PROJECT 10073 RECORD CARD

1. DATE	2. LOCATION	12. CONCLUSIONS
30 Jun, 1 Jul 62	Richmond, Virginia	☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon
3. DATE-TIME GROUP Local 0900 GMT 01/0200Z Jul	4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar	☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft
5. PHOTOS ☐ Yes ☒ No	6. SOURCE Civilian	☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical
7. LENGTH OF OBSERVATION 10-20 mins	8. NUMBER OF OBJECTS one obj one two rpts	9. COURSE East descending 2. Echo 1
		☐ Other 1 UNIDENTIFIED ☐ Insufficient Data for Evaluation ☐ Unknown

10. BRIEF SUMMARY OF SIGHTING

Two rpts. Second rpt of 1 Jul identified as Echo I. The 1st rpt of obj follows: one red obj (& white) circular observed at 20dgr elev 169 dgr azimuth. In ten mins obj descended to 13½ dgr elev 132dgr azimuth. No sound trail or exhaust. Flight steady. No unusual features noted. Speed constant.

11. COMMENTS

2d obj Echo I. Firs obj remains as unidentified.

ATIC FORM 329 (REV 26 SEP 52)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

SURFACE WEATHER OBSERVATIONS

STATION W.A.C. Richmond, Va. DATE JUN 30 1962

(1)	(2) WET BULB (°F)	(3) REL. HUMIDITY (%)	(4) TOTAL SKY COVER	CLOUDS AND OBSCURING PHENOMENA: LOWEST LAYER AMT.	LOWEST LAYER TYPE & DIR.	LOWEST LAYER HEIGHT	SECOND LAYER AMT.	SECOND LAYER TYPE & DIR.	SECOND LAYER HEIGHT	(5) SUMMATION TOTAL	THIRD LAYER AMT.	THIRD LAYER TYPE & DIR.	THIRD LAYER HEIGHT	(6) SUMMATION TOTAL	FOURTH LAYER AMT.	FOURTH LAYER TYPE & DIR.	FOURTH LAYER HEIGHT	(7) TOTAL OPAQUE SKY COVER	(8) PRESSURE CHANGE	(9) NET 3-HR CHANGE	(10) SUNSHINE MINUTES	(11) PRECIPITATION (INCHES)
	81	11	10	AC	E12	6					6				6			16	6	.070		
	81	14	10	AC	E20	20					20				20			10				
	81	14	10	AC	E120	20					20				20			10				
	81	14	14	AC	E100	20					20				20			10	7	070		
	73	11	10	AC	E120	20					20				20			10			0	
	76	10	8	AC	E80	2	CS	/	10		20				20			10			0	
	76	10	1	Sc	30	6	AC	E60	7		3	CS	/	10	20			10	5	.010	0	T
	84	10	3	Sc	30	5	AC	E60	8		2	CS	/	10	20			10			0	.06
	81	10	4	Sc	30	5	Ac	030	9		1	Cu	/	10	40			10			0	T
	71	9	[redacted]			1	Sc	30	1		6	Ac	060	7	20	Cu	/	8	6	.040	26	
	66	10	1	Sc	A30	2	Ac	60	9		1	Cu	/	10	40			10			60	
	60	9	7	Sc	E30	1	Ac	60	8		1	Cu	/	9	0			8			60	
	54	10	3	Sc	40	5	Sc	E35	8		2	Ac	120	10	40			10	5	.020	31	
	58	10	8	Sc	E55	8	Ac	120	10		4				40			10			48	
	79	10	9	Sc	A40	1	Ac	120	10		4				40			10			1	T
	71	10	8	Sc	E45	2	Ac	120	10		4				40			10	7	025	15	T
	67	8	3	Sc	45	3	Ac	E120	6		2	CS	/	8	0			7			17	
	65	10	7	Sc	E45	3	Ac	120	10		4				40			10			41	
	67	10	7	Sc	E45	3	Ac	100	10		4				40			10	5	.005	0	
	75	12	6	Sc	E45	3	Ac	100	9		0				0			7			0	
	79	8	4	Sc	45	2	Ac	100	6		2	Ci	/	8	0			7				
	87	7	3	Ac	100	4	CS	4	7		0				7	0		6	3	020		
	87	7	3	Ac	100	4	CS	4	7		0				7	0		6				
	90	7	2	Ac	100	5	CS	/	7		0				7	0		3				

SYNOPTIC OBSERVATIONS

(12) PRECIP. (INS.)	(13) SNOW FALL (INS.)	(14) SNOW DEPTH (INS.)	(15) MAX. TEMP. (°F.)	(16) MIN. TEMP. (°F.)	(17) HGT. 850 MB. SURFACE	(18) STATE OF GRND.	(19) SEA STATE & DIR.	(20) SWELL HGT. & DIR.	(21) SWELL PERIOD	(22) SURF H, H, M, P, D.	(23) WATER TEMP.	(24) SOIL TEMP	(25)	(26)
0	0	X	73	66	X	X	X	X	X	X	X	X		
0	0	0	71	66			0							
T	0	0	68	66			1							
0	0	0	80	66			1							
T	0	0	81	73			1							
0	0	0	77	68	X	X	X	X	X	X	X	X		

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (27)	0056	0656	1253	1856
ATT. THERM. (28)				
OBSRVD. BAR. (29)				
TOTAL CORR. (30)				
STA. PRESS. (31)	29.660	29.774	29.720	29.760
BAROGRAPH (32)	29.660	29.780	29.730	29.760
BAR. CORR. (33)	0	0	0	0

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

(34) HR. PRECIP. BEGAN (INS.)	(35) 24 HR. SNOWFALL SNWMLTD. (INS.)	(36) SNOW DEPTH (INS.)	PEAK GUST (37) SPEED (KNOTS)	(38) DIRECTION	(39) TIME L.S.T.	(40) THICKNESS OF ICE ON WATER (INS.)	FROZEN GRND LAYER (INS.) (41) TOP	(42) BASE	(43) RIVER GAGE	(44) 24 HR. MAX. R. H.	(45) 24 HR. MIN. R. H.	(46) WATER EQUIV. (INS.)	(47)	(48)
.06	0	0							1.0				10	

(49) AND MISCELLANEOUS PHENOMENA

Sunrise 7:52 Cloudy Sunset 8:04

and fastest 1-minute wind speed 25 m.p.h. or m.p.h. associated direction NE and time 1227 E

(50) Precipitation:

5	10	15	20	30	45	60	80	100	120	150	180

(51) CHECK 1137E

(52) PRECIP. & THDR/STM.	BEGAN (53)	ENDED (54)	DUR. (55) Hrs. Mins.	OBSTR. TO VIS. (56)	BEGAN (57)	ENDED (58)	DUR. (59) Hrs. Mins.
R-	0045	0703					
R-	0703	0720					
R-	0720	0737					
R-	0737	0742					
R	0743	2401					
R-	0001	0220					
RW-	1420	1545					

Attch 3 (cont'd)

