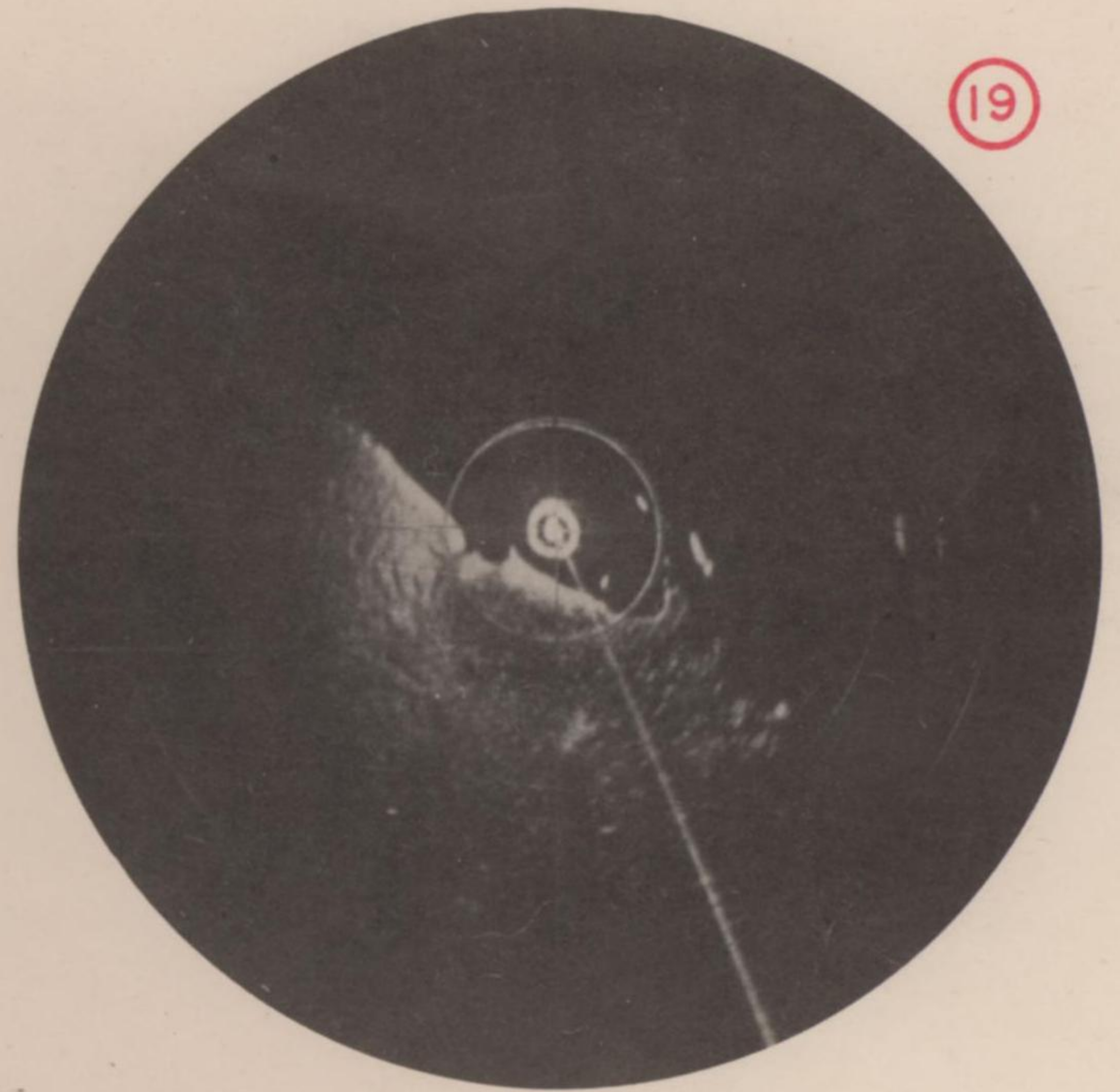
DECLASSIFIED
 Authority NND 760063
 By VAN NARA Date 12-8

