

## PROJECT 10073 RECORD CARD

1. DATE <u>16 Sep 52</u>	2. LOCATION <u>Portland, Maine</u>	12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input checked="" type="checkbox"/> Possibly Balloon  <input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input checked="" type="checkbox"/> Possibly Aircraft  <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input checked="" type="checkbox"/> Possibly Astronomical  <input type="checkbox"/> Other <input type="checkbox"/> Insufficient Data for Evaluation <input checked="" type="checkbox"/> Unknown
3. DATE-TIME GROUP Local <u>1422 EDT</u> GMT	4. TYPE OF OBSERVATION <input type="checkbox"/> Ground-Visual <b>AIR RADAR</b> <input checked="" type="checkbox"/> Air-Visual	5. SOURCE <u>Navy pilot and crew</u>
7. LENGTH OF OBSERVATION <u>20 minutes</u>	6. NUMBER OF OBJECTS <u>2</u>	8. COURSE <u>S</u>
10. BRIEF SUMMARY OF SIGHTING	11. COMMENTS	

RAITS  
OWPE100T

CBB132

JEDEN065

OPOP JEDWP

DE JEDEN 18F

OP 201440Z ZNJ

FM COC ADC ENT AFB COLO SPGS COLO

TO ATIC WRIGHT PATTERSON AFB OHIO

OPERATIONAL 22 SEP 52 00 48

ACTION

IMMEDIATE

SEP 20 16 44 1952

FOR

ATIC

19 SEP 20 11 2

TTN ATIAA-2C: FOLLOWING MSG FM HQ 32 ADIV HANCOCK  
FLD SYRACUSE N.Y. IS QUOTED FR YR INFO:

FOL IS COPY OF TWX MSG REC FR 654TH AC&W SQ: "NAVY PILOT AND CREW REPT  
OF VISUAL AND ELECT SIGHTING OF UNIDENTIFIED FLY OBJ. ON NIGHT OF 16  
SEP 52 THE PILOT AND CREW OF A RADAR EQUIPPED P2V OF VP SQ 26 PRESENTLY  
LOCATED AT THE BRUNSWICK NAS, BRUNSWICK, ME, MADE THE DISCUSSED SIGHTING.  
THE SIGHTING WASREPT TO THE VP SQ INTEL OFF, LT BRITT, AT THE MORNING  
BRIEFING AT 0800 HRS, 17 SEP 52. LT BRITT CONTACTED THE AC&W SQ INTEL  
OFF IN PERSON AND MADE THE FOL REPT: LT J.M. BOAK AND CREW DEPT BRUNSWICK  
NAS ON LOCAL FLT IN THE P2V AT 1822 HRS EDT. WHILE IN VICINITY OF  
PORTLAND ME, 2 OBJ WERE SIGHTED VISUALLY FLY IN SOUTHERLY DIR. LT BOAK

PAGE TWO JEDEN 18F

REPT THAT THERE WERE 2 OBJ. ONE ABOVE AND AHEAD OF THE OTHER MUCH AS A TOWING OR REFUELING FORMATION. THE UPPER OBJ WAS DARK WITH NO VISIBLE LIGHTS. THE LOWER OBJ HAD 4 OR 5 LIGHTS ARRANGED IN A CIRCLE. THE VISUAL SIGHTING WAS VERIFIED BY RADAR, APS31. THE TGT APPEARED ON RADAR AS A LINE RATHER THAN AS 2 SEPARATE PIPS. THERE WAS A DISCREPANCY IN REPT TIME OF SIGHTING. LT BOAK, WHO WAS NOT AVAL FOR INTERVIEW REPT TIME OF SIGHTINGS AS 1950 MRS EDT. ALT OF OBJ WAS 4000 FT. NO LINES ATCH 2 OBJ WERE VISIBLE. NO DEFINITE DESCRIPTION AS TO SHAPES DUE TO DARKNESS. ENSIGN HARA STATED THE DARK OBJ WAS LARGE AND FIRST IMPRESSION WAS A CECA 54 OR COCA 119 TOWING A LIGHTED OBJ. HARA FURTHER STATED SINCE THE CLOSEST OBJ WAS APPROACHED WAS FR 2 AND ONE HALF TO 3MILES, ALL THAT HE COULD DEFINITELY SAY WAS THAT THE DARK OBJ WAS LARGE BUT COULD NOT MAKE OUT A SIZE OR SHAPE OF LIGHTED OBJ. HARA STATED THAT THE PAPA 2 VICTOR ALTERNATELY CLOSED IN ON AND FELL BEHIND THE OBJ AND THAT THE PAPA 2 VICTOR WAS UNABLE TO GET IN A POSITION TO GET OBJ DOWN SUN ON THEM. HARA COULD NOT DEFINITELY STATE OBJ WERE TAKING EVASIVE ACTION AS HE WAS ALTERNATING BETWEEN COCKPIT AND READAR POSITION. HARA STATED OBJ WERE FOL FOR 20 MIN AND THAT CONTACT WAS BROKEN OFF WHEN BOAK HEADED N IN VICINITY OF PORTSMOUTH NEW HAMPSHIRE AT 2010 EDT. FOL IS NARRATIVE OF PLT LT BOAK AND CO PLT LT C G RENTISS TO VP SQ

PAGE THREE JEDEN 18F

INTEL OFF. TWO OBJ WERE SIGHTED AT 1700 ON A SOUTHERLY HEADING IN PSN W/A LARGE DARK OBJ ABOVE THIS OBJ WITH CIR ARNG OF FIVE LIGHTS. COULD NOT DETERMINE PSN OF LIGHTS ON LOWER OBJ DUE TO DARKNESS. BOAK REPT OBJ SIGHTED OVER PORTLAND ME AND WERE FOL FOR PD OF 15 MIN W/ CONTACT BKN OFF NEAR PORTSMOUTH NEW HAMPSHIRE. BOAK SAID WHEN HE ATTEMPTED TO GET IN BETTER PSM TO VIEW OBJ THEY TOOK EVSSIVE ACTION W/OUT BREAKING FORMATION. FOR THIS REASON BOAK DID NOT BELIEVE THEY WERE REFUELING. BOAK REPT OBJ AT TIMES WERE ACCELERATED TO 300 KNOTS BUT DECELERATED RAPIDLY. BOAK STATED THAT IN VICINITY OF PORTSMOUTH OBJ TURNED TOWARD HIM AND HE BROKE OFF CONTACT AND HEADED N. OBJ THEN TURNED SW AND FLEW OUT OF SIGHT. BOAK BELIEVES BREAK OFF OF CONTACT WUS AT 1915 EDT. HARA STATED BREAD OFF TIME WAS APRX 2000 EDT. LT BRITT THE INTEL OFF STATES THAT LTS BOAK AND PRENTISS ARE THIRTY YR OF AGE WITH MANY YRS OF FLYING EXPERIENCE. FURTHER THAT BOTH OFF ARE VERY DEPENDABLE. THE VP SQ IS SCB TO DEPT BRUNSWICK VERY SOON. IT IS SUGGESTED THAT ANQ PERS INTERVIEWS WITH CREW BE ARRANGED ACCORDINGLY."

28/1442Z SEP JEDEN TEESON AFB OHIO

Cy 1

Applies to 16 SEP 52  
Portland, Maine

1. Atia  
3. Ataa  
4. C. files  
3. ati

RF151V

WPG087

JEDBO 111

PP JEDWP

DE JEDBO 87

P 182130Z ZNJ

FM COADIV 801 LOCKBOURNE AFB OHIO

TO CG ATIC WRIGHT PATERSON AFB OHIO

[REDACTED] 91D00 2067-W PD UR MSG AFQIN-ATIAA-11-6-E DTD 14

NOV 52 PD REF PROJECT BLUE BOOK ANSWERED BY MYMSG 91D00 847 DTD 12 NOV

52 PD

18/2136Z NOV JEDBO

U  
X  
1952 NOV 18 13:41  
REF ID: A71177  
INFOR

WY

## PROJECT 10073 WORKSHEET

## I. GENERAL

1. DATE 16 Sep 52	2. LOCATION Portland, Me.	3. TIME Local: 1950 EDT Zebra: 2350
4. WAS OBJECT OBSERVED FROM THE GROUND?		<input type="checkbox"/> Yes <input type="checkbox"/> Naked Eye <input type="checkbox"/> Binoculars <input type="checkbox"/> Telescope <input type="checkbox"/> Theodolite
5. WAS OBJECT OBSERVED BY GROUND RADAR?		<input type="checkbox"/> Yes <input type="checkbox"/> By One Set <input type="checkbox"/> By Two Sets <input type="checkbox"/> By Three Sets
6. WAS OBJECT OBSERVED FROM THE AIR?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> A/C Observed Object <input checked="" type="checkbox"/> Interception Attempted <input type="checkbox"/> No Intercept Attempted
7. WERE AIRCRAFT SCRAMBLED TO INTERCEPT?		<input type="checkbox"/> Yes <input type="checkbox"/> A/C Scrambled <input checked="" type="checkbox"/> Visual Contact Made <input checked="" type="checkbox"/> A/I Contact Made <input type="checkbox"/> No Contact Made
8. DID OBJECT CHANGE DIRECTION AT ANY TIME?		<input type="checkbox"/> Yes <input type="checkbox"/> Normal <input type="checkbox"/> Violent
9. IF OBJECT WAS A "LIGHT", WAS IT:		<input type="checkbox"/> Blinking <input type="checkbox"/> Steady
10. LENGTH OF TIME IN SIGHT:		<input type="checkbox"/> 1-15 Seconds <input type="checkbox"/> 1-5 Minutes <input checked="" type="checkbox"/> Over 10 Minutes
11. REPORTING AGENCY (Unit Number and Mailing Address) 654TH ACW Sq., Brunswick, Me.		

## II. ASTRONOMICAL DATA

12. WHAT ASTRONOMICAL ACTIVITY WAS NOTED?	<i>None</i>	
13. DID OBJECT APPEAR TO ARCH DOWNWARD?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14. DID OBJECT HAVE A TAIL?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15. DID OBJECT APPEAR TO DISINTEGRATE?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
16. TIME OF SIGHTING RELATIVE TO SUNRISE OR SUNSET (Data From Air Almanac)	<input type="checkbox"/> Night <input type="checkbox"/> Day <input type="checkbox"/> Sunrise <input type="checkbox"/> Sunset	

## III. AIRCRAFT DATA

17. WERE AIRCRAFT NOTED IN AREA?	<input type="checkbox"/> Yes <input type="checkbox"/> One Aircraft <input type="checkbox"/> More Than One Aircraft	<input type="checkbox"/> No
18. WAS ANY SOUND HEARD?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
19. WERE THERE INDICATIONS OF HIGH BACKGROUND NOISE?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
20. WAS THE OBJECT VIEWED ABOVE 75° ELEVATION?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

## IV. BALLOON DATA

21. WERE BALLOONS RELEASED IN AREA?  Yes  No
22. TIME SINCE SCHEDULED BALLOON RELEASE: 82 Minutes or 440
23. POSSIBLE BALLOON LAUNCH SITES DOWNWIND OF SIGHTING:

Location	Type	Launching Agency	Lighted?		Describe Lighting
			Yes	No	
a. Portland, Me	P	W.B.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. "	Rocket	"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c.			<input type="checkbox"/>	<input type="checkbox"/>	
d.			<input type="checkbox"/>	<input type="checkbox"/>	

(attach overlay)

## V. EVALUATION

21. EVALUATION OF SOURCE:	22. DETAILS OF REPORT:
<input type="checkbox"/> Excellent <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Unreliable <input type="checkbox"/> Extremely Doubtful <input type="checkbox"/> Hoax	<input type="checkbox"/> Good <input checked="" type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Insufficient to Evaluate
23. FINAL EVALUATION:	
<input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon	<input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical
<input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft	<input type="checkbox"/> Other: _____ <input type="checkbox"/> Insufficient Data For Evaluation <input checked="" type="checkbox"/> Unknown

24. COMMENTS:

Possibilities: SAC refueling operation.  
Unfortunately, no!

## PROJECT 10073 WEATHER DATA SHE

1. DATE OF OBSERVATION 16 Sep 52	2. TIME OF OBSERVATION 2100Z	3. STATION OBSERVING Brunswick, Me.			
4. WINDS ALOFT:					
ALTITUDE (feet)	VELOCITY (knots)	DIRECTION (degrees)	ALTITUDE (feet)	VELOCITY (knots)	DIRECTION (degrees)
0			25,000		
1,000			30,000		
2,000	10	260	35,000		
3,000			40,000		
4,000	20	250	45,000		
5,000			50,000		
6,000	20	250	55,000		
7,000			60,000		
8,000	30	250	65,000		
9,000			70,000		
10,000	40	250	75,000		
12,000	45	250	80,000		
14,000	45	250	85,000		
16,000			90,000		
18,000			95,000		
20,000			100,000		
5. WAS AN INVERSION LAYER NOTED? (If yes, at what altitude?)			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
6. WERE ANY THUNDERSTORMS NOTED IN AREA? (If yes, at what quadrant?)			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
7. CLOUD COVER:  ____ tenths at ____ feet. ____ tenths at ____ feet.			8. VISIBILITY WAS ____ MILES.		
9. COMMENTS:					

# AERONAUTICAL SYMBOLS

## AERODROMES

LANDPLANE	SEAPLANE	
○	①	Military base
○	②	Civil
○	③	Joint civil and military base
○	④	Military
○	⑤	Civil
○	⑥	Joint civil and military
○	†	Landing area or anchorage
		No public services available

## AERODROME DATA

HARMON FIELD  
18 L H 46  
Airport of entry  
GCA SYSTEM  
278 126.18

LANDPLANE  
18 Elevation in feet  
L Minimum lighting  
H Hard surfaced runway  
46 Length of longest runway  
to nearest hundred feet

278 126.18 2870 Control tower transmitting frequencies

## SEAPLANE

OO Elevation in feet  
L Minimum lighting  
S Normally sheltered  
take-off area  
62 Length of longest runway  
to nearest hundred feet

NAS ANACOSTIA  
OO L S 62  
2870

VALLEY  
(750 L - 32)

## AIR NAVIGATION LIGHTS

Rotating light —————— ★  
Rotating light (with flashing code) —————— \*  
Rotating light (with course lights) —————— 17 ★  
Flashing light —————— \*

Flashing light (with code) —————— ■■■ ■  
Marine light —————— ●  
Lightship —————— ⚓

F-fixed FL-flashing Oc-occulting Alt-alternating Go-group R-red W-white G-green B-blue (U)-unwatched SEC-sector sec-second  
Marine alternating lights are red and white unless otherwise indicated. Marine lights are white unless colors are stated.

## RADIO FACILITIES

Use of the word "Radio" within the box indicates voice facilities

Radio range  
(Without voice)

WOODY RANGE  
251 FWA

Radio broadcasting station

BS.  
WOL  
1260

Marine radiobeacon  
(Without voice)

RBN  
EVERETT  
224 ——  
100-200 & 300-400

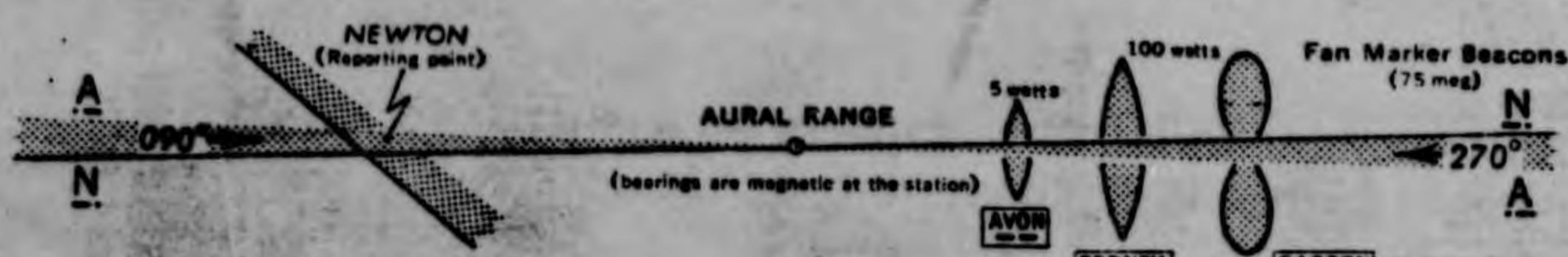
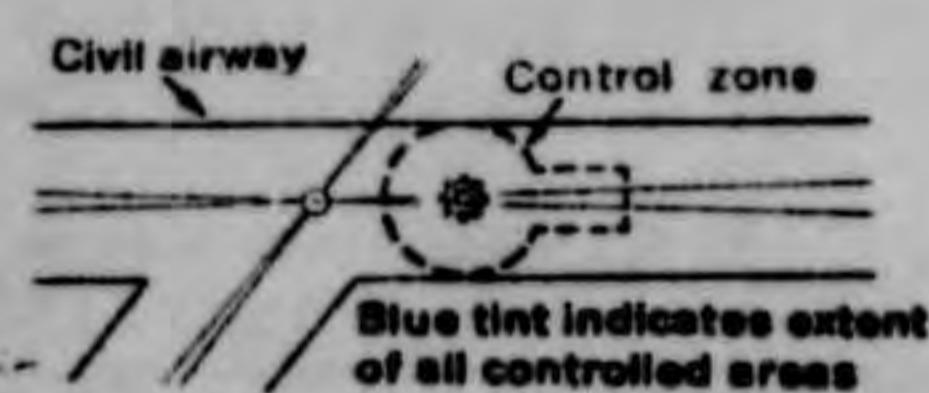
Radiobeacon, nondirectional  
(homing)

BEDFORD RADIO  
522 DBH

## MISCELLANEOUS

Isogonic line or isogonal —————— 8°E  
(Values for 1950)  
Mooring mast —————— □  
Prominent transmission line —————— T  
Obstruction —————— 1180  
(Numerals indicate elevation above sea level at top.)

