

1. DATE - TIME GROUP 21 June 53 21/1000Z	2. LOCATION Okinawa, Naha, Kadom
3. SOURCE Military	10. CONCLUSION 1. AIRCRAFT - 2. UNIDENTIFIED 1. Kadom observer looking WSW, probably observed a/c. 2. Naha observers looking NW in that area. This object carried as UNIDENTIFIED (No astro body in this location) winds to East.
4. NUMBER OF OBJECTS One	
5. LENGTH OF OBSERVATION 20 Minutes	
6. TYPE OF OBSERVATION Ground-Visual	
7. COURSE NW	11. BRIEF SUMMARY AND ANALYSIS One spherical to star shaped object was observed overhead and moved in a NW direction. Size of object was estimated by different observers to be like the average star, ping-pong ball, and like a baseball. COMMENTS, Cont'd: Balloon released at 1800I, that was 60 minutes before time of sighting, and balloon went to the East. Two F-80 a/c were 15 miles WSW of place of sighting doing acrobatics. Winds aloft to not coincide with movement of object. All observers are of the opinion that object was not an aircraft.
8. PHOTOS ☐ Yes ☒ No	
9. PHYSICAL EVIDENCE ☐ Yes ☒ No	

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

PAGE THREE JAPYC 9B

ABOUT 15000 FT AT TIME OF OBSERVATIONS CMA 10 TO 15 MILES WSW OF
OBSERVERS PD RADIOSONDE BALLOON WAS SENT ALOFT AT APPROX
1800I BUT WINDS ALOFT CARRIED BALLOON TOWARD EAST PD 8 PD NO
PHOTOGRAPHS OR OTHER PHYSICAL EVIDENCE PD 9 PD NO ACTION TAKEN PD
UNQUOTE PD 20TH AF BEING QUERIED FOR COMPLETE RPT

27/0045Z JUN JAPYC

[REDACTED]

UNCLASSIFIED

1) Est. of H₂ + E₁ from
Haber & Kautsky
Hawmany observed at same place
2) From which object seen
3) May local helicopter activity

JAPYC B06

RR JEPHQ JEDWP JEDEN 333

DE JAPYC 9B

R 270021Z ZNJ

FM COM FFAF TOKYO JAPAN

TO JEPHQ/HQ USAF WASH DC

JEDWP/COM ATIC WRIGHT PATTERSON AFB OHIO

JEDEN/COM ADC ENT AFB COLO

UNCLASSIFIED

/ [REDACTED] D//AX99871 IN-REQ ATTN CLN DIR OF INT PD ATIC

PASS TO ATIAE-5 PD FOLG MSG SUBJ CLN FLYOBRPT RECD FR 20TH AF AND

FWDD IN ACCORDANCE WITH AFL 200-5 PD QUOTE PD CITE CLN DX 12031.

INT PD 1 PD OBJECT CLN SPHERICAL TO STAR SHPAED SMCLN SIZE-DESCRIBE

AS SIZE OF AVERAGE STAR CMA AS SIZE OF PING PONG BALL CMA AND AS

SIZE OF BASEBALL WHEN SEEN THROUGH THEODOLITE PD COLOR-METALLIC OR

SILVERY SMCLN 1 OBJECT SMCLN NO TRAIL CMA NO EXHAUST CMA SPEED EST

CMA 20 MPH AND CMA BY OBSERVER USING THEODOLITE CMA AT 45 MPH IN

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RELATION TO MOVEMENT OF CLOUD SMCLN NEGATIVE SOUND SMCLN NO MANEUVERS
SMCLN TRAVELLED IN STRIGHT LINE ESTIMATED TOWARD NORTHWEST BY 8

PAGE TWO JAPYC 9B

OBSERVERS AND TOWARD WEST-SOUTHWEST BY 1 OBSERVER SMCLN DISAPPEARED
INTO CLOUDS AND TWILIGHT PD 2 PD TIME OF FIRST SIGHTING ABOUT
1900I CMA 21 JUNE SMCLN OBSERVED FOR 20 MIN PD BUT NOT REPORTED TO
THIS HQS UNTIL 23 JUNE PD DELAY IN OBTAINING OBSERVERS FOR
INTERROGATION PD 3 PD OBSERVED VISUALLY BY 3, SMCLN OBSERVED BY 6
VISUALLY AND THROUGH THEODOLITE SMCLN FROM RYUKYUS WEATHER SERVICE
STATION CMA RYUKYUS WEATHER COMMUNICATIONS STATION CMA NAHA
OKINAWA CMA AND KADENA WEATHER STATION CMA OKINAWA PD 4 PD OBSERVERS
AT NAHA LOCATED AT 26 DEGREES 13 MIN N 127 DEGREES 42 MIN E CMA
OBSERVERS AT KADENA LOCATED AT 26 DEGREES 21 MIN N 127 DEGREES 46
ZWN E PD OBJECT EST PD ABOUT 20000 FT PD ALT PD PASSED FROM OVERHEAD
TO NORTHWESTWARD PD 5 PD ALL OBSERVERS OKINAWAN OR JAPANESE WEATHER
FORECASTERS OR OBSERVERS WITH FROM 6 TO 30 YEARS EXPERIENCE SMCLN
ESTIMATED RELIABILITY GOOD PD ALL APPEARED SINCERE DURING
INTERROGATION PD 6 PD LOCAL WX .4 CU AT 1500 FT CMA .8 CS EST CMA
15000 FT - 20000 FT PD WINDS ALOFT CMA 10000 - 270 - 16K SMCLN
20000 FT - 290 DEGREES - 12K PD 7 PD OBSERVERS SAW PALE MOON
SMCLN NO STARS HAD APPEARED SMCLN NO OTHER OBJECTS APPEARED DURING
OBSERVATION PD ALL OBSERVERS FAMILIAR WITH JET AIRCRAFT AND RULED
SIGHTING OUT AS JET PD 26 FIGHTER SQ HAD 2 F-80 ON LOCAL ACROBATICS

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PAGE THREE JAPYC 9B

ACTION

27 JUN 53 07 31z

1953 JUN 30

09:21

E. Atta
3. Atta
4. C. files

V

WPG2450

YDB110

TYD068

TDA046T

JEZ A042

AGA B29

AIR DE AGA

RR AIR ZVA

AIA A23

AGA DE AIA

JAPYC B06

RR JEPHQ JEDWP JEDEN 333

DE JAPYC 9B

R 270021Z ZNJ

FM COM FEAF TOKYO JAPAN

TO JEPHQ/HQ USAF WASH DC

JEDWP/COM ATIC WRIGHT PATTERSON AFB OHIO

JEDEN/COM ADC ENT AFB COLO

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/ [REDACTED] D//AX99871 IN-REQ ATTN CLN DIR OF INT PD ATIC

PASS TO ATIAE-5 PD FOLG MSG SUBJ CLN FLYOBRPT RECD FR 20TH AF AND

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INT PD 1 PD OBJECT CLN SPHERICAL TO STAR SHPAED SMCLN SIZE-DESCRIBE

AS SIZE OF AVERAGE STAR CMA AS SIZE OF PING PONG BALL CMA AND AS

SIZE OF BASEBALL WHEN SEEN THROUGH THEODOLITE PD COLOR-METALLIC OR

SILVERY SMCLN 1 OBJECT SMCLN NO TRAIL CMA NO EXHAUST CMA SPEED EST

CMA 20 MPH AND CMA BY OBSERVER USING THEODOLITE CMA AT 45 MPH IN

RELATION TO MOVEMENT OF CLOUD SMCLN NEGATIVE SOUND SMCLN NO MANEUVERS

SMCLN TRAVELLED IN STRIGHT LINE ESTIMATED TOWARD NORTHWEST BY 8

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

FROM: (Originator)

COMDR ATIC

TO:

COMDR FEAF TOKYO JAPAN

INFO:

FROM: AFOIN-ATIAE-7-3-E

DATE-TIME GROUP

021930Z JULY 53

PRECEDENCE
FOR:

ACTION

INFORMATION

ROUTINE

☐ BOOK MESSAGE☐ ORIGINAL MESSAGE☐ MULTIPLE ADDRESS

CRYPTOPRECAUTION

☐ YES☒ NO

REFERS TO MESSAGE:

IDENTIFICATION

AX99871

IDENTIFICATION

[REDACTED]

ENCODED

Initials VC

Time 152332

Checked By [Signature]

UNCLASSIFIED

Reference basic FLYOBRPT AX99871 on unidentified object seen through theodolite Okinawa 211900I June 1953. Several questions arise in the analysis by ATIC on subject sighting. 1) Request estimate of azimuth and elevation readings from theodolite, including azimuth and elevation readings from both Naha and Kadena for possible triangulation. 2) Was theodolite at Naha or Kadena? 3) How many observers were at each place? 4) Your message states the object was viewed overhead, but from which point?

ATIC believes that local helicopter activity may account for the sighting. Request you investigate this possibility.

In reply cite Project Blue Book.

COORDINATION:

ATIAE-5 R. Olsson DATE 2 July '53

ATIAE Lt Olsson DATE 2 July 53

for Lt Col Johnston

ATIAE William H. [Signature] DATE 3 July 53

DRAFTER'S NAME (and signature, when required)

Lt R. M. Olsson/jos

SYMBOL

ATIAE-5

TELEPHONE

65365

RELEASING OFFICER'S SIGNATURE

[Signature]

OFFICIAL NAME

ROBERT C. BROWN, Major, USAF
Adjutant

PAGE 1 OF 1 PAGES

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DIR 5200.10

UNCLASSIFIED

1953 JUL 9

13: 6

NR 633 9 JULY 53

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C-1 ROUTINE

FM 22TH AF KADENA AB OKINAWA R I

TO COMDR ATIC WPAFB OHIO

COMDR FEAF TOKYO JAPAN ATTN: ATTIAA-2C

PARAPHRASE NOT REQUIRED. SEE CRYPTO-CENTER
BEFORE DECLASSIFYING

CITE DX12189INT.

REFURMSG 75959 DATED

AND PROJECT BLUEBOOK. RE QUESTIONS OF
FLY OB RPT AX99371: (1) NO TRIANGULATION POSSIBLE SINCE NO ANGLES
OF ELEVATION WERE TAKEN BY OBSERVERS USING THE ODOLITE. RE PARA 7:
IR-1-53. D/I HQS 20 AIRFORCE. DATED 27 JUNE CURR. (2) OBSERVATIONS
BY THEODOLITE MADE RYUKYUS WEATHER SERVICE STATION. NAHA. RE PARA 4;
IR-1-53 REFERRED TO ABOVE. (3) 6 OBSERVERS AT RYUKYUS WEATHER
SERVICE STATION. NAHA. THE OBSERVERS AT RYUKYUS WEATHER COMMUNICATION
STATION. NAHA AND 1 OBSERVER AT KADENA AIR FORCE BASE. OBJECT WAS
VIEWED OVERHEAD BY 8 OBSERVERS AT NAHA ONLY. 849 RE LOCAL HELICOPTER
ACTIVITYS; THIS OFFICE CONTACTED ALL UNITS POSSESSING HELICOPTERS;
NO HELICOPTERS AIRBORNE DURING PERIOD OF SIGHTING.

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Kadena, Okinawa

cy/

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COUNTRY Ryukyu Islands	REPORT NO. B-1-53	(LEAVE BLANK)
SUBJECT Unidentified Flying Object Report		
AREA REPORTED ON Ryukyu Island	FROM (Agency) D/I, Hq. 20th Air Force, APO 239	
DATE OF REPORT 27 June 1953	DATE OF INFORMATION 24 June 1953	EVALUATION C-3
PREPARED BY (Officer) Capt. Lawrence E. Randall Dir Current Intell, D/I 20th Air Force	SOURCE Ryukyu Weather Service, Naha, Okinawa Base Weather Service, KAB, Okinawa	
REFERENCES (Control number, directive, previous report, etc., as applicable) USAF BAFR 3A-15.1 AFL 200-5 dtd 29 Apr 52		

SUMMARY: (Enter concise summary of report. Give significance in final one-sentence paragraph. List inclosures at lower left. Begin text of report on AF Form 112-Part II.)

One object, spherical to star shaped was sighted both visually and through a theodolite by 9 Okinawan and Japanese weather observers on Okinawa from approximately 1900I to 1920I 21 June 1953.

The object, estimates of size ranging from a small star to a baseball, had no propulsion or exhaust trail but seemed to be traveling in a NW direction at an estimated speed of from 20 to 45 miles an hour at about 20,000 feet.

Although the object was described as being a silvery or metallic color, all observers discounted the possibility of it being a jet aircraft.

APPROVED, EVALUATION BY PREPARING OFFICER:

W. F. Wilkerson
W. F. WILKERSON
Major, USAF
Deputy for Intelligence

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2 INCL

(1) Map of Sightings

W. F. Wilkerson
AT 15 DIB

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DECLASSIFIED AFTER 12 YEARS
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AIRC 130376

AIR INTELLIGENCE INFORMATION REPORT

UNCLASSIFIED

FROM (Agency)

D/I Hq 20th Air Force, APO 239

REPORT NO.

IR 1-53

PAGE

1

OF

2

PAGES

1. One object, spherical to star-shaped, described as the size of an average star by one observer and about the size of a ping pong ball by others or about the size of a baseball when seen through a theodolite. The object was sighted from about 1900I to 1920I hours, Sunday, 21 June 1953. The object was described as being silvery or metallic colored with no exhaust trail, moving at an estimated speed of 20 miles per hour by observers seeing the object with the naked eye. Observers using theodolite estimated the object's speed to be about 45 miles per hour. They judged this speed in relation to the movement of the clouds at this time.

2. The object produced no sound and it performed no maneuvers. The object seemed to travel straight line estimated to be in a Northwest direction by 3 observers at Naha and toward the West-Southwest by one observer at Kadena.

3. Although the first sighting of unidentified object was around 1900I hours, 21 June 1953, this Headquarters was not notified of sighting until 23 June 1953. Upon notification this Headquarters immediately interrogated the nine observers of the unidentified object.

4. Three observers sighted the object visually and six observed the object both visually and by theodolite. Those who observed it by theodolite were from the Ryukyu Weather Service Station, Naha, Okinawa (26° 13'N; 127° 42' E). An Okinawan observer employed at Kadena Weather Station, Kadena Air Force Base (26° 21'N; 127° 46' E) was notified by telephone by the Ryukyu Weather Station of the presence of the object. Upon notification the Okinawan at Kadena observed the object for about two minutes.

5. The observers estimated the height of the object to be about 20,000' and moving from directly overhead to the Northwest, being obscured by cirrostratus clouds that were in the area at this time. Seven observers saw a pale moon but no stars were observed during observation of the object. All observers claimed to be familiar with Jet aircraft and ruled out the possibility of the object as a Jet. The only jet aircraft airborne locally at this time were two F-80s of the 26th Fighter Squadron doing acrobatics at about 15,000 feet 10 to 15 miles West South West of Naha observers. During this period the log of Okinawa Air Traffic Control indicated no other aircraft above 5,000' in this area. During this period logs of EW radar sites in the local area indicated no sightings of unidentified aircraft tracks. A radiosonde balloon was sent aloft locally at approximately 1800I but winds aloft carried the balloon eastward.

6. All nine observers were either Japanese or Okinawan weather observers with from 6 to 30 years experience in weather observing. Their estimated reliability was good and all seemed sincere during interrogation. No U.S. military personnel reported seeing this unidentified object.

7. The weather at the time of the sighting was as follows:

Kadena Weather Observation for 1756I was 4/10 cumulus clouds at 1500 feet and 3/10 cirrostratus clouds at estimated 20,000 feet. Surface winds at 15 miles per hour from SSW. Winds aloft were as follows:

5,000 ft	240°	18 Knots
10,000 ft	270°	16 Knots
20,000 ft	290°	12 Knots
25,000 ft	320°	11 Knots
30,000 ft	300°	19 Knots

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AIR INTELLIGENCE INFORMATION REPORT

FROM (Agency)	REPORT NO.	PAGE	2	OF	2	PAGES
D/I Hq 20th Air Force, APO 239	IR 1-53					

Kadena DAOB for 1809I indicated isothermal layer 600' thick between 4900' - 5500' MSL and a normal lapse rate above. No photographs or other physical evidences are available. No angles of elevation were taken by observers using the theodolite.