SURFACE WEATHER OBSERVATIONS

WEATHER OBSERVATIONS

				↓↓	5		007	
	171	66	60	↓↓	7		003	
15022	17066			80657			60604 47157	
				↓	7		001	
	113	66	60	↓↓	7		004	
				↓↓	7		000	
	153	66	60	↓↓	8		998	
				↓↓	12		997	
	146	66	60	↓↓	14		996	727 1052
				↓↓	13		996	
	146	67	58	↓↓	11		996	
				↓	12		996	
	157	66	58	↓	14		997	
R--				↓↓	10		995	3005
R--	146	69	60	↓↓	9		996	4025
5612	14668			65558	66500		70010 47166	
R--				↓↓	14		994	
R	142	67	62	↓	12		995	
R..				↓	12		994	
	136	68	62	↓	12		993	/RE20
				↓	15		992	
	133	70	63	↓	20		992	/FEW CF 10/ 614 1878
				↓	15		992	
	133	76	64	↓↓	12		992	/RINOVC
				↓	14		991	
	130	79	64	↓↓	15		991	
				↓	13		990	
	126	78	60	↓↓	12		990	
12678	65778			60807	70650		30006 48066	
				↓	11		988	RINOVC
	119	77	63	↓	9		988	/ BINOVC
RW-				↓	10		988	/ VARI NE-E
RW-	119	73	66	↓↓	15		988	RB20
RW-				↓↓	12		988	
	117	74	64	↓↓	11		987	RE45 708 1578
				↓	10		986	
	114	80	66	↓	14		986	
				↓	12		986	BINOVC RWU E-SE
	114	79	66	↓	13		986	BINOVC RWU E
				↓	11		986	
	115	77	64	↓	11		986	BINOVC
1582	11577			65678	60702		70640 31008 41766	
				↓	9		986	BINOVC
	115	75	67	↓	6		986	
				↓	6		987	
	119	73	66	↓	6		988	
				↓	6		988	
	122	70	66	↓	6		989	307 1038
				↓	6		989	
	122	70	66	↓	6		989	
				↓	6		979	
	122	67	65	↓	6		989	

NIGHT RESTRICTED AREA
FL 350 TO FL 550
R-5307

R-5306-C

R-5306-B

W-523

NORFOLK

PRICE 25 CENTS

Compiled and printed at Washington, D. C. by
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Principal Sources: U.S. Geological Survey, U.S. Air Force, U.S. Army Corps of Engineers, U.S. Dept. of Agriculture, Federal Aviation Agency, and Coast and Geodetic Survey.
BASE: Edition of July 1957 Revised Dec 1961

Detailed airport data and other useful information are printed on the back of this chart.

See Norfolk Local Aeronautical Chart, scale 1:250,000, for additional information

R-5306-A

ESTRICTED AREA
50 TO FL 550
R-5307

R-5306-B

R-5306-C

OLF JAX GROVE (NAVY)
27 - 40
(CLOSED)

Pollocksville

Oriental

Arapahoe

Croatan

Riverdale

Merrimon

Cedar I

MCAS CHERRY POINT
29 L 91
(CA OF
123 142.74 340.2

Cherry Point

Maysville

Belgrade

MARINE CHERRY POINT
116.1 NAT

North Harlowe

Harlowe

OLF ATLANTIC (NAVY)
24 - 35
(CLOSED)

Atlantic

Sealevel

Stacy

MARINE CHERRY POINT
e245 NAT

Church

Newport

Bettie

Williston

Davis

Kellum

WBAS
310
Days
only

Kunos

Silverdale

Wildwood

BEAUFORT MOREHEAD CITY
131 - 42

Smyrna

Midway Park

Straits

OLF BOGUE (NAVY)
22 - 40
(CLOSED)

Bogue

Ocean

Broad Creek

Hotel Morehead City

308

Beaufort

Marshallberg

Camp Le Jeune

Piney Green

Hubert

Swansboro

CG 191

Salter Path

WMBL 740
Days only

Harkers Island

Bear Creek

CG 192
Bogue Inlet

Shackleford Banks

Op Fl

CG 190

CAPE LOOKOUT

RBn
CAPE LOOKOUT
312 —··
Carrier
on 1 in & off 2m

Camp

Sneads Ferry

New River Inlet

Ashe I

ONSLOW BAY

5°W

ATLANTI

WARNI

W

Warning. Nationa
Operations hazard
conducted within

77°

5° W

30

30 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130

40 | 50 | 60 | 70 | 80

Low Altitude Federal Airways are indicated by center line

(Enroute) (Alternate)
RED 1 VOR V 3 092 → V 3 E

(miles are not shown on chart, but are generally five statute miles on either side of line)
(Brackets indicate width and length of non-standard segments.)

airways and controlled airspace which are effective below 14,500 feet
shown on this chart. See legend on back of chart for further details.

Underlining indicates aerodrome outside horizontal limits of controlled areas.

aerodrome may be omitted when same as nearest charted town name.

with hard-surfaced runway at least 1500 feet long as shown by runway pattern.

other useful information
back of this chart.

Aeronautical Chart,
additional information

D
L
R
A1
A2

COLOR RECITATION
Cont

R-5306-A

ATLANTIC COASTAL AIR DEFENSE IDENTIFICATION ZONE

WARNING AREA
W-122

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

CAPE LOOKOUT
312 ---
Carrier
on 1m & off 2m

CAR 60.18 as amended effective December 26, 1951, e
from the center of any airport having an operative c
2000 feet above the surface. Unless authorized by air t
area except for landing and taking off at airports wit
control tower operated by the Federal Government, d
during its hours of operation. The same requirement is
Government, if the aircraft has two-way radio capabili
maintained on the appropriate tower frequency. Contr
airports having traffic areas are shown in blue, all ot

Federally operated control tower

DAYTON
1000 L 70
119.5 126.2 257.8

Hours of operation of tower, if not continuous, are

AIRPOR

Now h

76°

6°W

30'

NOTICE TO USERS OF THIS CHART

You are urgently requested to inform us of corrections and additions that come to your attention while using this chart. When practicable, such information should be indicated clearly and accurately on the chart (a replacement copy will be returned). Mail to: THE DIRECTOR, U.S. COAST AND GEODETIC SURVEY, WASHINGTON 25, D.C.