Restricted areas are numbered, and are  
indicated on the charts as follows:  
Prohibited area (AR-78)  
Danger or warning area (D-32) (W-46)  
Caution area (C-54)



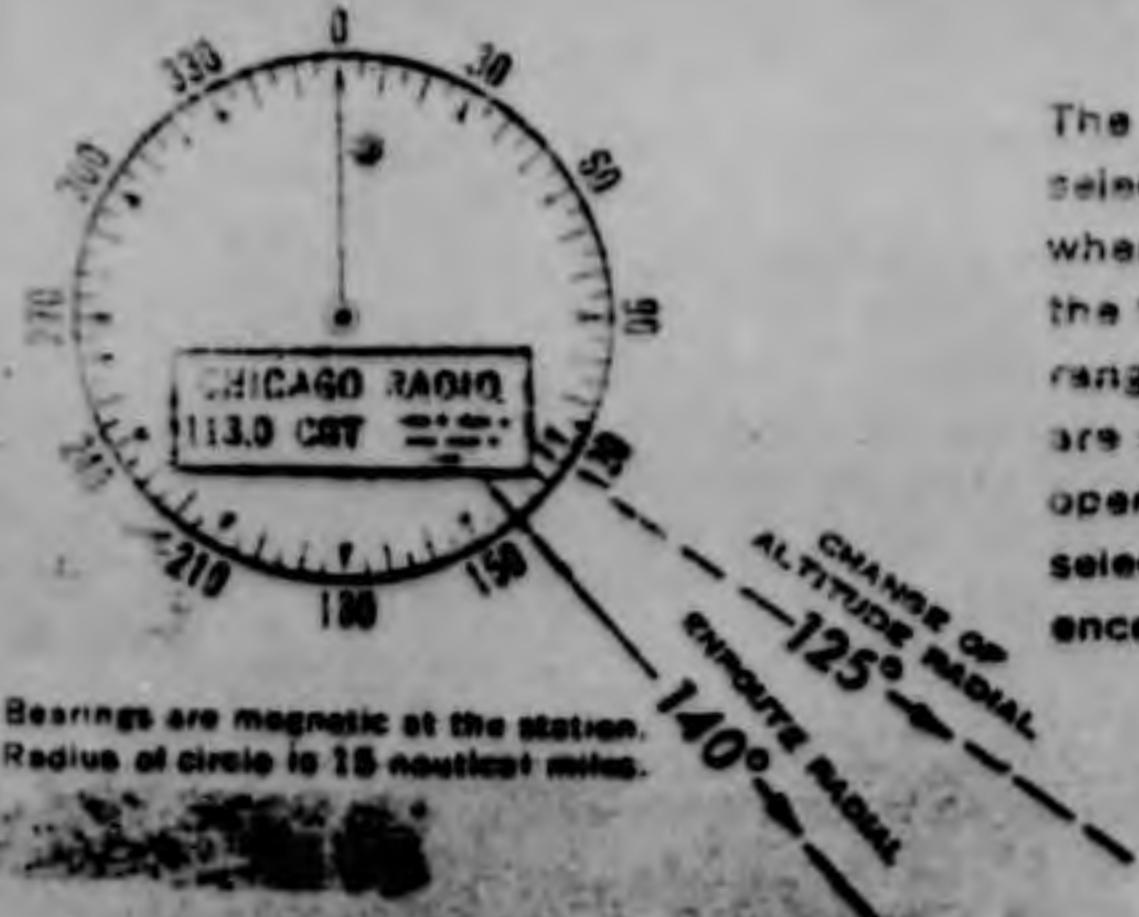
## VERY HIGH FREQUENCIES (VHF) PRINTED IN BLUE

VHF  
MATAWA RADIO  
W 108.1 MWA

VHF FOUR-COURSE VISUAL-AURAL RADIO RANGE  
The Blue and Yellow Visual Sectors are indicated by a B and Y; the Aural Sectors by A and N  
Letter preceding frequency in box indicates channel

## VHF OMNI-DIRECTIONAL RADIO RANGE DESCRIPTION

The VHF omni-directional range provides visual track guidance along any selected radial from the station out to a distance of approximately 50 miles when flying at the minimum instrument altitude. These ranges operate in the frequencies between 112 and 118 megacycles and require a special omni range type receiver to make use of the navigational features. Also provided are simultaneous voice communication and 3-letter (coded) identification. In operation, the pilot selects a course by setting the pointer on a course or radial selector to the desired magnetic bearing and then flies that course by reference to a cross pointer instrument.



## **SECTIONAL CHARTS**

The sectional aeronautical chart series provides complete coverage of the United States. An additional chart covers the Hawaiian Islands. These charts are designed primarily for piloting, which is also known as contact flying. They contain a maximum amount of cultural topographic features including important landmarks.

Sectional charts are revised at six-month periods to insure that the airman has the latest information available, and are sold through authorized agents located at airports and principal cities throughout the United States. They may also be obtained by writing to the Director, U. S. Coast and Geodetic Survey, Department of Commerce Building, Washington 25, D. C.

In the lower right-hand corner is printed the date of the chart. Below this the next scheduled printing is indicated. If the date of the chart is more than six months old, users are advised to check with the notices (Dates of Latest Prints) on file with authorized agents. Charts that carry older dates than those shown in large type on this list of dates are obsolete.



**ADDITIONAL AERONAUTICAL CHARTS PUBLISHED AND PRINTED BY  
THE U. S. COAST AND GEODETIC SURVEY**

<b>Planning Charts</b>	<b>AP-9 and 3069a 3060d</b>	<b>1:5,000,000 1:3,000,000</b>
<b>Aircraft Position Charts</b>	<b>3071 North Atlantic 3073 Caribbean Sea</b>	<b>1:5,000,000 1:5,000,000</b>
<b>Route Charts</b>	<b>Show limited topographic information, selected aerodromes, and major radio data.</b>	<b>1:2,000,000</b>
<b>Direction Finding Charts</b>	<b>Six charts cover the United States</b>	<b>1:2,000,000</b>
<b>World Aeronautical Charts</b>	<b>Forty-three charts cover the United States</b>	<b>1:1,000,000</b>
<b>Flight Charts</b>	<b>Thirty-seven charts cover the principal air routes of the United States</b>	<b>1:1,000,000</b>
<b>Local Charts</b>	<b>Designed to provide additional landmark information and topographic detail for important air terminals.</b>	<b>1:250,000</b>
<b>Instrument Approach and Landing Charts</b>	<b>More than 475 charts designed for use in manuals with Radio Facility Charts</b>	<b>Approach 1:250,000 Landing 1:31,680</b>
<b>Instrument Landing System Charts</b>	<b>Similar to Instrument Approach and Landing charts but printed in black and halftone instead of color. Show very little detail.</b>	<b>Approach 1:250,000 Landing 1:75,000 1:90,000</b>
<b>Airport Obstruction Plans</b>	<b>Show runways and selected aerodrome information and objects in the vicinity that may be hazards to air traffic.</b>	<b>1:12,000</b>
<b>Radio Facility Charts</b>	<b>Sixty-five charts of the U. S. show all radio facilities, airways and other information necessary for instrument flying.</b>	<b>1:2,000,000</b>

A catalog giving a complete list and description of the various series is available upon request.

## SEARCH AND RESCUE:

Search and Rescue Service is a life saving service provided through the combined efforts of the CAA, Air Force, and Coast Guard who are assisted by other organizations such as the Civil Air Patrol, Sheriffs Air Patrol, State Police, and such other agencies as may be available. It provides search, survival aid, and rescue of personnel of missing or crashed aircraft.

All you need to remember to obtain this valuable protection is:

1. File a Flight Plan with a CAA Airway Communications Station in person or by telephone or radio.
2. File an Arrival Report.
3. If you land at a location other than intended destination, report the landing to the nearest CAA Communications Station.
4. If you land enroute and are delayed more than an hour, report this information to the nearest communications station.
5. Remember that if you fail to report within one hour after your E.T.A., a search will be started to locate you. If you fail to report within three hours after your E.T.A., the full facilities of the Search and Rescue Service will be activated.

Searches are expensive, they inconvenience other people, and on numerous occasions the lives of other pilots are sacrificed when searching for lost or overdue pilots. SO, FILE AN ARRIVAL REPORT!

### GROUND TO AIR EMERGENCY CODE DISTRESS SIGNALS

REQUIRE DOCTOR, SERIOUS INJURIES	REQUIRE SIGNAL LAMP WITH BATTERY, AND RADIO	REQUIRE FUEL AND OIL
REQUIRE MEDICAL SUPPLIES	INDICATE DIRECTION TO PROCEED	ALL WELL
UNABLE TO PROCEED	AM PROCEEDING IN THIS DIRECTION	NO
REQUIRE FOOD AND WATER	WILL ATTEMPT TAKE-OFF	YES
REQUIRE FIREARMS AND AMMUNITION	AIRCRAFT SERIOUSLY DAMAGED	NOT UNDERSTOOD
REQUIRE MAP AND COMPASS	PROBABLY SAFE TO LAND HERE IF IN DOUBT, USE INTERNATIONAL SYMBOL	REQUIRE MECHANIC
	SOS	

#### INSTRUCTIONS:

1. Lay out symbols by using strips of fabric or parachutes, pieces of wood, stones, or any available material.
2. Provide as much color contrast as possible between material used for symbols and background against which symbols are exposed.
3. Symbols should be at least 10 feet high or larger, if possible. Care should be taken to lay out symbols exactly as shown to avoid confusion with other symbols.
4. In addition to using symbols, every effort is to be made to attract attention by means of radio, flares, smoke, or other available means.
5. When ground is covered with snow, signals can be made by dragging, shoveling or tramping the snow. The depressed areas forming the symbols will appear to be black from the air.
6. Pilot should acknowledge message by rocking wings from side to side.

### VISUAL EMERGENCY SIGNALS

NEED MEDICAL ASSISTANCE - URGENT NEED ONLY WHEN LIFE IS AT STAKE	ALL OK - DO NOT WAIT	CAN PROCEED SMOOTHLY - WAIT IF PRACTICAL	NEED MECHANICAL HELP OR PARTS - LONG DELAY	DO NOT ATTEMPT TO LAND HERE
LIE PRONE	WAVE ONE ARM OVERHEAD	ONE ARM HORIZONTAL	BOTH ARMS HORIZONTAL	BOTH ARMS WAVED ACROSS FACE
LAND HERE	USE DROP MESSAGE	OUR RECEIVER IS OPERATING	NEGATIVE (NO)	AFFIRMATIVE (YES)
BOTH ARMS FORWARD HORIZON- TALLY, SQUATTING AND POINTING IN DIRECTION OF LANDING - REPEAT	MAKE THROWING MOTION	CUP HANDS OVER EARS	WHITE CLOTH WAVED HORIZONTALLY	WHITE CLOTH WAVED VERTICALLY
PICK US UP - PLANE ABANDONED	AFFIRMATIVE (YES)	NEGATIVE (NO)	<b>HOW TO USE THEM</b> IF YOU ARE FORCED DOWN AND ARE ABLE TO ATTRACT THE ATTENTION OF THE PILOT OF A RESCUE AIRPLANE, THE BODY SIGNALS ILLUSTRATED ON THIS PAGE CAN BE USED TO TRANSMIT MESSAGES TO HIM AS HE CIRCLES OVER YOUR LOCATION. STAND IN THE OPEN WHEN YOU MAKE THE SIGNALS. BE SURE THAT THE BACKGROUND, AS SEEN FROM THE AIR, IS NOT CONFUSING. GO THROUGH THE MOTIONS SLOWLY AND REPEAT EACH SIGNAL UNTIL YOU ARE POSITIVE THAT THE PILOT UNDERSTANDS YOU.	
BOTH ARMS VERTICAL	DIP HEAD OF PLANE SEVERAL TIMES	FRONTAIL PLANE		

*CGATIC*  
ACTION

1. ATIAA P  
2. ATIAA  
3. C. files

AF147

1157

JEDMH B129

AR JEDWP

4:33

DD JEDMH B12

R 251652Z ZMJ

FM CGSAC OFFUTT AFB NEBR

TO CGATIC WRIGHT PATTERSON AFB OHIO

[REDACTED] DOC 27202. REF URM SG AFQIN-ATIAA-9-9E.

PROJECT BLUE BOOK. THIS MTRS REPORTS TWO KC-97 ACFT OVER  
PORTLAND, MAINE AT 1617 [EST] ALTITUDE 7000 FEET HEADING 036  
2117 Z.  
DEGREES.

25/1716Z SEP JEDMH

*re*

*Cy-1*

## NAUTICAL MILES

The CAA is adopting, for all air-ground communication within the continental United States and Alaska, the nautical mile as the unit of horizontal distance, and the knot as the unit of horizontal speed.

The United States nautical mile is defined as equal to one-sixtieth of a degree (one minute) of a great circle on a sphere whose surface is equal to the surface of the earth. The value of a nautical mile is calculated on this basis as 1853.25 meters or 6080.20 feet. Since the common or statute mile is equal to 5280 feet, one nautical mile equals approximately 1.152 statute miles, and one statute mile equals approximately 0.868 nautical mile. For quick calculation the nautical mile may be considered approximately one-seventh longer than the statute mile, and the statute mile approximately one-eighth shorter than the nautical mile.

In the lower margins of the sectional charts is provided a convenient conversion scale by which values in statute miles may be readily converted to nautical miles and vice versa. Distances expressed in either unit may thus be scaled directly on the charts.

The length of one minute of latitude measured along a meridian on the surface of the earth at latitude 48°15' is equal to a United States nautical mile. North or south of 48°15' the length of a minute is slightly longer or shorter, since the earth is not a perfect sphere. However, for practical purposes, the nautical mile is considered equivalent to a minute of latitude at any point on the earth's surface. Therefore, the one-minute subdivisions of the meridian lines on the face of charts may also be used for scaling distances.

The knot is a unit of speed only. One knot is equal to one nautical mile per hour; as, when an aircraft is travelling 200 nautical miles per hour, its speed is 200 knots.

### CONVERSION TABLES

**STATUTE MILES TO NAUTICAL MILES**

STATUTE MILES	NAUTICAL MILES	FEET	STATUTE MILES	NAUTICAL MILES
0.1	0.087	528	100	86.8
0.2	0.174	1056	110	95.5
0.3	0.261	1584	120	104.2
0.4	0.347	2112	130	112.9
0.5	0.434	2640	140	121.6
0.6	0.521	3168	150	130.3
0.7	0.608	3696	160	138.9
0.8	0.695	4224	170	147.6
0.9	0.782	4752	180	156.3
1.0	0.868	5280	190	165.0
		200	173.7	
2	1.74	216	182.4	2
3	2.61	228	191.0	3
4	3.47	230	199.7	4
5	4.34	240	208.4	5
6	5.21	250	217.1	6
7	6.08	260	225.8	7
8	6.95	270	234.5	8
9	7.82	280	243.1	9
10	8.68	290	251.8	10
11	9.55	300	260.5	11
12	10.42	310	269.2	12
13	11.29	320	277.9	13
14	12.16	330	286.6	14
15	13.03	340	295.3	15
16	13.89	350	303.9	16
17	14.76	360	312.6	17
18	15.63	370	321.3	18
19	16.50	380	330.0	19
20	17.37	390	338.7	20
		400	347.4	
30	26.05		30	34.55
40	34.74	500	40	46.06
50	43.42	600	50	57.58
60	52.10	700	60	69.09
70	60.79	800	70	80.61
80	69.47	900	80	92.12
90	78.16	1000	90	103.64

**NAUTICAL MILES TO STATUTE MILES**

NAUTICAL MILES	STATUTE MILES	FEET	NAUTICAL MILES	STATUTE MILES
0.1	0.115	608.0	100	115.2
0.2	0.230	1216.0	110	126.7
0.3	0.345	1824.1	120	138.2
0.4	0.461	2432.1	130	149.7
0.5	0.576	3040.1	140	161.2
0.6	0.691	3648.1	150	172.7
0.7	0.806	4256.1	160	184.2
0.8	0.921	4864.2	170	195.8
0.9	1.036	5472.2	180	207.3
1.0	1.152	6080.2	190	218.8
		200	230.3	
2	2.30		210	241.8
3	3.45		220	253.3
4	4.61		230	264.9
5	5.76		240	276.4
6	6.91		250	287.9
7	8.06		260	299.4
8	9.21		270	310.9
9	10.36		280	322.4
10	11.52		290	334.0
11	12.67		300	345.5
12	13.82		310	357.0
13	14.97		320	368.5
14	16.12		330	380.0
15	17.27		340	391.5
16	18.42		350	403.0
17	19.58		360	414.6
18	20.73		370	426.1
19	21.88		380	437.6
20	23.03		390	449.1
		400	460.6	
30	34.55		500	575.8
40	46.06		600	690.9
50	57.58		700	806.1
60	69.09		800	921.2
70	80.61		900	1036.4
80	92.12		1000	1151.6