COMMENTS OF THE PREPARING OFFICER:

Validity of reported sighting appears doubtful because: (1) radar sites reported no track of unidentified object; (2) friendly pilots in general vicinity of sighting may have been mistaken for object while at high altitude and did not report any unusual sighting themselves; (3) radiosonde balloon aloft at this time, while moving eastward was subject to relatively light winds at high altitude; (4) no U S personnel reported seeing this object. However, sincerity during interrogation and experience (in observing weather phenomena, balloons, and aircraft) of so many skilled indigenous personnel requires that this sighting not be discounted.

Lawrence E. Randall
LAWRENCE E. RANDALL
Capt, USAF

COMMENTS OF APPROVING OFFICER:

This is second reported sighting of unidentified object in this vicinity during 1953. (Reference FLYOBRPT IR 1-53, Hq 6351st Air Base Wing dated 20 February 1953) Unidentified object cited in February report was tracked on radar scope as well as seen visually by U S jet aircraft crew.

W. F. W.
W. F. W.

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AIR INTELLIGENCE INFORMATION REPORT

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STAR-SHAPED UNIDENTIFIED
OBJECT MOVING DIRECTLY
OVERHEAD IN A NORTH WEST
DIRECTION



26° 21' N
127° 46' E

KADENA

26° 13' N
127° 46' E

NAHA

RADIOSONDE
BALLOON MOVED EAST
AFTER BEING RELEASED



2-F-80's AT 15,000 FT.
15 OR 20 MILES FROM
NAHA

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

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130376A

THE OHIO STATE UNIVERSITY

HOWARD L. BEVIS, President

COLUMBUS 10

EMERSON McMILLIN OBSERVATORY

21 July 1953

1st Lt. Robert Olsson
ATTC - Wright-Patterson AFB

Dear Lt.;

This is quite a batch coming back at you. I think the idea of being in readiness with a press release is a good idea. I should like to have Dr. Robinson's comments on our Pinchbottle cases. *Robertson*

In two cases here we are taking the liberty of sending out Form As, with an accompanying note stating that the sighting has been referred to us as having possible astronomical significance, and would they oblige us by filling out the report. If you have any objection to this procedure please let us know.

As to seeing you in the near future, I hope so too. Did you know I am sailing for Europe on August 26th. I'll send you a postcard from Paris! The project here will lie fallow, I'm afraid, during September, but we will attack these problems with great strength in October. Now to get on to business.

There appears to be only two possible pinchbottles in this last batch: The 21 June Okinawa and the 22 June Goose AFB. On both of these I should like to request a complete report and follow-up.

→ The Okinawa one may yet prove to be a balloon, though the evidence is against it. Object going against wind and object disappearing into cloud with relative velocity of 45 kts. I think the best thing to do is to wait for further data. I am asking Jen to needle both you and me on these follow-ups because there is no point in having follow-ups unless they are followed up!

The Goose AFB also needs follow-up with special attention to the 9 questions on our Form "Eye".

Now as to the others: we pass by with a smirk the little monkey man.

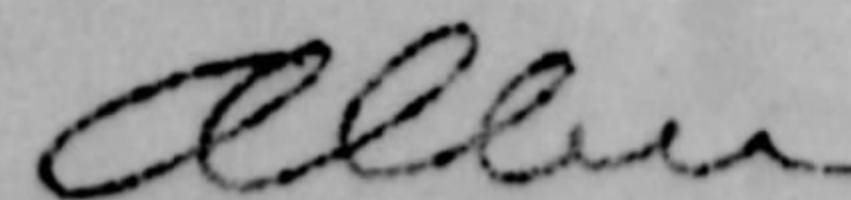
As to the Tinker Tower cases, how come such an epidemic of balloons? Can't they tell a balloon from a hole in the ground? Most interesting of the Tinker batch was July 3rd. Glad to see that a camera was used. What did the pictures look like? And on the July 6th case, I don't think much of the observer.

On the others, the notes we have made on the Form I just about cover the case.

We have some reference TWXs but we don't know to what they refer. They would probably be important only if they refer to our pinchbottle cases.

Please give our regards to Ed and indoctrinate him fully into the system we have developed. Any comments that either you or he have on this method of handling sightings would of course be appreciated.

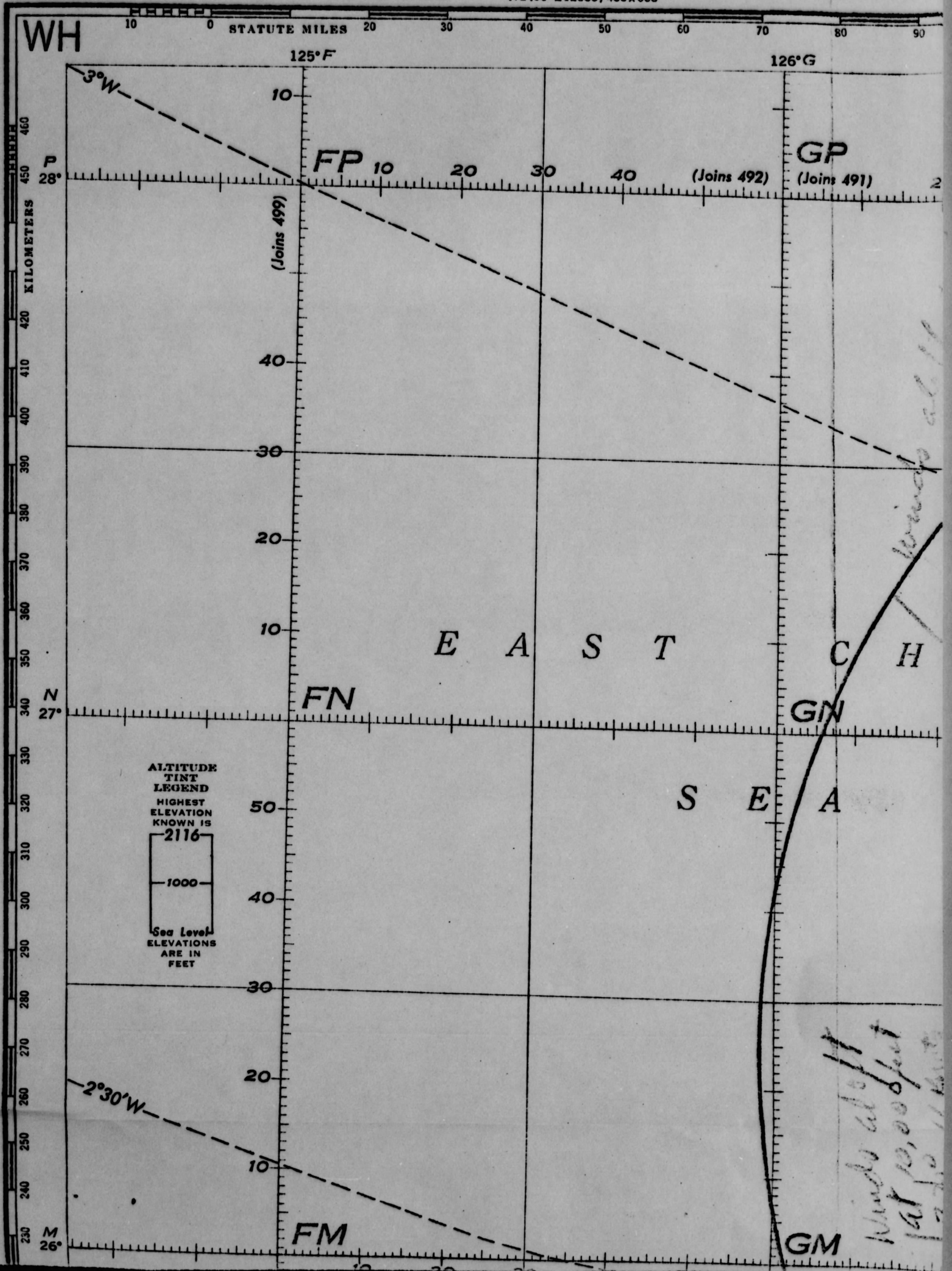
Cordially,

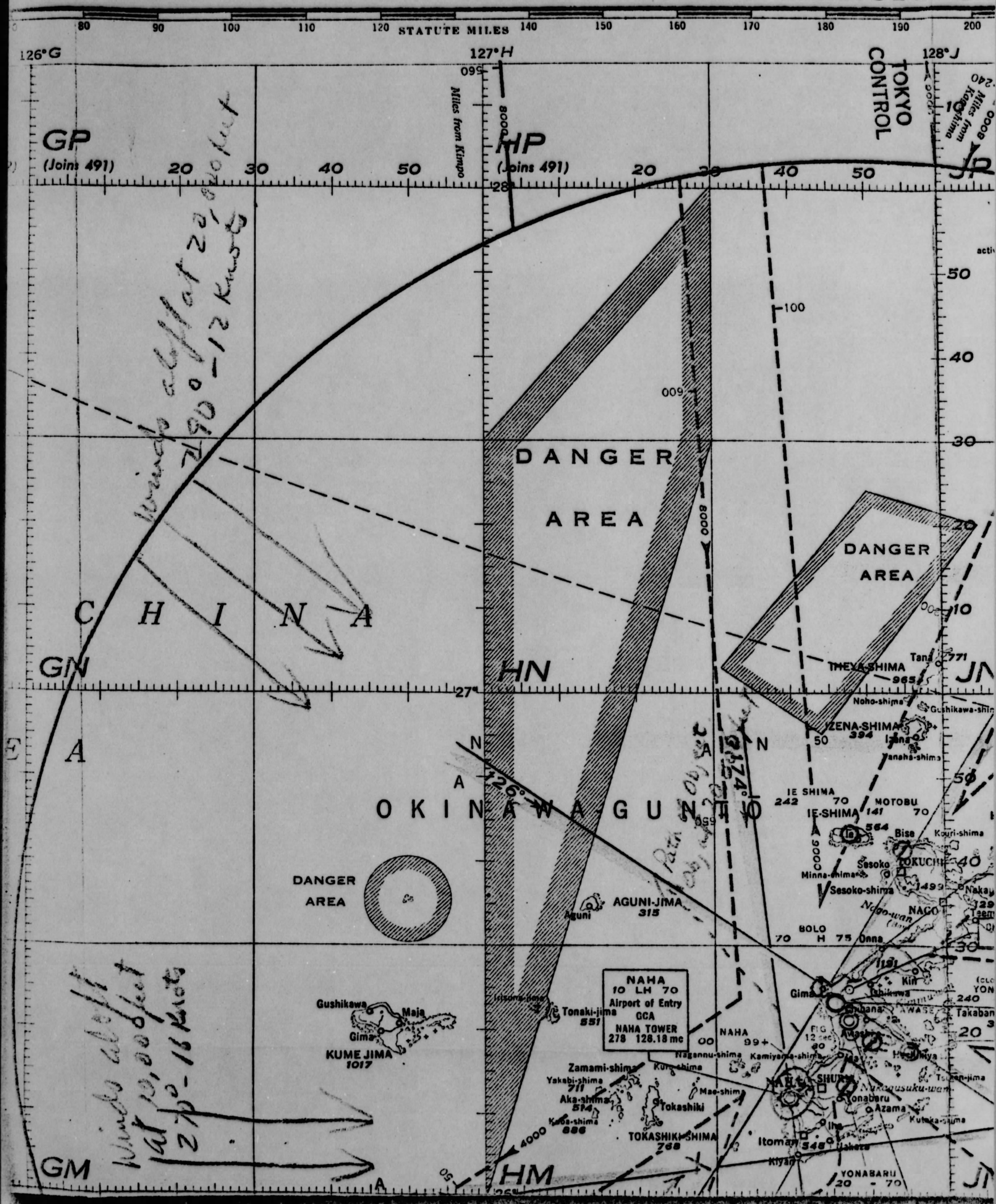
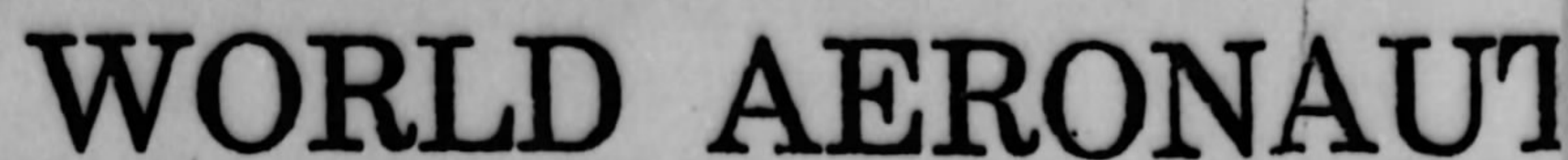