SECRET

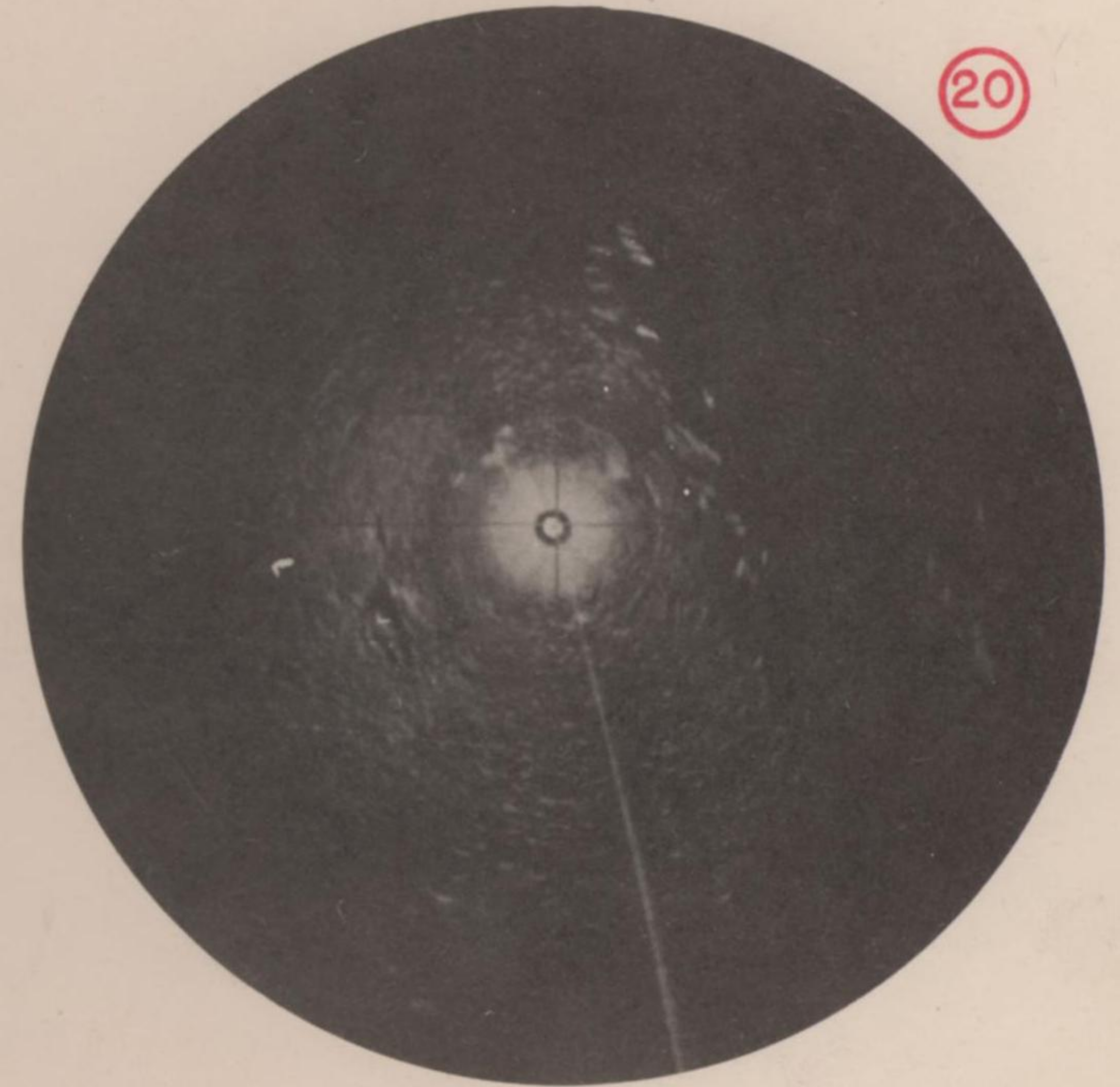
92.2 SHEET P

RADAR PHOTOGRAPH ANALYSIS
SINGAPORE AREA-MALAY STATES
40 MINING OF APPROACHES TO HARBOR & NAVAL BASE

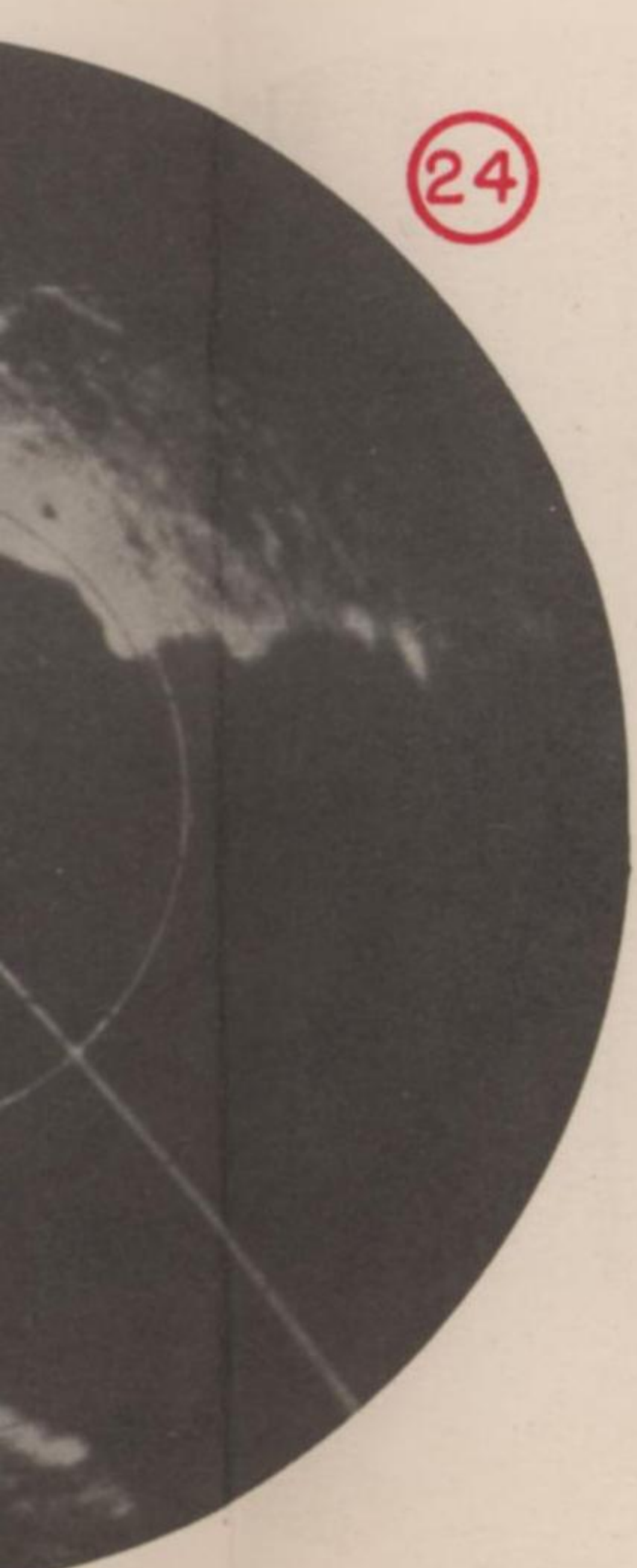
JOHORE STRAIT FIELD



HEADING 156° MAG. 20 MILE SWEEP



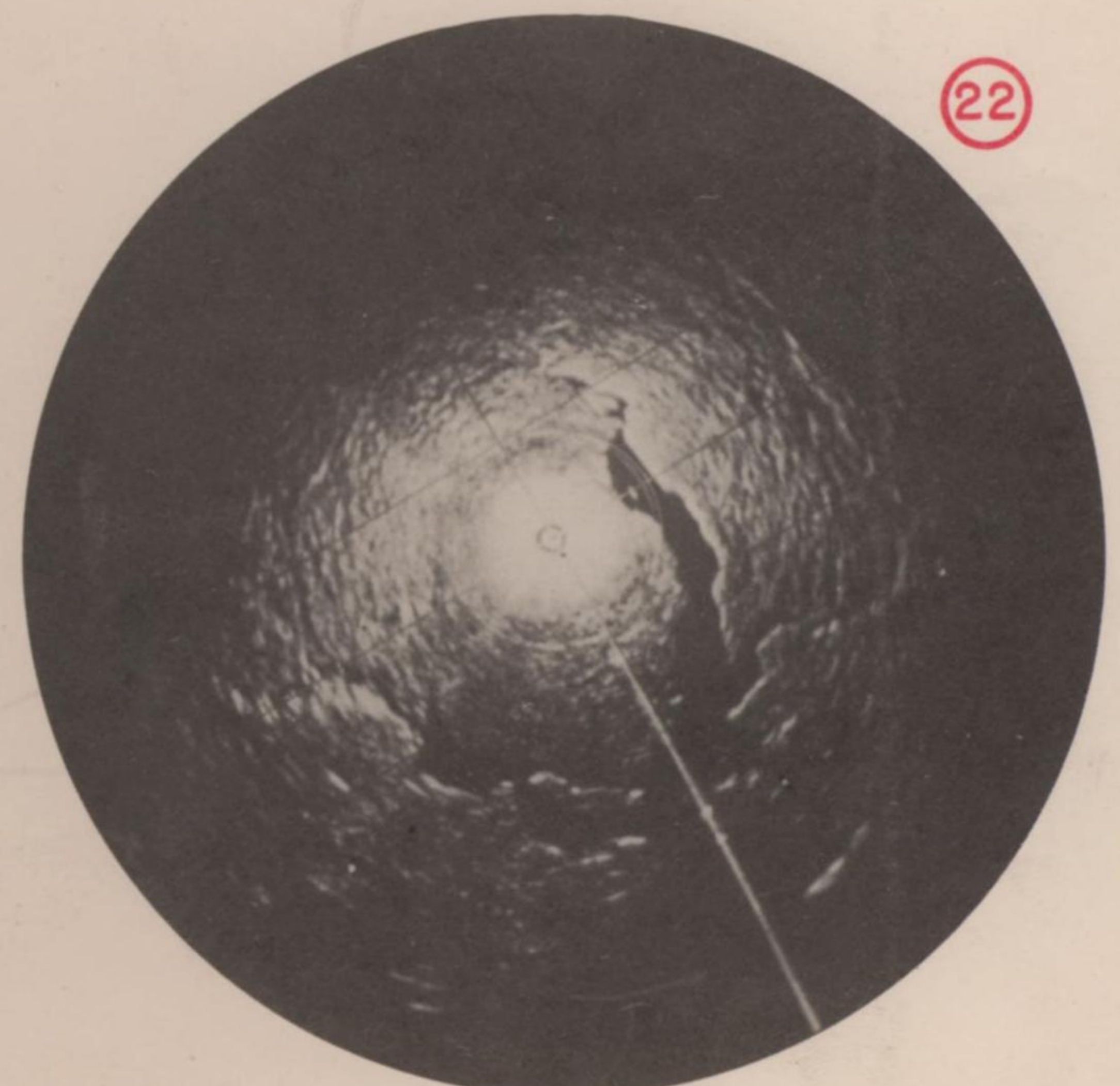
HEADING 166° MAG. 20 MILE SWEEP



10 MILE SWEEP



HEADING 142° MAG. 10 MILE SWEEP



HEADING 151° MAG. 20 MILE SWEEP

BY RADAR INTELLIGENCE, TARGET UNIT, INTELLIGENCE SECTION - XX BOMBER COMMAND

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By VAN NARA Date 12-8

273-27/2/45

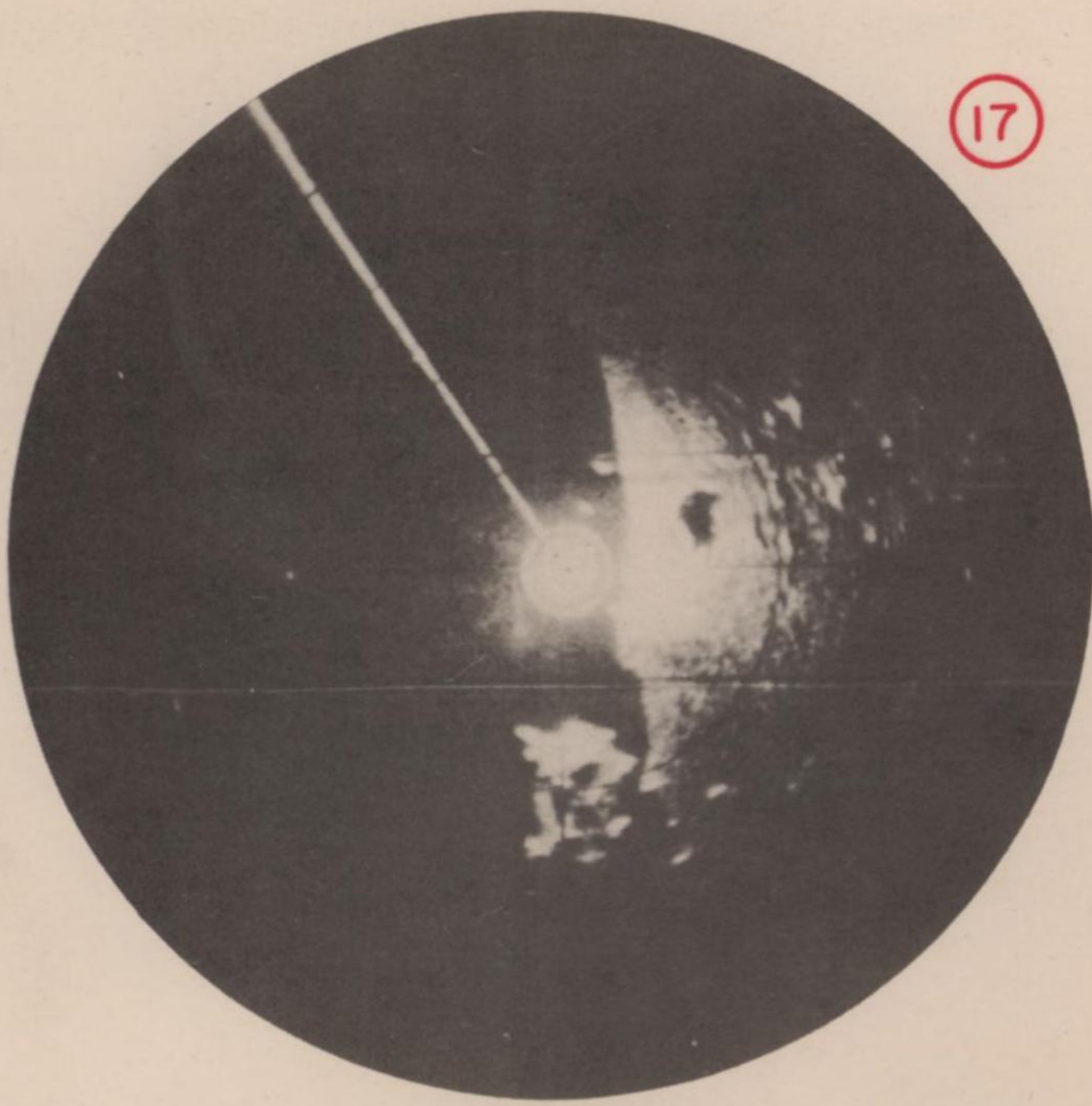
ALL ALTITUDES 11,000. SWEEPS 20 MILES
UNLESS OTHERWISE INDICATED.