**AERODROMES - BOSTON SECTIONAL CHART**

LOCATION	NAME	GEOGR. POSITION	TYPE	ELEV.	FACILITIES					REMARKS
					FUEL (OCTANE)	REPAIRS	RUNWAYS		LIGHTS	
							NO.	LONGEST		
Alton Bay, N.H.	Downing's SPB	43°28' - 71°14'	Com. Seapl.	504	80	Minor	1	5000		Ramp, buoy
Ashland, N.H.	Riverside	43°44' - 71°40'	Com.	470			1	2000		
Auburn, Mass.	Auburn	42°11' - 71°51'	Priv.	700			2	1550		
Ayer, Mass.	Ft. Devens AAF	42°34' - 71°38'	Army	268	C	Minor	3	5200H		
Bedford, Mass.	Hanacom Field	42°28' - 71°17'	Mun. & AF	135	80, 91, 100	Major	3	5000H	Rwy., appr., hi-intens. rwy.	*
Berkeley, R.I.	Berkeley	41°56' - 71°26'	Com.	75	80	Major	1	2050		
Berkley, Mass.	Myricks	41°50' - 71°02'	Com.	65	80	Minor	2	2000	Port. prior req.	
Beverly, Mass.	Mountain	42°35' - 70°55'	Mun.	108	80, 91	Major	3	5000H	Rwy. prior req.	Ben. prior req.
Biddeford, Maine	Biddeford Mun.	43°28' - 70°28'	Mun.	160			2	2150		
Billerica, Mass.	Shawshene Pines	42°33' - 71°13'	Com.	110	80	Major	2	2125H	Rwy. prior req.	2310 ft. gravel avail.
Block Island, R.I.	Block Island State	41°10' - 71°35'	Mun.	105	80		1	2000H	Runway	Lgts. oper. by elec. cur.
Bolton, Mass.	Bolton	42°26' - 71°39'	Com.	380	80, 91	Minor	3	2540	Port. prior req.	
Boothbay Harbor, Maine	Boothbay Harbor Flying Svc. SPB	43°51' - 69°37'	Com. Seapl.	00			3	7800		Ramp, floats, dock, marine railways
Boston, Mass.	Logan	42°22' - 71°01'	Mun.	19	80, 91, 100, J	Major	4	10022H	High intens. rwy., approach	2 way radio required. Landing fee
Boston, Mass.	NAS Squantum	42°18' - 71°02'	Navy	10	AB	Minor	3	4100H	Rot. ben., code ben., rwy.	All lgts. prior req.
Boston, Mass.	NAS Squantum	42°18' - 71°02'	Navy Seapl.	00	A+B	Minor	1	12000		Ramp, buoy
Brockton, Mass.	Brockton	42°03' - 71°01'	Com.	80	80	Major	1	1300H		Closed daily at 1900
Brunswick, Maine	Brunswick	43°53' - 70°02'	Com.	175	80	Minor	1	1665		
Brunswick, Maine	NAS Brunswick	43°54' - 69°58'	Navy	77	A+B		3	6000H	Rwy., appr., hi-intens. rwy.	Lgts. prior req. off. bus. only
Brunswick, Maine	Riverside Arpk. SPB	43°55' - 69°59'	Com. Seapl.	50	80		1	4000		Circle Mun. arpt. for ave. float
Canton, Mass.	Boston Metropolitan	42°10' - 71°09'	Com.	50	80, 91	Major	4	2100		E/W rwy. Closed
Charlestown, R.I.	NAAS Charlestown	41°22' - 71°40'	Navy	32			3	5800H		O.C. bus. only. ALF to NAS Quonset Pt.
Chatham, Mass.	Chatham	41°41' - 69°59'	Mun.	66	80, 91	Minor	1	2500H	Rwy. prior req.	
Concord, N.H.	Concord Mun.	43°12' - 71°30'	Mun.	345	80, 91	Major	3	3996H	Rwy. on req.	Aero. Adv. Sta. 122.8
Concord, N.H.	Merrimack Bay Arpk.	43°17' - 71°34'	Priv.	260			1	1500		Emerg. use only
Conway, N.H.	Conway Valley	43°59' - 71°08'	Com.	465	80	Minor	1	2400		
Coventry, R.I.	Coventry Airpark	41°41' - 71°35'	Com.	260	80	Major	1	1460		Attend. weekends
Dartmouth, Mass.	New Bedford Aviation	41°38' - 70°56'	Com. Seapl.	00	80	Minor	3	Unlim.	Flood in emerg.	Ramp, float, piers, haulout. Major a/c. repairs.
Dorchester (Lowell), Mass.	Richardson	42°10' - 71°30'	Com.	115	80, 91	Major	2	2200	Strip prior req.	
East Baldwin, Maine	Baldwin	43°48' - 70°41'	Priv.	230			1	1400		
Easton (Brockton), Mass.	Ames Field	42°03' - 71°08'	Com.	120	80	Major	2	2000	Port. prior req. (by 5:00 P.M.)	
Edgartown, Mass.	Edgartown	41°31' - 70°31'	Com.	20	80, 91	Minor	4	3300	Handy. prior req.	
Fall River, Mass.	Fall River Mun.	41°45' - 71°07'	Mun.	192	80, 91	Minor	2	3500H	Runway	
Falmouth, Mass.	Coonamassett Ranch	41°36' - 70°33'	Com.	100	80	Minor	3	2000	Port. prior req.	
Falmouth, Mass.	Falmouth	41°34' - 70°35'	Com.	35			1	2150	Strip, prior req.	Landing fee
Falmouth Foreside, Maine	Handy Boat Service Seaplane Base	43°44' - 70°12'	Com. Seapl.	00	80		All way	Unlim.		Mar. rwy., floats, dock, buoys, haulout
Fitchburg, Mass.	Fitchburg Mun.	42°33' - 71°45'	Mun.	348	80, 91	Major	2	4500H	Runway	
Franklin, N.H.	Franklin	43°28' - 71°39'	Com.	360	80		1	2000		Landing Fee
Freeport, Maine	Stover	43°34' - 70°07'	Priv.	180			1	1100		
Grafton (North Grafton), Mass.	Grafton	42°13' - 71°43'	Com.	450	80	Major	4	3000		
Greene, R.I.	Ricona	41°42' - 71°47'	Com.	380	80	Minor	2	1700		Attend. weekends
Groton, Mass.	Groton	42°39' - 71°39'	Com.	280	80	Major	1	2710	Port. prior req.	
Hampton, N.H.	Hampton	42°55' - 70°50'	Com.	80			1	2000		
Hanover, Mass.	Clark	42°06' - 70°52'	Com.	74	80, 91	Major	3	2350H		
Haverhill, Mass.	Walker-Dutton	42°48' - 71°04'	Com.	125	80	Minor	3	1600		
Hillsgrove (Providence), R.I.	Green	41°43' - 71°26'	Mun.	56	80, 91, 100	Major	4	5466H	Rwy. hi-intens. rwy.	2-way radio required nights, receiver days
Hooksett, N.H.	Hooksett-Manchester	43°04' - 71°28'	Com.	187	80	Major	1	3000		
Hooksett, N.H.	Hooksett-Manchester	43°04' - 71°28'	Priv. Seapl.	178			1	3000		Ramp, haulout, float, beach
Hyannis, Mass.	Barnstable Mun.	41°40' - 70°16'	Mun.	56	80, 91	Major	3	4140H	Port. flood, rwy. prior req.	Aero. Adv. Sta. 122.8
Kennebunk, Maine	Kennebunk	43°22' - 70°53'	Com.	50			1	2000		Rough/
Laconia, N.H.	Laconia Mun.	43°34' - 71°25'	Mun.	552	80, 91	Minor	2	3500H	Runway	Aero. Adv. Sta. 122.8
Laconia, N.H.	Pawtux Bay SPB	43°34' - 71°27'	Com. Seapl.	504	80	Minor	2	5000		Ramp, dock, beach. Repairs at Mun.Arpt.
Lawrence, Mass.	Lawrence Mun.	42°42' - 71°07'	Mun.	165	80, 91	Major	3	4000H	Runway	
Leicester, Mass.	Leicester	42°16' - 71°55'	Com.	1140	80, 91	Minor	2	2000H	Port. prior req.	
Limerick, Maine	Limerick Yarn Mills	43°42' - 70°47'	Priv.	370			1	1500		Use at own risk
Mansfield, Mass.	Mansfield Mun.	42°00' - 71°12'	Mun.	124	80		3	2200		Attend. weekends
Marlboro, Mass.	Marlboro	42°20' - 71°30'	Com.	280	80	Minor	2	1670		
Marshfield, Mass.	Marshfield	42°06' - 70°40'	Com.	9	80	Minor	1	2200		
Martins Mills, Mass.	Cape Cod	41°41' - 70°24'	Priv.	100			3	2025		
Mattapoisett, Mass.	Wanderer SPB	41°33' - 70°49'	Com.	80	80	Minor	2	Unlim.		Ramp, float, beach, haulout, buoys
Merrimack (Nashua), N.H.	Emmet Webster	42°48' - 71°29'	Com.	195	80, 91	Major	4	2400	Strip prior req.	
Metuchen (Lawrence), Mass.	Merrimac Valley Skypoint SPB	42°42' - 71°13'	Com. Seapl.	50	80		4	8000		Ramp, float, haulout
Middleton (Newport), R.I.	Newport Airport	41°32' - 71°17'	Com.	188	80, 91	Major	2	2330H		
Millbury, Mass.	Windie	42°10' - 71°19'	Com.	750			2	2000		
Montauk, N.Y.	Montauk SPB	41°04' - 71°56'	Priv. Seapl.	90			1	10560		Ramp

**AERODROMES - BOSTON SECTIONAL CHART**

LOCATION	NAME	GEOGR. POSITION	TYPE	ELEV.	FACILITIES					REMARKS
					FUEL (OCTANE)	REPAIRS	RUNWAYS		LIGHTS	
							NO.	LONGEST		
Nantucket, Mass.	Nantucket Memorial	41°15'-70°08'	Mun.	48	80	Major	2	4000H	Rwy., mobile flood, flare pots	Fld. lgts. prior req.
Naples, Maine	Naples Seaplane Base	43°38'-70°38'	Com. Seapl.	267	80		3	11000		Ramp
Nashua, N.H.	Burn Field	42°47'-71°31'	Mun.	193	80, 87, 91	Major	1	3200H	Bndy. prior req.	3800 ft. avail. Aero. Adv. Sta. 122.3
Nashua, N.H.	Gate City Airpark	42°43'-71°28'	Com.	120	80		1	1500		Attend. evenings & weekends
New Bedford, Mass.	New Bedford Mun.	41°40'-70°57'	Mun.	79	80, 91, 100	Minor	2	5000H	Bndy., rwy., hi-intens. rwy. & appr.	
Newbury (Newburyport), Mass.	Plum Island	42°47'-70°50'	Com.	15			2	1545H		2800 ft. rwy. avail. Inactive
North Attleboro, Mass.	Wilkins	42°00'-71°18'	Com.	200	80, 91	Major	2	2000	Port. prior req.	
North Westport (Fall River), Mass.	Fall River SPB	41°41'-71°07'	Com. Seapl.	131	80	Minor	4	11000		Ramps, piers, beach, mar. rwy., haulout
North Windham, Maine	Little Sebago Lake	43°51'-70°25'	Com.	285	80		3	6700		Attended part time Week-ends & evenings
Norwood, Mass.	Norwood Memorial	42°11'-71°10'	Mun.	61	80, 91	Minor	2	4000H	Rwy., prior req.	Flare pots in emerg.
Oak Bluffs, Mass.	Oak Bluffs	41°26'-70°34'	Com.	40	80	Minor	2	2200		
Pachaug, Conn.	Pachaug	41°35'-71°55'	Com.	204		Minor	1	2350	Strip prior req.	
Pembroke (Concord), N.H.	Pembroke	43°10'-71°29'	Com.	320	80		1	2000		
Plymouth, Mass.	Plymouth	41°55'-70°44'	Mun.	149	80	Minor	3	2415		Attend. part time
Plymouth, N.H.	Plymouth Mun.	43°47'-71°45'	Mun.	506			1	2000		
Portland, Maine	Portland Mun.	43°39'-70°18'	Mun.	60	80, 91, 100	Major	3	4262H	Bndy., rwy. on request	
Portsmouth, N.H.	Portsmouth Mun.	43°04'-70°49'	Mun.	94	80, 91	Major	3	5000H	Rwy., prior req.	
Providence, R.I.	NAS Quonset Point	41°35'-71°25'	Navy	14	A+B	Major	4	6000H	Flood, rwy., hi-intens. rwy.	
Providence, R.I.	NAS Quonset Point	41°35'-71°25'	Navy Seapl.	00	A+A BJ	Major	4	21000	Flare path 2 hr. prior req.	Ramps, buoys, beach. Face. avail. 2 hr. prior req.
Provincetown, Mass.	Provincetown Mun.	42°04'-71°13'	Mun.	8	80	Minor	1	3500H	Rwy. prior req.	Fee for lights Aero. Adv. Sta. 122.3
Revere (Boston), Mass.	Revere	42°28'-71°01'	Com.	25	80, 91	Major	3	2715H	Runway, port. prior req.	Fee for lights Aero. Adv. Sta. 122.3
Revere (Boston), Mass.	Revere Seaplane Base	42°28'-71°01'	Com. Seapl.	00	80, 91	Major	1	3300		Closed multi-engine & amphibious acft. Ramp, haulout
Rochester, N.H.	Skyhaven	43°17'-70°55'	Priv.	320			1	1350		Emerg. use only
Salem, Mass.	CGAS Salem	43°31'-70°52'	CG Seapl.	00	A+	Minor	2	10000		Ramp
Sanford, Maine	Sanford Mun.	43°26'-70°43'	Mun.	243	80, 87	Major	3	6000H		
Scarboro, Maine	Scarboro Downs	43°34'-70°21'	Com.	20	87		1	2400		Attend. part time
Seekonk, Mass.	Providence	41°47'-71°18'	Com.	25	90	Major	3	1700		
Smithfield, R.I.	Smithfield	41°55'-71°32'	Com.	400	80	Major	1	1780		
Somersworth, N.H.	Wayside	43°15'-70°54'	Com.	212	80	Major	1	1500		
South Portland, Maine	Port O' Maine	43°36'-70°16'	Com.	60	80, 91	Major	3	2715	Port. prior req.	
South Weymouth, Mass.	NAF South Weymouth	42°09'-70°36'	Navy	152			4	4500		Closed
South Woodstock (Woodstock), Conn.	De Flores	41°55'-71°57'	Com.	450	80	Minor	2	1850		Attd. noon to dusk summer, weekends winter
Spencer, Mass.	Spencer	42°17'-71°58'	Com.	1040			1	1700		Inactive
Sterling, Mass.	Sterling	42°25'-71°47'	Com.	450	80	Major	1	2800	Strip	
Taunton, Mass.	King Field	41°53'-71°01'	Com.	25	80	Major	2	2550		
Tewksbury (Lowell), Mass.	Tew-Mac	42°33'-71°12'	Com.	90	80	Major	1	1850		Attend. weekends
The Weirs, N.H.	The Weirs SPB	43°36'-71°27'	Com. Seapl.	504			3	5000		Ramps, docks, beach. Inactive
Truro, Mass.	Pilgrim Lake SPB	42°04'-70°08'	Com. Seapl.	2	80		3	5000		Pier, buoys, beach
Vineyard Haven, Mass.	Martha's Vineyard	41°23'-70°37'	Mun.	68	80, 91	Major	3	3765H	Port. prior req.	Fld. lgts. on req. Summer season
Wareham, Mass.	Country Club	41°40'-70°43'	Com.	25			1	1780		Inact. not maint.
Warren, N.H.	Morse	43°58'-71°58'	Priv.	780			1	2700		Emerg. use only
Westboro, Mass.	Westboro	42°16'-71°30'	Com.	310	80		4	1800		
West Buxton, Maine	Hilltop	43°40'-70°37'	Com.	300			2	2000		Closed except prior permission
Westerly, R.I.	Westerly State	41°21'-71°45'	Mun.	81	80, 91	Minor	2	4000H	Runway	Field lgts. dusk-2200. After 2200 on req.
Wolfeboro, N.H.	Lakes Region	43°35'-71°16'	Com.	580						Closed. Under constr.
Wolfeboro, N.H.	Lakes Region SPB	43°35'-71°16'	Com. Seapl.	504			All way	Unlim.		Ramp, beach Inactive
Worcester, Mass.	Worcester Mun.	42°16'-71°52'	Mun.	1009	80, 91, 100	Major	3	5498H	Approach, hi-intens. rwy.	Field lgts. prior req. or circle field
York Beach, Maine	York Beach	43°10'-73°36'	Priv.	30			1	1400		Closed

Fuel octane ratings listed by number are those available to civil aircraft, unless otherwise noted.

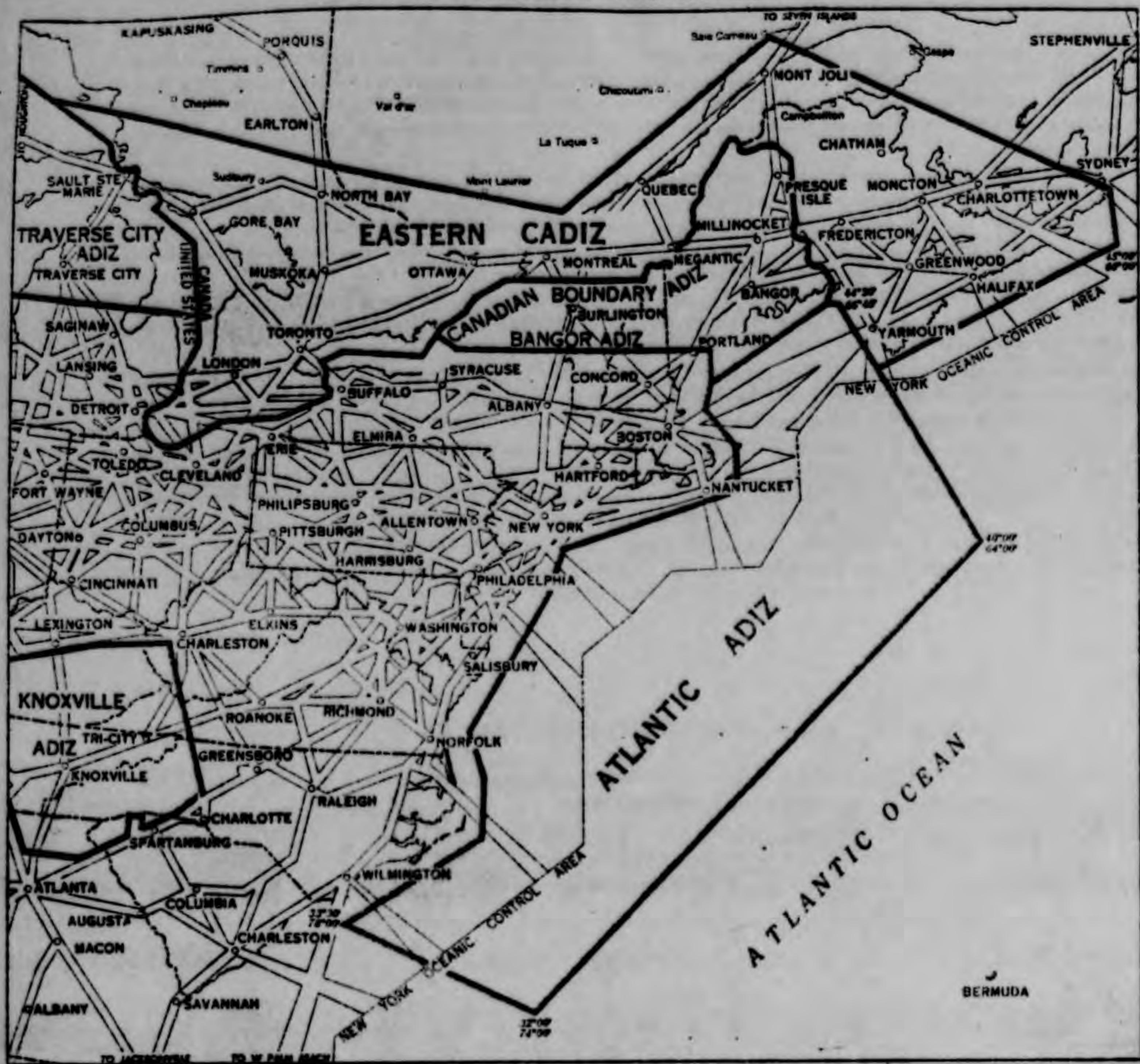
Military fuel is listed by letter code indicating octane ratings as follows: A+ : 115/145, A: 100/130, B: 91/94, C: 73 or 80, J: JP-1, Z.

The above listing does not include Air Force aerodromes.

\*Joint civil and military operation; Air Force facilities at these fields are not listed.

Consult the latest Airman's Guide for changes in data subsequent to date of chart.