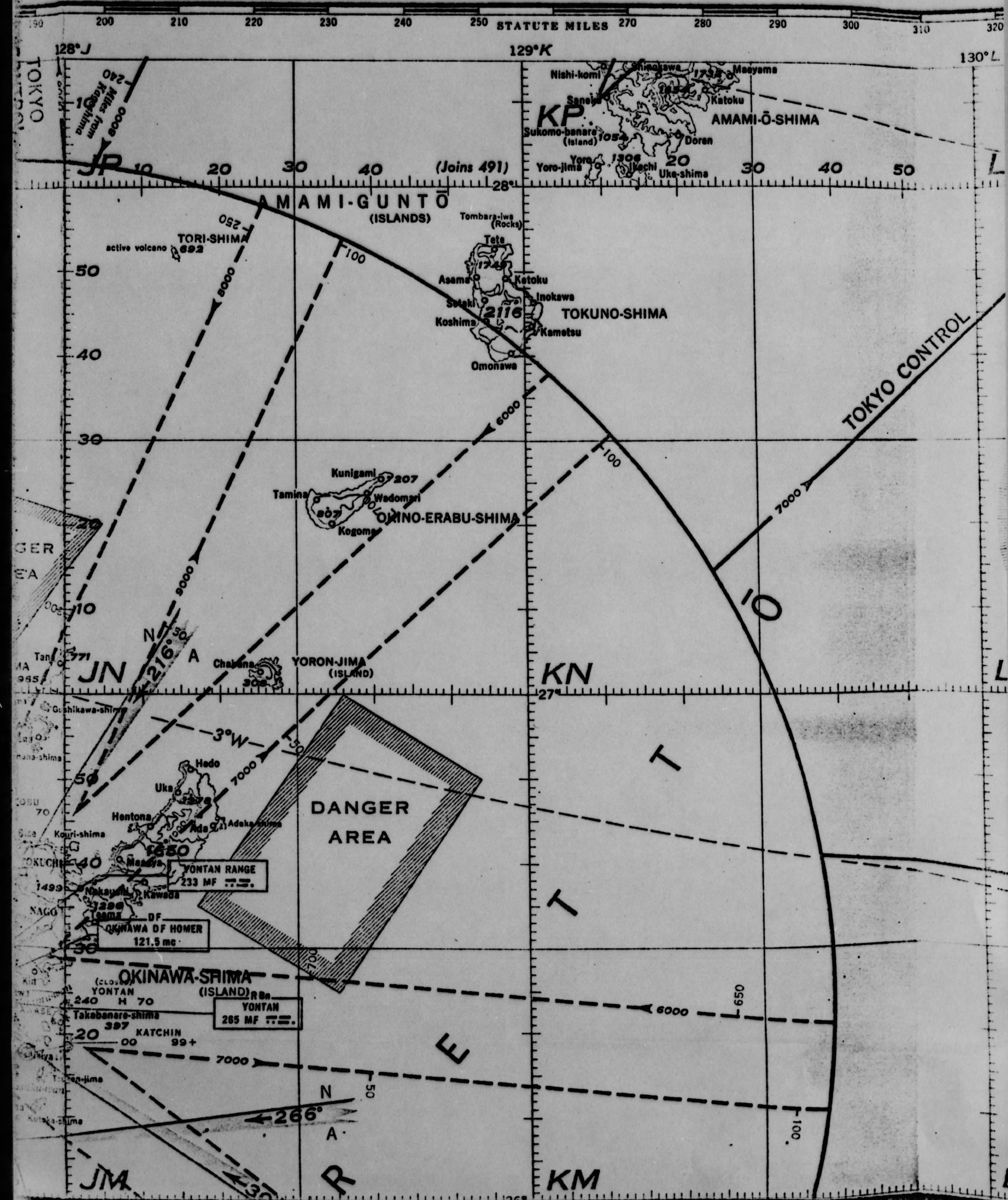
Allen

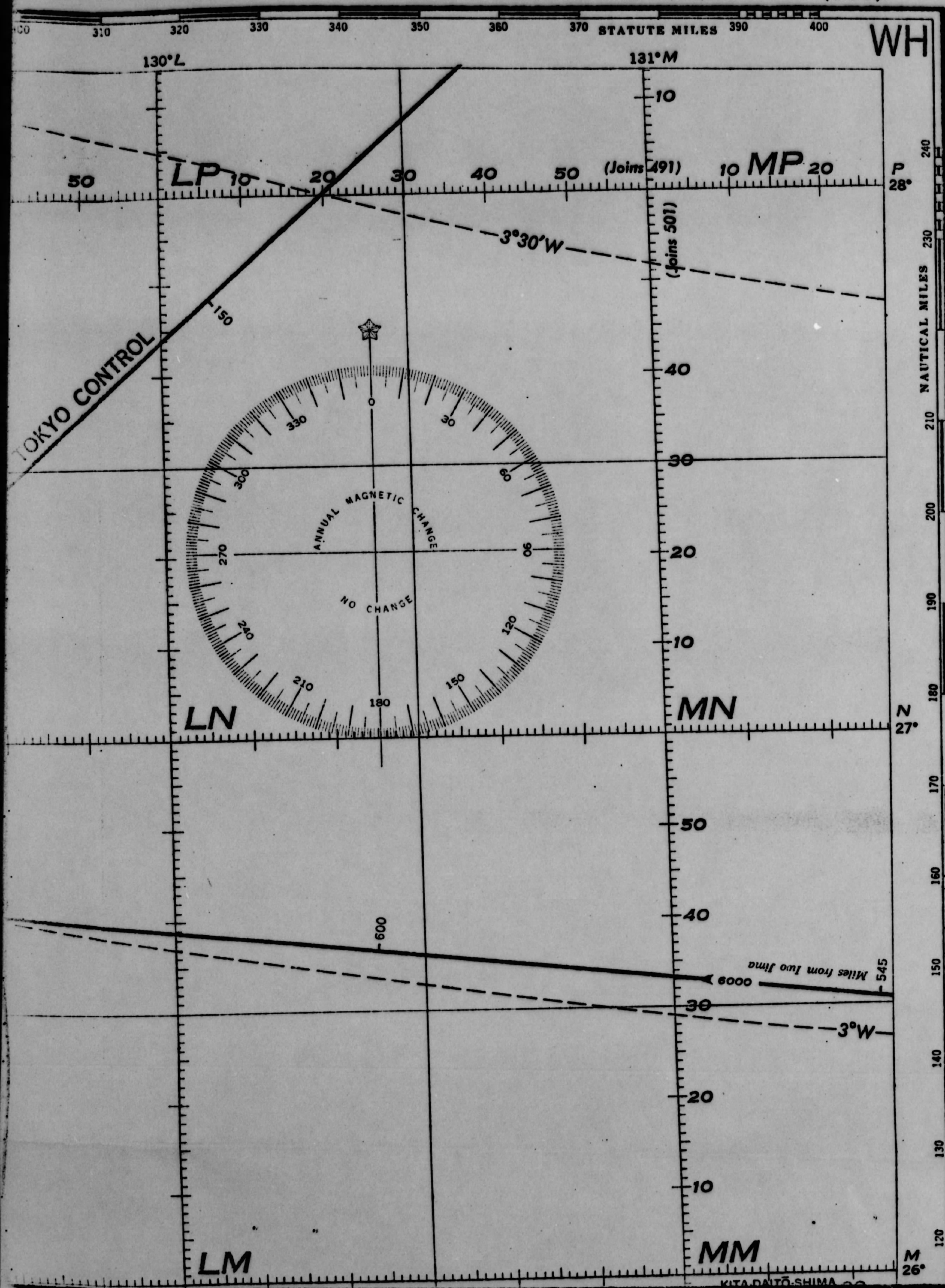
(500) OKINAWA ISLAND

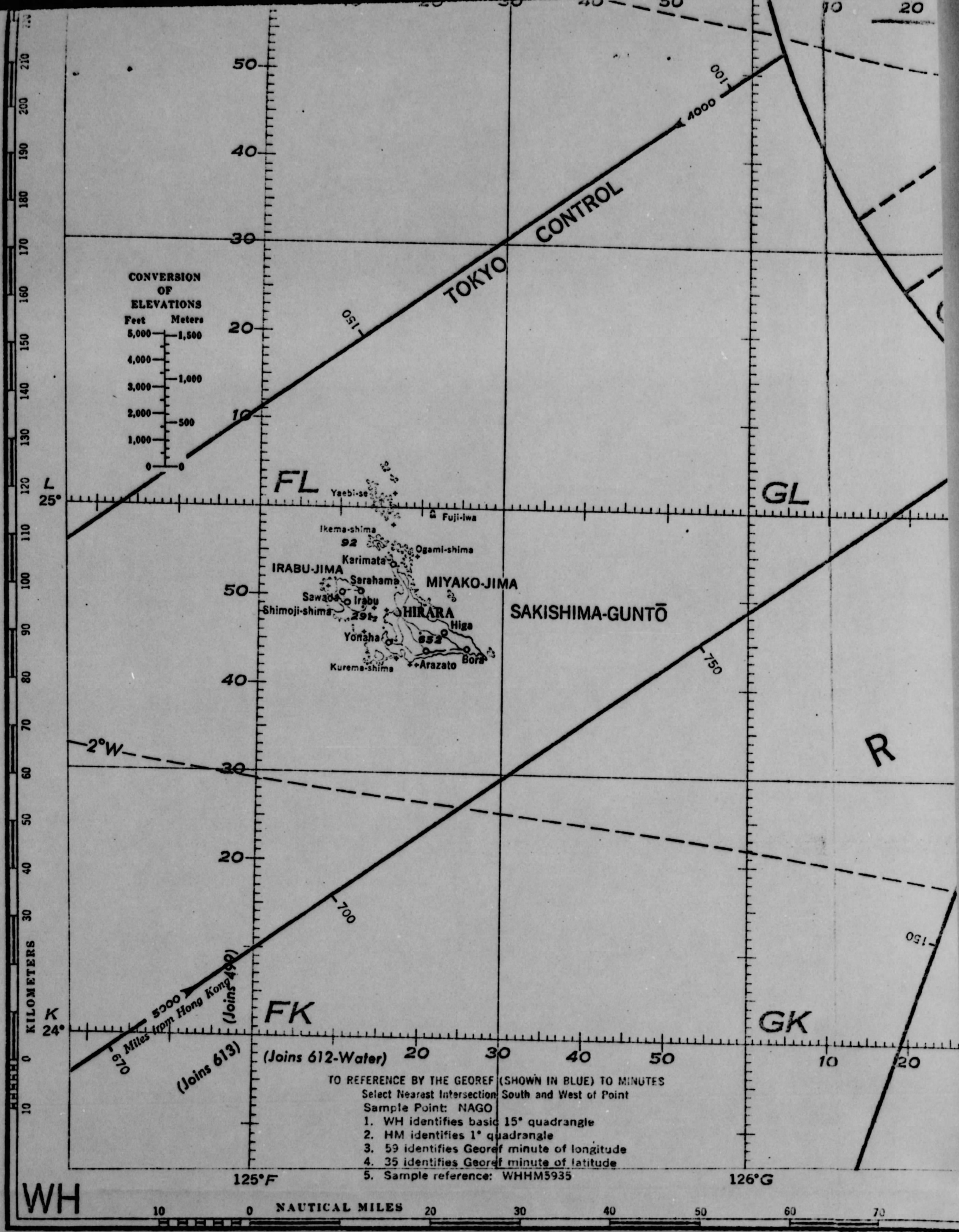
N 2400 - E 12500 / 400 x 600









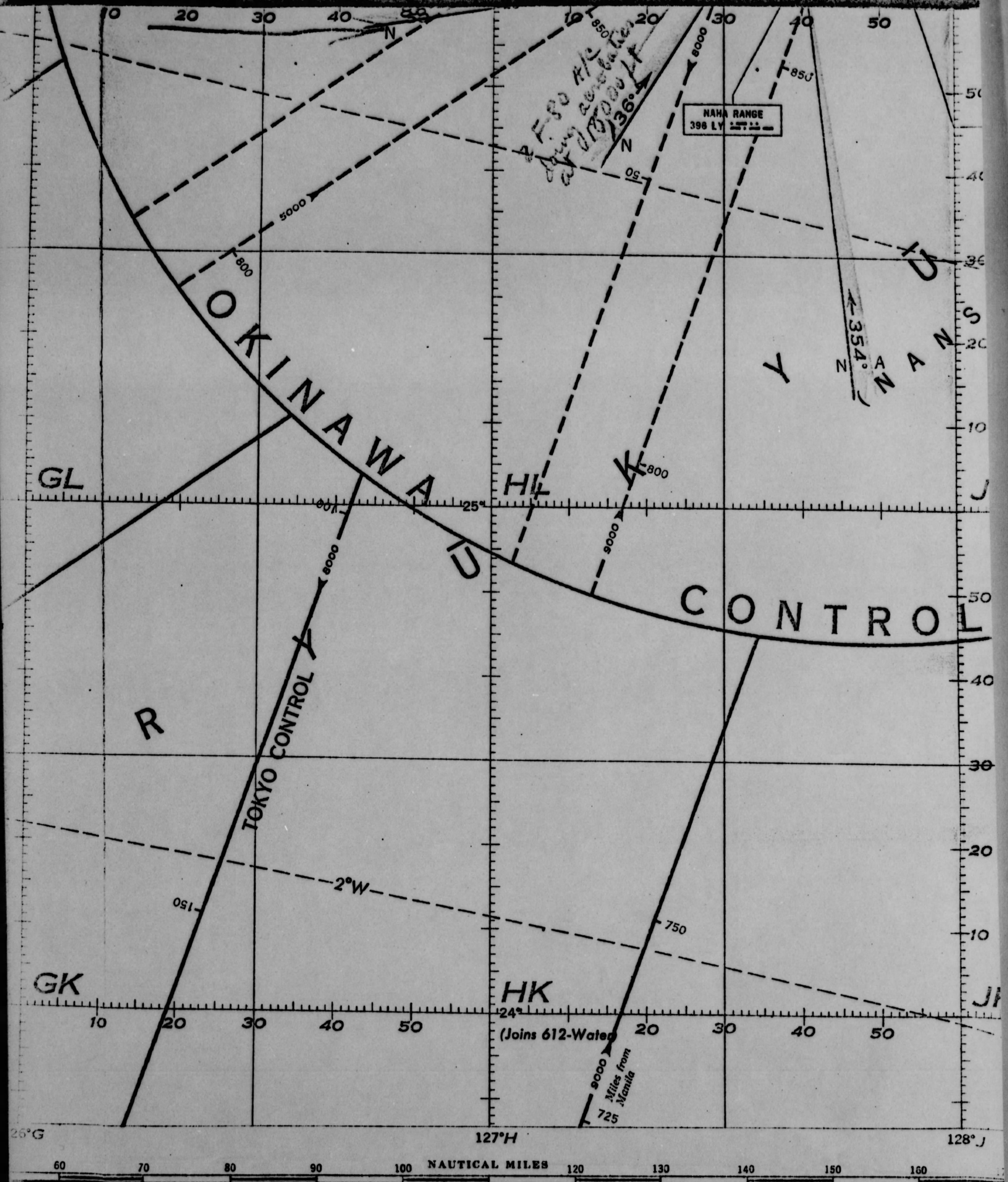


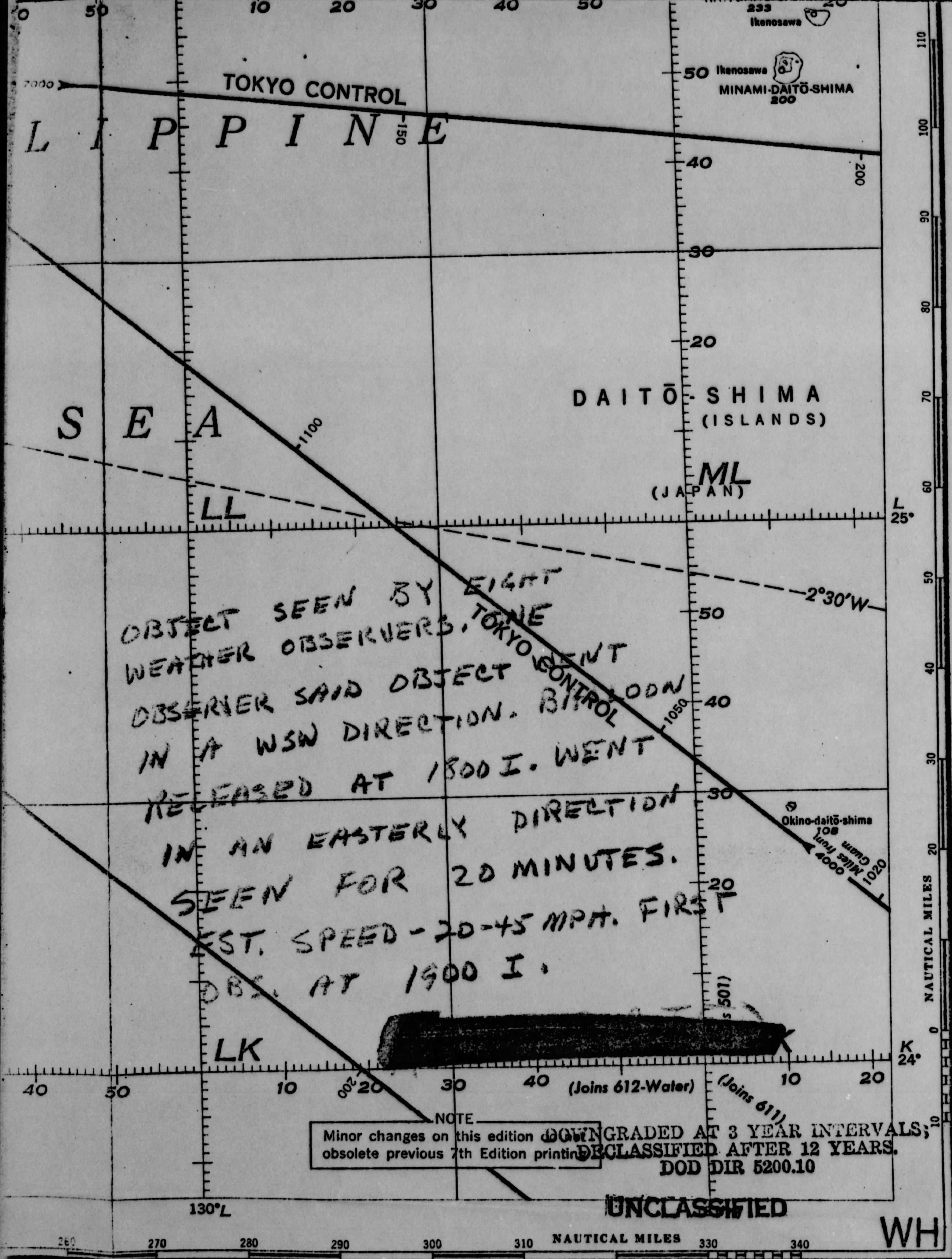
(500)

PUBLISHED BY THE AERONAUTICAL CHART SERVICE,
 U. S. AIR FORCE, WASHINGTON, D. C.
 FEBRUARY 1949 (ACS) Revised FEBRUARY 1951 (ACS)

BASE NO. 4R

Lines of





OP JM 4-51

N 2400-E 12500/400x600
SCALE 1:1,000,000
7th EDITION Revised
AIR INFO CURRENT APR 1951