SECRET

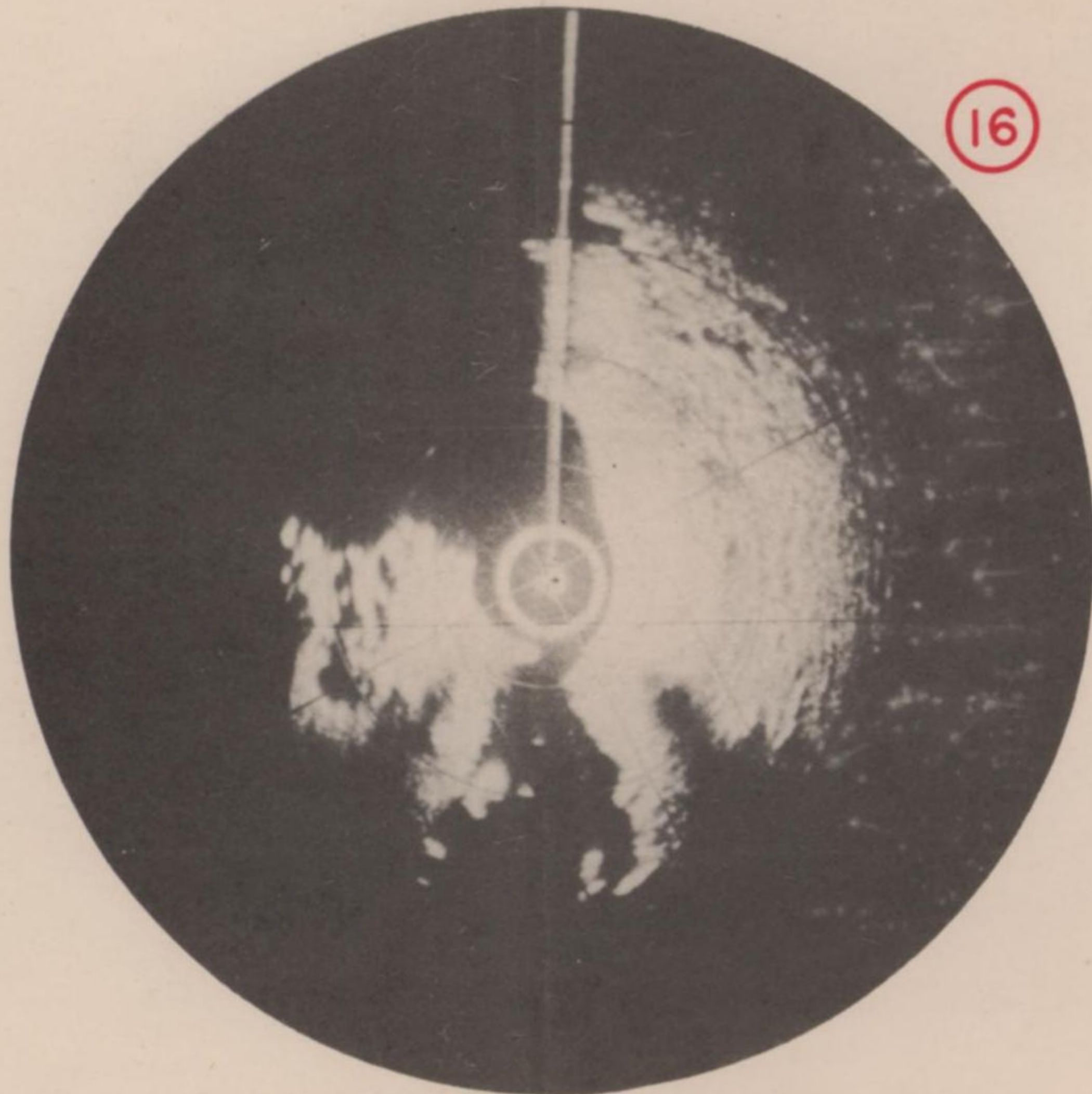
RADAR PHOTOGRAPH ANALYSIS

PANANG AREA-MALAY STATES

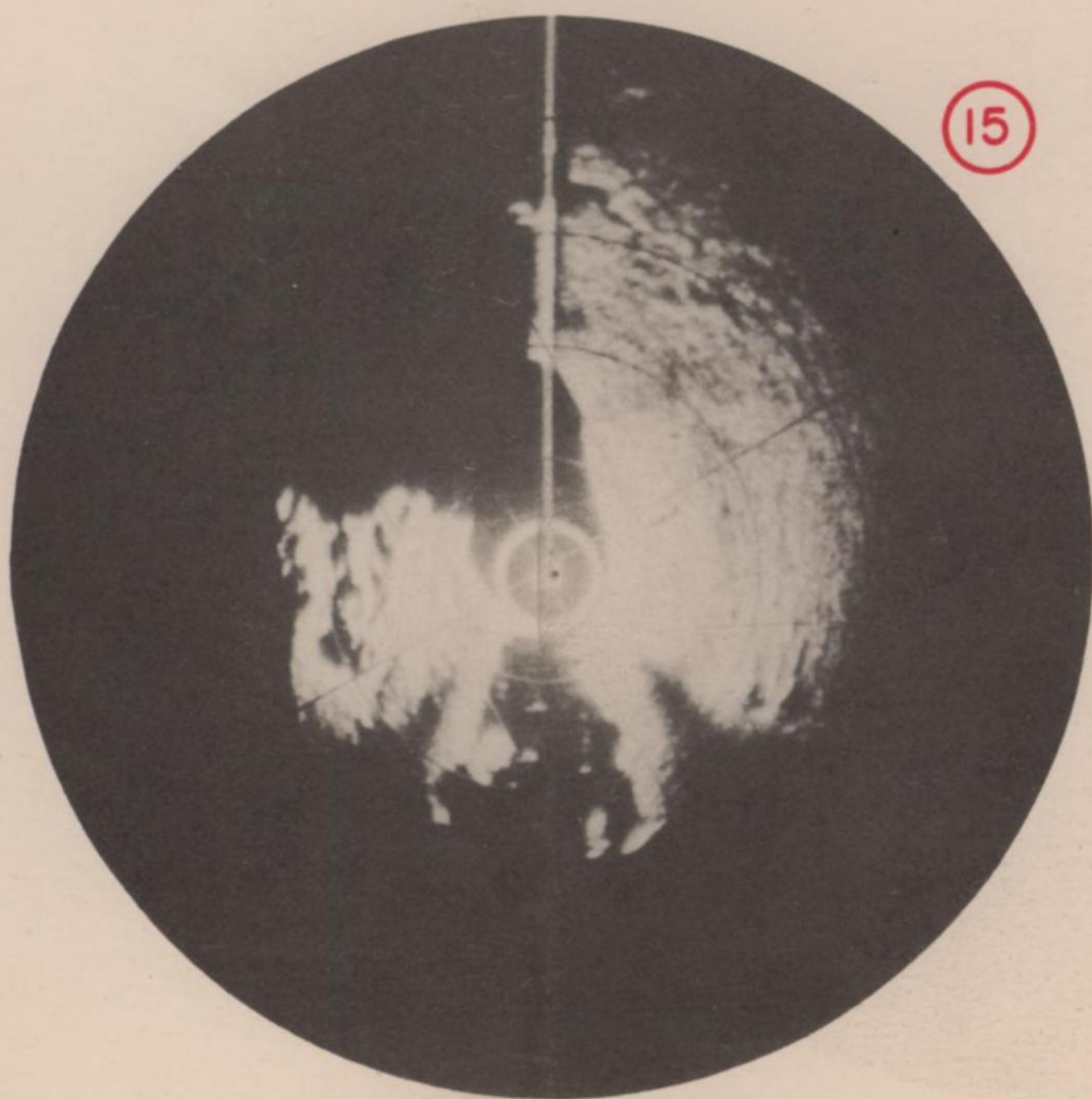
MISSION NO. 40 - MINING OF APPROACHES TO