50TH EDITION Aer
information on t
includes data receiv
FEB. 5, 19
Consult appropriate NO
Chart Information Public
supplemental data and
formation. Next edition
approximately six mon

COLOR REGISTRATION CHART

IFICATION ZONE

T L

7°W

35°

30°

75°

30°

34°

AIRPORT TRAFFIC AREAS

CAR 60.18 as amended effective December 26, 1961, establishes an airport traffic area within a radius of 5 statute miles from the center of any airport having an operative control tower and extending from the surface to but not including 2000 feet above the surface. Unless authorized by air traffic control, aircraft may not be operated within an airport traffic area except for landing and taking off at airports within that area. While operating in an airport traffic area having a control tower operated by the Federal Government, two way radio communication must be maintained with that tower, during its hours of operation. The same requirement applies where the control tower is operated by other than the Federal Government, if the aircraft has two-way radio capability; if equipment permits reception only, a listening watch must be maintained on the appropriate tower frequency. Limits of airport traffic areas are not shown on this chart. However, all airports having traffic areas are shown in blue, all other airports in magenta, thus:

Federally operated control tower

DAYTON
FOOS L 70
119.5 126.2 257.8

Non-Federal control tower

NF
MARTINSBURG
SSB L 70
120.5 126.2 236.6

Other Airport (no traffic area)

SOMERSET
1540 L 37

Hours of operation of tower, if not continuous, are included under Remarks in aerodrome directory on back of chart.

HIGHEST ELEVATION
1549

GROUND ELEVATIONS IN FEET
475

190 200 210 220 230 240 250
100 110 120 130 140 150 160
120 130 140 150 160

50TH EDITION Aeronautical information on this chart includes data received through

FEB 5, 1962

Consult appropriate NOTAMS and Flight Information Publications for supplemental data and current information. Next edition is scheduled in approximately six months.

NORFOLK
SECTIONAL AERONAUTICAL CHART

To Raleigh Durham
(Joins Charlotte)
To Myrtle Beach
(Joins Charlotte)
Elm City
WILSON
Bailey
Sims
Wilson
Macclesfield
Pinetops
Crisp
Conetoe
Bethel
Parmele
Bear Grass
Sawmill
Stokes
Falkland
Fountain
Lucama
School
Black Creek
Saratoga
Stantonsburg
Walstonburg
Bellarthur
Greenville
Farmville
PITT-GREENVILLE
House
Pactolus
Simpson
Grimesland
Kenly
Fremont
Eureka
Winterville
Pikeville
Maury
Ayden
GOLDSBORO
VOR
SEYMOUR JOHNSON AF
116.5 GSB
Snow Hill
Hookerton
KINSTON
109.6 ISO
Shelmerdine
Goldsboro
Rosewood
Grifton
1549
STALLINGS
Graingers
Plant
Open-air-theater
SEYMOUR JOHNSON
285 GSB
No voice
La Grange
Institution
Kinston
Ft Barnwell
SEYMOUR JOHNSON AFB
109 L 117
126.2 236.6 GCA DF
Neuse R
Seven Springs
Dover
Sawmill
Cove City
Jasper
Mt Olive
MILITARY CLIMB
CORRIDOR R-5312
Altitude limits
C - 2100 to FL 270
Calypso
Deep Run
School
Seymour Johnson Tower
126.2 122.5G
See back of chart for details
Bowdens
Pleasant Hill
Pink Hill
Trenton
OLF OAK GROVE (NAVY)
27 - 40
(CLOSED)
GRADY (Pvt)
95 - 20
Warsaw
Comfort
NIGHT RESTRICTED AREA
FL 350 TO FL 550
R-5307
Kenansville
Magnolia
Beulaville
Richlands
School
White Oak Swamp
Belgrade
Maysville
KENANSVILLE
ROSE HILL
(Pvt)
80 - 22
Rose Hill
Charity
Chinquapin
Catherine Lake
JACKSONVILLE
Kellum
Houses
Jacksonville
Midway Park
Silverdale
Wallace
NEW RIVER
356 NCA
Camp
Le Jeune
Piney
Green
Hubert
Swansboro
WALLACE
Willard
Maple
Hill
MCAF NEW RIVER
GCA-DF
Houses
Watha
Verona
R-5306-C
R-5306-B
Bear Creek
Burgaw
OLF CAMP DAVIS (NAVY)
60 - 55
Aband
Camp
Sneads Ferry
Folkstone
Camp
School
St Helena
Hollyridge
Rocky Point
Longcreek
WILMINGTON
Resort
Castle Hayne
New Topsail Beach

NIGHT RESTRICTED AREA
FL 350 TO FL 550
R-5307

R-5306-A

R-5306-B

R-5306-C

Bethel
Parmele
Robersonville
Everetts
Bear Grass
Jamesville
Darden
Crisp
Falkland
Fountain
Sawmill
Stokes
PITT GREENVILLE
25 L 50 U
House
Pactolus
School & Wt
Greenville
Bellarthur
Brick Kilns
Simpson
Grimesland
WASHINGTON
38 L 50 U
Pinetown
Gaylord
Wilkinson
Pungo
Pantego
Stock
Washington
Winterville
Chocowinity
Bldgs
Belhaven
Ayden
Hackney
Bath
Ransomville
Shelmerdine
Wade Point
Pamlico
Indian
Wilmar
Grifton
Edward
South Creek
Aurora
Graingers
Open-air-theater
Vanceboro
Ft Barnwell
Kinston
Ernul
Askin
Jasper
Dover
Cove City
Sawmill
Mesic
Maribel
Vandemere
Bennett
Bayboro
Florence
Stonewall
NEW BERN
299 108.4 EWN
NSME
New Bern
Bridgeton
James City
Rhems
Merritt
Pamlico
Trenton
Pleasant Hill
SCHAINS NOTT
13 L 48 U
OLF OAK GROVE (NAVY)
27 - 40
(CLOSED)
Comfort
Pollocksville
Arapahoe
Oriental
Riverdale
Croatan
MCAS CHERRY POINT
29 L 91
Merrimon
Maysville
Cherry Point
Belgrade
White Oak Swamp
MARINE CHERRY POINT
118.2 NKT
MARINE CHERRY POINT
245 NKT
North Harlowe
Harlowe
Church
Newport
Bettie
Williston
JACKSONVILLE
27 L 31 L 14
85
WEAS
910
Days
only
Kuhns
Silverdale
Wildwood
BEAUFORT MOREHEAD CITY
131 - 42
Smyrna
Straits
Midway Park
Jacksonville
Camp Le Jeune
Piney Green
Hubert
OLF BOGUE (NAVY)
22 - 40
(CLOSED)
Swansboro
Bogue
Ocean
Broad Creek
Hotel
Morehead City
CG 191
Salter Path
WWHL 74
Days only
Harkers Island
Shackleford Banks
Verona
Bear Creek
CG 192
CG 190
CAPE LOOKOUT
Camp
School
Sneads Ferry
Folkstone Ferry
Atlantic

149TH TACTICAL FIGHTER SQUADRON (TAC)

UNITED STATES AIR FORCE
BYRD FIELD, SANDSTON, VIRGINIA

REPLY TO
ATTN OF: OIT

20 July 1962

SUBJECT: Report of UFO Sightings

TO: Air Technical Intelligence Center
Wright-Patterson AFB, Ohio

1. On 6 July 1962, this squadron was notified that two local Richmond residents of the same family had made UFO sightings on 30 June 62 and 1 July 62.

2. The family was on vacation on 6 July and was contacted by the squadron Intelligence Officer on 9 July for more details.

3. The 30 June sighting was not resolved as to its possible identity and information is forwarded in attachments in accordance with AFR 200-2.