# AIR DEFENSE IDENTIFICATION ZONES (ADIZ)



In the United States several areas have been designated as Air Defense Identification Zones (ADIZ) by the Administrator of Civil Aeronautics in the interest of national security. All aircraft entering the Air Defense Identification Zones are required to file flight plans, except aircraft entering from within the Continental Limits of the United States or operating within the Seattle, San Francisco, Los Angeles, Albuquerque, Knoxville, Great Falls, Minneapolis, Traverse City, and Bangor Zones, at altitudes of less than 4000 feet above the immediate terrain. Any person who knowingly or willfully fails to do so is subject to penalties of one year in prison or \$10,000 fine. The Air Defense Identification Zones are identified as follows: Seattle ADIZ, San Francisco ADIZ, Los Angeles ADIZ, Atlantic ADIZ, Pacific ADIZ, Albuquerque ADIZ, Knoxville ADIZ, Great Falls ADIZ, Minneapolis ADIZ, Traverse City ADIZ, Bangor ADIZ, Mexican Boundary ADIZ, and Canadian Boundary ADIZ. These areas are indicated on the face of Aeronautical Charts and are so labeled. For additional information see Civil Air Regulations Part 620.

Canadian Air Defense Identification Zones (CADIZ) have been designated by the Director of Air Services, Department of Transport. All aircraft entering these zones at altitudes of 4000 feet or more above the immediate terrain are required to file flight plans. The Canadian Air Defense Identification Zones are identified as the Eastern CADIZ and the Western CADIZ. They are also indicated on the face of aeronautical charts and are so labeled.

## V.H.F. OMNI-RANGE (VOR)

The V.H.F. omni-range operates within the 112-118 megacycle band. In this band it is relatively free from atmospheric and precipitation static and interference from other radio stations. Furthermore, it is not limited to four courses as is the A-N range, but provides definite guidance on any course, to or from the station, the pilot may select. That is why it is called the Omni (Directional) Range. At minimum instrument altitudes the VOR gives reliable indications up to about 50 miles, depending on enroute terrain.

In flying the V.H.F. omni-range, the pilot uses three basic instruments. The first is the Flight Path Deviation Indicator (cross-pointer instrument), the same type used for the visual-aural range (VAR) and the ILS localizer. The vertical needle of this instrument tells the pilot whether he is right or left of the desired course. The second is an Omni-bearing Selector, manually operated by the rotation of a small knob, by which the pilot selects the course he desires to fly. When the cross-pointer needle is centered, the omni-bearing selector indicates the magnetic bearing of the aircraft either to or from the station. The third is a "TO-FROM" indicator which shows whether the bearing indicated by the Omni-bearing Selector is from or to the station. Furthermore, the "TO-FROM" needle can tell a flier when his aircraft is too far from the VOR or is otherwise receiving a weak signal. In this case the needle points to a red sector instead of TO or FROM.

In operation, the pilot selects a course by adjusting the omni-bearing selector to the desired magnetic bearing, and then maintains it by keeping the cross-pointer needle centered. If the aircraft is correctly aligned with the TO-FROM indications, when the needle swings to the right, for example, it indicates that the course selected lies to the right.

For example, an aircraft is due south of a VOR station. If its pilot desires to fly to the station, he sets the omni-bearing selector to indicate 0°. The "TO-FROM" indicator will then point to the word "TO". As the aircraft passes over the station the "TO-FROM" indicator will point to the word "FROM". If a turn of 180° is made north of the station, although the vertical cross-pointer needle will again become centered, the "TO-FROM" indicator will still point to "FROM". The pilot, however, will now find that he must fly "Away from the needle" to stay on course. This shows him that the "TO-FROM" indicator is incorrect. So, the pilot now rotates his omni-bearing selector to 180°. After he has done this, the "TO-FROM" indicator shifts to the "TO" position, and flying "Toward the needle" will keep him on course.

## TABLE OF V.H.F. RECEPTION DISTANCES

With the increasing use of VHF and UHF frequencies for communication and navigation it appears desirable to publicize the reception distances for these frequencies. They, therefore, are tabulated below:

Feet Above Ground Station*	Reception Distance**- Statute Miles
500	30
1,000	45
3,000	80
5,000	100
10,000	140
15,000	175
20,000	200

\*No physical obstruction intervening.

\*\*Based on zero elevation of the facility.

If you are using a VHF transmitter, remember that its effective range increases with your altitude. Don't attempt to contact a station unless you are within "line of sight"

## U.S. WEATHER BROADCASTS AND TRANSMISSIONS

All continuously operated CAA radio range and radio beacon stations having voice facilities on the range or radio beacon frequencies broadcast weather reports and airway information at 15 and 45 minutes past each hour. The 15-minutes past-the-hour broadcast is an "airway" broadcast consisting of weather reports from important terminals located on airway (s) within approximately 400 miles of the station. The 45-minutes-past-the-hour broadcast is an "area" broadcast consisting of weather reports from locations within the flight information area of the station.

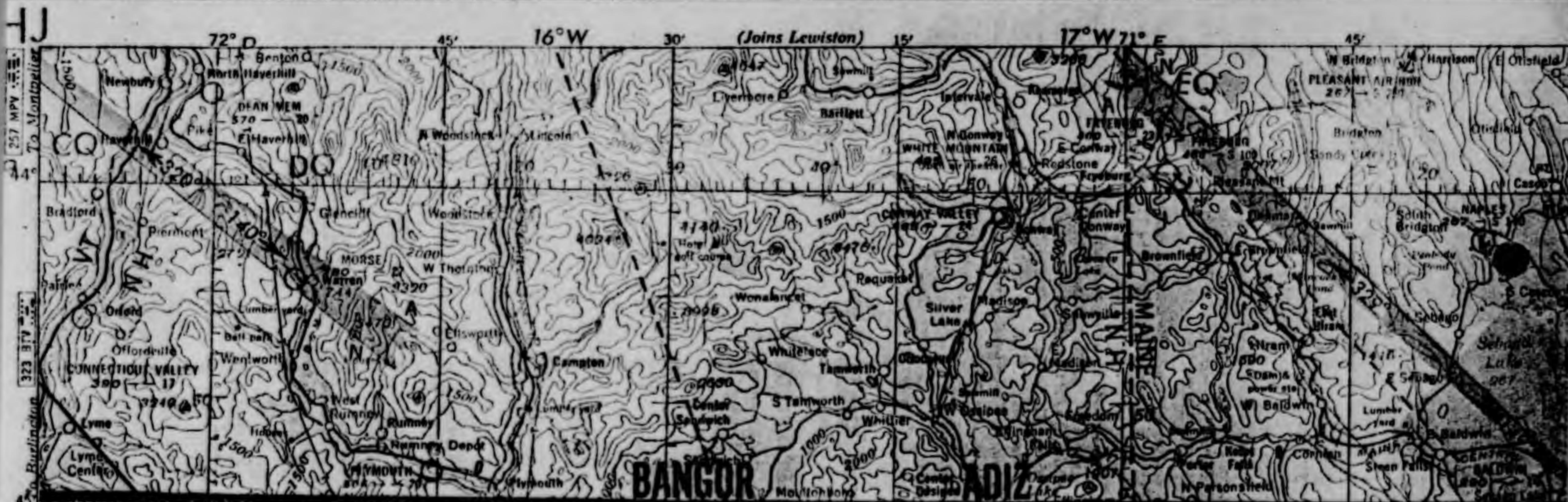
The broadcast consists of the local weather report and the latest available surface reports from other locations. Reports more than one hour old are not broadcast. Local winds aloft are broadcast 4 times after the broadcasts at 6:15 and 12:15 A.M., and P.M., E.S.T. The velocities of winds aloft are broadcast in knots - not miles.

At selected stations the Weather Bureau provides a local terminal forecast covering the next two hours. This forecast is broadcast, when available, immediately following the local weather report.

Pilots enroute are requested to avoid, if possible, calling airway communications stations at or about 15 and 45 minutes past the hour (which are the scheduled broadcast times) to request weather information, as such calls may delay starting of scheduled broadcasts and cause inconvenience to other persons who are dependent on the broadcasts for weather reports.

# BOSTON (UV-10)

**ELEVATIONS IN FEET**



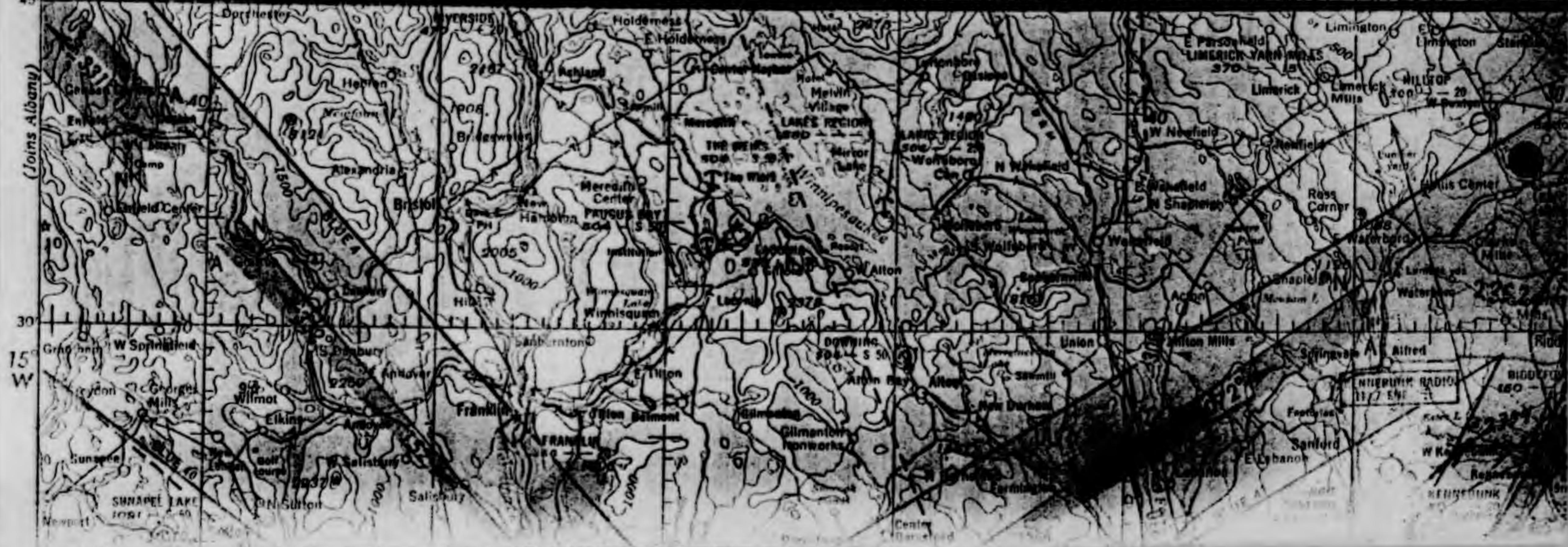
# BOSTON (UV-10)

**ELEVATIONS IN FEET**

HJ



(Join's Albany)



2352Z First radar contact  
0007Z Final radar contact

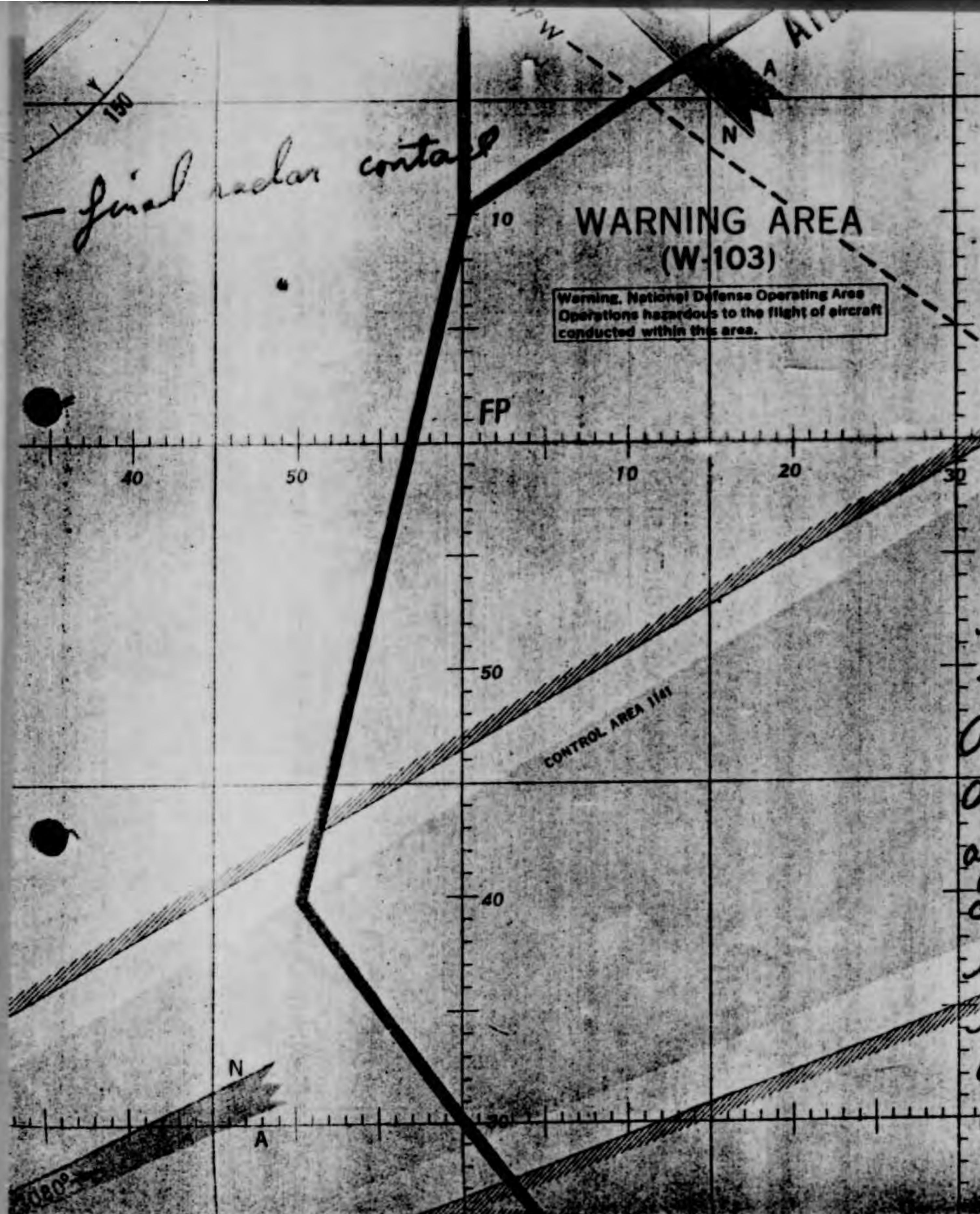
24002 - Find radar contacts

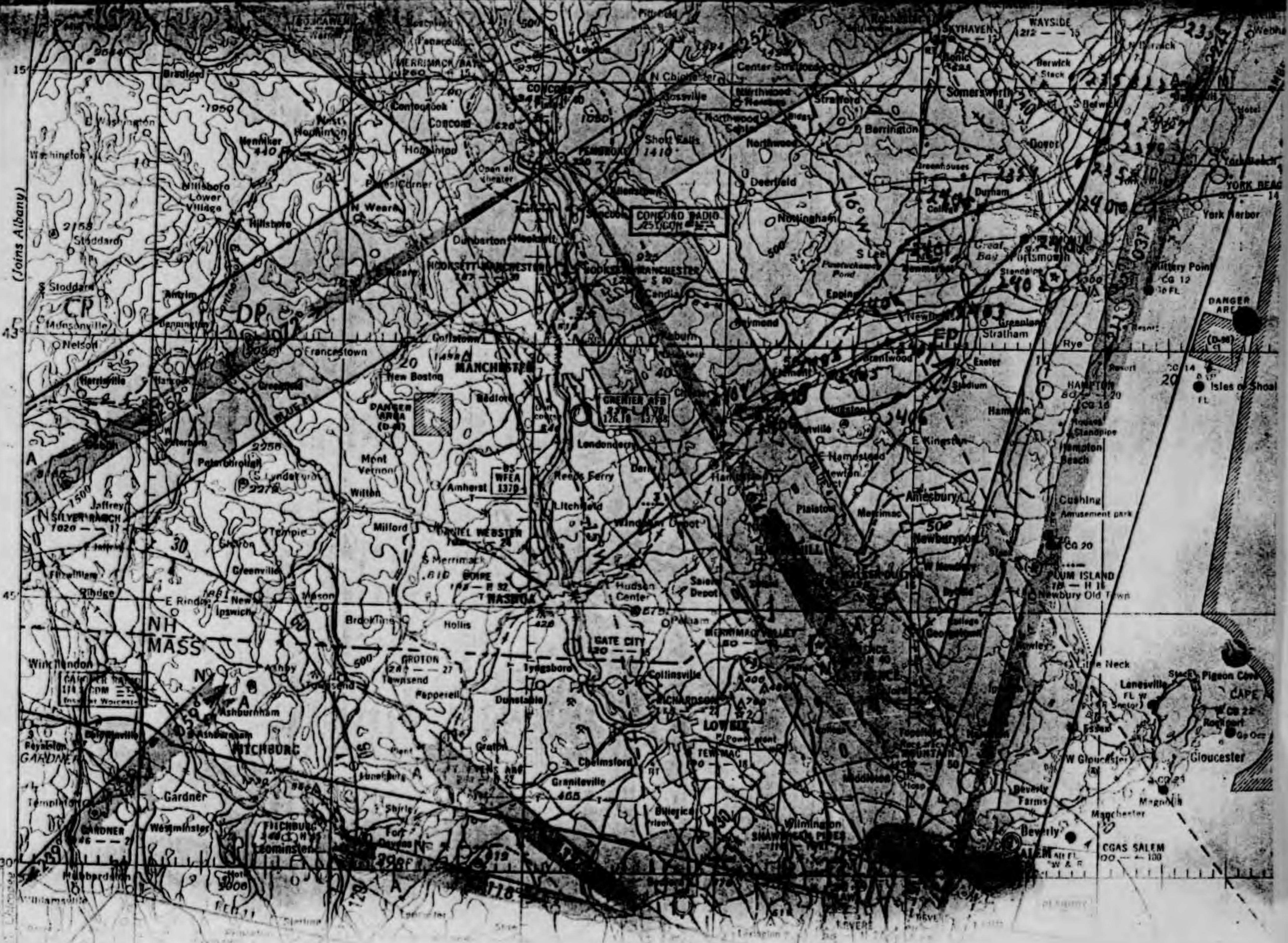
Radar contact was intermittent  
with first range out 3 mi and  
final range at 5 mi.