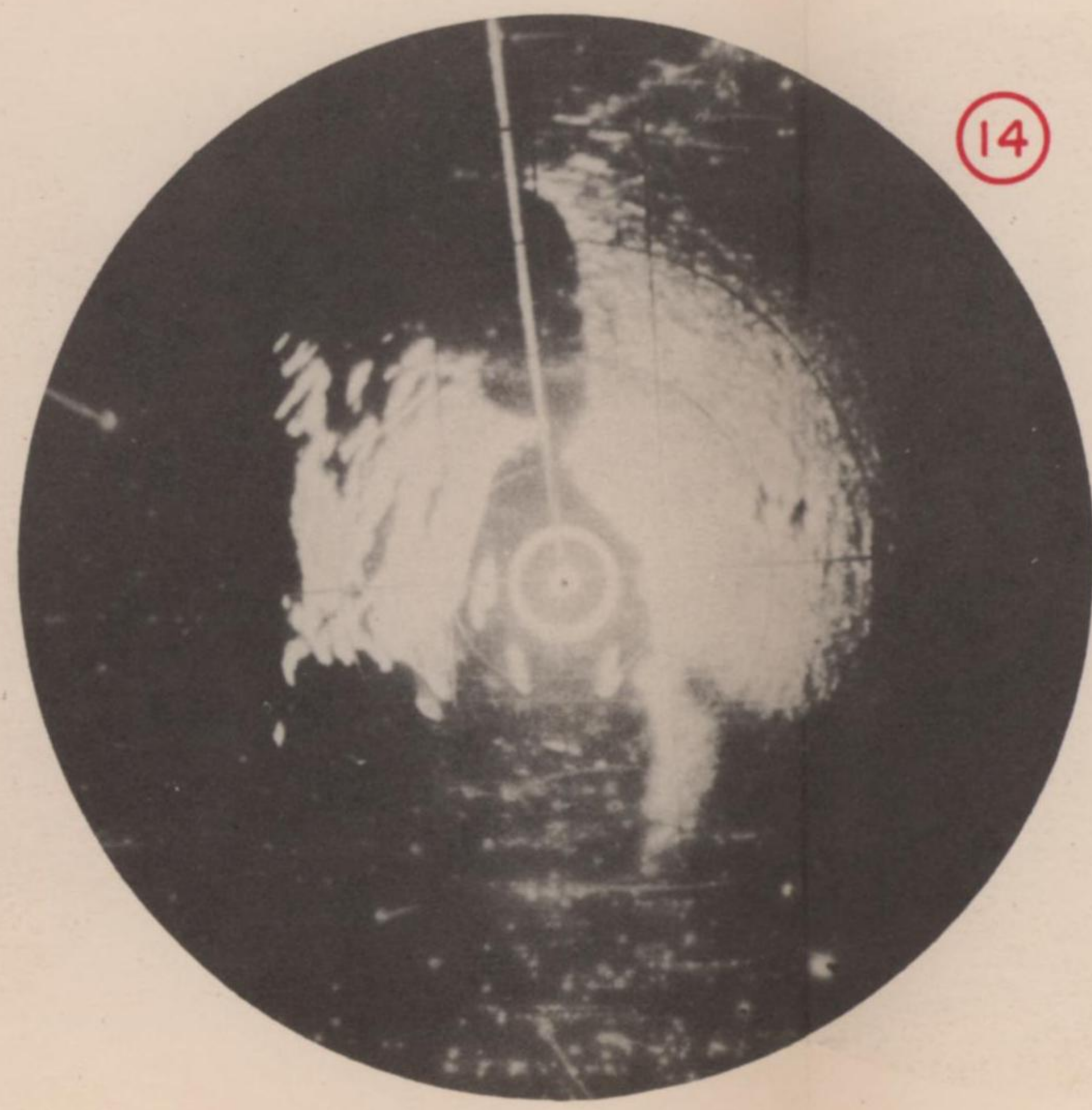
HEADING 327° MAG. SWEEP 50 MILES



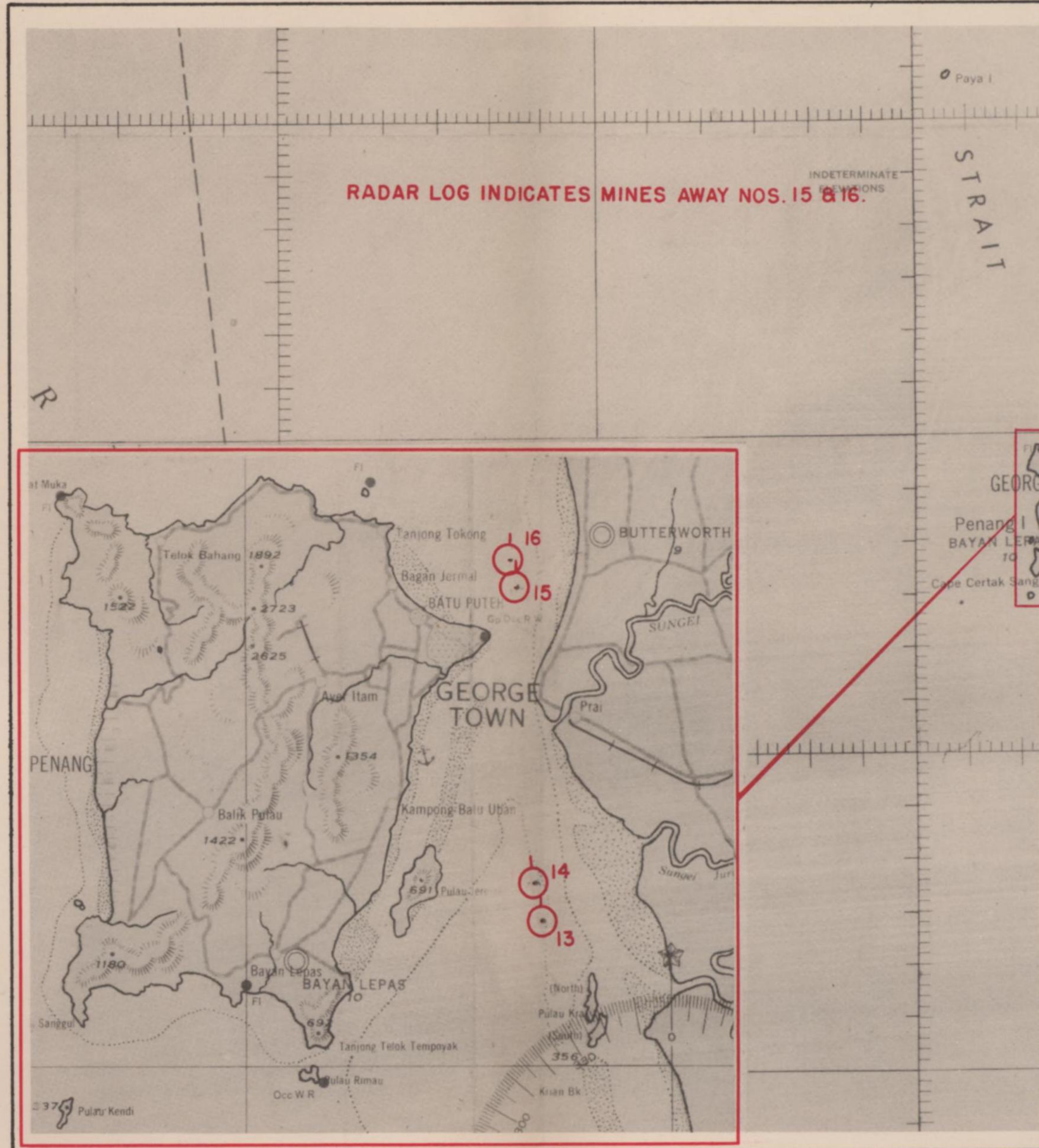
HEADING 02° MAG.



HEADING 360° MAG.



HEADING 352° MAG.