OKINAWA ISLAND (500)
NANSEI ISLANDS

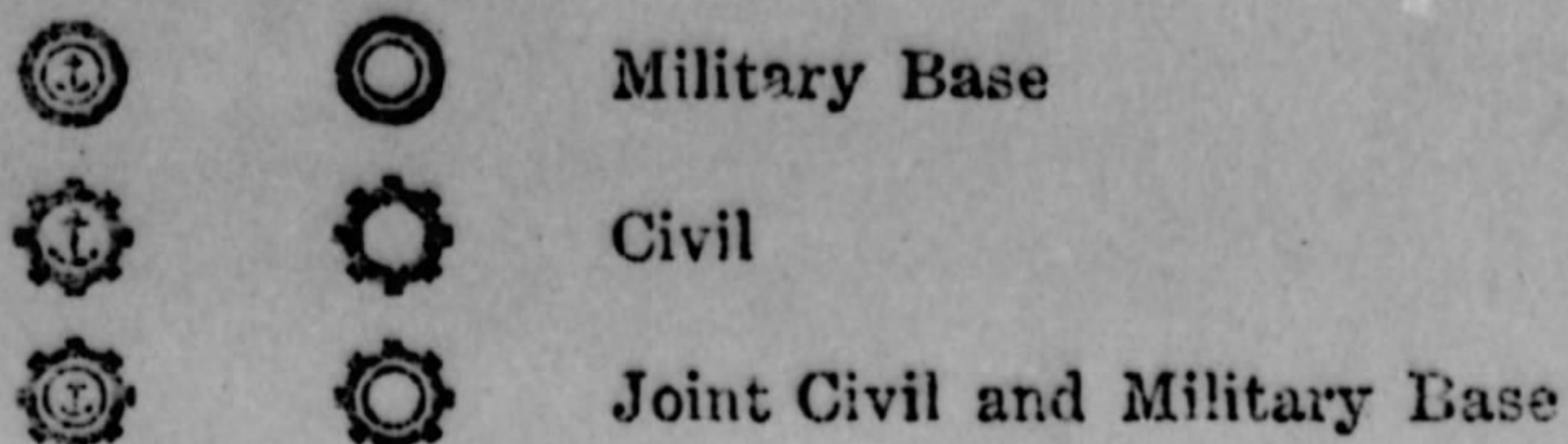
AERONAUTICAL SYMBOLS

AERODROMES

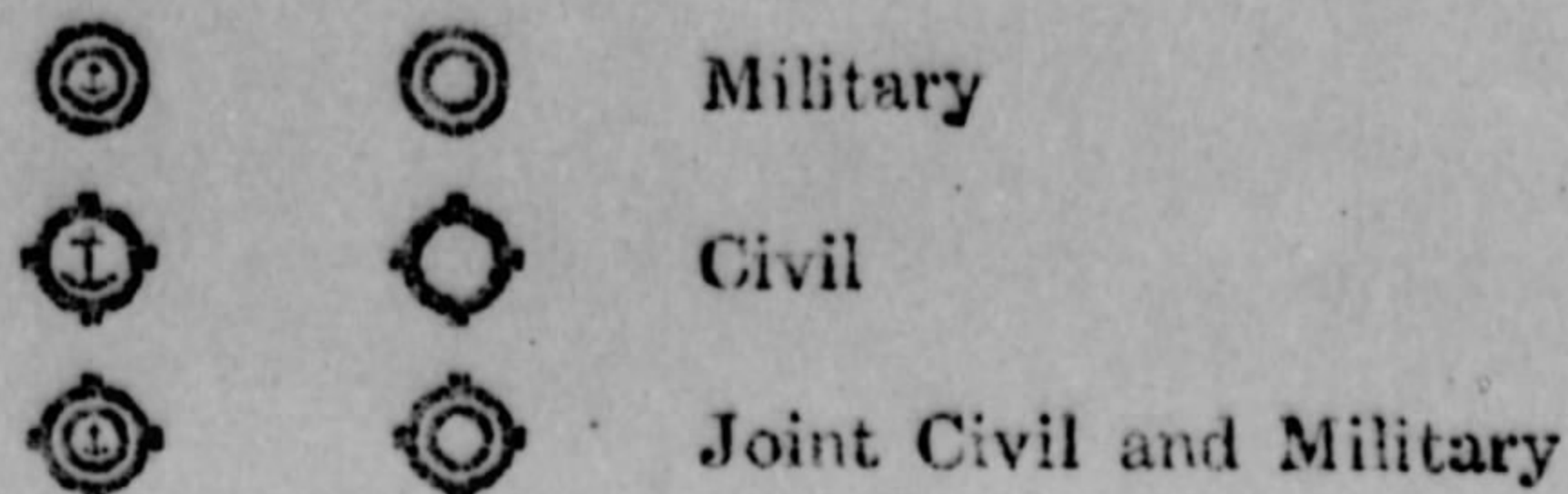
AIRPORTS—COMPLETE FACILITIES Refueling services, complete repairs, shelter, and (where applicable) passenger or cargo services and/or seaplane ramp with hauling-out facilities.

AIRFIELDS—LIMITED FACILITIES Refueling services for normal traffic and limited repair facilities.

SEAPLANE LANDPLANE



SEAPLANE LANDPLANE



LANDING GROUNDS and ANCHORAGES

- Emergency Landing Ground with Landing Strip — Very limited or no facilities or complete information not available
- Emergency Landing Ground — Very limited or no facilities or complete information not available
- Sheltered Anchorage — Very limited or no facilities

AIRFIELD DATA

- 300** Elevation in feet
- L** Minimum lighting; obstruction, boundary or runway lights, aeronautical light and lighted wind indicator
- H** Hard surface runway, normally all-weather
- S** Normally sheltered take-off area
- 60** Length of longest runway to nearest hundred feet

When specific information pertaining to airfield data is lacking, or unconfirmed, the respective character is replaced by a dash (-).

SKYVIEW
300 LH 60

TARANTO
3 LS 99

ASANSOL
300 -H 60

TARANTO
3 -- 99

AIR NAVIGATION LIGHTS

Numerals in italics indicate elevation above mean sea level.

Rotating or Oscillating Light.....110★

Rotating Light (With flashing code lights).....—..★

Rotating Light (With course lights and site number).....15★

Flashing Light.....★

Flashing Light (With code).....—..★

Obstruction Light.....★

Marine Light (Elevations of marine lights are above high water).....Occ WRG 92

Lightship.....★

F—Fixed Qk FI—Quick Flashing Occ—Occulting Gp—Group W—White B—Blue SEC—Sector
FI—Flashing I Qk FI—Interrupted Quick Flashing Alt—Alternating R—Red G—Green (u)—Unwatched sec—Second

Marine lights are white unless colors are indicated; alternating lights are red and white unless otherwise indicated.

MISCELLANEOUS

Mooring Mast.....

Dirigible Base.....

Prominent Transmission Line.....—T—T—

Ocean Station Vessel (Normal position).....

Lighted Obstruction.....★

Obstruction (Numerals in italics indicate elevation above sea level of obstruction top. Vertical numerals within parentheses indicate heights above ground.)

Line of Equal Magnetic Variation.....—4°E—

Visual Ground Sign.....

Town having Visual Ground Sign.....HOUSTON

High Explosives Area (Marked).....

High Explosives Area (Unmarked).....

Group Obstruction.....AA

1108
A
(259)

Radio Beacon
(With voice)

Radio Beacon
(Without voice)

Non-Directional Beacon
(With voice)

Non-Directional Beacon
(Without voice)

Marine Beacon

Radio Beacon
(With voice)

Radio Beacon
(Without voice)

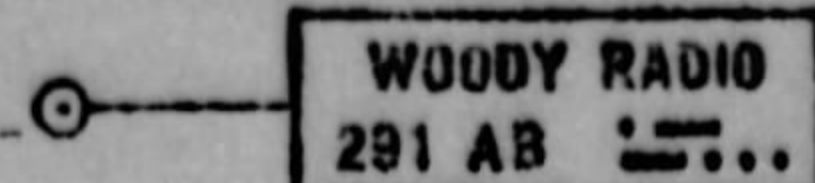
AIRPORT

AERONAUTICAL SYMBOLS

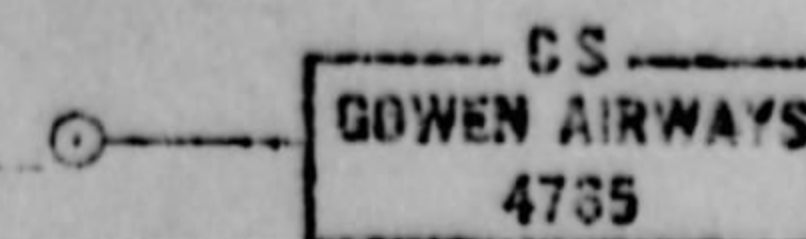
RADIO FACILITIES

All frequencies are kilocycles unless otherwise stated
Methods of indicating specific voice and CW calls are shown below

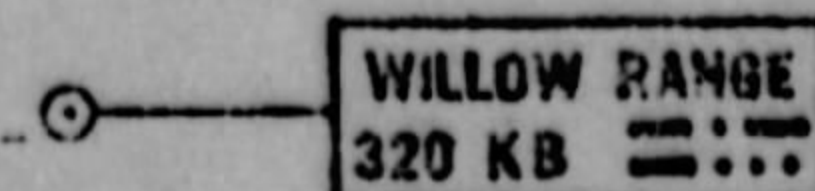
Radio Range
(With voice)



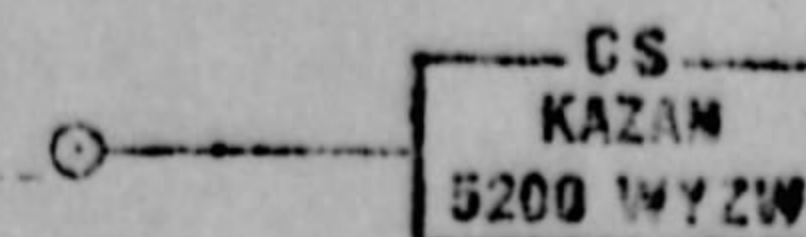
Radio Communication Station
(With voice)



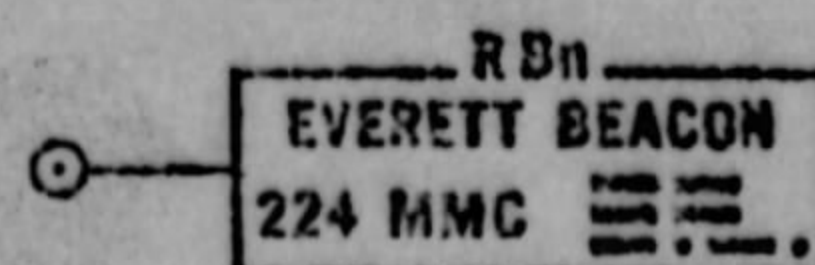
Radio Range
(Without voice)



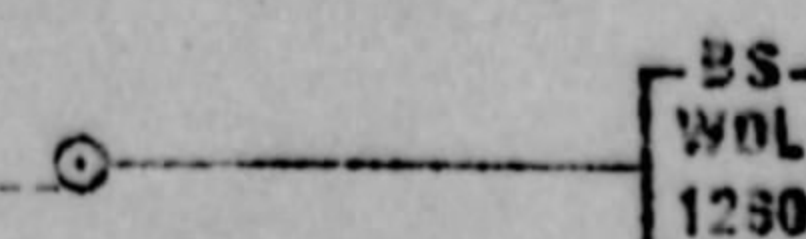
Radio Communication Station
(Without voice)



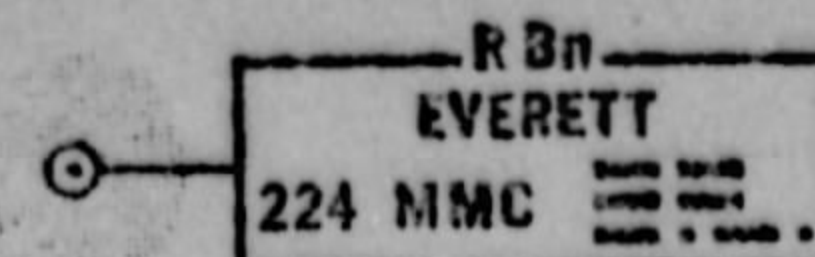
Non-Directional Radio Beacon
(With voice)



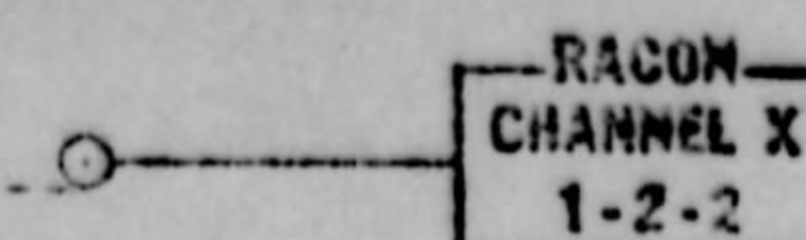
Radio Broadcasting Station



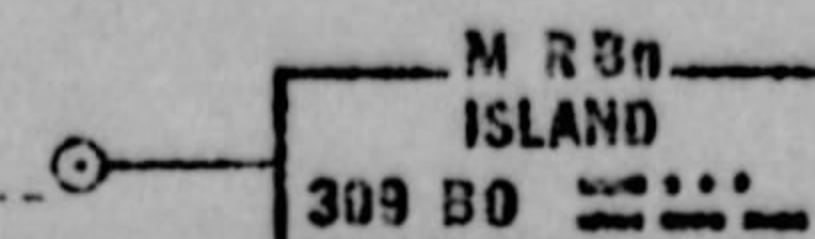
Non-Directional Radio Beacon
(Without voice)



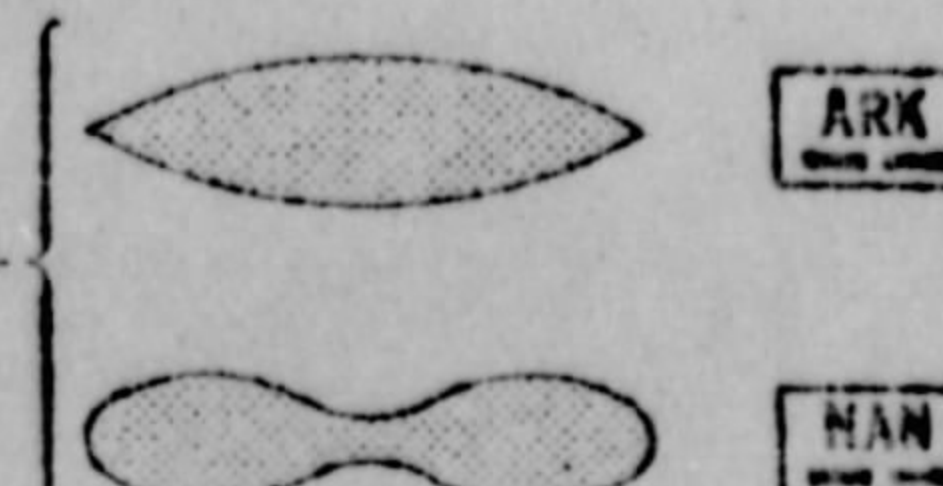
Radar Beacon (Racon)



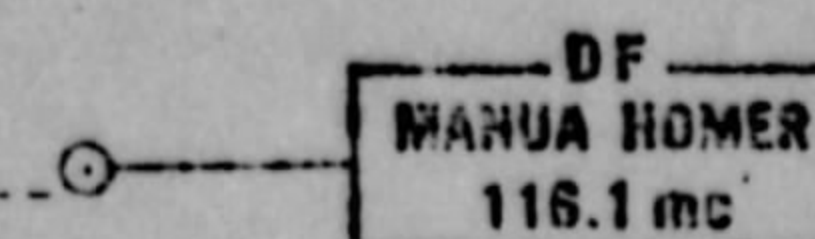
Marine Radio Beacon



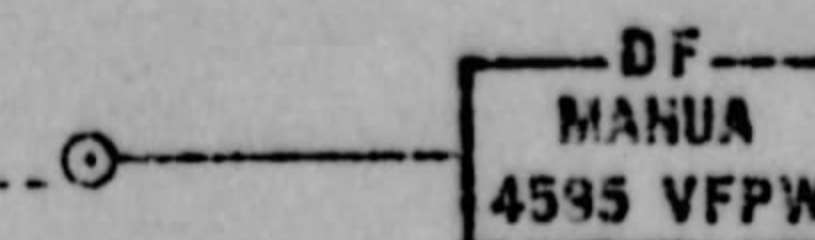
Radio Fan Marker Beacons



Radio Direction Finder
(With voice)