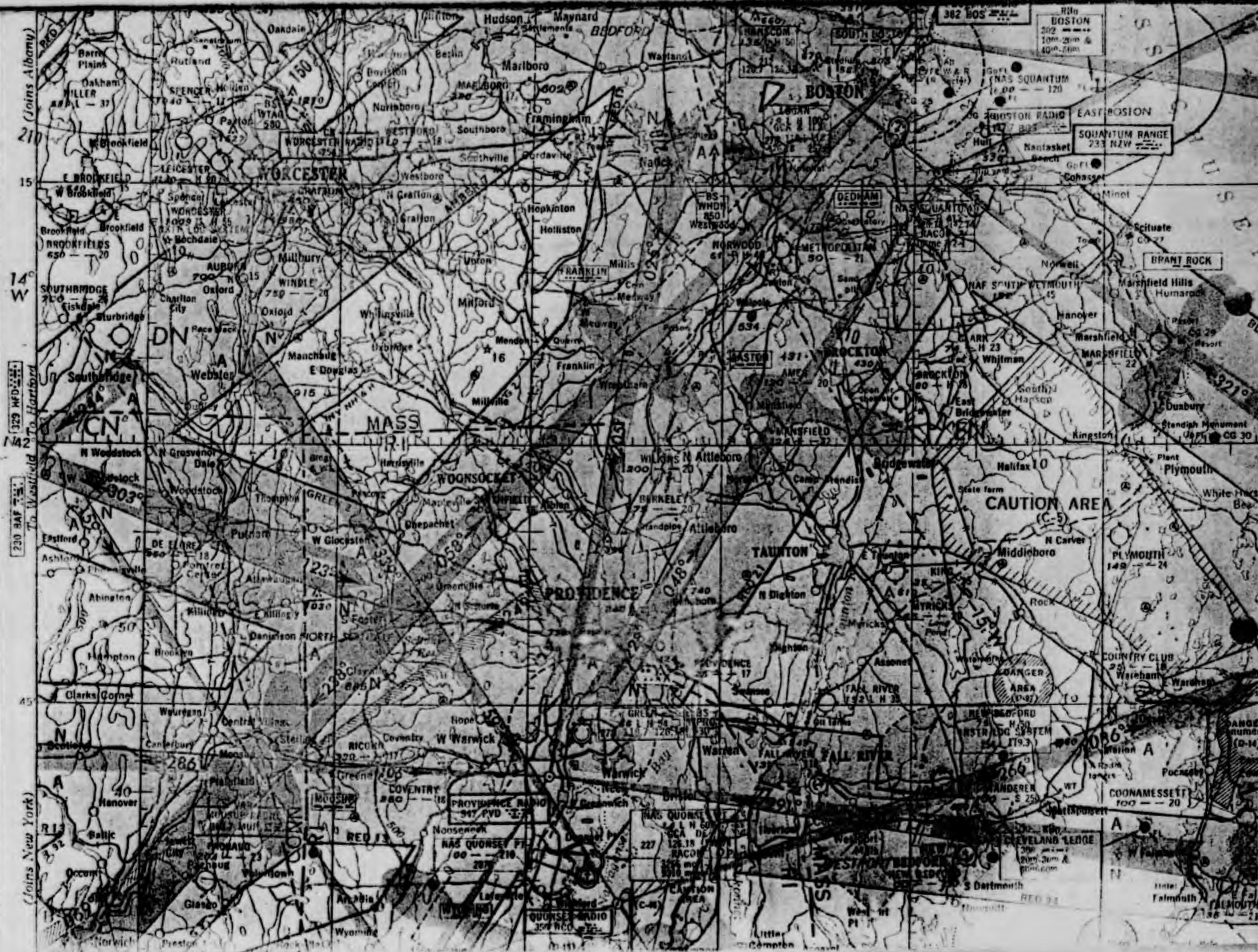
~~Course of P2V is approximate and  
line is apparent relative velocity~~  
of objects. P2V course heading. Times  
are relative at initial sighting. Times  
of objects and P2V shows change in  
relative speed between the two. P2V speed  
was constant at 165 K indicated, 180 K

At 2403 a turn was made heading directly for object. At 2405 object appeared to be closing fast on collision course. At 2405 a turn was made because of high closing rate, which have been caused by object either on heading WARNING AREA 25. After turn was made object disappeared slowly in

**Warning. National Defense Operating Area.  
Operations hazardous to the flight of aircraft  
conducted within this area.**







## JOINT MESSAGEFORM

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: CG SAC OFFUTT AFB OMAHA NEBR

INFO:

DATE-TIME GROUP <b>222030Z SEPT 52</b>		SECURITY CLASSIFICATION [REDACTED]
PRECEDENCE FOR:	ACTION <b>ROUTINE</b>	
<input type="checkbox"/> BOOK MESSAGE <input type="checkbox"/> MULTIPLE ADDRESS		<input checked="" type="checkbox"/> ORIGINAL MESSAGE <input type="checkbox"/> CRYPTOPRECAUTION <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
REFERS TO MESSAGE:		
IDENTIFICATION	CLASSIFICATION	

FROM: AFODIN-ATIC-9-9-E

FOR DIRECTOR OF INTELLIGENCE

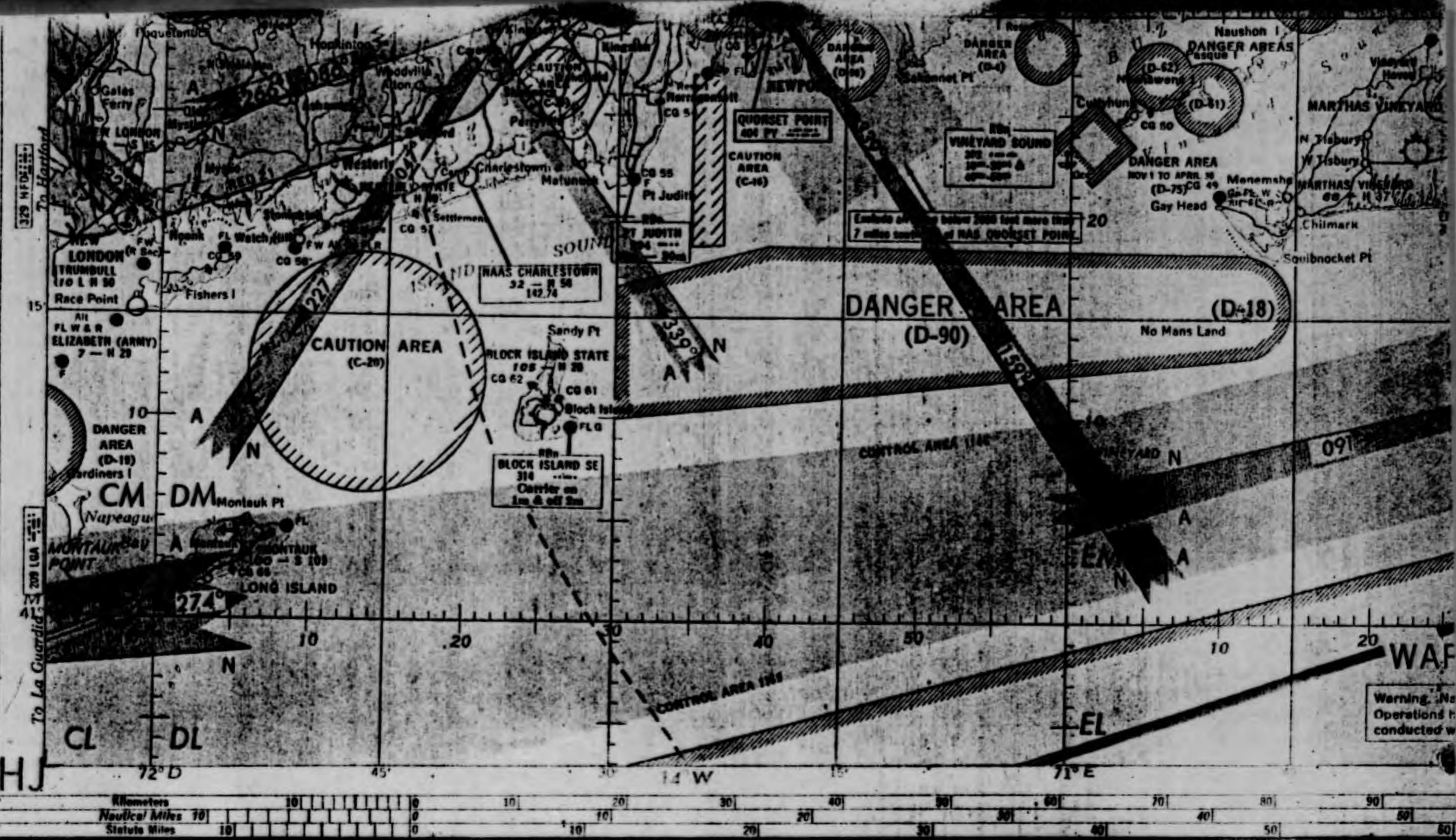
Naval P2V reported electronic and visual sighting of unidentified flying object from 162100Z to 170000Z Sept 52 in vicinity of Portland, Maine, 4340N - 07320W. Report indicates possibility that subject sighting was caused by an air to air refueling operation. Request you inform this HQ of any such SAC activities in area of Portland, Maine, at the above times. In reply, cite Project Blue Book.

		PAGE <b>1</b> OF <b>1</b> PAGES
DRAFTER'S NAME (and signature, when required)  LIA S. MURRAY		RELEASING OFFICER'S SIGNATURE
SYMBOL  ATIC-5	TELEPHONE  65365	OFFICIAL TITLE  DIRECTOR OF INTELLIGENCE, AIR FORCE AIR ASSISTANT GENERAL

DD FORM 1 OCT 49 173

REPLACES NMIC FORM 173, 1 MAY 48.  
WHICH MAY BE USED.

16-58920-8 ★ U. S. GOVERNMENT PRINTING OFFICE



PRICE 25 CENTS

## **BOSTON (UV-10)**

COMPILED AND PRINTED AT WASHINGTON, D. C.  
BY THE U. S. COAST AND GEODETIC SURVEY  
UNDER AUTHORITY OF THE SECRETARY OF COMMERCE

**Principal Sources:** U. S. Geological Survey, U. S. Army Corps of Engineers, U. S. Air Force, U. S. Dept. of Agriculture, Civil Aeronautics Administration, and the U. S. Coast and Geodetic Survey.

**NOTE: It is requested that users of this chart indicate corrections and additions which come to their attention and notify "THE DIRECTOR, U. S. COAST AND GEODETIC SURVEY, WASHINGTON 25, D. C."**

TO REFERENCE BY THE GEOREF (SHOWN IN BLUE) TO MINUTE

**(Select nearest intersection South and west of point)**

**Sample Point: BRADFORD**

1. HJ identifies basic 15° quadrangle
  2. DM identifies 1° quadrangle
  3. 15 identifies Georef minute of longitude
  4. 24 identifies Georef minute of latitude
  5. Sample reference: **HJDM1524**

1. Other  
2. Attached  
3. C. files

REB880

NOV 12 08 AM 1952

AFOR

JEDMH B889

P9

AT 1<sup>C</sup>

RR JESBA JEDWP JEDBO 333

DE JEDMH 438

ACTION

1623 001 13

R 111958Z ZNJ

FM CGSAC OFFUTT AFB NEBR

TO JESBA/CG 2 AF BARKSDALE AFB LA.

INFO JEDWP/CGATIC WRIGHT PATTISON AFB OHIO

JEDBO/CO 801 AIR DIV LOCKBOURNE AFB OHIO

[REDACTED] DOCOC 30708. PROJECT BLUE BOOK. FOLG MSG RECD FROM CG ATIC WRIGHT PATTISON AFB OHIO IS FWDD FOR NECESSARY ACTION.

"FROM AFOIN-ATIAA-9-18-E FOR D/INT REURMSG AFOIN-ATIAA-9-9-E CONCERNING FLYOBRPT OF 162345Z TO 170001Z SEP 52 AT PORTLAND, ME AND REURMSG DOCO 27202. ADDITIONAL INFO FR CREW OF U S NAVY P2V WHICH MADE SIGHTING INDICATES VISUAL CONTACT WITH OBJECTS WAS CONSTANT FR 162352Z TO 170001Z. OBJECTS WERE ON COURSE HEADING OF APRX 220 DEG FOR OVER 70 NAUTICAL MILES.

NAVAL ACFT FOLLOWED OBJECTS FROM 4345N - 07015W TO 4300N - 07115W. DESCRIPTIONS OF THE FLYING OBJECTS BY PILOT AND CO-PILOT

ACTION

ACTION

PAGE TWO JEDMH 438

OF P2V NEVERTHELESS INDICATE STRONG POSSIBILITY THAT THEY  
OBSERVED A REFUELING OPN HOWEVER TIME QUOTED IN YOUR MSG DOCO  
2722 AND COURSE OF THE 2 KC-97'S OVER PORTLAND ARE AT VARIANCE  
WITH NAVAL P2V'S RPT. REQ YOU VERIFY THE TIME THE 2 KC-97'S  
ENTERED THE PORTLAND MAINE AREA WHEN AND WHERE THEY CONDUCTED  
REFUELING OPN AND COURSE HEADING AND APPROXIMATE TIME AS THEY LEFT  
THE PORTLAND, ME AREA. ALSO REQ YOU DETERMINE WHETHER OR NOT CREWS  
OF KC-97'S WERE AWARE OF OTHER ACFT FOLG THEM. IF YOU ARE UNABLE  
TO DO THIS REQ NBR'S OF KC-97 ACFT PILOTS NAMES, ORGANIZATIONS AND HOME  
STATIONS SO THAT ATIC CAN INTERROGATE DIRECTLY. IN REPLY, CITE PROJECT BLE  
BOOK." 2. TELEPHONE CONVERSATION WITH LOCKBOURNE CONTROL ROOM INDICATES  
THESE ACFT WERE KC-97'S NBR'S 5-1243 AND 5-1262 OF 26 ARS. ACFT COMDRS  
WERE CAPT DONALD E DODDINGTON AND CAPT ALMERY R. HAMBLIN. REQ YOU  
FURNISH INFO DIRECT TO ATIC, INFO THIS HQ.

11/28/72 OCT JEDMH

RE: P2V NEALS VIDEO REC

JEDMH BN30

BN30

## JOINT MESSAGEFORM

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG AZIS

TO: CG SECY AFIAA-AIR INTL

INFO:

DATE/TIME/GROUP <b>10000 00Z 52</b>		SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>
PRECEDENCE FOR:	ACTION ROUTINE	INFORMATION
<input type="checkbox"/> BOOK MESSAGE	<input type="checkbox"/> ORIGINAL MESSAGE	
<input type="checkbox"/> MULTIPLE ADDRESS	CRYPTOPRECAUTION	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
REFERS TO MESSAGE:		
IDENTIFICATION <b>1000 30708</b>	CLASSIFICATION <b>UNCLASSIFIED</b>	

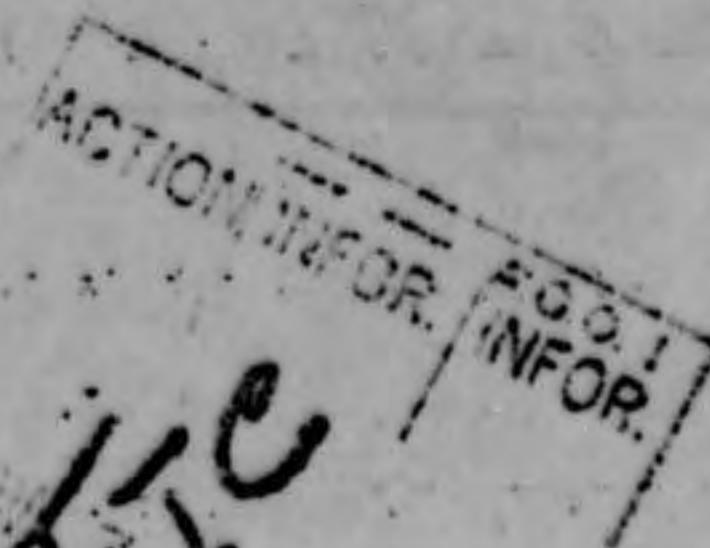
FROM: AFIAA-AIR INTL-10-19-8 FOR DIRECTOR OF INTELLIGENCE

Reference your message 1000 30708, AZIS has received no information from Lockbourne AB. Request 2nd follow-up or authorizing AZIS to contact the 801 Air Div. directly.  
In reply cite Project Blue Book.

SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>		PAGE <b>1</b> OF <b>1</b> PAGES
DRAFTER'S NAME (and signature, when required)  <b>LT A. G. FLICK/VS</b>	RELEASING OFFICER'S SIGNATURE  <b>JOHN W. CROWLEY, MAJOR, USAF</b>	
SYMBOL <b>AFIAA-5</b>	TELEPHONE <b>63365</b>	OFFICIAL TITLE <b>AIR ADJUTANT GENERAL</b>

1. Atia  
2. Atica  
3. C. files

7 Nov 52 1338  
P.S.



RC 93T

WPA 122

VMA 277

JEDMH B793

RR JEDWP JESBA JEDBO 333

DE JEDMH 97

R 062300Z

FM CGSAC OFFUTT AFB NEBR

TO JEDWP/CG ATIC WRIGHT PATTISON AFB OHIO

INFO JESBA/COMGENAF TWO BARKSDALE AFB LA

JEDBO/CO AD 801 LOCKBOURNE AFB OHIO

DOCOC 36238. PROJECT BLUE BOOK. REF OUR MSG DOCOC 30708

DTG 110500Z AND URMSG AFQIN = ATIAA-10-19-E. THIS HQ AUTHORIZES  
CG ATIC TO CONTACT 801ST AIR DIV DIRECT TO OBTAIN DESIRED INFO.