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By VAN NARA Date 12-8

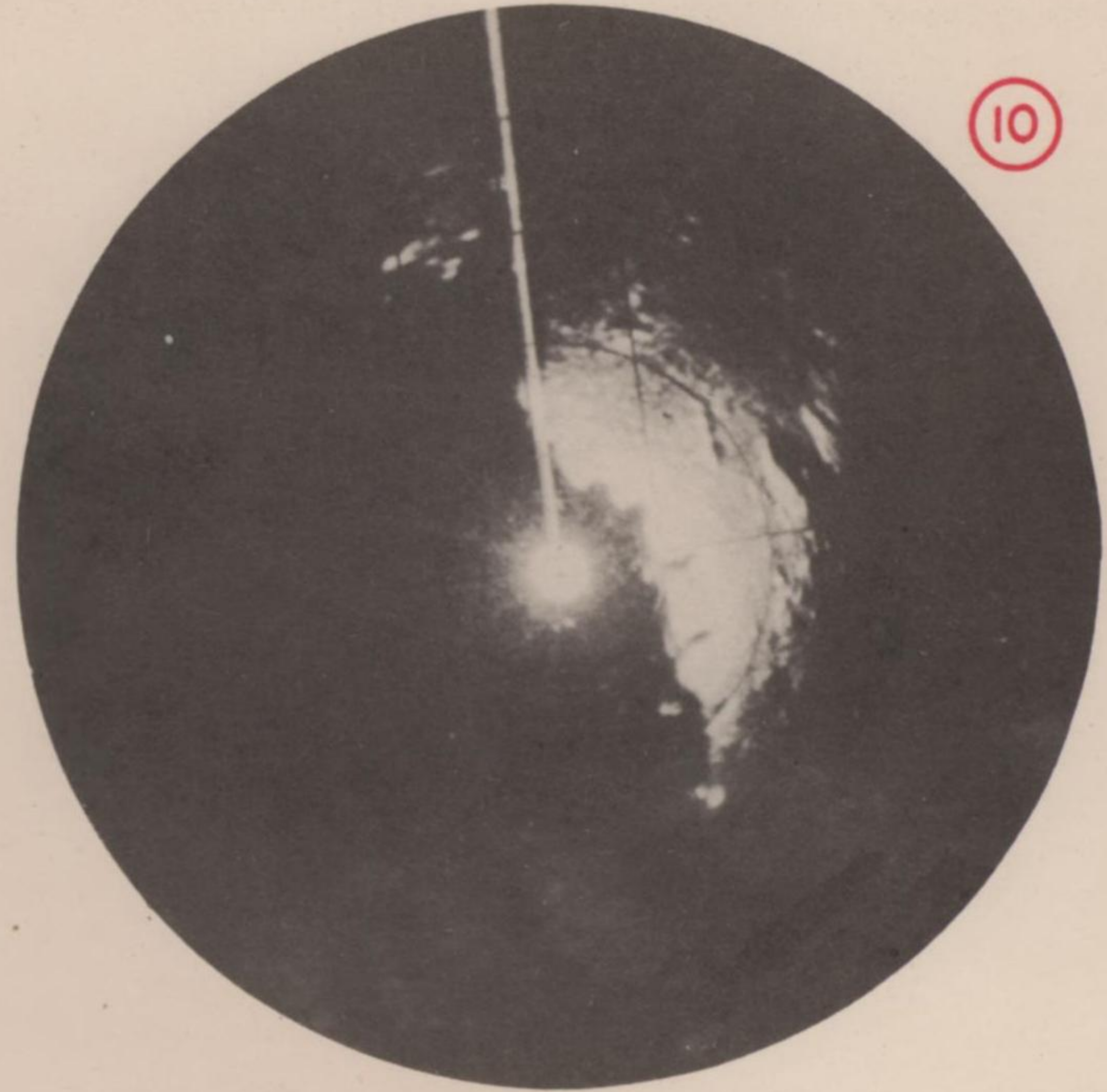
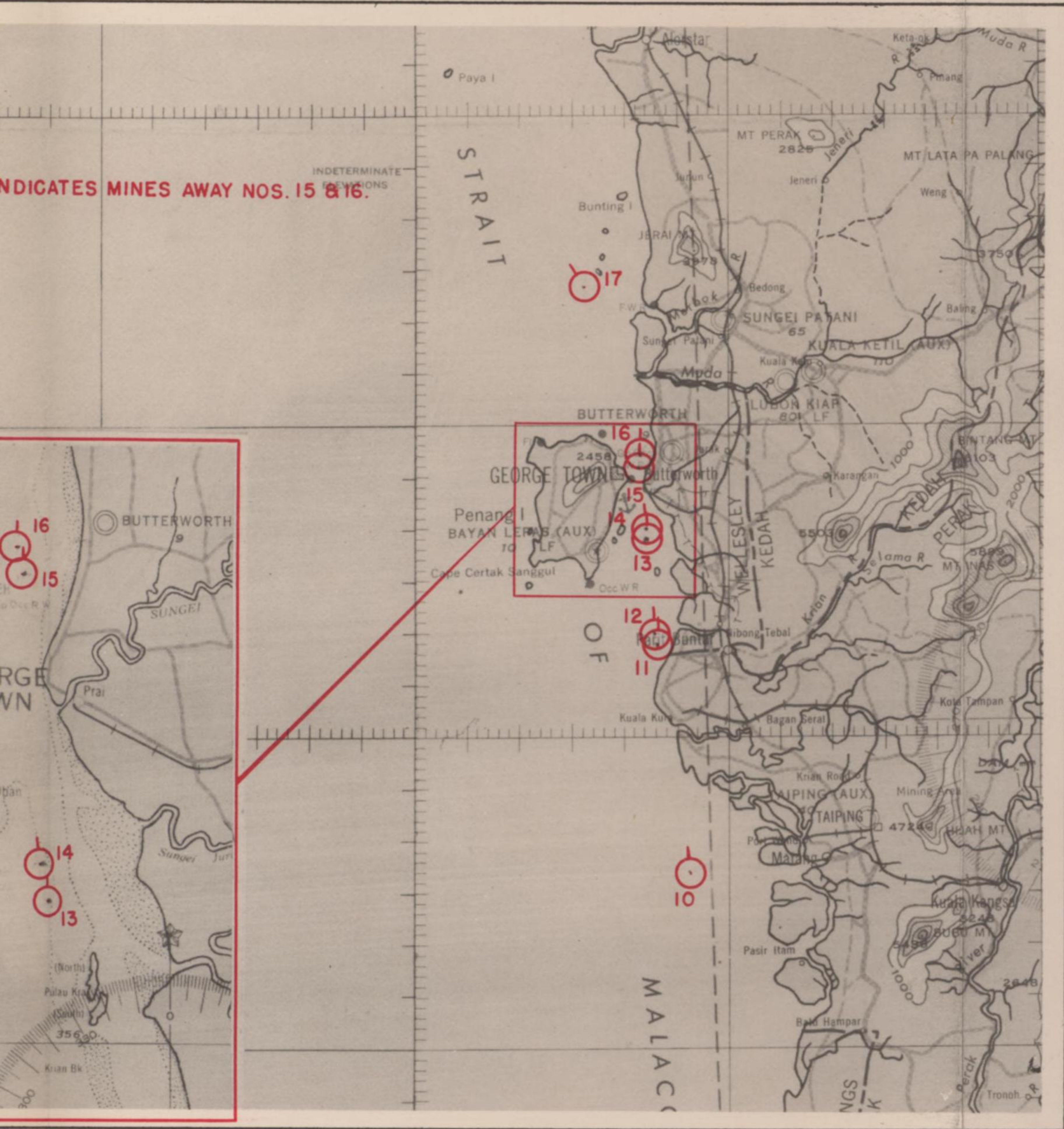
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RADAR PHOTOGRAPH ANALYSIS