4. The 1 July sighting was obviously an observation of ECHO I when compared to information received from the National Aeronautics and Space Administration.

5. All additional information is contained in attachment form.

James P. Whitman

JAMES P. WHITMAN
Captain USAF
Intelligence Officer

4 atchs
1. 30 June Sighting
2. 1 July Sighting
3. 30 June Local Weather Observations
4. Norfolk Section with Observers Location and Sight Bearings Plotted

Copy to:
108 TFW (DI)
9th AF (DI)
TAC (DI)

Houses
Houses
Houses
Houses
Phelps L
The Frying Pan
Alligator
76°
Gum Neck
Sheds
Stumpy Point
Long Shoal Pt
R-5313
Pungo
Wilkinson
Pantego
Leechville
INLAND WATERWAY
New Lake
Sawmill
Fairfield
Belhaven
Lake Mattamuskeet
Engelhard
Elevator
Middletown
ENGELHARD
01 - 30
Gladesville
Plant & stack
White Plains
New Holland
Swanquarter
Pamlico Beach
Bluff Point
Great I
Pamlico Pt
Hobucken
Brant I
Mesic
Vandemere
Florence
Merritt
Pamlico
Point Of Marsh
West Bay
Portsmouth I
Ocracoke
Ocracoke I
CG 187
Ocracoke Inlet
Hatteras
CG 186
Hatteras Inlet
BILLY MITCHELL
15 - 21
Frisco
CAPE HATTE
Oriental
R-5306-A
Merrimon
Settlement
Cedar I
OLF ATLANTIC (NAVY)
24 - 35
(CLOSED)
Atlantic
Sealevel
Stacy
Davis
Williston
Smyrna
Straits
Beaufort
Marshallberg
CG 191
Harkers Island
Shackleford Banks
CG 190
CAPE LOOKOUT
RBn
CAPE LOOKOUT
312 →
Carrier
on 1m & off 2m
Swash Inlet
6°W
ATLANTIC COASTAL AIR DEFENSE IDENTIFICATION ZO
A
WARNING AREA
W-122

Wanchese
Co Pt
Bridge
Inlet
CG 176
Tower
Stumpy Point
Rodanthe
Waves
Salvo
Long Shoal Pt
R-5313
Gull I
Avon
Tower
Buxton
CG 183
BILLY MITCHELL
Hatteras
CAPE HATTERAS
CG 186
Hatteras Inlet
Occ
RBn
DIAMOND SHOAL
312
Carrier
on 1m & off 2m
CONTROL AREA 1181
IDENTIFICATION ZONE
75°
30'
35°
A
T
L
N
C
7nM

TRUE Bearing

Barhamsville
Providence Forge
Chickahominy R
Toano
WILLIAMSBURG
Lightfoot
Gloucester
Capahosic
YORK R
CAMP PEARY (AF)
CLOSED
Hospital
Stadium
Williamsburg
Supply depot
Yorktown
Charles City
Hopewell
Factories & tanks
Petersburg
Matoaca
Fort Lee
Burrowsville
Claremont
JAMES R
Jamestown I.
Ferry
Fort Eustis
Cabin Point
Savedge
Disputanta
Sawmill
WAVERLY
Dinwiddie
Carson
Stony Creek
Yale
Factory & WT
Purdy
Jarratt
Sebrell
Burdette
Walters
Colosse
Sedley
Myrtle
Windsor
Zuni
Chuckatuck
Isle of Wight
Cemetery
Ivor
Wakefield
Smithfield
Rescue
Dendron
Waverly
COCKES
Blackwater R
Courtland
Drewryville
Settlement
Sawmills
Emporia
Capron
Franklin
Holland
Suffolk
Barretts
Ferry
Newsoms
Boykins
Branchville
Margarettsville
Pleasant Hill
Skippers
Seven
Como
Sheds
Gaston
Roanoke Rapids
Gumberry
Seaboard
Garysburg
Conway
Faisons
Milwaukee
Murfreesboro
Maplecon
Eure
Gatesville
Winton
Tunis
Willow
Cofield
Harrellsville
Ahoskie
Cypress Chapel
Whaleyville
Somerton
Corapeake
Holly Grove
Sunbury
Weldon
Halifax
State prison farm
Potecasi
Menola
Woodland
Rich Square
Roxobel
Kelford
Aulander
Powellsville
Colerain
Sheds & piers
Scotland Neck
Lewiston
Buena Vista
Askewville
Windsor
Hobgood
Settlement
Speed
School
Oak City
Hamilton
Roanoke R
Tyner
Valhalla
Jenton
Belvidere
Merry Hill
Drew
Church
Fish hatchery
Macksville
Skiffes Creek
Isle of Wight
Suffolk
Portsmouth
Pungo
Dismal Swamp
Gates
Como
Margarettsville
Seven
Yale
Factory & WT
Purdy
Jarratt
Sebrell
Burdette
Walters
Colosse
Sedley
Myrtle
Windsor
Zuni
Chuckatuck
Isle of Wight
Cemetery
Ivor
Wakefield
Smithfield
Rescue
Dendron
Waverly
COCKES
Blackwater R
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Drewryville
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Menola
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Scotland Neck
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Merry Hill
Drew
Church
Fish hatchery
Macksville
Skiffes Creek
Isle of Wight
Suffolk
Portsmouth
Pungo
Dismal Swamp
Gates

MILITARY CLIMB
CORRIDOR R-6610
Altitude limits
[illegible]00 to 15,000
[illegible]00 to FL 240
[illegible]ley A/C
[illegible]5.2 122.5G 236.6
See [illegible] of chart for details

VORTAC
CAPE CHARLES
112.7 Ch 59 CCV

LANGLEY AFB
112.2

NAS NORFOLK
(CHESAPEAKE)
00
385.3
142.74

NAVY NORFOLK
269 NGU

FORT STORY
AUX AAF

CAPE HENRY
290
No voice

NORFOLK
(HAMBERS)

VORTAC
NORF 34
115.8 Ch 115 ORF

NORFOLK
26 L 50
GS OF
338 121.1 257.3

NAS OCEANA
20 L 120
GCA OF
142.74 340.2

SOUTH NORFOLK
20 - 32

NAVY FENTRESS
356 114.3 NFO
No voice on 356

CAPE CHARLES
293

CAPE HENRY
No voice

Hampton
NEWPORT NEWS
HAMPTON ROADS
NORFOLK
PORTSMOUTH
Suffolk
Virginia Beach
Cape Charles AF
Oceanview
Ocean Park
Cape Henry
Fort Story
Fentress
Great Bridge
Deep Creek
Dismal Swamp
Chesapeake
Currituck
Sligo
Knotts Island
Waterlily
Poplar Branch
Camden
Elizabeth City
Hertford
Woodville
Durant I
Fort Landing
Manns Harbor
East Lake
Colington
Harbinger
Mamie
Camden Pt
Powells Pt
Jarvisburg
Grandy
Kitty Hawk
Pt Harbor
Shawboro
Belcross
Princess Anne
Back Bay
St Brides
Hickory
Mayock
Sawmill
Cypress Chapel
Lake Drummond
Whalebone
Galeville
Bunbury
Morgans Corners
South Mills
Harrellsville
Holland
Windsor
Boone
Grafton
Yorktown
Seaford
Stack 334
Severn
Achilles
Messick
Machipongo
Birdsnest
Eastville
Oyster
Townsends
Kiptopeke
Smith I
Fisherman I
Towers
Bridge under constr
Houses
Bldgs & steel tower
Cobb I
Wreck I
Ship Shoal I
Hog I
CG 155
CG 157
CG 164
CG 170
R-6606
R-5309
R-5308
R-5310
R-5301
R-5302
W-50
W-386
V 256
V 194
V 412
V 134
B58
B56
B30
B49
B
A