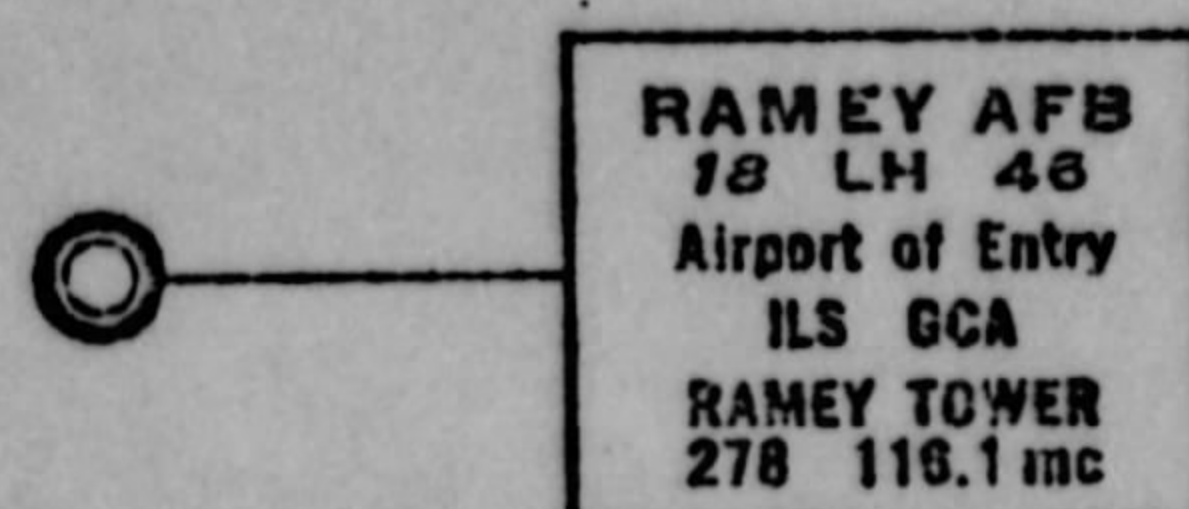
Radio Direction Finder
(Without voice)



International Boundary
(Closed to passage of aircraft except through air corridor)

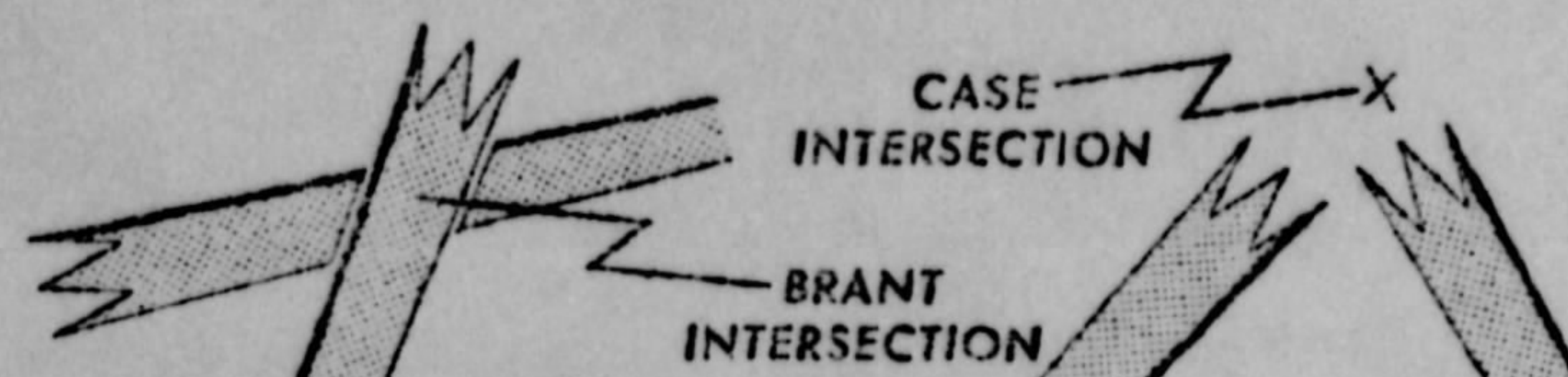


AIRCRAFT LANDING FACILITY INFORMATION

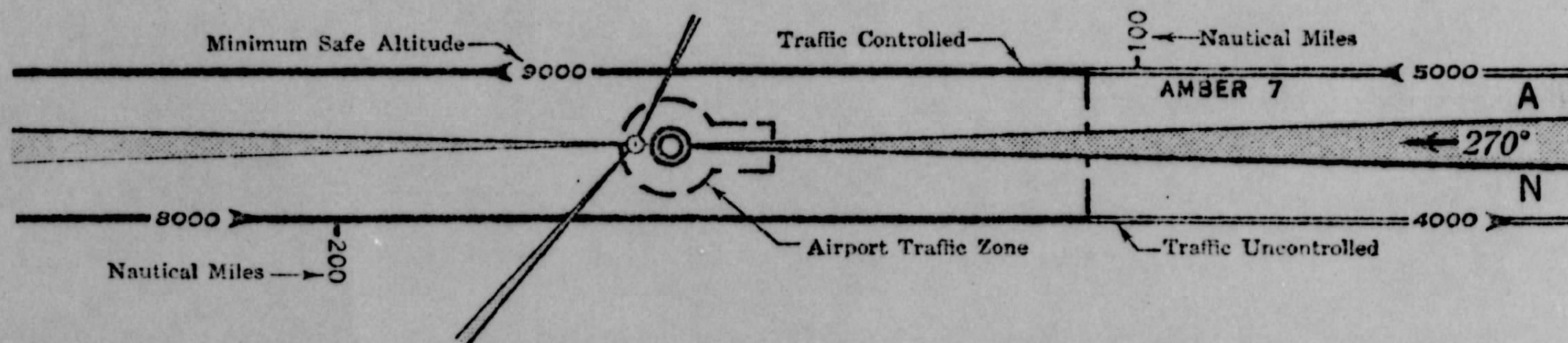


RADIO FIXES

Reporting point.



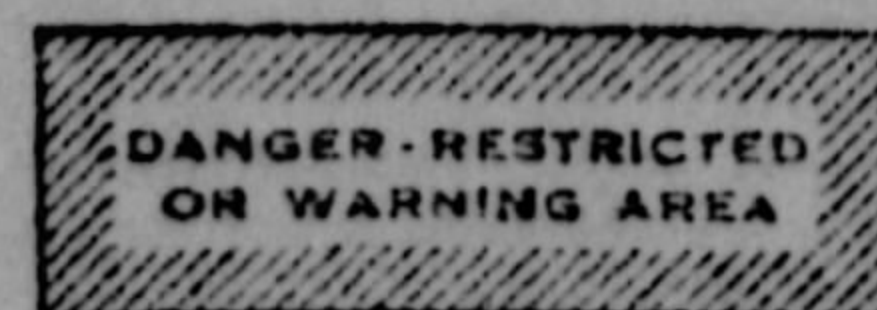
AIRWAYS & RADIO RANGE (AURAL)



AIRSPACE RESTRICTED AREAS



Prohibited Area — Flight of aircraft prohibited except by specific authority of using agency



Danger, Restricted or Warning Area — Invisible hazards to air navigation (Specific authority required prior to entry of Danger Area)



Caution Area — Visible hazards to Air Navigation (Avoid if practical)

TOPOGRAPHICAL SYMBOLS

CITIES and TOWNS

Metropolitan Areas	NEW YORK	
Large Cities	RICHMOND	
Cities	ARLINGTON	
Small Cities	SANGATE	
Large Towns	Corville	
Towns & Villages	Arcola	

HIGHWAYS and ROADS

Dual Lane Highways	
Primary Roads	
Secondary Roads	
Trails	
U. S. Road Markers	
National, State or Provincial Road Markers	
Road Names	ALASKA HIGHWAY

RELIEF FEATURES

Contours	Reliable	
	Depression	
	Approximate	
Bluffs, Cliffs & Escarpments		
	Sand	
	Dunes	
	Areas	
	Ridges	

HYDROGRAPHIC FEATURES

Swamps & Marshes	
Mud & Tidal Flats (Exposed at low tide)	
Fathom Line (Dots uniformly spaced) (1 fathom, 6 ft. below mean low water level)	
Danger Line (Dots grouped in pairs) (2 fathoms, 12 ft. below mean low water level)	
Charted Rocks	
Shoals, Sand Bars, etc. (Exposed at low tide)	
Springs	
Wells & Water Holes	
Reefs, Coral & Rocky Ledges (Awash at low tide)	
Streams & Rivers	Perennial
	Intermittent
	Probable or Unsurveyed
	Braided
Intermittent Lakes	
Drainage Ditches	
Canals	In use
	Abandoned
Flood Marked Areas	
Sand Deposits in river bed	
Dry Washes	
Glaciers	

CULTURAL and MISCELLANEOUS

Power Transmission Lines	
Telephone & Telegraph Lines	
Dams	
Elevations (In feet)	Highest in a General Area (Highest on chart is devoid of tint)
	Spot
Mines and Quarries	
Mountain Passes	
Lookout Towers (Elevation is base of tower) (Height above ground in magenta)	
Forts	
Pipelines	
Race Tracks	
Stranded Wrecks	
Boundaries	International
	State & Provincial*
	*The same as International symbol on older style charts
Railroads	Abandoned or Under Construction
	Single Track
	Double Track
	Sidings & Spurs
	Overpass
	Underpass
Bridges	Railroad
	Highway
Tunnels	Railroad
	Highway

AERONAUTICAL CHART SUPPLY

(Ref: AF Reg. 67-3)

1. Aeronautical charts, maps and publications distributed by the Aeronautical Chart Service are indexed or listed in the current edition of the USAF "Catalog of Aeronautical Charts and Related Publications."

2. Requisitioning.

a. Outside Continental United States:

(1) USAF activities are to submit requisitions thru the supply channels designated by the Theater Commander for maintenance and distribution of aeronautical charts and maps.

(2) Theater supply facilities are to submit requisitions for replenishment of stocks of aeronautical charts and maps thru channels to Commanding Officer, Hq, Aeronautical Chart Service, Washington, 25, D.C.

b. Within Continental United States: Requisitions from USAF activities within Continental United States are to be submitted to the Aeronautical Chart Service Store, St. Louis, Mo. Except when emanating from an Air Force, Wing, or Command Headquarters, requisitions are to bear the signature or approval by indorsement of the Base or Station Operations Officer. Quantities of charts and maps requested are to be such as to assure the maintenance of a 30-day supply at all times but not to exceed a 60-day supply.

3. Requirements for Special Purpose Maps and Charts.

a. Maps and charts for special purposes, specific missions, and also those maps and charts published by other government agencies, which are not listed in the principal types of aeronautical charts, in the current edition of the USAF "Catalog of Aeronautical Charts and Related Publications," should be requisitioned from Commanding Officer, Hq, Aeronautical Chart Service, Washington, 25, D.C. Charts will be furnished, if available, when sufficiently identified in requisitions as to name or number, scale, projection and publisher.

b. Information regarding cloth reproduction of certain selected aeronautical charts and maps may be obtained on request to Commanding Officer, Hq, Aeronautical Chart Service, Washington, 25, D.C.

4. Obsolete Charts.

Aeronautical charts rendered obsolete-for-air by a new edition, when not practicable to correct for conformity with new edition, are to be salvaged if feasible, or else destroyed. Disposition by salvage or destruction is to be made in accordance with provisions of AFR 205-1. New editions of charts available are announced in the Aeronautical Chart Service Bulletin published semimonthly.

5. Aeronautical Charts for Civilian Use.

The U. S. Coast and Geodetic Survey, Department of Commerce, Washington, 25, D.C., is responsible for the sale and distribution of aeronautical charts required for civilian use. Inquiries from United States civilians regarding price, coverage, distribution, etc., should be submitted directly to that agency.

.....MAKE EXTRA FOLD HERE TO RETURN TO HQQRS.. ACS.....

FROM _____

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300

OFFICIAL BUSINESS
PERMIT NO. 1034

To:
Commanding Officer
Hq, Aeronautical Chart Service
Washington, 25, D.C.