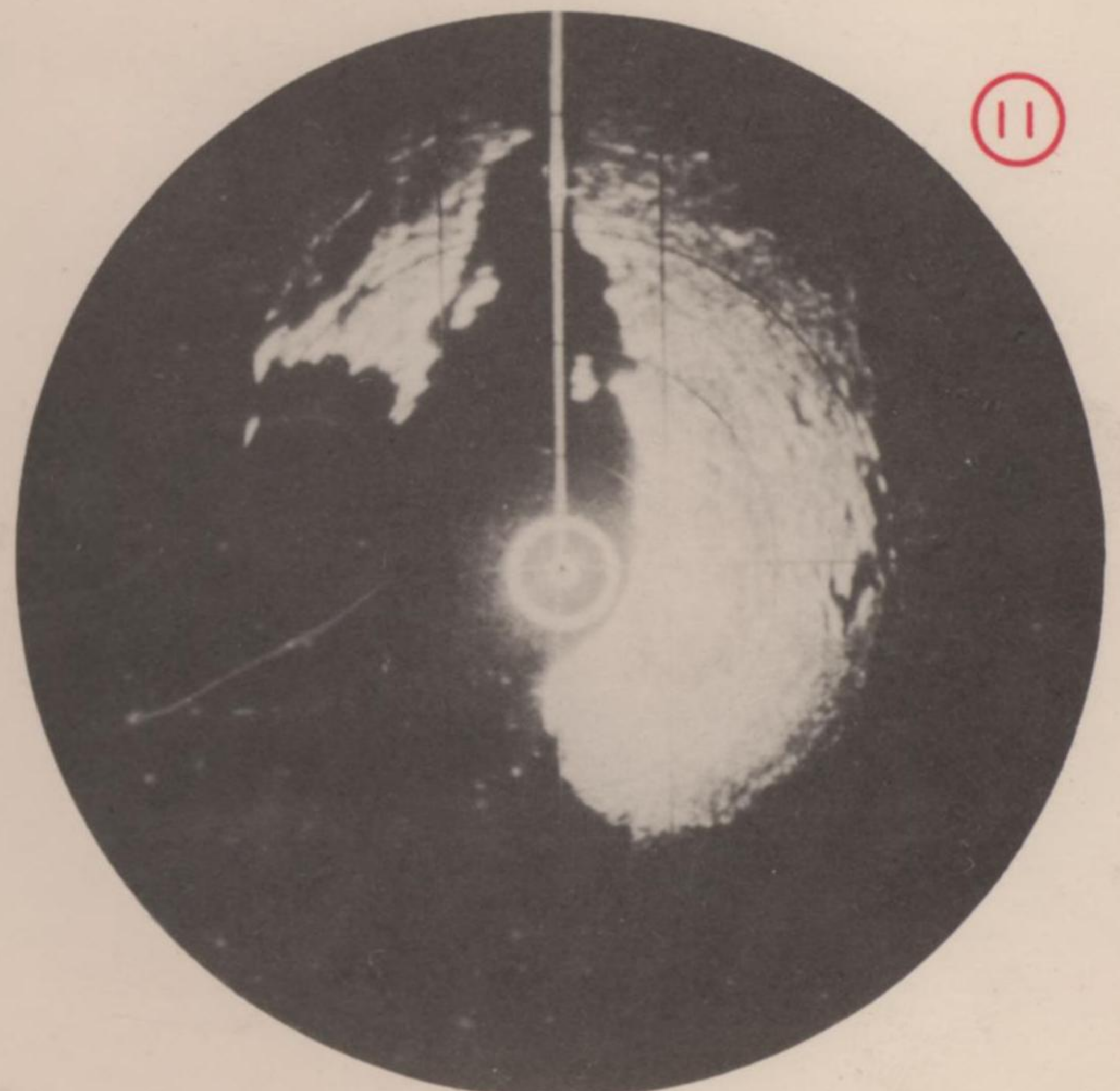
PANANG AREA-MALAY STATES

NO. 40 - MINING OF APPROACHES TO HARBOR

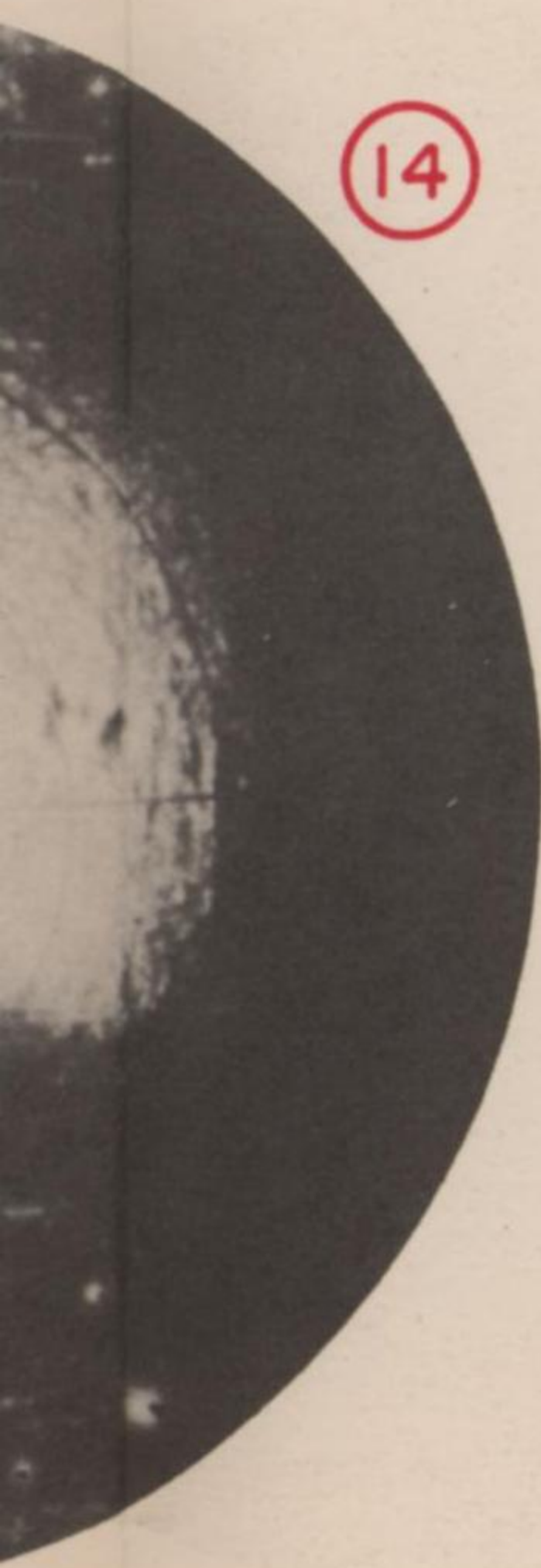
R 92.1 SHEET B



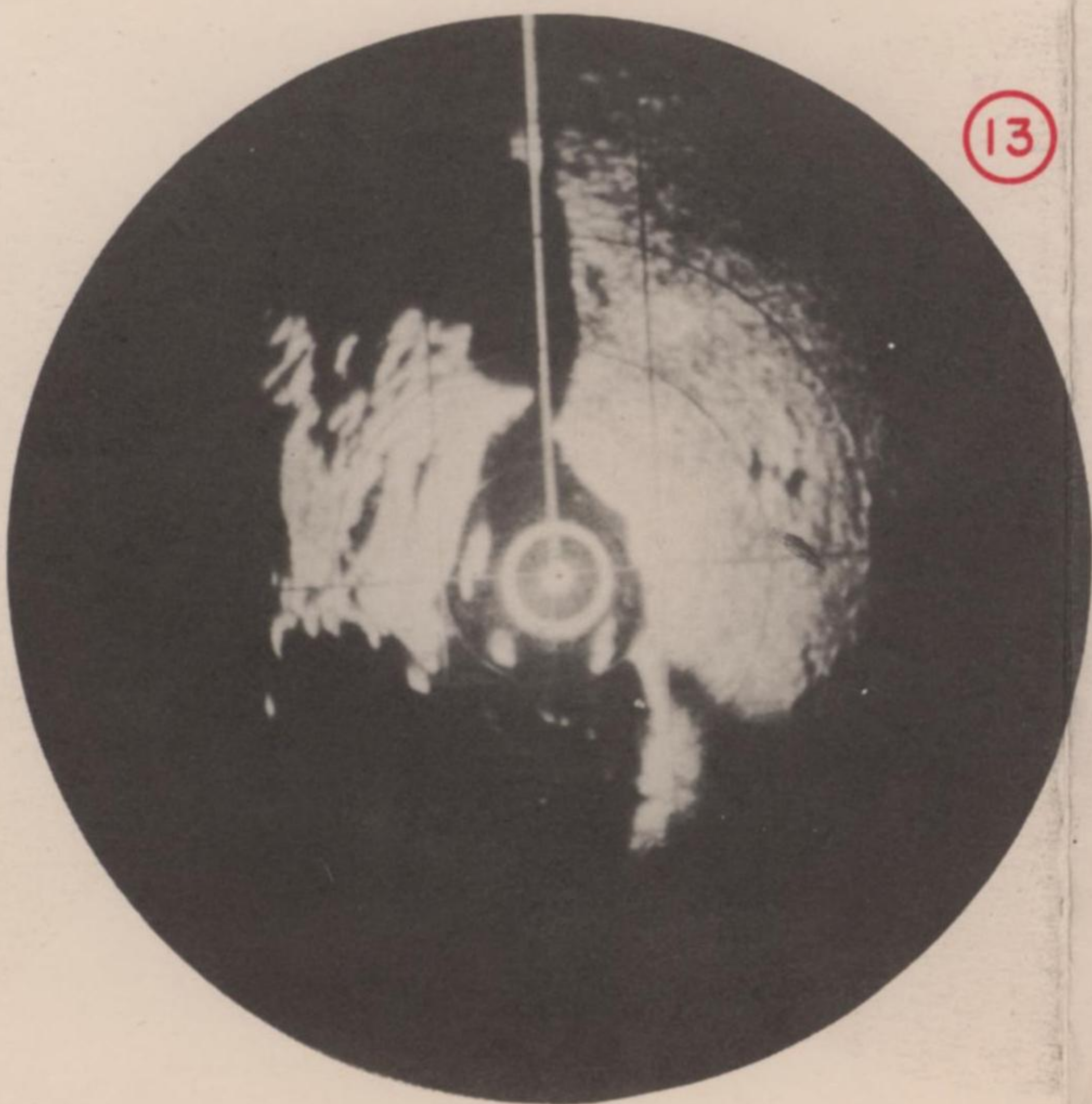
HEADING 253° MAG. SWEEP 50 MILES



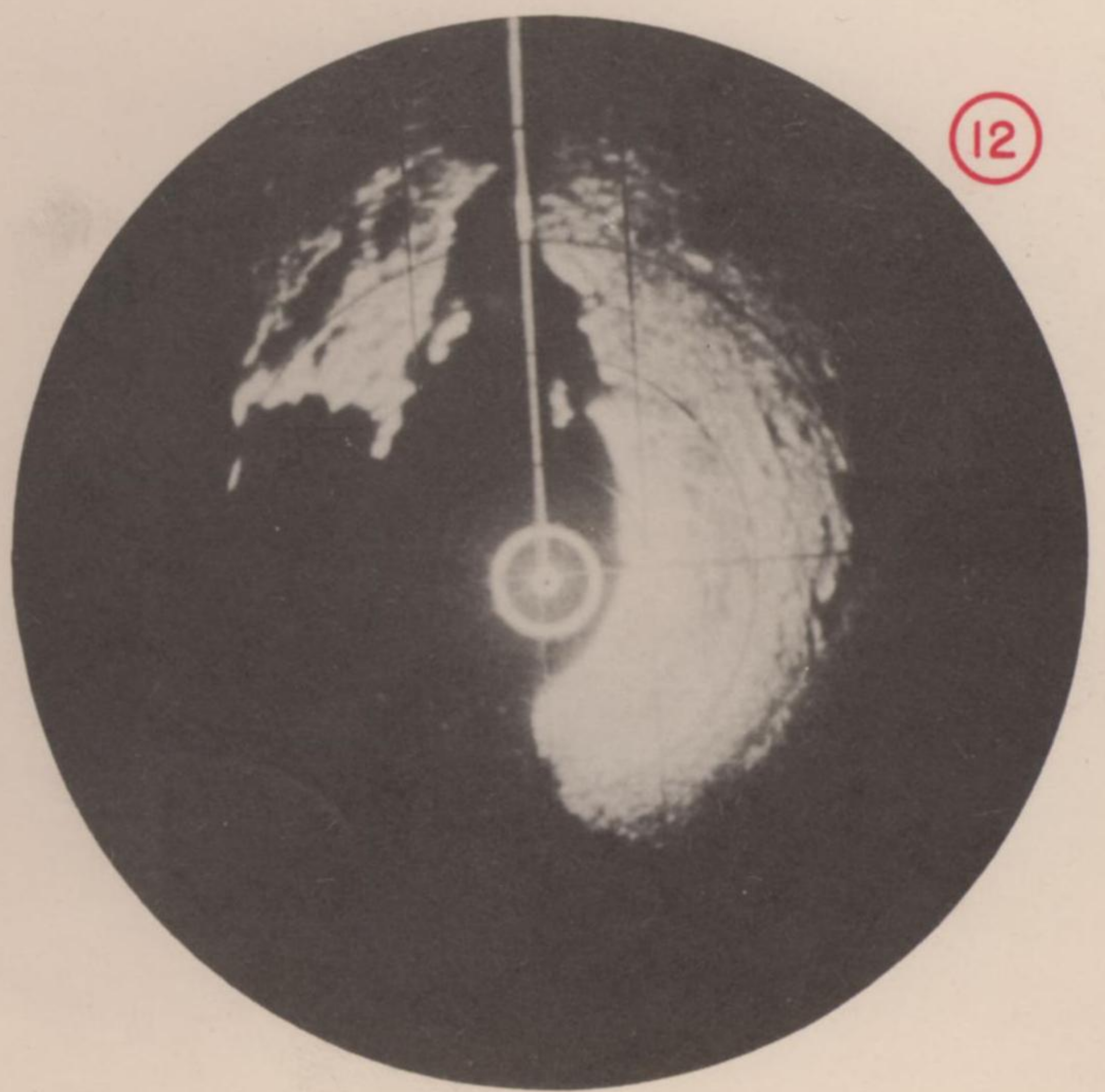
HEADING 359° MAG.



AG.



HEADING 356° MAG.



HEADING 356° MAG.