06/23/52 NOV JEDMH

JEDMH 092  
JESBA A 01  
T

PARAPHRASE NOT REQUIRED. SEE CRYPTO-CENTER  
BEFORE DECLASSIFYING

1. Atta  
2. Atta  
3. Atta  
[redacted file]

JEBBO A35  
OPOP JEDWP JEDMH JESBA 333

DE JEDBO 68

OP 112/2219Z

FM COADIV 881 LOCKBOURNE AFB OHIO  
TO JEDWP/AIR TECHNICAL INTELLIGENCE CENTER WRIGHT-PATTERSON FIELD OHIO  
INFO JEDMH/CGSAC OFFUTT AFB NEBR  
JESBA/338-1 2 BARKSDALE AFB LA

/ [redacted] //91D00 & 847 PD ICW SAC MSG DOCOC 30708 DTD  
11 OCT 52 AND 2D AF MSG 2AF00 4682 DTD 14 OCT 52 PD A THROUGH INSP OF  
NAV LOGS AND INTERROGATION OF CAPT DONALD E DODDINGTON ACFT COMDR ON  
KC-97 NO 5-1234 AND CAPT ALMERY R HAMBLEN ACNT COMDR ON KC-97 NO  
5-1262 CMA PLT ASGD TO 26TH AIR RFLG SQ LOCKBOURNE AFB OHIO REVELS THE  
FOLG INFO PD CAPT HAMBLEN IN KC-97 NO 5-1262 STATES THAT AT 2117Z CMA  
16 SEPT 52 HE PASSED OVER PORTLAND CMA MAINE ON A TRUE CRSE OF 242  
DEGREES E/R TO CONCORD CM NEW HAMPSHIRE ARR AT 2138Z NAD HELD UNTIL  
2200Z THEN PRO TO MONTAUK PT CM NEW YORK RR AT 2245Z PD THIS ACFT  
THEN PRACTICED RENDEZ-VOUS WITH ACFT KC-97 NO 5-1234 BETWEEN MONTAUK PT

PAG TWO JEDBO 68

CMA NEW YORK AND TEN MILES WEST OF PROVIDENCE CMA RHODE ISLAND CMA DEPT  
42 DEGREES 15 MIN 71 DEGREES 30 MIN WEST AT 0919Z CMA 17 SEPT 52 FOR  
LOCKBOURNE AFB OHIO PD CAPT DODDINGTON IN KC-97 NO G5-1234 STATES THAT  
HIS ACFT ARR FROM ELMIRA CMA NEW YORK AT MONTAUK PT CMA NEW YORK ON A  
TRUE CRSE ON 186 DEGREES AT 2240Z CMA 16 SEPT 52 AND PRACTICED REND  
EZVOUS WITH ACFT KC-97 NO 5-1234 DEPT WORCESTER CMA MASSACHUSETTES AT  
APPROX 0919Z CMA 17 SEPT 52 FOR NEWARK CMA NEW JERSEY E/R TO LOCKBOURNE  
AFB OHIO PD FURTHER INFO SBM IS THAT AT NO TIME DID THESE ACFT FLY A  
RFLG OR FORMATION MSN TO-GETHER AND WERE SEP AT ALL TIMS BY AT LEAST  
TWO MILES ON THE COMP OF THEIR RENDZG-VOUS PD PLT OF THESE TWO KC-97'S  
ALSO HAVE STATED THAT THEY DID NOT AT ANY TIME OBSR ACFT FOL THEM  
DURING THEIR MSN PD PLT STATE ALSO THAT THEIR PSN WERE KNOWN AT ALL TIMES  
SINCE THE WEA WAS CAVU IN THE RENDEZ-VOUS AREAS PD FURTHER INTERROGATION  
IS NEEDED ACFT AND PLT MENTIONED ABOVE ARE ASGD TO THE 26TH AIR RFLG  
SQ LOCKBOURNE AFB OHIO PD THIS MSG SUPS AND CORRECTS ANY PREVIOUS MSG  
GIVEN PD

12/2220Z NOV JEDBO

## JOINT MESSAGEFORM

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: CO, LOCKHEED AFB, COLUMBUS, OHIO

INFO:

DATE-TIME GROUP <b>121415Z NOV 52</b>		SE
PRECEDENCE FOR:	ACTION <b>ROUTINE</b>	INFORMATION
<input type="checkbox"/> BOOK MESSAGE		<input checked="" type="checkbox"/> ORIGINAL MESSAGE
<input type="checkbox"/> MULTIPLE ADDRESS		CRYPTOPRECAUTION <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
REFERS TO MESSAGE:		
IDENTIFICATION		CLASSIFICATION

FROM: AFQMR-ATIC-A-11-6-2 FOR 501st Air Div, HQ, Intelligence Office

ATIC-A-5

Headquarters SAC advises that two KC-97 aircraft of 26 ARS numbers 5-1243 and 5-1262, aircraft commanders Capt Donald E. Doddington and Capt Almyry R. Hamblen, were in the vicinity of Portland, Maine, at or about the time that a US Navy P2V aircraft reported sighting of two unidentified flying objects. US Navy aircraft maintained visual contact with objects from 162315Z to 170010Z Sep 52. Electronic contact with objects was intermittent from 162550Z to 162555Z Sep 52. Objects were on course heading of approximately 240° for over 70 nautical miles. US Navy P2V followed objects from 16150-070157 to 1600-071157. Descriptions of the flying objects by pilot and co-pilot indicate strong possibility that they observed a refueling operation. Request all available information concerning times, courses, locations, and refueling operations of the above referenced KC-97 aircraft during the time of the sighting of the two unidentified flying objects. Also request you determine whether or not crews of

## JOINT MESSAGEFORM

FROM: (Originator)

CC ATIC

TO:

INFO:

KC-97's were aware of other aircraft following them.

In reply a/c Project Blue Book.

DATE-TIME GROUP <b>121415Z NOV 52</b>		SECURITY
PRECEDENCE FOR:	ACTION	INFORMATION
<input type="checkbox"/> BOOK MESSAGE	<input type="checkbox"/> ORIGINAL MESSAGE	
<input type="checkbox"/> MULTIPLE ADDRESS	CRYPTOPRECAUTION <input type="checkbox"/> YES <input type="checkbox"/> NO	
REFERS TO MESSAGE:		
IDENTIFICATION	CLASSIFICATION	

COMMUNICATIONS

MEMO

RCA

SECURITY	PAGE <b>2</b> OF <b>2</b> PAGES
DRAFTER'S NAME (and signature, when required) <b>Lt A. G. Flores/jos</b>	RELEASING OFFICER'S SIGNATURE
SYMBOL <b>ATIAA-5</b>	TELEPHONE <b>65365</b>
OFFICIAL TITLE <b>ROBERT E. KENNEDY, VAUGHN, USAF</b> <b>AIR ADJUTANT GENERAL</b>	

DD FORM 173  
1 OCT 49REPLACES NMIC FORM 173, 1 MAY 48,  
WHICH MAY BE USED.

16-58923-8 ★ U. S. GOVERNMENT PRINTING OFFICE

FM HQ USAF WASHDC

TO JEDEN/CGAIRDEFCOM ENT AFB COLO

JEDWP/CHIEF ATIC WRIGHT PATTERSON AFB OHIO

JEPLG/CGTAC Langley AFB VA

FROM: AFOIN 57793. FLYOBRPT. ATTN: ATIAA-20.

RE OUR AFOIN 57785/CMA PART ONE CMA SOURCE COCO PORTION CONCERNING

ELEV AT WHICH SIGHTED SHOULD READ AS FOLWS CLN OBJ OBSERVED

THROUGH ABOUT THREE FIVE DEGREES OF ELEV OR IN OTHER WORDS FR INITIAL

ELEV OF ABOUT FOUR FIVE DEGREES TO POINT OF DISAPPEARANCE BEHIND

HOUSE PD LATTER POINT CORRESPONDS TO ABOUT ONE ZERO DEGREE ELEV END

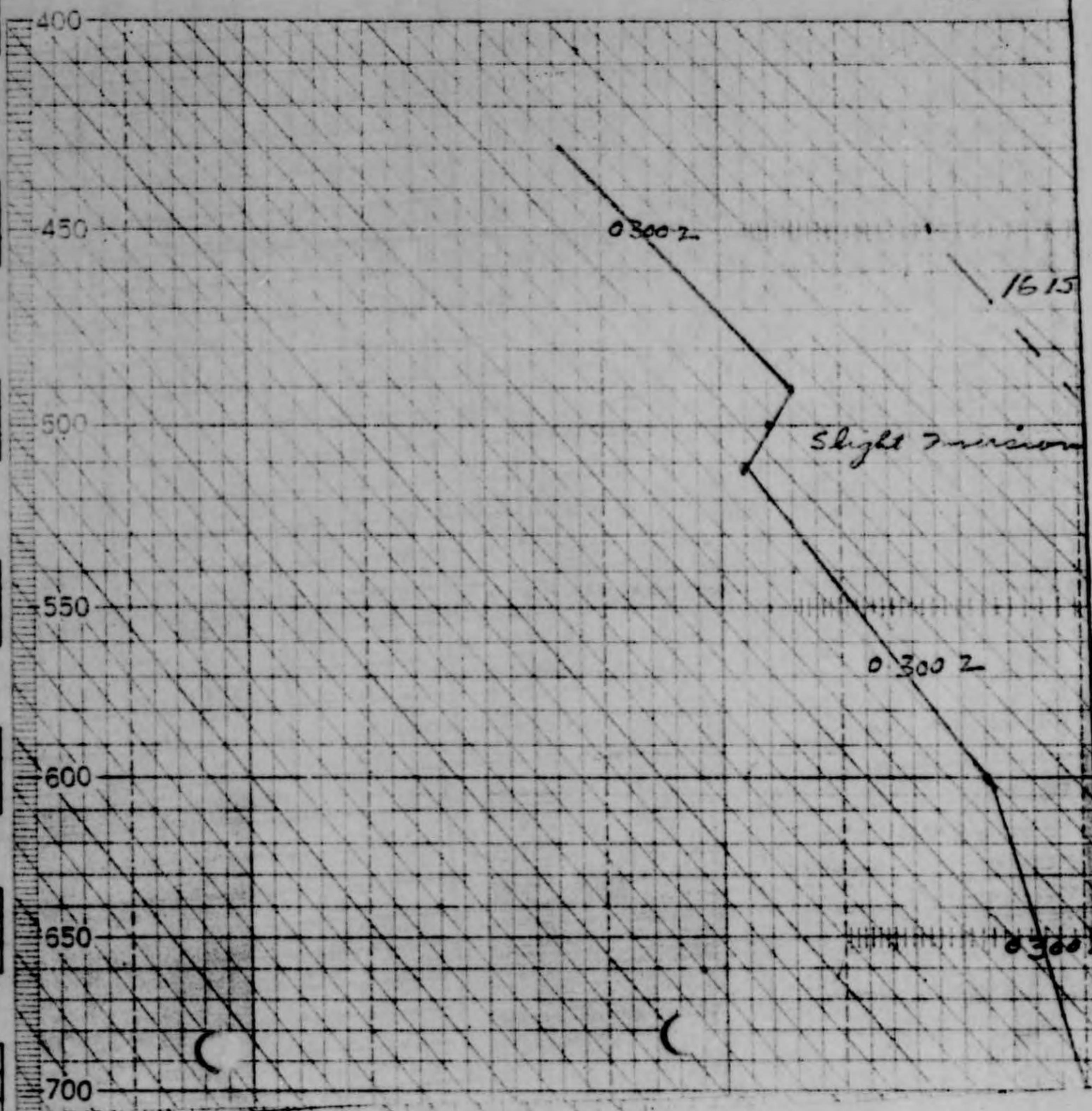
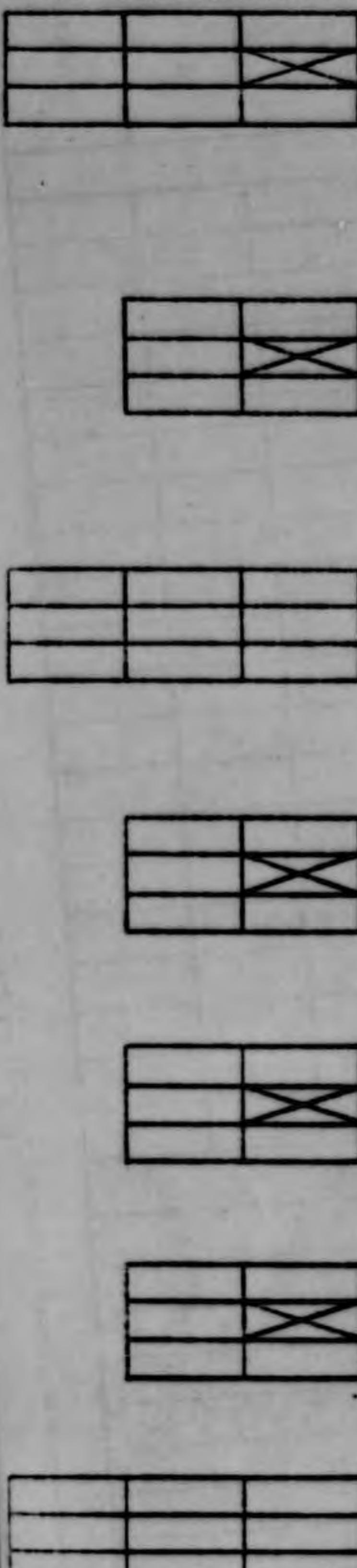
13/1722Z SEP JEPHQ

*Cy*

## BASELINE CHECK READINGS

Time G.C.T.	Ordinate	Temperature		Relative Humidity			Psychrometer (ice) (water)	
		Dry	Wet	Ordinate	Read %	Cor. %		
			$\sigma_p$		$^{\circ}C$			

## CONSTANT PRESSURE DATA

9 Km.  
 $-40^{\circ}$ 8 Km.  
 $-30^{\circ}$ 7 Km.  
 $-20^{\circ}$ 6 Km.  
 $-10^{\circ}$ 

## JOINT MESSAGEFORM

10073

~~SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY~~

FROM: (Originator)

CG ATIC

TO: CG SAC OFFUTT AFB OMAHA NEB

INFO:

DATE-TIME GROUP <b>301345Z SEP 52</b>		SE
PRECEDENCE FOR:	ACTION	INFORMATION
<input type="checkbox"/> BOOK MESSAGE <input type="checkbox"/> ORIGINAL MESSAGE		
<input type="checkbox"/> MULTIPLE ADDRESS      CRYPTOPRECAUTION <input type="checkbox"/> YES <input type="checkbox"/> NO		
REFERS TO MESSAGE:		
IDENTIFICATION DOC# 27202	CLASSIFICATION UNCLAS/STUFFED	

FROM: AFOLB-ATIC-AIAA-9-10-2 FOR DIRECTOR OF INTELLIGENCE

ATIC

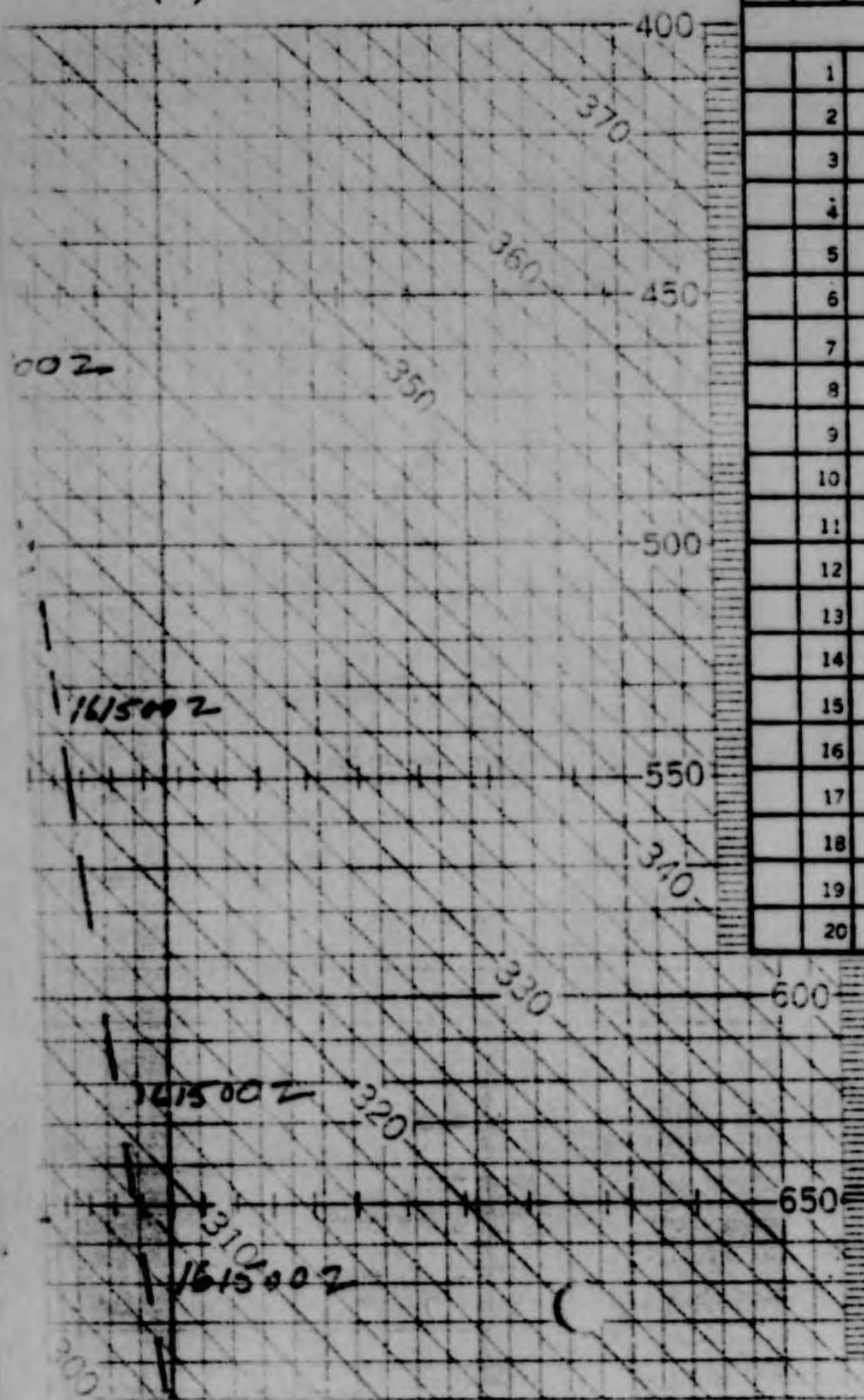
Reconning AFOLB-ATIC-AIAA-9-9-4 concerning Mycrypt of 162345Z to 170010Z Sep 52 at Portland, Maine, and reconning DOC# 27202. Additional information from crew of U.S. Navy P2V which made sighting indicates visual contact with objects was constant from 160350Z to 170001Z. Objects were on course heading of approximately 220° for over 70 nautical miles. Naval aircraft followed objects from 14345W - 07015W to 1300H - 07115W. Descriptions of the flying objects by pilot and co-pilot of P2V nevertheless indicate strong possibility that they observed a refueling operation; however, time quoted in your message DOC# 27202 and courses of the two KC-97's over Portland are at variance with Naval P2V's report. Request you verify the time the two KC-97's entered the Portland, Maine area, when and where they conducted refueling operation, and courses headings and approximate time as they left the Portland, Maine area. Also,