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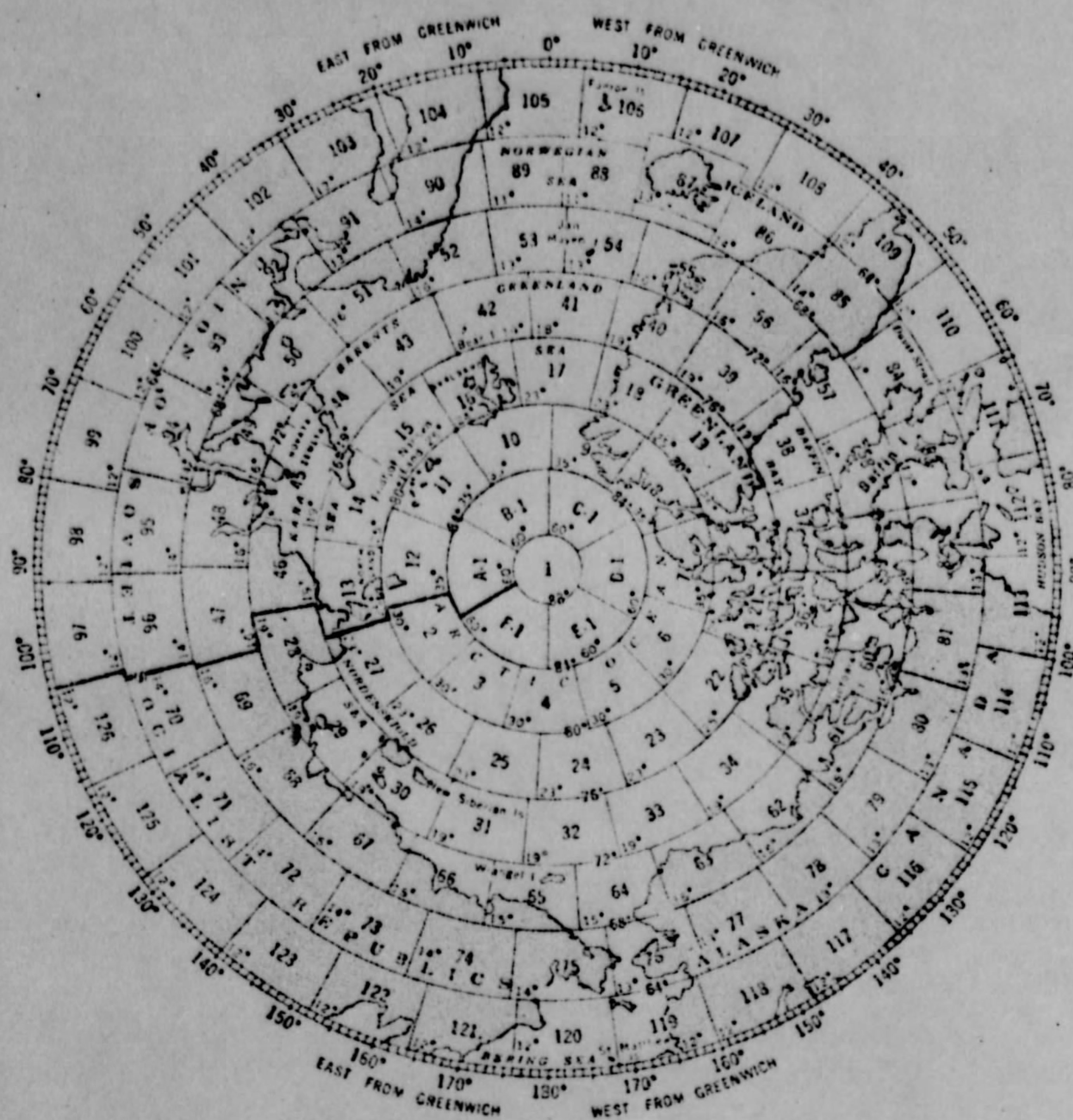
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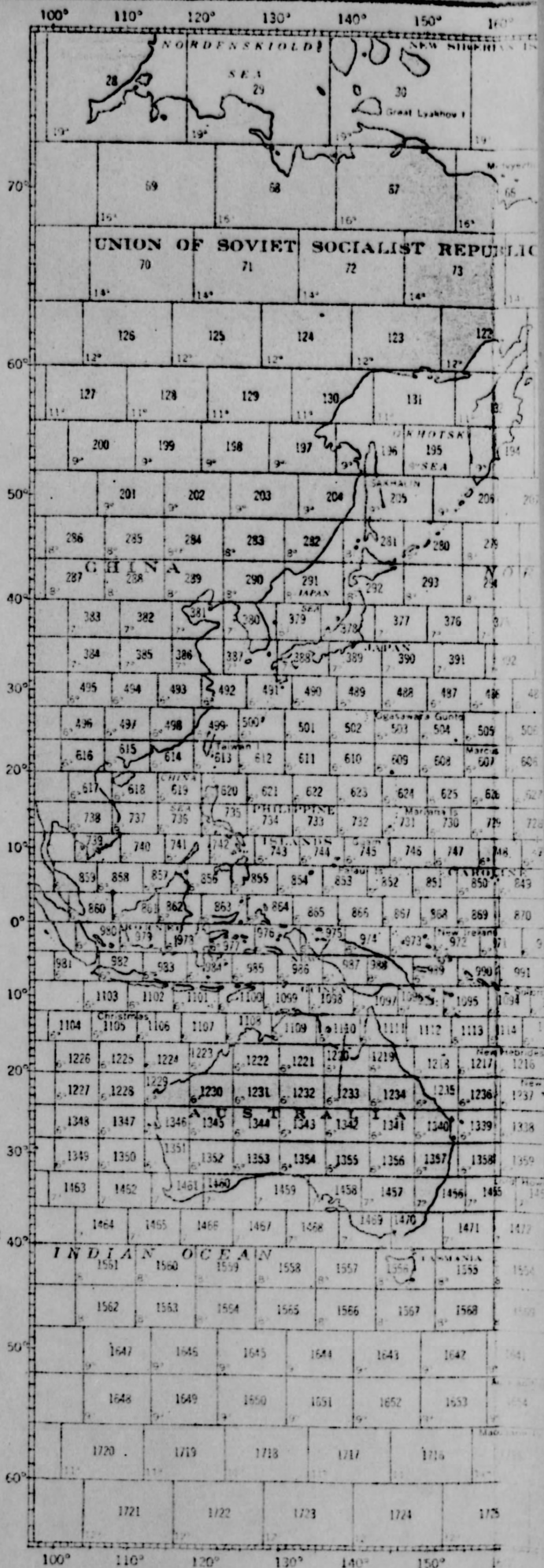
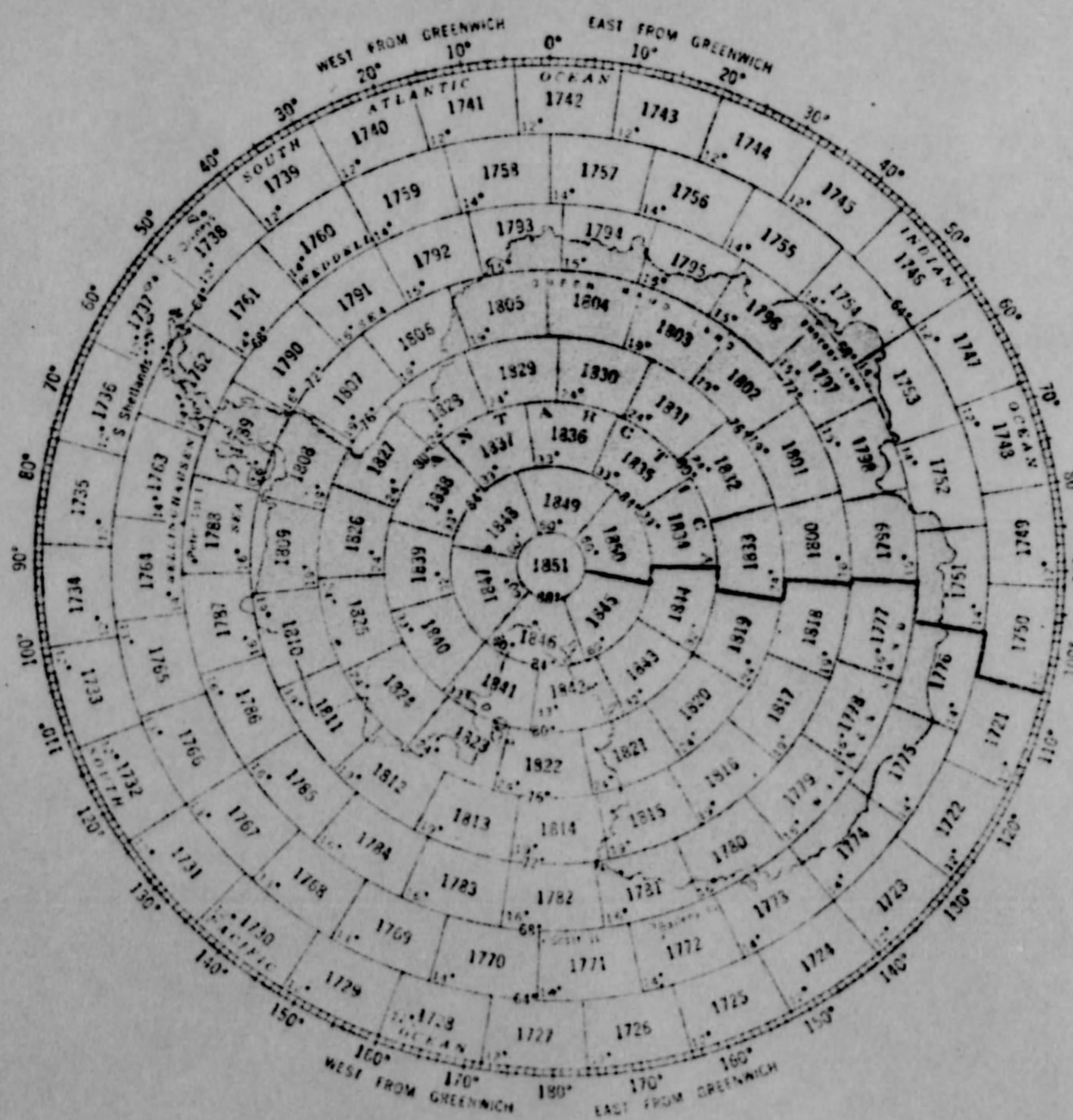
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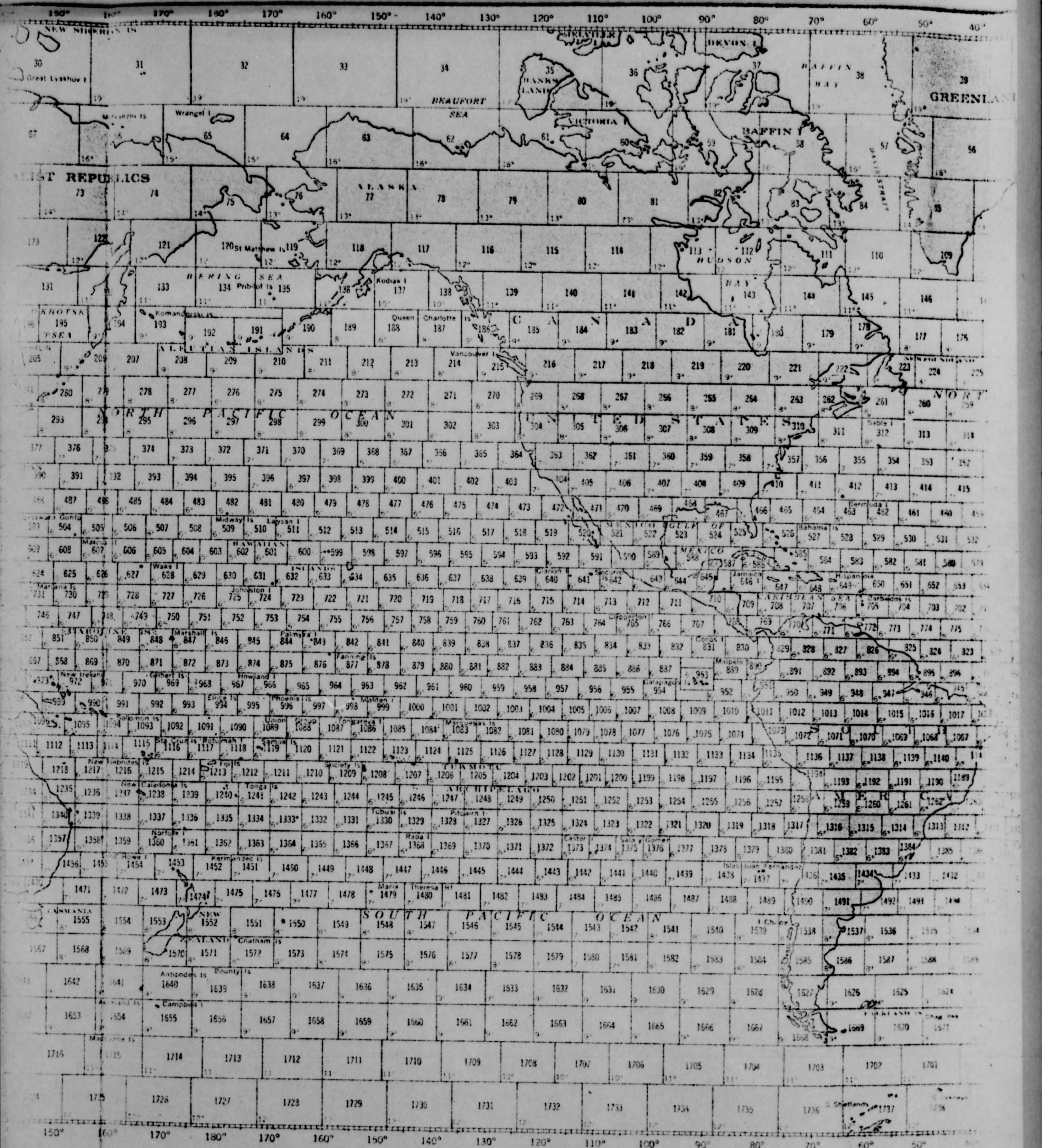
STAPLE HERE

NORTH POLAR AREA

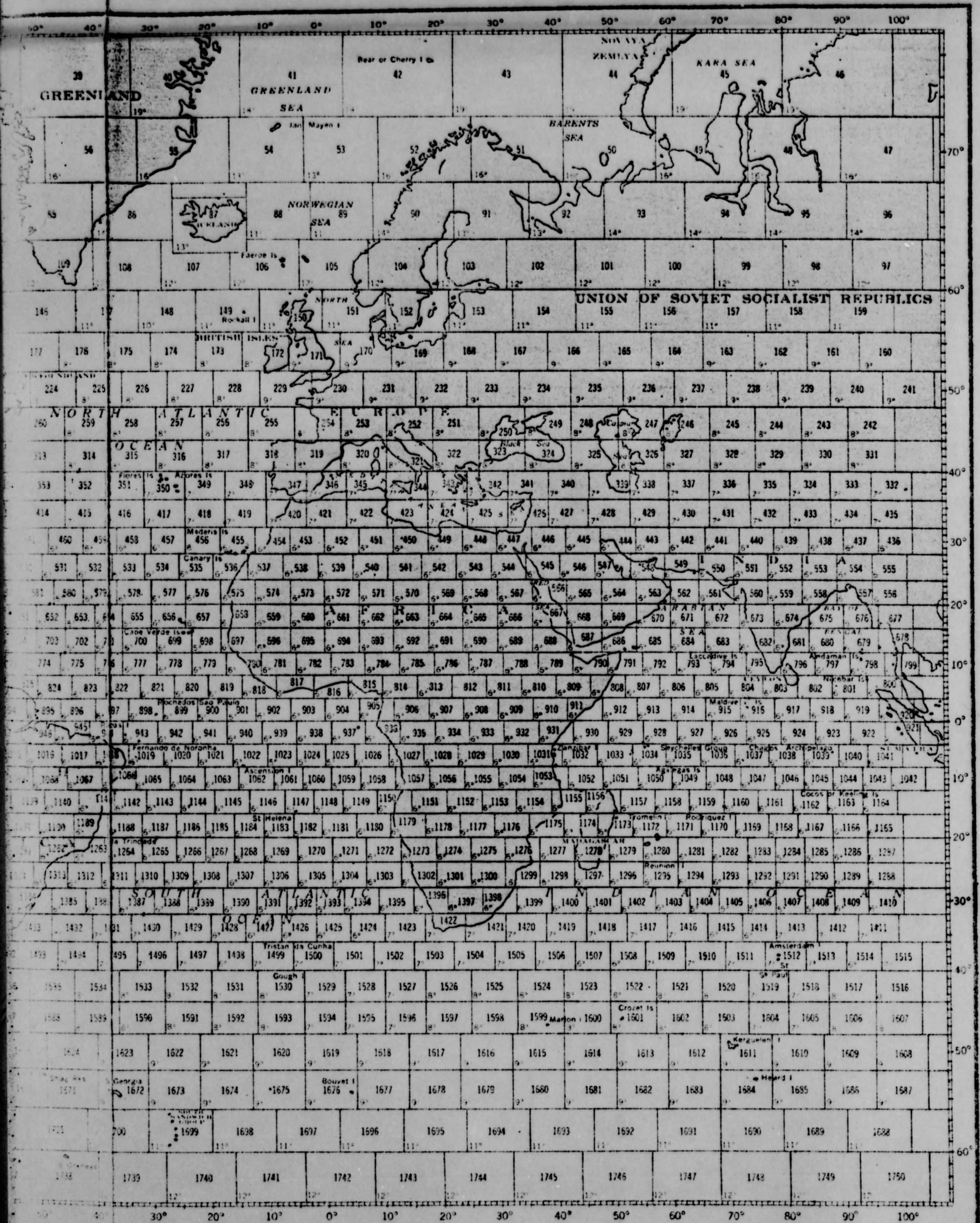


SOUTH POLAR AREA





WORLD AERONAUTICAL CHART INDEX
Scale of Series 1:1,000,000



CORRECTION INSTRUCTIONS

1. The Aeronautical Chart Service is making every effort to furnish the user with accurate charts. The user will materially assist in this effort by marking corrections of aeronautical information, drainage and cultural features (roads, canals, power lines, etc.) on the face of the chart, on an overlay of the area, or under "Remarks" below. In reporting elevation corrections, state method used by observer in making the determination.

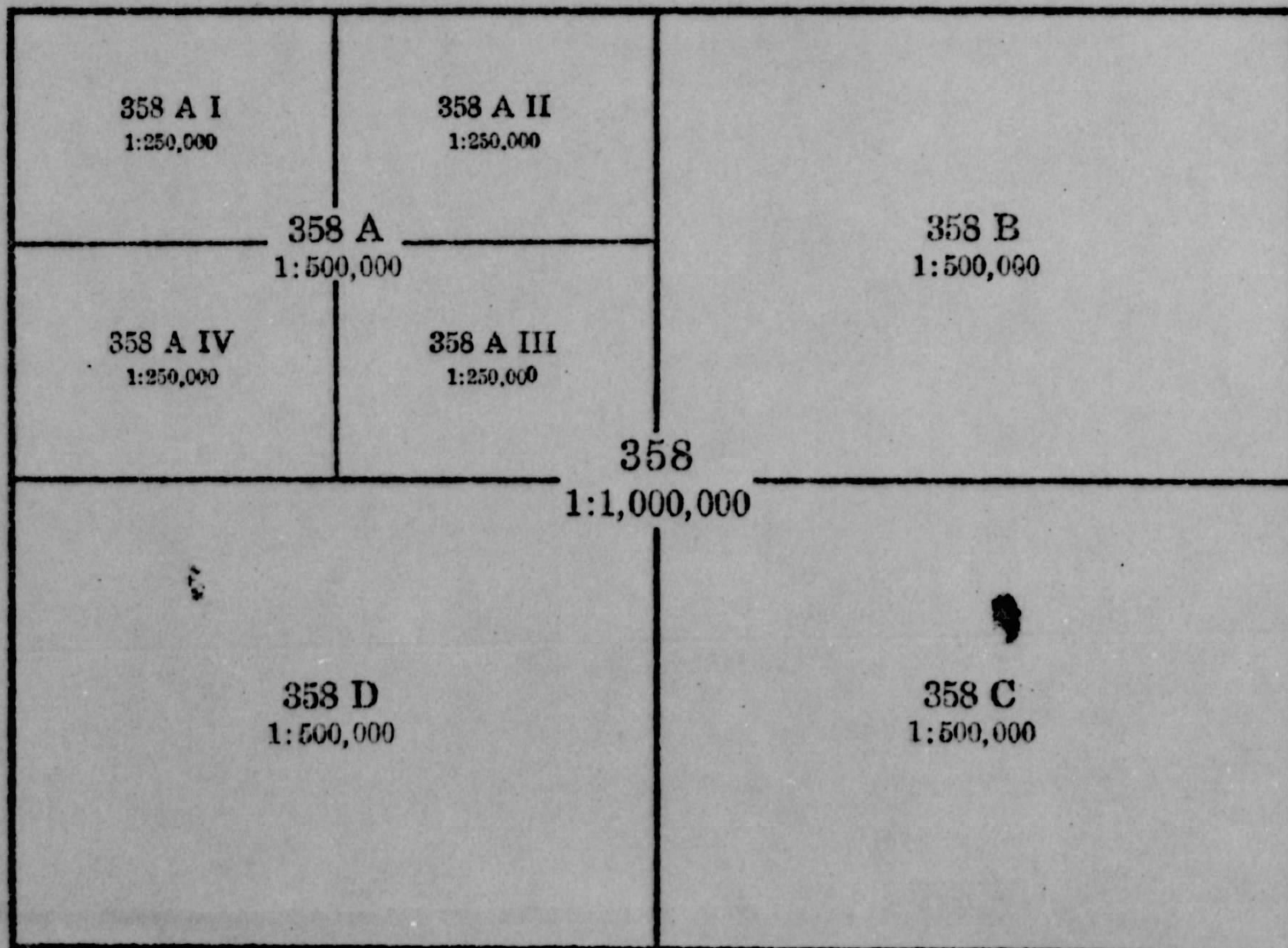
2. The corrected chart shall be forwarded to Commanding Officer, Hq. Aeronautical Chart Service, Washington, 25, D.C., in accordance with established security regulations. When security regulations permit mailing an unsealed chart, the following instructions for use of the mailing frank and the forwarding address on this back-up are to be followed:

- Mark correction on face of chart or under "Remarks" below.
- Fold chart along regular fold lines, but with back out.
- Make an extra fold along dotted line and staple at points so marked.
- Fill in the return address and drop the chart in any U.S. mail box.