RADAR INTELLIGENCE, TARGET UNIT, INTELLIGENCE SECTION - XX BOMBER COMMAND

SECRET

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DECLASSIFIED

Authority NND 760063

By VAN NARA Date 12-8

S E C R E T

ANNEX

G

RCM INFORMATION

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* * * * *
* Prepared by: *
* RCM Section *
* XX Bomber Command *
* * * * *
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S E C R E T

S E C R E T

SECRET
Auth: Dep/Com 20 AF
Initials: map
Date: 7 March 45

TWENTIETH AIR FORCE
Office of the Deputy Commander, IB & C
APO 493

7 March 1945

SUBJECT: RCM Report - Combat Mission No. 40, Singapore,
27 February 45 - Night.

TO : Commanding General, Twentieth Air Force,
Washington 25, D. C.

A. General

One RCM search aircraft equipped with a bottom mount D/F antenna participated in this mission. The RCM observer monitored the early warning band enroute to and from the target and the 200 Mc. gun laying band while in the target area.

B. Results

The Penang radar was logged for approximately 200 miles down the East coast of the Malay Peninsula. In addition two early warning radar sites were in operation in the Singapore area. It would seem natural that these early warning radar sites would furnish adequate warning to the target area. However, the first two aircraft over the target reported the town lit up and upon departure of the two aircraft, the town began to black out. Succeeding aircraft reported a good black out.

1. Port Blair Radar (Possible) 100/730/12. Enroute to the target while the search aircraft was in the Andaman Island area a 100 Mc. Mk 1 Model 1 radar was intercepted. It was a strong signal, however, before definite analysis could be made the observer was required to turn off the search equipment due to gas fumes within the aircraft. The PRF of 730 is low for the Port Blair Radar (100/830/10).

2. Penang Radar 102/530/28. Six good cuts were made on Penang Island Radar as the search aircraft was enroute to the target down the east coast of the Malay Peninsula. The characteristics do not correspond exactly with previous intercepts (101/465/15) and may suggest that a dual radar site is in operation on Penang Island.

-1-

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3. Singapore Radar 100/500/10. This radar has been previously analyzed on Missions No. 31, 33, and 38. A good set of cuts intersect at approximately 103°43'E 1°19'N.

4. Singapore Radar 106/435/12. A good set of cuts intersect at approximately 103°50'E 1°16'N. This agrees with the set of cuts obtained on Mission No. 38: 106°/508/10, 103°50'E 1°16'N.

5. Alorstar Radar (100°22'E 6°07'N) 101/460/16. Five good cuts intersect at Alorstar which substantiate the suspected cuts made on this same radar site on Mission No. 31. The characteristics of this radar site are similar to the characteristics of the Penang Island Radar site.

6. While in the target area, a strong radar signal, 100/375/60, was tracking the search aircraft. No D/F cuts were obtained, inasmuch as the one observer was already D/F'ing the 99 Mc. and the 106 Mc. Mk 1 Model 1 radar sites.

7. Only one 200 Mc. intercept was made and this occurred in the target area: 200/980/5.5. Logged as strong, searching and tracking, on only momentarily.

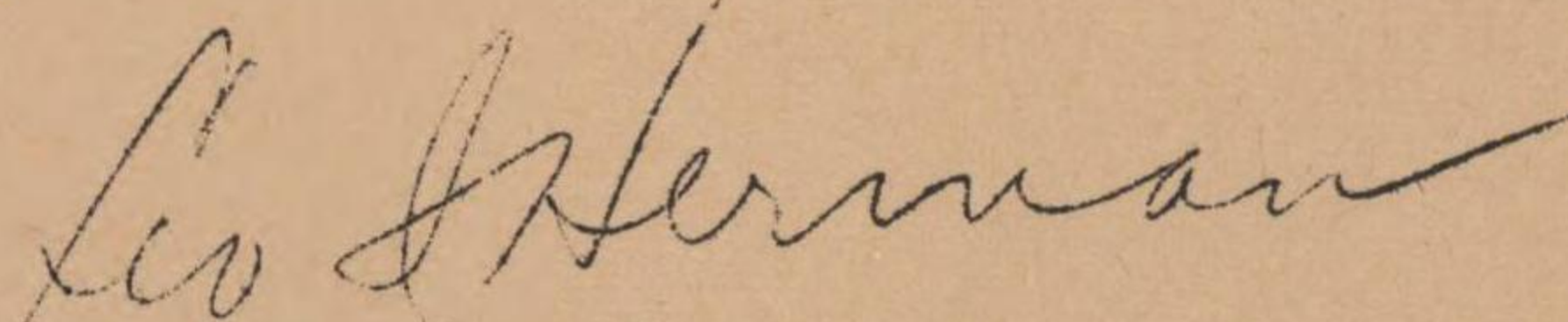
C. Enemy Countermeasures

Negative.

D. Equipment Malfunctions

Negative.

FOR THE DEPUTY COMMANDER:



LEO I. HERMAN
Colonel, Air Corps
Actg. Adjutant General.

-2-

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ANNEX

H

CENTRAL STATION FIRE CONTROL AND GUNNERY

* * * * *
* Prepared by: *
* * * * *
* Staff Gunnery Officer *
* * * * *
* XX Bomber Command *
* * * * *

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SECRET

HEADQUARTERS
XX BOMBER COMMAND
APO 493

SECRET

Auth: CG XX BC

Initials *JW*

Date 4 MARCH 45

CONSOLIDATED SPECIALIST
MISSION REPORT OF
STAFF GUNNERY OFFICER

Date prepared: 3 March 1945

Field Order Number 40

Date of Mission: 27 February 45

On the mission directed by Field Order number 40, only one Group participated in this night mission against Singapore. A negative report is submitted on the gunnery phase. There were no fighters sighted during the entire mission.

- 1 -

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By *VAN* NARA Date *12-8*

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ANNEX

I

CAMERAS AND PHOTOGRAPHS

Cameras carried were exclusively K-24 and K-35 radar scope cameras. For details, see Annex F, Radar, Section B and Table B.

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ANNEX

J

AIRCRAFT LOSSES AND DAMAGE

There were no losses or damage of any sort on this mission.

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By **VAN NARA** Date **12-8**

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ANNEX

K

FUNCTIONING OF EQUIPMENT

I - Functioning of Equipment

II - Performance Data *

* Prepared by Staff Flight Engineer

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I - FUNCTIONING OF EQUIPMENT

Mission No. 40

27 - 28 February 1945

- | | |
|---|-----|
| 1. A/C Airborne | 12 |
| 2. A/C mining PT area | 10* |
| 3. A/C failing to mine PT - mechanical trouble | |
| a. Mined secondary target | 1 |
| (1) A/C 273: Internal failure #4 engine. Oil leak. | |
| b. Jettisoned mines | 2* |
| (1) A/C 277: (6 mines): #1 engine trouble, backfiring and RPM loss. | |
| (2) A/C 557: (5 mines): Mine release trouble. | |

* A/C 557 dropped one mine at PT and jettisoned 5 later.

K-I-1

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SECRET

By auth of CG XX BC

Initials: [Signature]

Date: 11 March 1945

CONSOLIDATED SPECIALIST
MISSION REPORT OF
STAFF FLIGHT ENGINEER

Date Prepared: 1 March 1945

Field Order No. 40

Date of Mission: 27 Feb 45

1. The summary of performance of the aircraft mining the primary target area is given in the attached table.
2. All aircraft carried the maximum possible load to this target.

- 1 -
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SUMMARY OF PERFORMANCE
FIELD ORDER NO. 40
PRIMARY TARGET

444TH BOMB GROUP

* No. of aircraft		9	
Total Time		18:41	
Time to Target		9:16	
Fuel	Ave	6885	
Burned	Max	7250	
Burned	Min	6650	
Fuel	Ave	7655	
	Max	7700	
Carried	Min	7650	
Burnable	Ave	770	
	Max	1050	
Reserve	Min	400	
** Air Miles		3864	
Ground Miles		3894	
** Gal/Air Miles		1.78	
*** Bombing Altitude		4000	
Starting	Ave	134,856	
	Max	135,400	
Gross Weight	Min	134,336	
Weight of	Ave	6360	
	Max	6360	
Mines	Min	6360	
No. of Mines MK-26		6	

- * Aircraft that mined the primary target and returned to their own base.
- ** Air mile values are of doubtful accuracy due to difficulties in determination.
- *** Pressure altitude.

- 1 -
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ANNEX

L

Mining Instructions

and

Results of Mining

I - Mining Instructions

II - Results of Mining

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By **VAN** NARA Date **12-8**

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I - MINING INSTRUCTIONS - JOHORE STRAIT FIELD

Mission No. 40

27 - 28 February 1945

- a. No separate mining annex was prepared, as the mining was to be conducted on the same plan as was used in the mining of Johore Strait Field by this Group in Mission No. 31 which was conducted on 25 - 26 January.
- b. Mines required - 72 MK26-1 for 12 aircraft of the 444th Group.
- c. Details of Mines:
 1. 24 set to arm immediately of which 18 will have PDM's set on 1, and 6 will have PDM's set on 4.
 2. 48 fitted with arming delay clocks as follows:
 - (a) 12 will have arming delay of 15 days.
 - (b) 24 will have arming delay of 20 days.
 - (c) 12 will have arming delay of 30 days.
 3. The 48 mines fitted with arming delay clock so indicated above will have PDM's set as follows:
 - (a) The mines arming at 15 and 30 days will have PDM's set on 1.
 - (b) The mines arming at 20 days will have PDM's set, 12 on 1, and 12 on 2.
- d. The plan for laying the mines will be as follows:
 1. Load: 6 MK26-1 per aircraft.
 2. Initial Point: Penyabong Point ($02^{\circ}38'N - 103^{\circ}46'E$).
 3. Pin Point: NW tip of Tekong Island ($01^{\circ}26'N - 104^{\circ}03'E$).
 4. Magnetic heading: 150° .
 5. Altitude: 4,000' Pressure
 6. Ground speed: 200 mph.
 7. Release interval: 15 seconds.
 8. Time over target: 1530Z.