# ADIABATIC CHART

**WBAN-31 A**

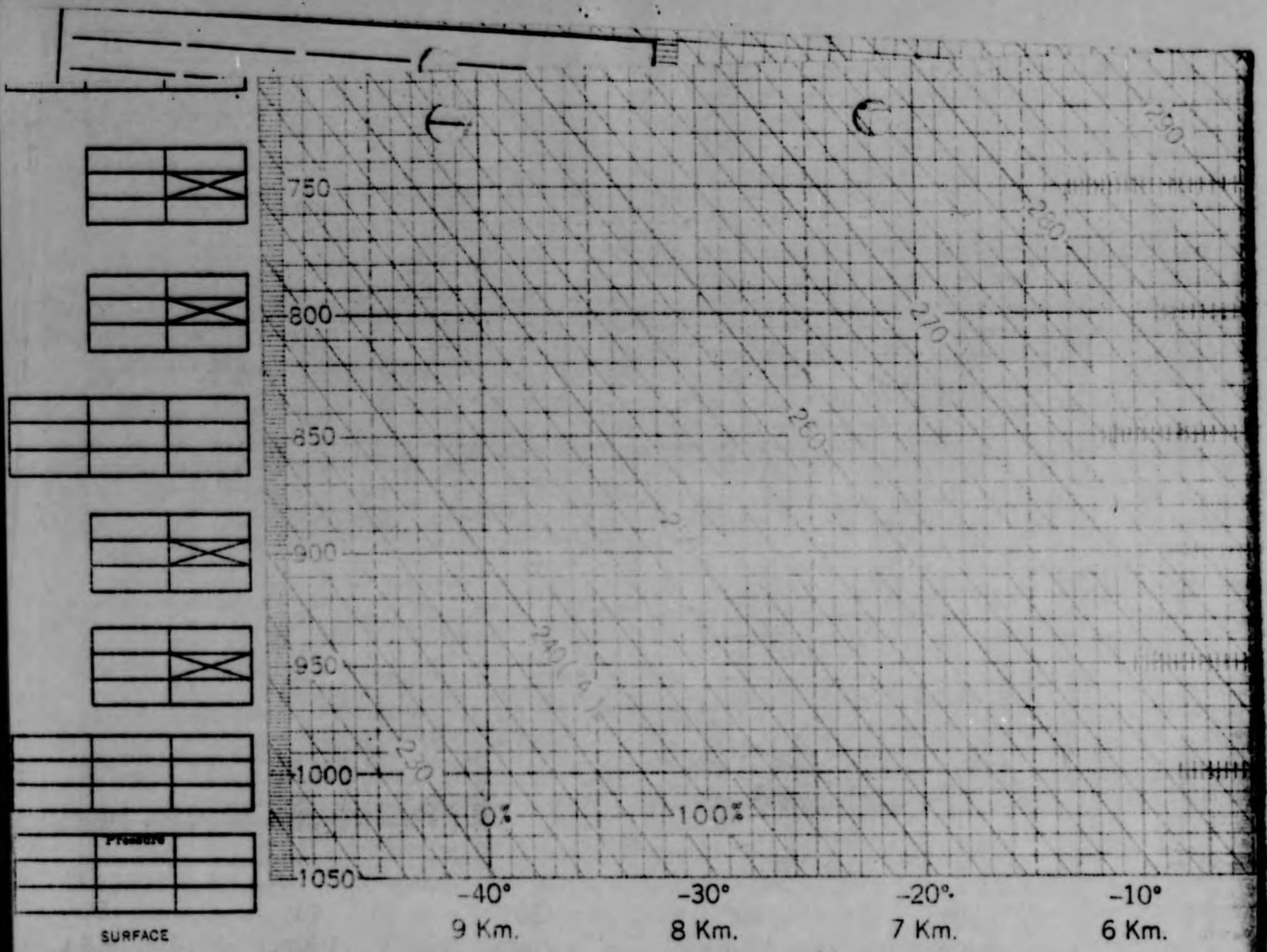
5 Km  
0°(C.)

4 Km.  
10°



**DATA BLOCK A**

Code Check	Level No.	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT °C	REMARKS
		Contact	mb	Ordinate	Ascent (°C)	Ordinate	% Including Correction of %		
SIGNIFICANT LEVELS									
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
		CODED MESSAGE FOR TRANSMISSION							
		<hr/>							
									



Station **PWM**  
**Portland, Me. 606**  
 Lat. \_\_\_\_\_ Long. \_\_\_\_\_

DATA AS TRANSMITTED		D. P. TO 0.1 °C OTHER DATA AS ENTERED ON WSAN-33 OR PUNCHED CARD	
00NNN		H (gpm)	T
TTT <sub>2</sub> T <sub>0</sub> T <sub>2</sub>	*	RH	D P
OooW	D (16 pts.)	Wind	S (m.p.s.)

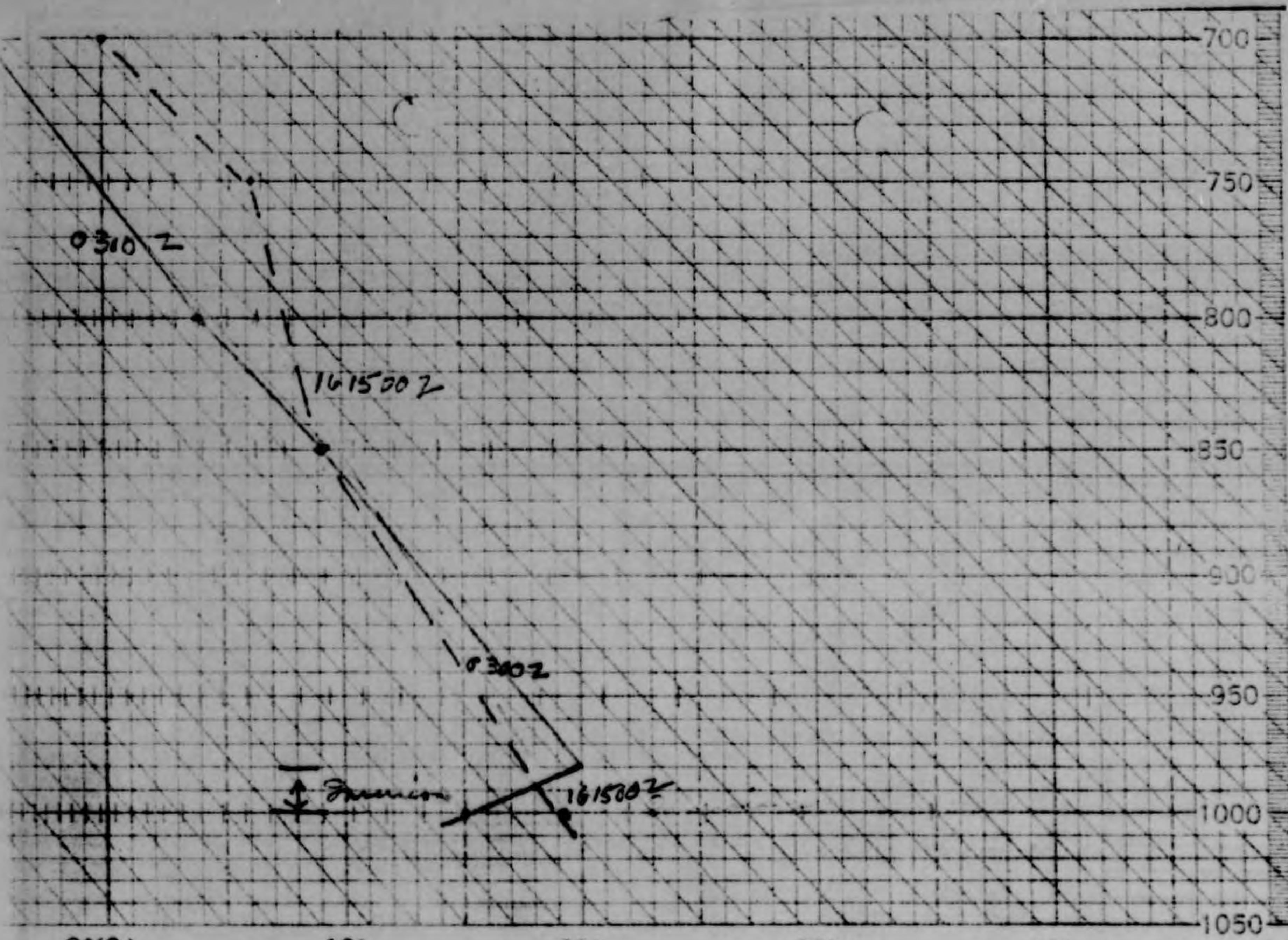
\* Omitted above 200 mbs.

PH—Pressure-height

T—Temperature °C

RH—Relative Humidity

Height scale in gpm



0°(C.)                  10°                  20°                  30°                  40°                  50°  
 5 Km.                  4 Km.                  3 Km.                  2 Km.                  1 Km.                  M.S.L.

Drawn by.....

*Flures*

Verified by.....

al meters

Inspected by.....

DATE AND RELEASE TIME

	Year	Month	Day	Time
th Mar.				
G.C.T.	52	SEP	17	0300Z
Radiosonde No.				Ascension No.

A. F. STOCK NO. 2600-701-636-510

BASELINE CHECK READINGS

Temperature	Humidity	Altitude	Time	G.C.T.

443-C-855343

SW AND FLEW OUT OF CONTACT AND HEADED

DE JEPSON 76

P 151950Z

FM HQ 32D AD "MANCOCK FLD EASTWOOD STA & SYRACUSE NY

TO JEPNB/CG EADF STEWART AFB NEWBURGH NY

INFO JEDVP/ATIC WRIGHT-PATTERSON AFB OHIO

~~RECORDED~~ ACFOIN 9445. ATTN DIRECTOR OF INTELLIGENCE

EADF PD ATTN CAPT RUFELT WRIGHT PATTERSON PD FLYOBRPT. FOL IS COPY OF TWI MSG REC FR 654TH AC&W SQS "NAVY PILOT AND CREW REPT OF VISUAL AND ELECT SIGHTING OF UNIDENTIFIED FLY OBJ. ON NIGHT OF 16 SEP 52 THE PILOT AND CREW OF A RADAR EQUIPPED P2V OF VP SQ 26 PRESENTLY LOCATED AT THE BRUNSWICK NAS, BRUNSWICK, ME, MADE THE DISCUSSED SIGHTING. THE SIGHTING WAS REPT TO THE VP SQ INTEL OFF, LT BRITT, AT THE MORNING BRIEFING AT 0800 HRS, 17 SEP 52. LT BRITT CONTACTED THE AC&W SQ INTEL OFF IN PERSON AND MADE THE FOL REPTS LT J. M. BOAK AND CREW DEPT

1. Atac  
2. Atac

C. files

CENTRAL FILES

PAGE TWO JEPSON 76

BRUNSWICK WAS ON LOCAL FLT IN THE P2V AT 1822 HRS EDT. WHILE IN VICINITY OF PORTLAND ME, 2 OBJ WERE SIGHTED VISUALLY FLY IN SOUTHERLY DIR. LT BOAK REPT THAT THERE WERE 2 OBJ, ONE ABOVE AND AHEAD OF THE OTHER MUCH AS A TOWING OR REFUELING FORMATION. THE UPPER OBJ WAS DARK WITH NO VISIBLE LIGHTS. THE LOWER OBJ HAD 4 OR 5 LIGHTS ARRANGED IN A CIRCLE. THE VISUAL SIGHTING WAS VERIFIED BY RADAR, APS 31. THE TGT APPEARED ON RADAR AS A LINE RATHER THAN AS 2 SEPARATE PIPS. THERE WAS A DISCREPANCY IN REPT TIME OF SIGHTING. LT BOAK, WHO WAS NOT AVAL FOR

INTERVIEW REPT TIME OF SIGHTING AGAINST  
NO LINES ATCH 2 OBJ WERE VISIBLE. NO DEFINITE REPR  
DUE TO DARKNESS. ENSIGN HARA STATED THE DARK OBJ WAS LARGE AND FIRST  
IMPRESSION WAS A COCA 54 OR COCA 119 TOWING A LIGHTED OBJ. HARA  
FURTHER STATED SINCE THE CLOSEST OBJ WAS APPROACHED WAS FR 2 AND ONE  
HALF TO 3 MILES, ALL THAT HE COULD DEFINITELY SAY WAS THAT THE DARK OBJ  
WAS LARGE BUT COULD NOT MAKE OUT A SIZE OR SHAPE OF LIGHTED OBJ. HARA  
STATED THAT THE PAPA 2 VICTOR ALTERNATELY CLOSED IN ON AND FELL BEHIND  
THE OBJ AND THAT THE PAPA 2 VICTOR WAS UNABLE TO GET IN A POSITION TO  
GET OBJ DOWN SUN ON THEM. HARA COULD NOT DEFINITELY STATE OBJ WERE  
TAKING EVASIVE ACTION AS HE WAS ALTERNATING BETWEEN COCKPIT AND RADAR  
POSITION. HARA STATED OBJ WERE FOL FOR 20 MIN AND THAT CONTACT WAS

---

NAME THREE JEPON 76

SIGHTED OFF PORTSMOUTH BOAK HEADED N IN VICINITY OF PORTSMOUTH NEW HAMPSHIRE  
AT 1700Z EDT. PD 15. THIS IS NARRATIVE OF PLTS LT BOAK AND CO PLT LT C G PRENTISS  
TO VP 50 UNIT OFF. TWO OBJ WERE SIGHTED AT 1700Z ON A SOUTHERLY  
HEADING IN PSN B/A. A LARGE DARK OBJ ABOVE THIS OBJ WITH CIR ARNG OF FIVE  
LIGHTS. COULD NOT DETERMINE PSN OF LIGHTS ON LOWER OBJ DUE TO DARKNESS  
PD BOAK REPT OBJ SIGHTED OVER PORTLAND ME AND WERE FOL FOR PD OF 15 MIN  
W/CONTACT BEN OFF NEAR PORTSMOUTH NEW HAMPSHIRE. BOAK SAID WHEN HE  
ATTEMPTED TO GET IN BETTER PSN TO VIEW OBJ THEY TOOK EVASIVE ACTION  
B/CUT BREAKING FORMATION. FOR THIS REASON BOAK DID NOT BELIEVE THEY  
WERE REFUELING. BOAK REPT OBJ AT TIMES WERE ACCELERATED TO 350 KNOTS  
BUT DECELERATED RAPIDLY. BOAK STATED THAT IN VICINITY OF PORTSMOUTH OBJ

TURNED TOWARD HIM AND HE BROKE OFF CONTACT AND HEADED N. OBJ THEN TURNED  
SW AND FLEW OUT OF SIGHT. BOAK BELIEVES BREAK OFF OF CONTACT WAS AT  
1915 EDT. HARA STATED BREAK OFF TIME WAS APRX 2000 EDT. LT BRITT THE  
INT'L OFF STATES THAT LTS BOAK AND PRENTISS ARE THIRTY YEAR OF AGE  
WITH MANY YR OF FLYING EXPERIENCE. FURTHER THAT BOTH OFF ARE VERY DEPEND-  
ABLE. THE VP SQ IS AGD TO DEPT BRUNSWICK VERY SOON. IT IS SUGGESTED THAT  
ANY PERS INTERVIEWS WITH CREW BE ARRANGED ACCORDINGLY."

48/1952Z SEP JEPSN

654TH AIRCRAFT CONTROL AND WARNING SQUADRON  
U.S. NAVAL AIR STATION  
Brunswick, Maine

BY AUTH OF CG 32-010  
245-  
INITIALS C

319.1

23 September 1952

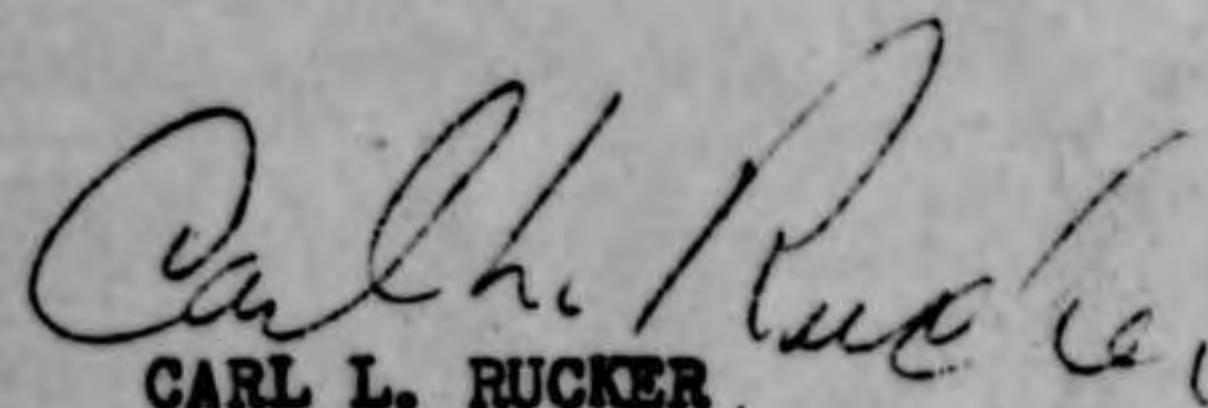
SUBJECT: Navy Pilots sighting of flying objects.

TO: Lt. Flues  
A.T.I.C.  
Project Blue Book  
Wright Patterson Air Force Base  
Dayton, Ohio

1. In accordance with verbal instructions of Major Rudy, Intelligence Officer, 32d Air Division (Defense) on 23 September 1952 the following, and enclosed information and statements are forwarded.
2. The original report did not include original statements in writing of subject witnesses due to their non-availability at the time.
3. All statements enclosed are in the handwriting of the person whose signature appears on the statement.
4. All statements were prepared and signed in the presence of the undersigned.

5 Incls:

1. Question & Answer sheet
2. Chart showing tracks
3. PPI presentation sketch
4. Visual appearance - Lt. Boak
5. Visual appearance - Lt. Prentiss



CARL L. RUCKER  
Capt., USAF  
Intelligence Officer

QUESTION AND ANSWER SHEET

AUTH: CG 32-440  
DATE: 245-4252  
INITIALS: C-10

The following are the questions and answers directed by your office through Major Rudy.