3. If chart cannot be mailed without wrapping, it shall be placed in a diplomatic pouch or wrapped and transmitted in accordance with existing security regulations.

Remarks: _____

INTERCHART RELATIONSHIP



Each chart is a component section of 1:1,000,000 World Aeronautical Chart Series, and is indexed within the series as indicated on diagram.

AIRPORT
services, co-
cable) pass
ramp with

SEAPLANE



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or

Rotating

Rotating

Rotating

Flashing

F-- Fixed
Fl-- Flashing

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Dirigible

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Obstructio

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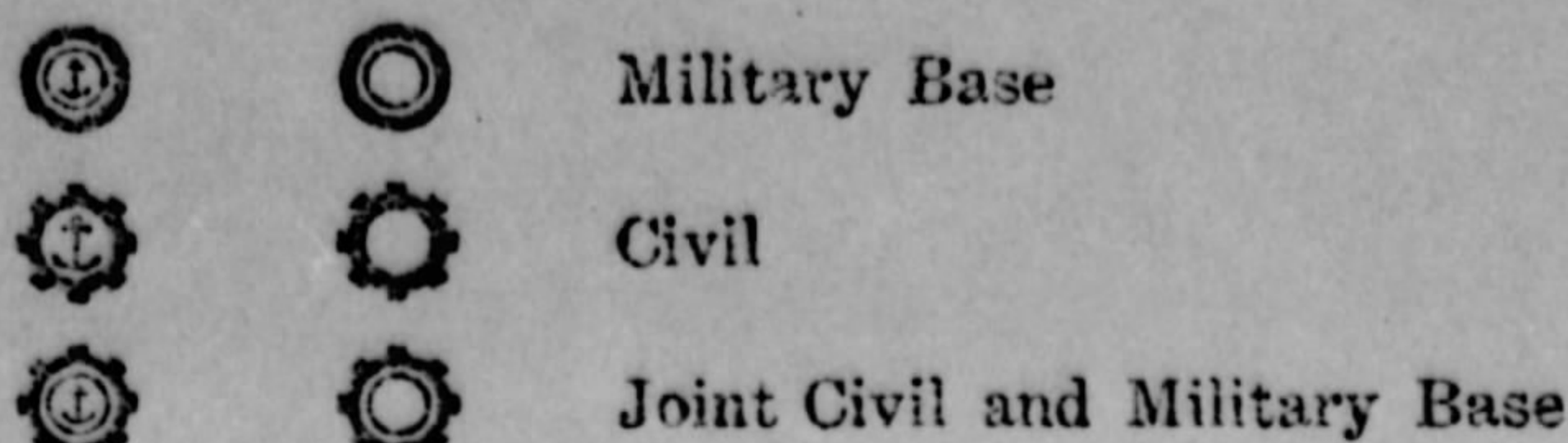
AERONAUTICAL SYMBOLS

AERODROMES

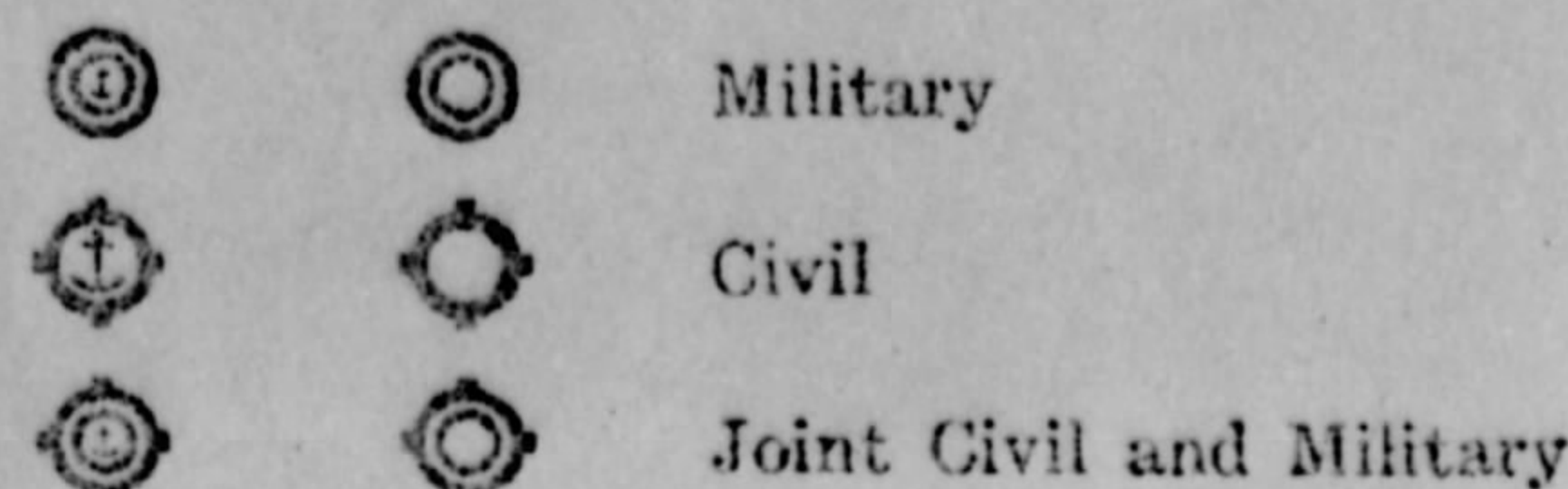
AIRPORTS—COMPLETE FACILITIES Refueling services, complete repairs, shelter, and (where applicable) passenger or cargo services and/or seaplane ramp with hauling-out facilities.

AIRFIELDS—LIMITED FACILITIES Refueling services for normal traffic and limited repair facilities.

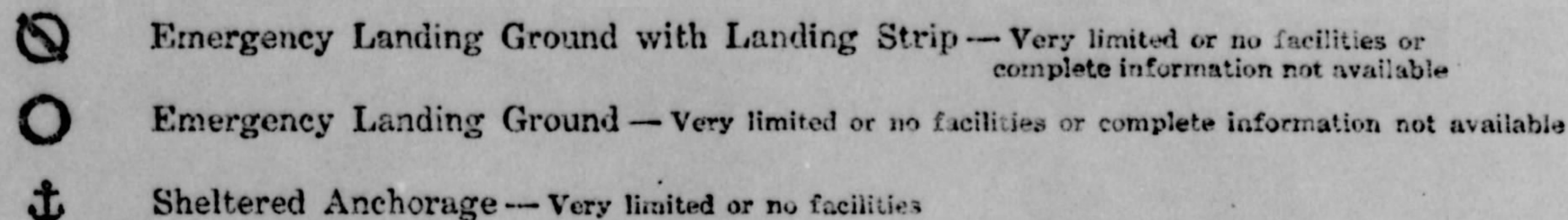
SEAPLANE LANDPLANE



SEAPLANE LANDPLANE

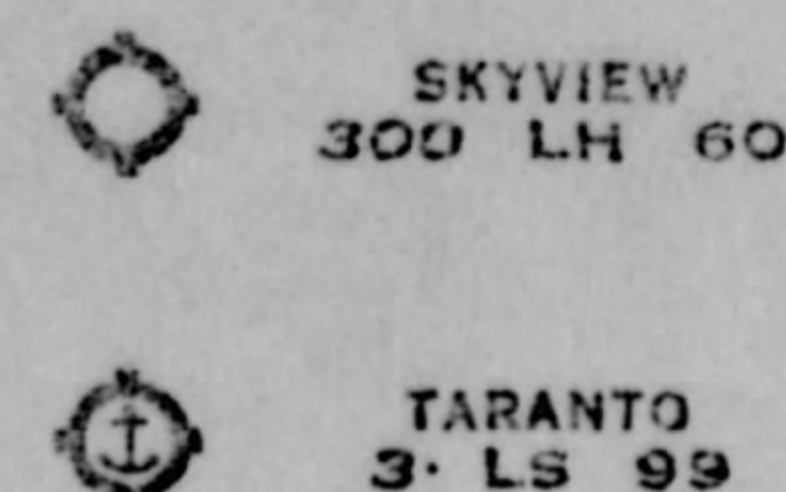


LANDING GROUNDS and ANCHORAGES



AIRFIELD DATA

300 Elevation in feet
L Minimum lighting; obstruction, boundary or runway lights, aeronautical light and lighted wind indicator
H Hard surface runway, normally all-weather
S Normally sheltered take-off area
60 Length of longest runway to nearest hundred feet

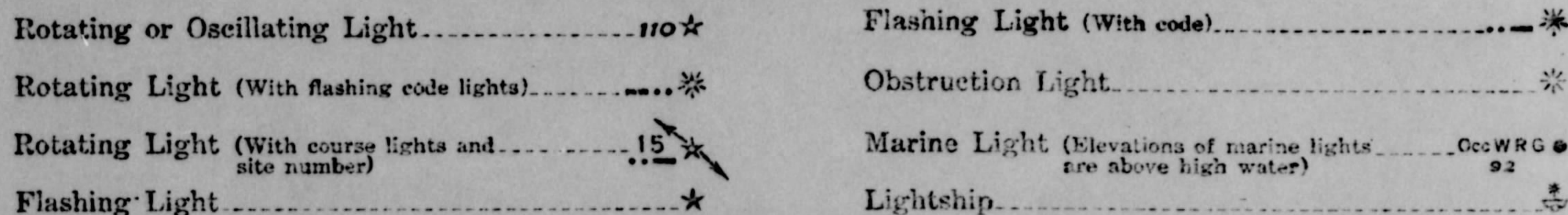


When specific information pertaining to airfield data is lacking, or unconfirmed, the respective character is replaced by a dash (-).

ASANSOL 300 -H 60 TARANTO 3 -- 99

AIR NAVIGATION LIGHTS

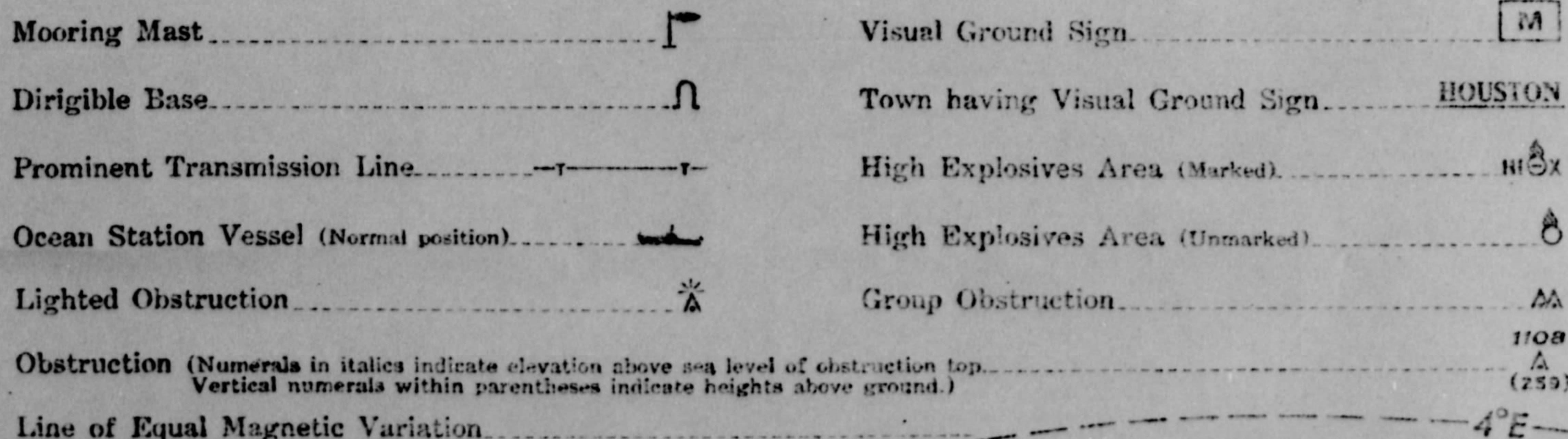
Numerals in italics indicate elevation above mean sea level.



F—Fixed Qk Fl—Quick Flashing Occ—Occulting Gp—Group W—White B—Blue SEC—Sector
Fl—Flashing I Qk Fl—Interrupted Quick Flashing Alt—Alternating R—Red G—Green (U)—Unwatched sec—Second

Marine lights are white unless colors are indicated; alternating lights are red and white unless otherwise indicated.

MISCELLANEOUS

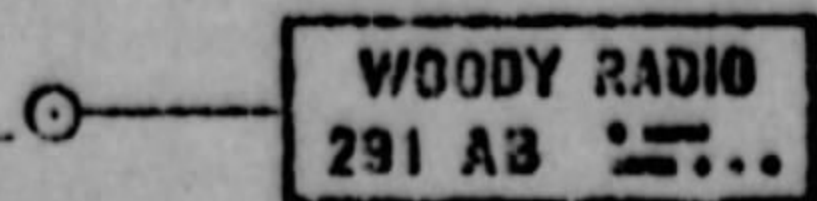


AERONAUTICAL SYMBOLS

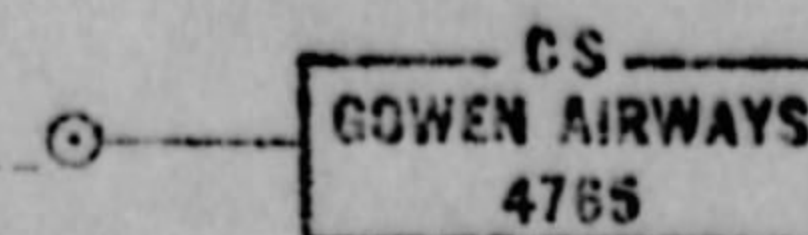
RADIO FACILITIES

All frequencies are kilocycles unless otherwise stated
Methods of indicating specific voice and CW calls are shown below

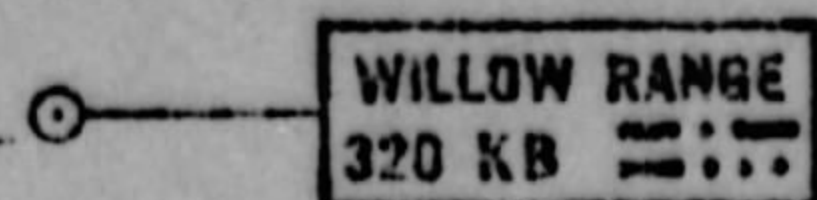
Radio Range
(With voice)



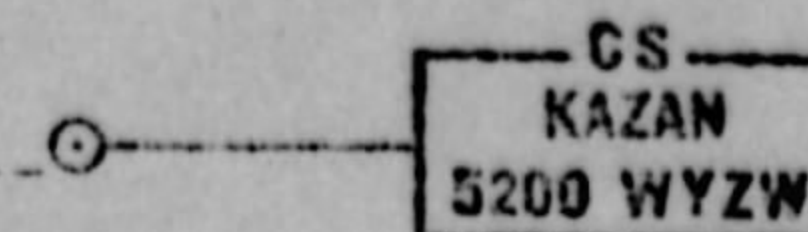
Radio Communication Station
(With voice)