II - RESULTS OF MINING

For details of results of mining see the Report of the Staff Bombing Officer in Annex A - Section IV, and the tables annexed thereto as Section VI and VII entitled Disposition of Mines, and Method of Laying of Mines, respectively.

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By VAN NARA Date 12-8

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ANNEX

M

CONSOLIDATED MISSION STATISTICAL SUMMARY

```
* * * * *  
* Prepared by: *  
* * * * *  
* Statistical Control Section *  
* * * * *  
* XX Bomber Command *  
* * * * *
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XX BOMBER COMMAND
CONSOLIDATED MISSION STATISTICAL SUMMARY
Mission Number Forty
27 February 1945

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By Authority of the
Commanding General:

3-14-45
Date Initials

Table I and II - Aircraft Participating *

Group	Mission No.	Field Order No.	** A/C Taking Off	Airborne A/C Failing to Mine Designated Primary Target								Time of First Takeoff	Time of Latest Return	Average Time of Flight	
				Total No.	Percent	Reason					A/C Mining Primary			Airborne A/C Not Mining Primary	
						Mech.	Pers.	Wea.	Not in Form	Misc.					Unknown
444th	40	40	12	2	16.7%	2					0621Z	0318Z	18:41	8:57	

* Mission was run from Rear Area Base; Tables I and II consolidated because there was no Rear to Forward Area Movement.
** Field Order #40 required the 444th Group to set up 12 aircraft.

Table III - Mining Runs

Group	No. of A/C Mining	Target Mined	Time of Release		Altitude of Release		Visual Bomb A/C Sighting For		Radar Bomb A/C Sighting For		Blind Bomb A/C Sighting For		On The Leader			A/C Dropping On	
			Earliest	Latest	Highest	Lowest	R&D	Range	R&D	Range	R&D	Range	Visual	Radar	Blind	AFCE	Manual
			444th	10 1	Johore Strait Penang Harbor	1535Z 1531Z	1650Z 1531Z	4000 10800	4000 10800	10 1							

Primary Target - Johore Strait, Singapore Area.
Secondary Targets - (1) Penang Harbor, (2) Pakchan River, (3) Mergui Harbor.

Table IV - Mine Loading & Disposal

Group	* Type of Mines	Mine Loading on A/C Airborne in R.A.				On Targets			Mine Disposal		
		Fusing**		Average No. Loaded	Total Loaded	*** Johore Strait	Penang Harbor	Jettisoned	Returned	Unknown	
		Nose	Tail								
444th	1M 26-1	Unk.	Unk.	6	72	55	6	11			

* Mine, A/C 1000# AN-MK 26 Mod. 1 -- Actual weight 1060 pounds.
** Aerial Mines - Preset by Navy.
*** One aircraft dropped but one mine on primary and jettisoned five.
NOTE: Mine weight information supplied by Ordnance Section, XX Bomber Command.

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Commanding General:
3-14-45 SR
Date Initials

XX BOMBER COMMAND
CONSOLIDATED MISSION STATISTICAL SUMMARY
Mission Number Forty
27 February 1945

Table X - Airborne A/C Failing to Bomb Primary Target

A/C Serial Number	Specific Mechanical Malfunctions	Other Reasons	Local Action To Prevent Recurrence
<u>444th Group</u>			
65277	#1 Engine Trouble, backfiring and RPM Loss.		Plug change. Engine checked satisfactory.
65273	Internal failure, #4 engine, oil leak.		Engine replaced. U.R. #45-96 submitted.

Table XI - Engineering Malfunctions

Part I - Engineering Malfunctions Preventing Airborne A/C From Bombing Primary

		<u>444th</u>
POWER PLANT & ACCESSORY SECT.	Engine Running Rough	1
	Engine Failure	1
OIL SYSTEM	Oil Leaks	1
TOTAL		3

NOTE: For Details, see Table X - "Summary of A/C Failing to Bomb Primary".

Part II - Engineering Malfunctions Not Preventing A/C From Bombing Primary

		<u>444th</u>
INSTRUMENTS	Cylinder Head Temp. Gage	1
	Tachometer	1
	AFCE	1
TOTAL		3

NOTE PERTAINING TO BOTH PART I AND PART II:

Only engineering malfunctions are listed. All other malfunctions, such as radar, are excluded. If one aircraft had more than one engineering malfunction, all malfunctions have been listed.

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XX BOTBER CONTLAND
CONSOLIDATED MISSION STATISTICAL SUMMARY
Mission Number Party
27 February 1945

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By Authority of the
Commanding General:

[Signature]
Date *[Signature]* Initials *[Signature]*

Table IX - Gasoline Loading and Consumption

Group	Average Gross Weight Per Plane Before Rear Area Takeoff	Average Gallons Loaded Per A/C Before Rear Area Takeoff	Average Gallons Consumed on Mission Per Aircraft		Average Gallons Remaining in A/C after Mission Per A/C	
			Wining Primary	Not Wining Primary	Wining Primary	Per A/C Not Wining Primary
444th	134632	7658	6887	4100	773	3550

Table XII - Utilization of Useful Load
(Based on A/C Wining P.T.)

Group	No. of Ground Miles	Number of A/C Considered	Type of A/C	Av. Gross Weight at Takeoff for Mission	Average Weight of Useful Load		Aver. Number of Mines Loaded	* Aver. Weight of Mines Loaded	Aver. Weight of Gas Loaded at 6 Pounds Per Gal	Average Miscellaneous Weight
					Aver. Basic Weight of A/C	Useful Load				
444th	3894	10	Center Wing Tanks	134758	75503	59255	IX 26-1 6	6360	45960	6935

* Mine A/C 1000# AM-MK 26 Mod 1 equals 1060 pounds.

NOTE: TABLES X AND XI ON NEXT SHEET.

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HEADQUARTERS
XX BOMBER COMMAND
APO 493

DISTRIBUTION - MISSION NO. 40

27 - 28 February 1945

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1	Commanding General, Twentieth Air Force
2	Commanding General, XX Bomber Command
3	Chief of Staff, XX Bomber Command
4	Chief, Intelligence Section, XX Bomber Command
5	Commanding Officer, 40th Bombardment Group
6	Commanding Officer, 444th Bombardment Group
7	Commanding Officer, 462nd Bombardment Group
8	Commanding Officer, 468th Bombardment Group
9 - 10	Commanding General, Army Air Forces, Attention AC/AS Intelligence, Collection Division
11 - 20	Intelligence Section, XXI Bomber Command
21	Commanding General, XXI Bomber Command
22	USMWO, SEAC
23	Assistant Chief Air Staff, Intelligence
24	Chief of Staff, Twentieth Air Force
25	AIUSLO, c/o XX Bomber Command
26	Historical Officer, XX Bomber Command
27	Intelligence Section, 58th Bombardment Wing
28 - 29	Vice Chief Naval Operations (Attention: Section OP 30M)
30	Operational Intelligence, XX Bomber Command

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By **VAN** NARA Date **12-8**

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HEADQUARTERS
TWENTIETH AIR FORCE
ADJUTANT GENERAL

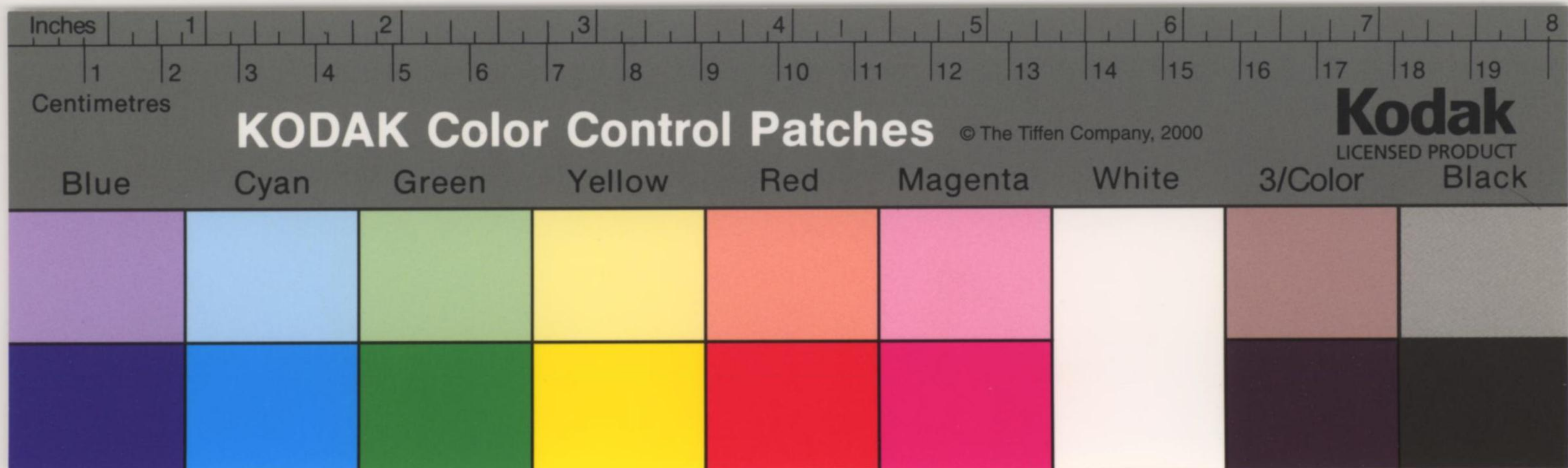


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