WARNING AREA
W-386

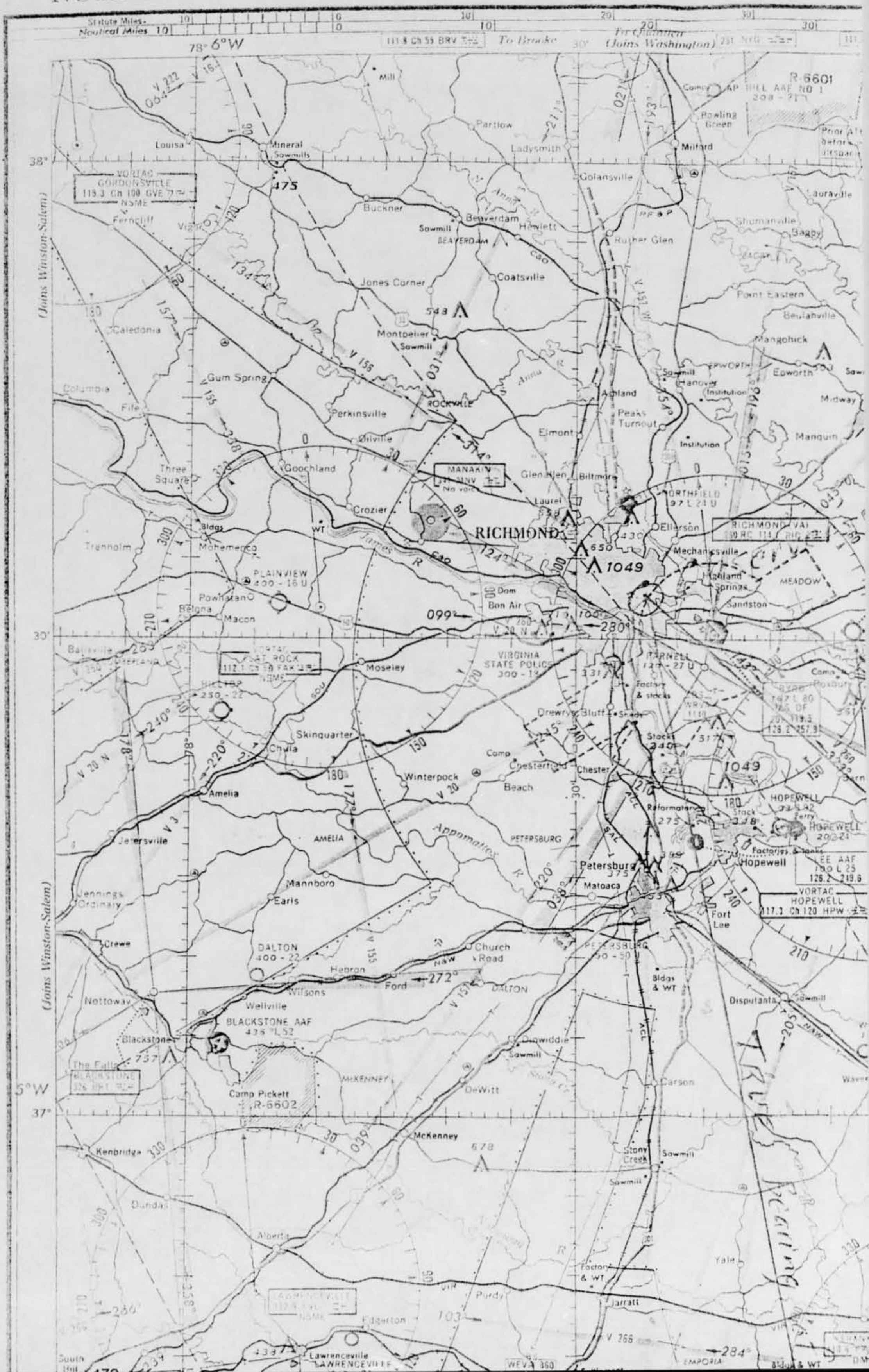
Warning: National Defense Operating Area
Operations hazardous to the flight of aircraft
conducted within this area

ATLANTIC COASTAL AIR DEFENSE IDENTIFICATION ZONE

CG 155
Hog I
Cobb I
CG 157
CHESAPEAKE
Light
on Im & off Im
W-50
W-386
CG 170
R-5308
R-5310
Kitty Hawk
Towers
Wright Monument
CG 173
Nags Head
CG 174
Pier
Roanoke I
ATLANTIC
W-72
Warning: National Defense Operating Area
Operations hazardous to the flight of aircraft
conducted within this area

NORFOLK

ELEVATIONS



ELEVATIONS IN FEET

R-6601
CAMP A.P. HILL AAF NO 1
208 - 21

Prior ATC approval required before entering controlled airspace within R-6601

RICHMOND
1242
650
1049
2801

RICHMOND (VA)
260 RC 114 T RIC

NORTHFIELD
97 L 24 U

MANAKIN
UHV

TAPPAHANNOCK
275 TPP

YORKTOWN
288 YKT

CENTRAL
105 - 42 U

LEE AAF
100 L 25
126.2 249.6

HOPEWELL
115.82

HOPEWELL
20324

VORTAC
HOPEWELL
117.3 Ch 120 HPW

WEST POINT
24 °L 60

NEW KENT CO
141 - 30

VIRGINIA STATE POLICE
300 - 18

PETERSBURG
90 - 50 U

TURNER
135 - 27 U

1 d7 L 60
AS OF
20 119.5
126.2 257.3

PELKER AAF
10 L 30
126.3 241.0 GCA

BACONS CASTLE
347 BCL
No voice

EVANS
80 - 45

GARNER
80 - 25

SHARPS
WIND 338

SEBRANDON
108 PAN

COCKES
115 - 19

MORTSON
MOV

LANGLEY (AF)