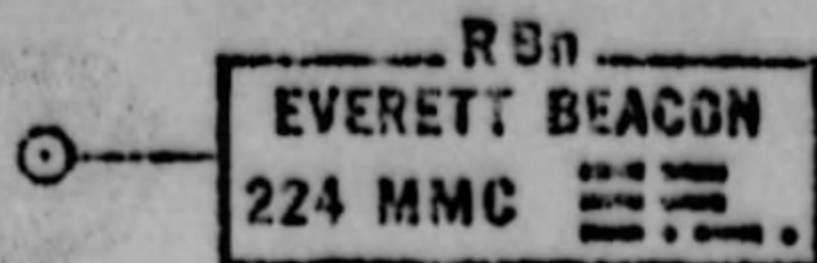
Radio Range
(Without voice)



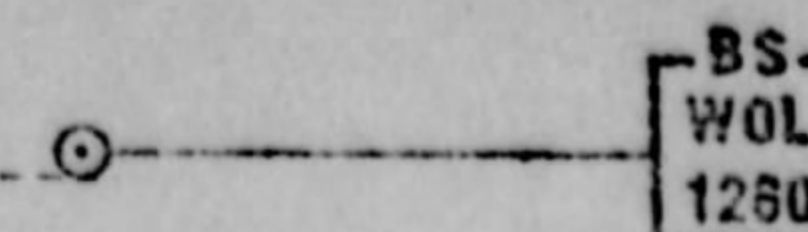
Radio Communication Station
(Without voice)



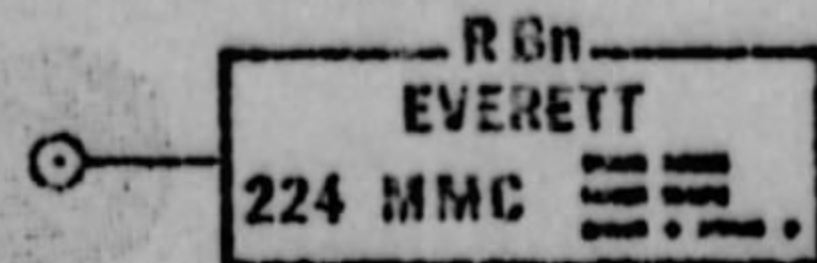
Non-Directional Radio Beacon
(With voice)



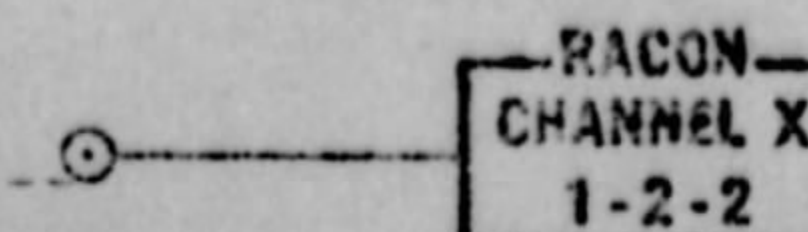
Radio Broadcasting Station



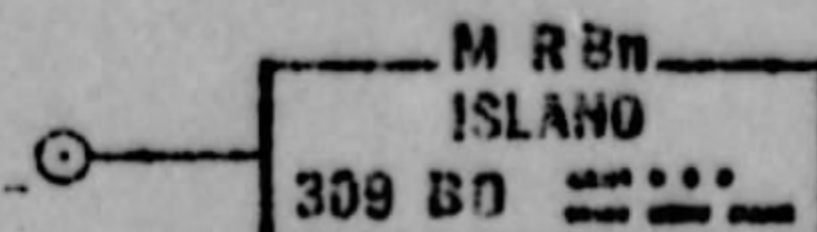
Non-Directional Radio Beacon
(Without voice)



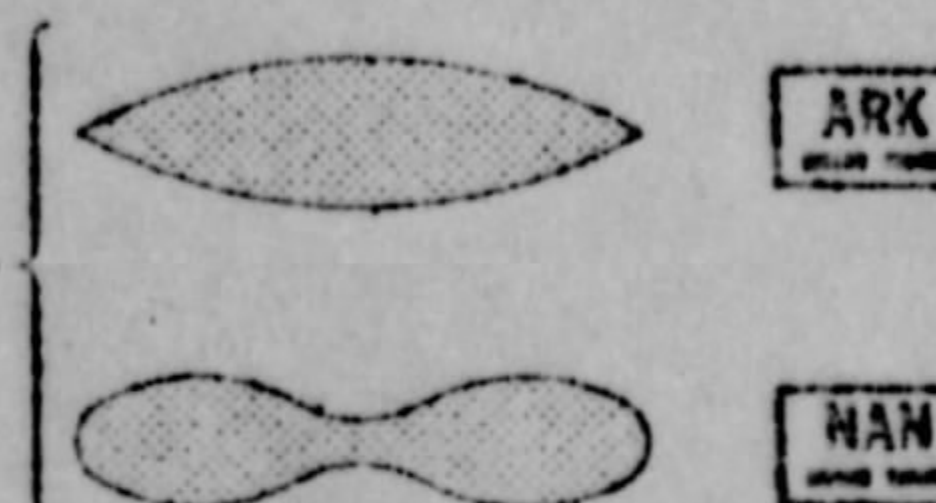
Radar Beacon (Racon)



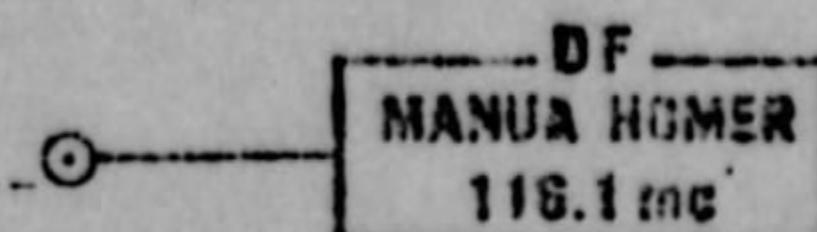
Marine Radio Beacon



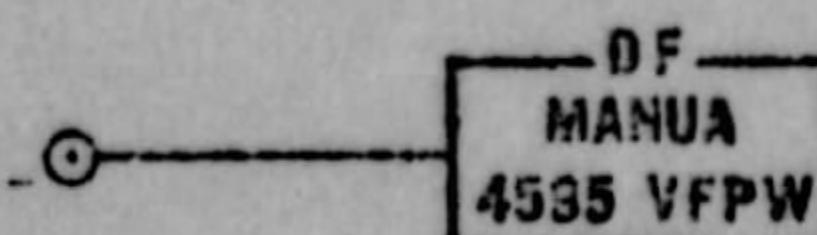
Radio Fan Marker Beacons



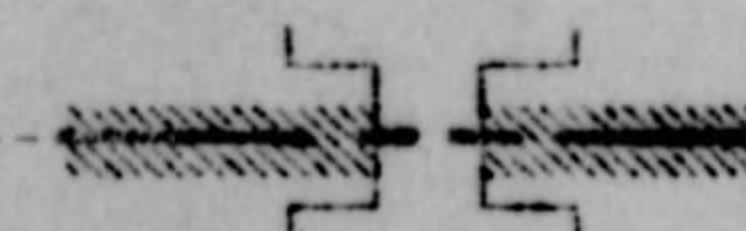
Radio Direction Finder
(With voice)



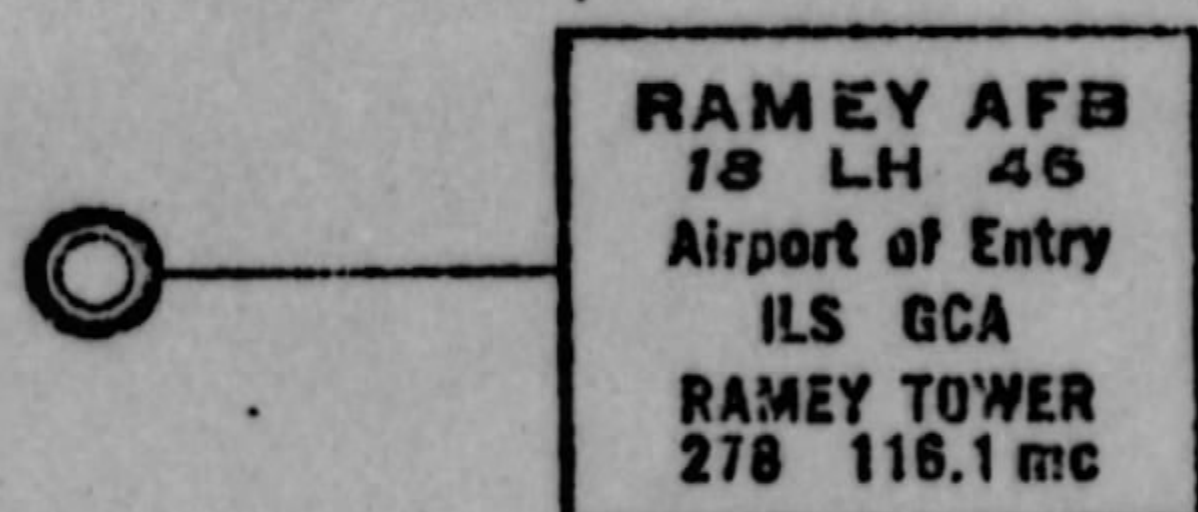
Radio Direction Finder
(Without voice)



International Boundary
(Closed to passage of aircraft except through air corridor)

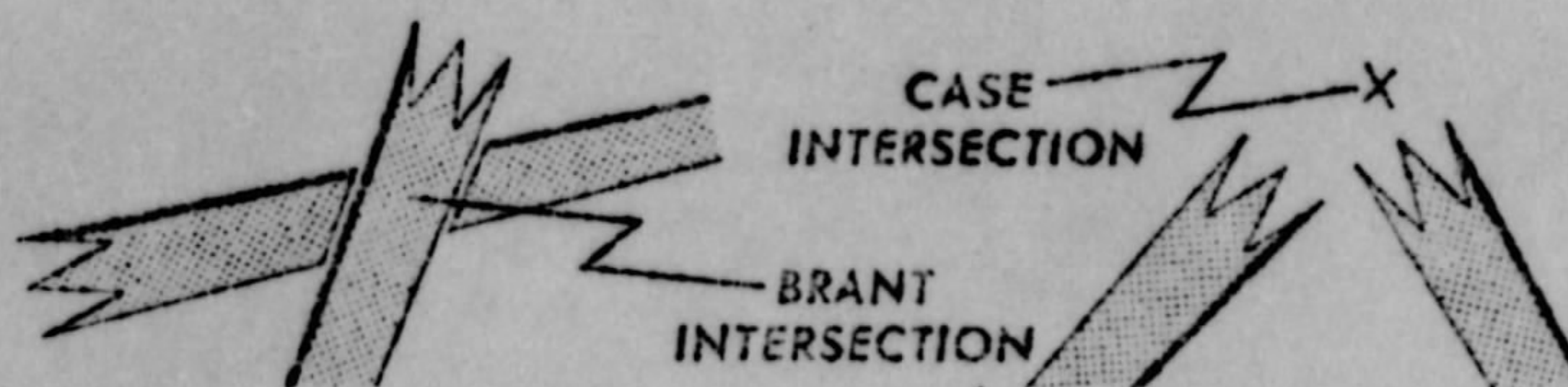


AIRCRAFT LANDING FACILITY INFORMATION

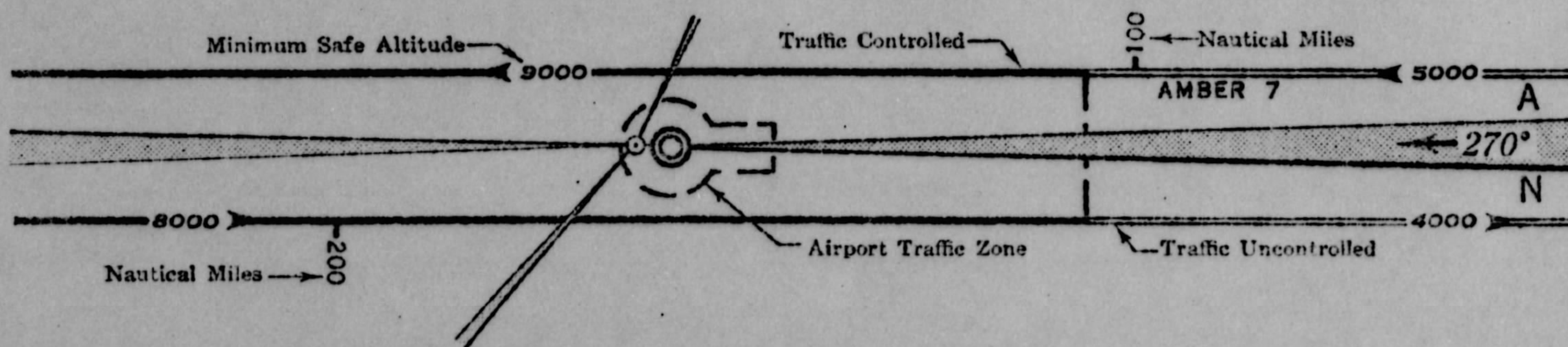


RADIO FIXES

Reporting point.



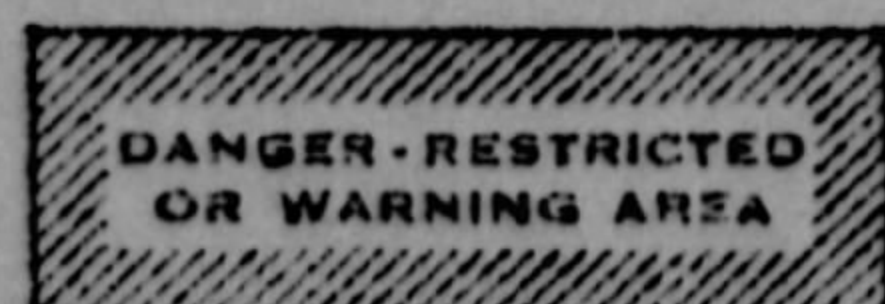
AIRWAYS & RADIO RANGE (AURAL)



AIRSPACE RESTRICTED AREAS



Prohibited Area — Flight of aircraft prohibited except by specific authority of using agency



Danger, Restricted or Warning Area — Invisible hazards to air navigation (Specific authority required prior to entry of Danger Area)



Caution Area — Visible hazards to Air Navigation (Avoid if practical)

Metropolit
Large Citi
Cities
Small Citi
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Towns &
Contours
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Springs
Wells &
Reefs, Co
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Dams
Elevation
(In feet)
Mines an
Mountair
Lookout
Forts
Pipelines
Race Tr
Stranded

TOPOGRAPHICAL SYMBOLS

CITIES and TOWNS

Metropolitan Areas.....	NEW YORK	
Large Cities.....	RICHMOND	
Cities.....	ARLINGTON	
Small Cities.....	SANGATE	
Large Towns.....	Corville	
Towns & Villages.....	Arcola	

HIGHWAYS and ROADS

Dual Lane Highways.....	
Primary Roads.....	
Secondary Roads.....	
Trails.....	
U. S. Road Markers.....	
National, State or Provincial Road Markers.....	
Road Names.....	ALASKA HIGHWAY

RELIEF FEATURES

Contours	- Reliable..... - Depression..... - Approximate.....		- Dunes..... - Sand Areas..... - Ridges.....	
Bluffs, Cliffs & Escarpments.....				

HYDROGRAPHIC FEATURES

Swamps & Marshes		Perennial		
Mud & Tidal Flats. (Exposed at low tide)		Streams & Rivers		Intermittent
Fathom Line (Dots uniformly spaced) (1 fathom, 6 ft. below mean low water level)				Probable or Unsurveyed
Danger Line (Dots grouped in pairs) (2 fathoms, 12 ft. below mean low water level)				Braided
Charted Rocks		Intermittent Lakes		
Shoals, Sand Bars, etc. (Exposed at low tide)		Drainage Ditches		
Springs		Canals { In use Abandoned		
Wells & Water Holes		Flood Marked Areas		
Reefs, Coral & Rocky Ledges (Awash at low tide)		Sand Deposits in river bed		
		Dry Washes		
	Glaciers			

CULTURAL and MISCELLANEOUS

Power Transmission Lines			Boundaries	International State & Provincial*	
Telephone & Telegraph Lines					
Dams					
Elevations	Highest in a General Area (Highest on chart is devoid of tint) Spot	• 5237 • 4291			
Mines and Quarries					
Mountain Passes					
Lookout Towers	(Elevation is base of tower) (Height above ground in magenta)	⊙ 2495 75			
Forts		Fort Lewis			
Pipelines					
Race Tracks					
Stranded Wrecks					

*The same as International symbol on older style charts