1. (Q) Clarification of time and duration of visual sighting.  
(A) Lts. Boak and Prentiss state that the time of initial visual sighting was at 2345 zebra and that visual contact was maintained until 0005 zebra.
2. (Q) Clarification of time of electronic contact and duration of electronic contact.  
(A) Initial radar contact (APS 31) was at 2352 zebra. Electronic contact was intermittent with none when the object was dead ahead. Contact could be maintained only when the relative bearing of the objects were 15 to 30 degrees. Radar contact was last completed at 2400 zebra. The ranges varied from three to five miles.
3. (Q) Show track of Naval P2V and track of flying object on a sectional chart or sectional overlay.  
(A) See enclosure two.
4. (Q) What was the range and speed of unidentified object as determined from radar scope of P2V?  
(A) The range varied from three to five miles during the intermittent periods that the target appeared on the radar scope. The speed of the objects could not be determined electronically.
5. (Q) What was the appearance of target on radar scope?  
(A) See enclosure number three.
6. (Q) What was the location of known a/c in the area?  
(A) There were none in the area of sighting as far as is known.
7. (Q) This question concerned radar reports of a/c, etc. in the area at the time.  
(A) The radar located at Brunswick was on preventative maintenance during the time of this occurrence. None of the adjacent sites had any radar information pertinent to the incident. The pilots did not report this sighting until the following morning or the radar located at Brunswick could have been placed back into operation at the time.

Enclosure 1

Question and Answer Sheet. (Cont'd)

AUTH: CG37240  
DATE: 24 SEP 52  
INRMS: CS

8. (Q) What was the altitude of the P2V as compared to the altitude of the unidentified objects?
- (A) The altitude of the P2V was 4000 feet plus or minus 400 feet. The altitude of the P2V was varied within these limits in the attempt to see the objects better against the remaining light of the sun. As far as could be determined the unidentified objects were at 4000 feet and did not deviate from that altitude.
9. (Q) What was the cloud cover in the area at the time of the sighting?
- (A) According to the pilot and co-pilot of the P2V it was a clear nite with no moon and with a few clouds on the horizon. This is borne out by weather report and the undersigned personal observation.

*Carl L. Rucker*  
CARL L. RUCKER  
Capt., USAF  
Intelligence Officer

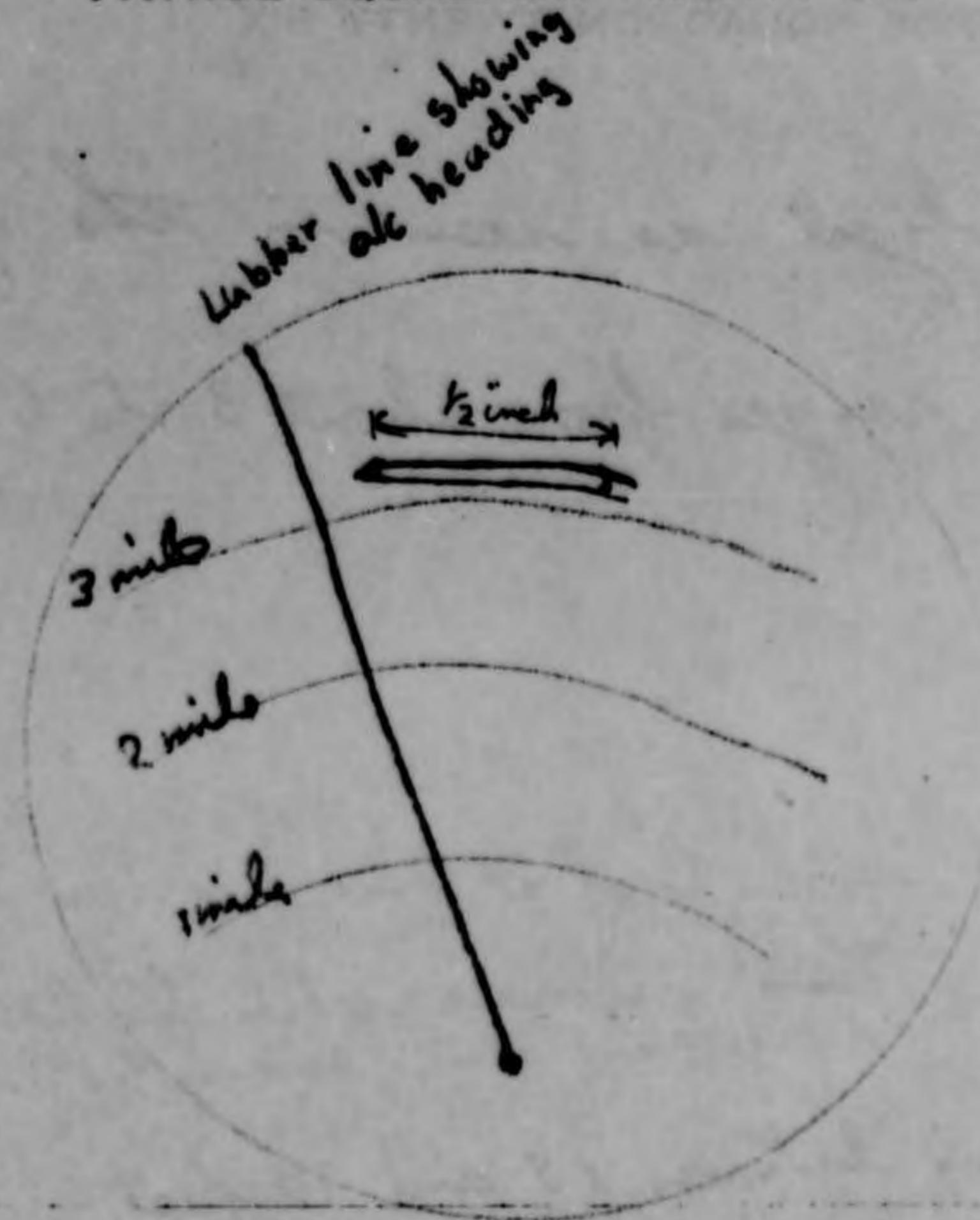
NOTE: All answers excepting the concurrence listed in (Q) #9 and the answers to questions #6 and #7 are those of Lts. Boak and Prentiss. These pilots were interviewed 23 September 1952.

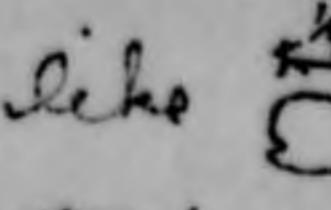
PPI Present alarm

VP-26/

SERIALS

UNITED STATES ATLANTIC FLEET  
AIR FORCE  
PATROL SQUADRON TWENTY SIX



normal pip of plane  
at 3 miles looks  
like  and about  
twice as wide as  
the object sighted

appearance of object on APS 31 radar <sup>scope</sup> ~~scope~~

It is felt that the equipment was operating properly and that the object on the radar scope was the same as the object sighted visually.

J. W. Brink

line, #3

## JOINT MESSAGEFORM

FROM: (Originator)

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

CG AFIC

TO:

INFO:

DATE-TIME GROUP <b>30315Z APR 58</b>		SEC
PRECEDENCE   ACTION		INFORMATION
FOR:		
<input type="checkbox"/> BOOK MESSAGE	<input type="checkbox"/> ORIGINAL MESSAGE	
<input type="checkbox"/> MULTIPLE ADDRESS	CRYPTOPRECAUTION	<input type="checkbox"/> YES <input type="checkbox"/> NO
REFERS TO MESSAGE:		
IDENTIFICATION	CLASSIFICATION	

request you determine whether or not crews of KC-97's were aware of other A/C following them. If you are unable to do this, request numbers of KC-97 A/C, pilots' names, organizations and home stations, so that AFIC can interrogate directly.

In reply cite Project Blue Book.

Conditions:

ATTACH-3

ATTACH

ATTACH

SECTION	PAGE <b>2</b> OF <b>2</b> PAGES
---------	---------------------------------

DRAFTER'S NAME (and signature, when required)

RELEASING OFFICER'S SIGNATURE

Lt. A. G. Flores/Jos.

SYMBOL

ATTACH-3

TELEPHONE  
**65365**

OFFICIAL TITLE

**ROBERT E. KENNEDY, Major, USAF**  
His Adjutant General

DD FORM 1 OCT 48 173

REPLACES NMIC FORM 173, 1 MAY 48.  
WHICH MAY BE USED.

16-38923-8 ★ U. S. GOVERNMENT PRINTING OFFICE

VP-26/

SERIALS

# Visual appearance of object

UNITED STATES ATLANTIC FLEET  
AIR FORCE  
PATROL SQUADRON TWENTY SIX

Appearance of object as seen in the afterglow  
of the sunset at ranges from about 3 to 6 miles

dark object with no lights; also at some angles seemed to be in front of lights cluster slightly on the port beam of the cluster

X = something between 15 and 30 feet

cluster of at least five very bright white or yellowish-white lights. Due to brightness of lights and state of darkness no form could be seen.

JWBoak  
Lt USN

Event #4

The appearance of this object did not <sup>not accurately</sup> fit anything which I have previously seen or heard of, which is flyable. I have approximately 1000 hours in the air (3 years experience) and five years of combatant sea duty working with naval aircraft. [REDACTED]

VISUAL APPEARANCE OF OBJECT.

VP-26/

SERIALS

UNITED STATES ATLANTIC FLEET  
AIR FORCE  
PATROL SQUADRON TWENTY SIX

DARK OBJECT (I THOUGHT IT WAS AN AIRCRAFT DEFINITELY)  
(THWK)

SILHOUETTE \*

WE SAW THIS BEFORE DARK,  
AGAINST THE SKY JUST ABOVE EARTH'S SURFACE.

NO LIGHTS AT ALL  
VERY DARK - NO EXHAUST

BRIGHT  
LIGHTS { WHITE

IF ANYTHING WERE  
SPACED WIDER AS THIS SHOWS

I CANNOT ESTIMATE THE  
DISTANCE BETWEEN LIGHTS  
AND I DO NOT KNOW THE  
SIZE OR BRILLIANCE OF THEM

AFTER DUSK ALL WE COULD  
SEE WAS THE LIGHTS (NO  
COLORED LIGHTS) LIGHTS LOOKED  
LIKE LANDING (AIRCRAFT) LIGHTS,  
STEADY. THEY DID NOT SEEM TO  
SEPARATE. I AM INCLINED TO THINK  
THAT THESE LIGHTS WERE  
ON THE SAME OBJECT.

THERE WAS NO  
DEFINITE PATTERN  
TO WHITE LIGHTS

Paul A. Prentiss Jr.  
USNR 230688/1310  
VP-26

The reason for this statement is I don't want to give the impression  
that I think it was definitely an airplane, but the silhouette was of  
that nature.

T 52-16909-E

[REDACTED] EC. STF. MSG. DIV.

DEPARTMENT OF THE AIR FORCE  
STAFF MESSAGE DIVISION

06 27 52

INCOMING CLASSIFIED MESSAGE

SMD C 989

HQEO51

TDC937

CBC928

JEPSON SOS

PP JEDEN JEPHQ 222

DE JEPSON SOS

P 191916Z

FM HQ 32D AD /D/ HANCOCK FLD EASTWOOD STA & SYRACUSE NY  
TO JEDEN/CG ADC ENT AFB COLO SPRINGS, COLO

JEPHQ/HQ USAF WASHINGTON 25 DC

[REDACTED] ACFOIN 9436. ATTN: DIRECTOR OF INTEL. [REDACTED]  
FOL IS COPY OF TEL MSG REC FR 654TH AC&W SQ: "NAVY PILOT AND CREW REPT  
OF VISUAL AND ELECT SIGHTING OF UNIDENTIFIED FLY OBJ. ON NIGHT OF 16  
SEP 52 THE PILOT AND CREW OF A RADAR EQUIPPED P2V OF VP SQ 26 PRESENTLY  
LOCATED AT THE BRUNSWICK NAS, BRUNSWICK, ME, MADE THE DISCUSSED SIGHTING.  
SIGHTING WAS REPT TO THE VP SQ INTEL OFF, [REDACTED], AT THE MORNING  
BRIEFING AT 0800 HRS, 17 SEP 52. [REDACTED] CONTACTED THE AC&W SQ INTEL  
OFF IN PERSON AND MADE THE FOL REPT: [REDACTED] U.S. [REDACTED] AND CREW DEPT BRUNSWICK  
NAS ON LOCAL FLT IN THE P2V AT 1822 HRS EDT. WHILE IN VICINITY OF  
PORTLAND ME, 2 OBJ WERE SIGHTED VISUALLY FLY IN SOUTHERLY DIR. [REDACTED]

CAF TN: 67732 (20 Sep 52) Page 1 of 3 pages

AFHQ FORM 19 JAN 51 0-309g  
PREVIOUS EDITIONS OF THIS FORM MAY BE USED.

16-92744-2 \* U.S. GOVERNMENT PRINTING OFFICE: 1951-O-927440

ATC 821173

LPAGE TWO JEPSON 60

DEPARTMENT OF THE AIR FORCE  
STAFF MESSAGE DIVISION

REPT THAT THERE WERE 2 OBJ. ONE ABOVE AND AHEAD OF THE OTHER MUCH AS A TOWING OR REFUELING FORMATION. THE UPPER OBJ WAS DARK WITH NO VISIBLE LIGHTS. THE LOWER OBJ HAD 4 OR 5 LIGHTS ARRANGED IN A CIRCLE. THE VISUAL SIGHTING WAS VERIFIED BY RADAR, APS31. THE TGT APPEARED ON RADAR AS A LINE RATHER THAN AS 2 SEPARATE PIPES. THERE WAS A DISCREPANCY IN REPT TIME OF SIGHTING. LT BOAK, WHO WAS NOT AVAIL FOR INTERVIEW REPT TIME OF SIGHTINGS AS 1950 HRS EDT. ALT OF OBJ WAS 4000 FT. NO LINES ATCH 2 OBJ WERE VISIBLE. NO DEFINITE DESCRIPTION AS TO SHAPES DUE TO DARKNESS. ENSIGN HARA STATED THE DARK OBJ WAS LARGE AND FIRST IMPRESSION WAS A CECA 54 OR COCA 119 TOWING A LIGHTED OBJ. HARA FURTHER STATED SINCE THE CLOSEST OBJ WAS APPROACHED WAS FR 2 AND ONE HALF TO 3 MILES, ALL THAT HE COULD DEFINITELY SAY WAS THAT THE DARK OBJ WAS LARGE BUT COULD NOT MAKE OUT A SIZE OR SHAPE OF LIGHTED OBJ. HARA STATED THAT THE PAPA 2 VICTOR ALTERNATELY CLOSED IN ON AND FELL BEHIND THE OBJ AND THAT THE PAPA 2 VICTOR WAS UNABLE TO GET IN A POSITION TO GET OBJ DOWN SUN ON THEM. HARA COULD NOT DEFINITELY STATE OBJ WERE TAKING EVASIVE ACTION AS HE WAS ALTERNATING BETWEEN COCKPIT AND READAR POSITION. HARA STATED OBJ WERE FOL FOR 20 MIN AND THAT CONTACT WAS BROKEN OFF WHEN BOAK HEADED N IN VICINITY OF PORTSMOUTH NEW HAMPSHIRE AT 2010 EDT. FOL IS NARRATIVE OF PLTS LT BOAK AND CO PLT LT C G PRENTISS TO VP SQ

CAP ID: 67732 (20 Sep 62) - Page 2 of 3 pages

AFHQ FORM 19 JAN 61 0-309g

PREVIOUS EDITIONS OF THIS FORM MAY BE USED.

DEPARTMENT OF THE AIR FORCE  
STAFF MESSAGE DIVISION

INCOMING CLASSIFIED MESSAGE

PAGE THREE JEPSN 69

INTEL OFF. TWO OBJ WERE SIGHTED AT 1700 ON A SOUTHERLY HEADING IN PSN W/A LARGE DARK OBJ ABOVE THIS OBJ WITH CIR ARNG OF FIVE LIGHTS. COULD NOT DETERMINE PSN OF LIGHTS ON LOWER OBJ DUE TO DARKNESS. BOAK REPT OBJ SIGHTED OVER PORTLAND ME AND WERE FOL FOR PD OF 15 MIN W/ CONTACT BKN OFF NEAR PORTSMOUTH NEW HAMPSHIRE. BOAK SAID WHEN HE ATTEMPTED TO GET IN BETTER PSN TO VIEW OBJ THEY TOOK EVASIVE ACTION W/OUT BREAKING FORMATION. FOR THIS REASON BOAK DID NOT BELIEVE THEY WERE REFUELING. BOAK REPT OBJ AT TIME WERE ACCELERATED TO 300 KNOTS BUT DECELERATED RAPIDLY. BOAK STATED THAT IN VICINITY OF PORTSMOUTH OBJ TURNED TOWARD HIM AND HE BROKE OFF CONTACT AND HEADED N. OBJ THEN TURNED SW AND FLEW OUT OF SIGHT. BOAK BELIEVES BREAK OFF OF CONTACT WAS AT 1915 EDT. HARA STATED BREAK OFF TIME WAS APRX 2000 EDT. LT BRITT THE INTEL OFF STATES THAT LTS BOAK AND PRENTISS ARE THIRTY YR OF AGE WITH MANY YRS OF FLYING EXPERIENCE. FURTHER THAT BOTH OFF ARE VERY DEPENDABLE. THE VP IS SCD TO DEPT BRUNSWICK VERY SOON. IT IS SUGGESTED THAT ANQ PERS INTERVIEWS WITH CREW BE ARRANGED ACCORDINGLY.

191921Z SEPT JEPSN

ACTION: OIN

INFO : DOP, ARMY, NAVY, JCS, CIA, AFSA, OAG

CAF BN: 67732 (20 Sep 52) Page 3 of 3 pages

FRD/mew

Memorandum for Record

22 September 1952

These questions passed by telephone to Director of Intelligence, Hq 32nd Air Defense Division, Syracuse, New York, on 22 Sept 52 by Lt Flues.

Reference your FLYOBRPT of 16 Sept 52 in vicinity of Portland, Maine, concerning sighting of unidentified flying object by Naval P2V as passed to your Hq by 654th AC&W Squadrons Brunswick, Maine. The following additional information is requested:

- a. Clarification of time of visual sighting and duration of visual sighting.
- b. Clarification of time of electronic contact and duration of electronic contact.
- c. Track of naval P2V and apparent track of unidentified flying object on sectional chart.
- d. Range, speed, etc., of unidentified flying object as determined from radar scope of P2V.
- e. Appearance of target on radar scope.
- f. Location of known air traffic in area and presence of any other unidentified targets on AC&W radar.
- g. Existence of simultaneous reports from GOC in area.
- h. Altitude of P2V as compared to altitude of unidentified flying object.
- i. Cloud cover in area at time of sighting.

Suggest submission of AF Form 112 to this Hq as per AFL 200-5, dated 29 Apr 52, via air mail. In reply, cite Project "Blue Book".