CAMP PERRY (AF)
37 - 57
CLOSED

ELIPSE
109 NGU

Fish hatchery

Leedstown
Montross
Mt Holly
Sawmill
Templeman
Hague
Westmoreland
Hustle
Bowling Green
Milford
Oldhams
Kinsale
Central Point
Lauraville
Snumanville
Barby
Newtown
Owenton
Ruther Glen
Warsaw
440
Haynesville
Callao
Village
Tappahannock
Wellford
Farnham
Blue Sls
Dunnsville
Millers Tavern
Center Cross
Robley
Downings
Simonson
Morattico
Montague
314
Ino
Lively
Waterview
Dragonville
Church View
Stevensville
Rumford
Manquin
Midway
Epworth
Sawmill
Hanover
Institution
Mangohick
Beulahville
Point Eastern
Coatesville
Ashland
Peaks Turnout
Elmont
Glen Allen
Biltmore
Laurel
Truhart
Warner
Urbanna
Mascot
Saluda
Whitehouse
Sweet Hall
Romancoke
Elsom
Port Richmond
Colegne
Oak
West Point
Plain View
Gressitt
Barhamsville
Ark
Gloucester
Capahosic
Toano
Williamsburg
Lightfoot
Magruder
Hospital
350
Stadium
Williamsburg
Supply depot
Yorktown
Jamestown I
Bldgs
Fort Eustis
Claremont
Burrowsville
Cabin Point
Savedge
Disputanta
Sawmill
Waverly
Dendron
Blackwater R
Smithfield
Rescue
Wakefield
Isle of Wight
Chuckatuck
Windsor
Myrtle
Walters
Boddette
Sedley
Zuni
Yale
Factory & WT
Jarratt
Carson
Stony Creek
Dewitt
Dewiddie
Sawmill
Church Road
Dalton
Bldgs & WT
Petersburg
Matoaca
Fort Lee
Hopewell
Factories & tanks
Reformatory
Stack 340
Stack 338
Chesterfield
Beach
Camp
Providence Forge
Barnetts
Charles City
Camp Poxoury
Sawmill
Chickahominy R
Diascund Cr Res
Ruthers Glen
Factory & stacks
Drewryville
Shads
Sawmill
Meadow
Sandston
Mechanicsville
Ellerson
Holland Springs
Bon Air
Dam
Laurel
Glen Allen
Biltmore
Elmont
Peaks Turnout
Ashland
Coatesville
Beaverdam
Sawmill
Goochland
Courthouse
Fairfield
Manakin
Sabot
Powhatan
Courthouse
Amelia
Courthouse
Jetersville
Amelia
Paineville
Deatonville
Bevilles
Crossroads
Dinwiddie
Courthouse
Sutherland
Stage
Junction
Namozine
Church
Wilsons
Corner
Prince George
Courthouse
Hopewell
Airport
Fort Lee
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Carson
Stony Creek
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Sawmill
Factory & WT
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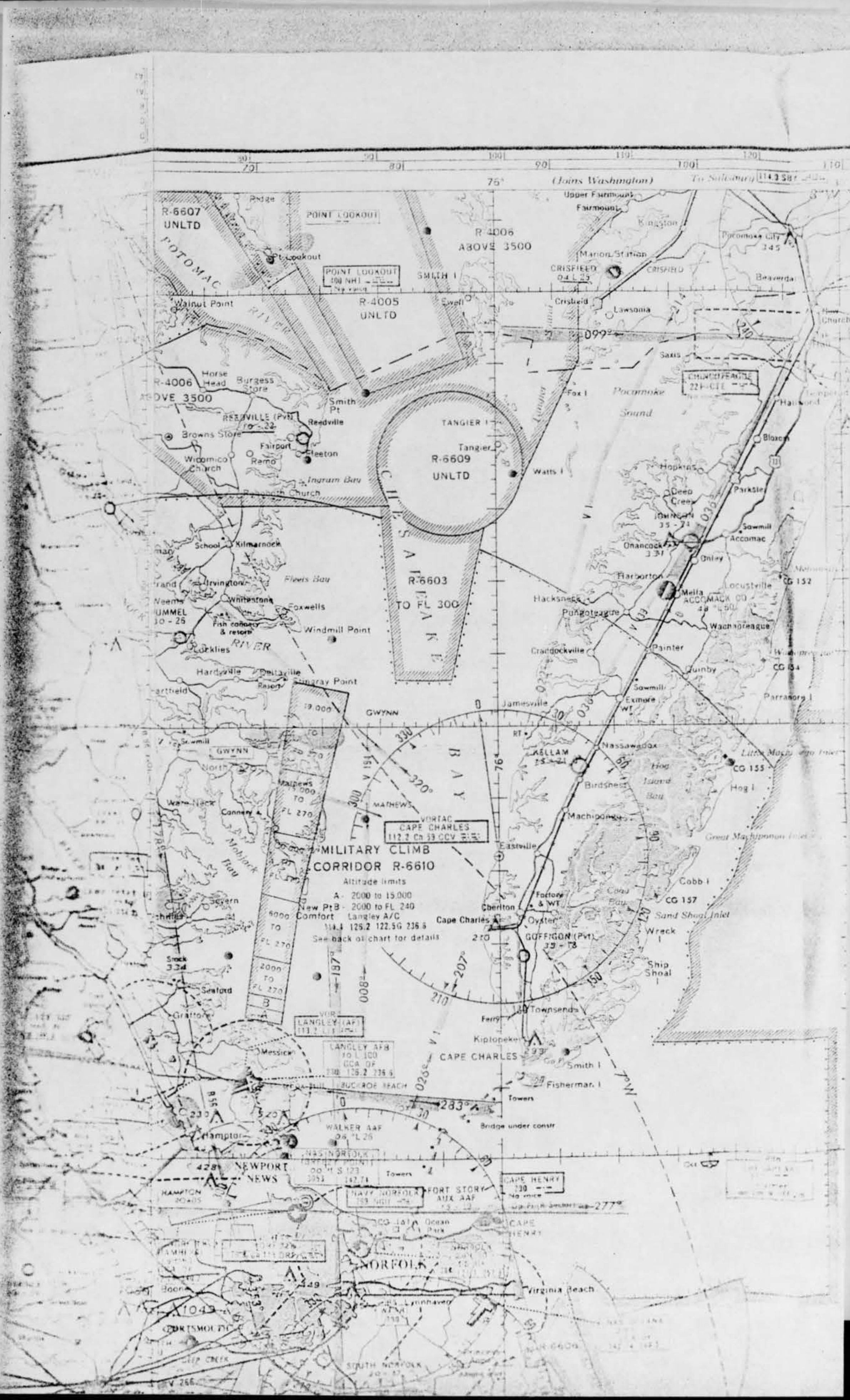
Namozine
Church
Wilsons
Corner
Prince George
Courthouse
Hopewell
Airport
Fort Lee
Petersburg
Matoaca


R-6607
UNLTD
POINT LOOKOUT
POTOMAC
Pt Lookout
POINT LOOKOUT
SMITH I
R-4006
ABOVE 3500
R-4005
UNLTD
Walnut Point
Swell
Upper Fairmount
Fairmount
Kingston
Marion Station
CRISFIELD
Crisfield
Lawsonia
Pocomoke City
Beaverdale
Horse Head
Burgess Store
Smith Pt
Reedville
Browns Store
Fairport
Fleeton
Wicomico Church
Ramo
Ingram Bay
Kilmarnock
School
Irvington
Fleets Bay
Whitestone
Foxwells
Windmill Point
Fish canning & resort
Locklies
RIVER
Hardyville
Deltaville
Rasco
Smarag Point
TANGIER I
Tangier
R-6609
UNLTD
Watts I
Fox I
Pocomoke Sound
Saxis
CHINCOTEAGUE
221 - CTE
Hallwood
Bloxom
Hopkins
Deep Creek
Parksley
Sawmill
Accomac
Onancock
331
Onley
Harborton
Melfa
ACCOMACK CO
48 - 50
Locustville
CG 152
Hacksneck
Pungoteague
Wachapreague
Craddockville
Painter
Quinby
CG 154
Parramore I
Sawmill
Exmore
WT
Jamesville
GWYNN
North
Mathews
Ware Neck
Cooney A
Mobjack Bay
Severn
Stack
334
Seaford
Grafton
Messick
Hampton
Nassawadox
KELLAM
25 - 21
CG 155
Hog I
Birdsnest
Machipongo
Eastville
Cobb I
CG 157
Cheriton
Factory & WT
Cape Charles A
Oyster
GOFFIGON (Pvt)
35 - 78
Wreck I
Ship Shoal I
Townsends
Ferry
Kiptopeke
CAPE CHARLES
Smith I
Fishermans I
Towers
Bridge under constr
WALKER AAF
06 °L 26
NEWPORT NEWS
HAMPTON ROADS
NAS NORFOLK
CHAMBERLAIN FIELD
Towers
NAVY NORFOLK
FORT STORY AUX AAF
CAPE HENRY
230
No voice
CAPE HENRY
Ocean Park
NORFOLK
Virginia Beach
PORTSMOUTH
SOUTH NORFOLK
Boone
Deep Creek
Buckroe Beach
MILITARY CLIMB CORRIDOR R-6610
Altitude limits
A - 2000 to 15,000
B - 2000 to FL 240
New Pt Comfort Langley A/C
See back of chart for details
VORTAC
CAPE CHARLES
VOR
LANGLEY (AF)
LANGLEY AFB
10 L 10
GCA OF
Joins Washington
To Salisbury
Upper Fairmount
Fairmount
Kingston
Marion Station
CRISFIELD
Crisfield
Lawsonia
Pocomoke City
Beaverdale
Saxis
CHINCOTEAGUE
221 - CTE
Hallwood
Bloxom
Hopkins
Deep Creek
Parksley
Sawmill
Accomac
Onancock
331
Onley
Harborton
Melfa
ACCOMACK CO
48 - 50
Locustville
CG 152
Hacksneck
Pungoteague
Wachapreague
Craddockville
Painter
Quinby
CG 154
Parramore I
Sawmill
Exmore
WT
Jamesville
GWYNN
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Mathews
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KELLAM
25 - 21
CG 155
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Eastville
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Cheriton
Factory & WT
Cape Charles A
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GOFFIGON (Pvt)
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Bridge under constr
WALKER AAF
06 °L 26
NEWPORT NEWS
HAMPTON ROADS
NAS NORFOLK
CHAMBERLAIN FIELD
Towers
NAVY NORFOLK
FORT STORY AUX AAF
CAPE HENRY
230
No voice
CAPE HENRY
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Deep Creek
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MILITARY CLIMB CORRIDOR R-6610
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B - 2000 to FL 240
New Pt Comfort Langley A/C
See back of chart for details
VORTAC
CAPE CHARLES
VOR
LANGLEY (AF)
LANGLEY AFB
10 L 10
GCA OF
Joins Washington
To Salisbury

NORFOLK

Lambert Conformal Conic Projection Standard Parallels 33° and 45° Scale 1:500,000

(John Washington)

To Salisbury 114.0 SBY

Girdletree

Pocomoke City 345

Stockton

Beaverdam

Greenbackville

MD / VA

NASA WALLOPS STATION 38 L 80

Prior approval required

Chincoteague

Atlantic

Temperanceville

Hallwood

CG 150

R-6604

Wallops I

Bloxom

Hopkins

Deep Creek

Parksley

Sawmill

Accomac

Onley

Metomkin Inlet

CG 152

Locustville

Melfa

ACCOMACK CO 48 °L 50A

Wachapreague

Painter

Wachapreague Inlet

CG 154

Quinby

Parramore I

Little Machipongo Inlet

CG 155

Hog I

Great Machipongo Inlet

Cobb I

CG 157

Sand Shoal Inlet

Wreck I

Ship Shoal I

W-108

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

WARNING AREA
W-386

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

CHESAPEAKE
Buoy
RBn
Carries
on 1m & off 2m

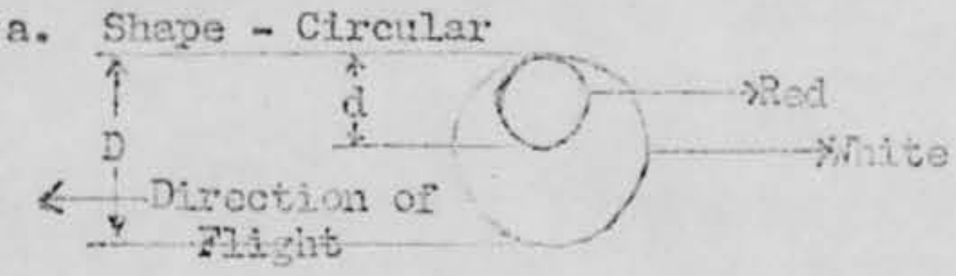
ATLANTIC COASTAL WATERS

75° 38° 30° 8°W 37°

Summary of 30 June Sighting

1. Description of object

a. Shape - Circular



$\frac{D}{d}$ equals appr. 2 to 3

b. Size

(1) The individual observed Echo I the following night. If the size of Echo I was assumed to be that of a fifty cent piece, the size of this object would be that of a dime or slightly smaller.

c. Color

(1) As indicated above.

d. Number - One only.

e. Details or features

(1) As indicated above. Two solid circular areas of white and red light source. No other details visible to the observer.

f. No tail, trail, or exhaust were visible to the observer.

g. No sound was heard in connection with the object.

h. No other pertinent or unusual features were apparent to the observer.

2. Description of Course

a. The observer stated that his attention was first called to the object because of the source of red light involved. At the time he stated he was sitting on a porch of his residence looking at the stars. The observer wears glasses to correct for lack of detail of distant objects. He does not require glasses for reading purposes. He was wearing his glasses at the time of initial observation.

b. Location of object at initial observation

Angle of elevation - 20° plus or minus 1°
True bearing - 169° plus or minus 5°

c. Location of object as it disappeared behind trees

Angle of elevation: $13\frac{1}{2}$° plus or minus 1°
True bearing - 132° plus or minus 5°

AERODROMES - NORFOLK SECTIONAL CHART

NAME	LAT. LONG.	ELEV.	RUNWAYS			FACILITIES			REMARKS
			NO.	LONGEST	SURFACE	FUEL	REPAIRS	LIGHTING	
Accomack Co. Municipal	37°39'-75°48'	48	1	5000	Concrete			2000' N end on prior request	5000' of runway available. 2000' of S end closed
OLF Atlantic (Navy)	34°53'-76°21'	24	3	3500	Asphalt				Closed. OLF to MCAS Cherry Point
Barnhill	35°57'-77°33'	60	1	4000	Turf				Private. Pole line W. Trees E
Beaufort-Morehead City	34°44'-76°40'	13	3	4252	Bituminous	80,91			
Billy Mitchell (Hatteras)	35°14'-75°37'	15	1	2400	Asphalt				
Blackstone AAF	37°04'-77°57'	436	4	5240	Concrete			Beacon & rnwy. on prior request	Attd. 24 hrs. Caution: Freq. parachuting & sky diving. Rnwys. 3/21, 8/26, 12/30 closed
OLF Bogue (Navy)	34°41'-77°01'	22	3	4000	Asphalt				Closed; OLF to MCAS Cherry Point
Byrd	37°30'-77°19'	187	3	8000	Concrete	80,91, 100,J, A,B,C, 115/145	Major	Runway, hi-intens. appr., & runway on request	Attd. 24 hrs. 2-way radio req'd. Use paved areas only. Landing fee for executive & non-schedule air carrier. Rt. tfc. rnwys. 6/24 & 33. ‡ 123.0 mc. A.N.G. use
OLF Camp Davis (Navy)	34°50'-77°34'	60	2	5500	Concrete				Closed
Camp Peary (AF)	37°19'-76°38'	37	1	5000	Asphalt				
Central	37°19'-76°43'	105	2	4200	Turf	80/87	Major		SW, E blocked trees. NE blocked pole line
MCAS Cherry Point	34°54'-76°53'	29	8	9100	Asphalt	A+B,J	Major	Rnwy., flood, hi-intens. rnwy. & approach	Official business only
Cockes	37°04'-76°53'	115	1	1900	Turf				
Como	36°28'-76°39'	15	1	2000	Turf				Private
Dalton	37°05'-77°24'	400	1	2200	Turf				
Edenton	35°01'-76°34'	19	3	4600	Asphalt				
CGAS Elizabeth City	36°16'-76°11'	10	5	7219	Concrete	A+,B		Runway, hi-intens. rnwy.	Runway 5/23 & 14/32 closed. Rnwy. 7/25 emerg. use only. Official business only. Operates on prior notice
CGAS Elizabeth City	36°16'-76°10'	00	2	16000	Pasquotank River		Minor	Seadrome lights on 1 hr. prior request, flood	Tower operates 0800-1600 Mon.-Fri. 0800-2200 Sat., Sun.
Elizabeth City Municipal	36°15'-76°10'	15	3	2800	Turf	80/87	Major		Landing strips rough
Elizabeth City (Navy)	36°14'-76°08'	07	2	3200	Asphalt				Closed
Emporia Mun.	36°41'-77°29'	128	3	5044	Asphalt & Concrete	80/87	Minor	Rnwy., dusk to 2300	W & NE bkd trees
Engelhart	35°50'-76°00'	01	1	3000	Turf				
Evans	37°24'-76°52'	80	1	4500	Turf				
Felker AAF	37°08'-76°37'	10	1	3020	Asphalt	A	Major	Runway	Attended 24 hours
ALF Fentress (Navy)	36°42'-76°08'	16	5	8000	Concrete			Rnwy., prior req.	ALF to NAS Oceana
Fort Story Aux AAF	36°55'-76°01'	13	1	1950	Steel mat				
Franklin Mun.	36°42'-76°54'	87	3	4100	Concrete	80,100	Minor	Bndy. & ben. on prior req. by phone	Use paved areas only
Garner	36°51'-76°11'	80	1	2500	Turf				Not attended. Fuel available
Goffigon	37°14'-76°58'	35	1	1800	Turf				Private
Grady Field	35°09'-77°35'	95	1	2000	Turf				Private
Halifax County	36°26'-77°43'	250	3	3200	Turf	80,91		Strip on req. after 2300	Field rough
Hilltop	37°25'-77°37'	250	1	2200	Turf	80			Pole line W
Hopewell	37°18'-77°13'	20	3	2415	Asphalt	80,100	Major		SW bkd. trees
Hopewell Seapl. Base	37°18'-77°13'	03	1	9240	James River	80, 100/130	Major		Ramp, float, dock
Hummel	37°36'-76°27'	30	2	2600	Turf				
Jacksonville	34°47'-77°23'	31	1	2800	Turf, W half paved				Private
Jernigan	36°15'-76°59'	125	1	2100	Turf	80			Strip rough
Johnson Field	37°42'-76°43'	35	1	2450	Turf	80/87			Pole line NW
Kellam	37°27'-75°53'	15	2	2100	Turf	80/87	Major		
Lawrenceville Municipal	36°45'-77°47'	317	2	2400	Turf				Irreg. attd. Fuel, repairs avail. N blocked trees
Lee AAF	37°17'-77°22'	150	1	2500	Asphalt	A,C	Minor	Runway	Twr. opers. 0730-1600 Mon.-Fri.
Lively	37°43'-76°34'	15	2	3400	Turf			Bndy., rnwy. on request	Not attended. Fuel available
Manteo	35°55'-75°42'	12	3	3300	Asphalt	80,91, 100	Major		Attd. 24 hrs. NE bkd. trees. E/W runway rough
Manteo Seaplane	35°53'-75°43'	00		10,560	Croatan Sound	80,91	Major		Ramp dock, combined oper. with airport. Unsafe for light aircraft-rough water
New Hanover County	34°16'-77°54'	31	5	8000	Asphalt & Conc.	80,91, 100,J	Major	Rnwy. appr. & hi-intens. runway	Attd. 24 hrs. 50' unlighted overhead hi-voltage pole line running W from Cont. twr. to airport boundary. Rotar tower NW
New Kent Co.	37°31'-77°08'	161	1	3000	Turf	80/87	Minor		
MCAF New River	34°42'-77°26'	24	3	1125	Asphalt	A+B	Minor	Runway	Attd. wk. days, Sat. on 2 hr. prior notice. Off. business only. Rnwy. 14/32 clsd. Twr. oper. 0700-sunset Mon.-Fri.
NAS Norfolk (Chambers Fld.)	36°56'-76°17'	15	3	6320	Concrete	A+BC, J	Major	Rnwy., bndy., ltd. and hi-intens. rnwy.	Restricted
NAS Norfolk (Sewey Point SPB)	36°57'-76°17'	00		12,500	Willoughby Bay	A+B, J	Major	Lighted buoys, Hi-intens. appr. on 6 hrs. prior request	Ramps, buoys, harbour

12-22-61

NAME	LAT.
Norfolk Mun.	36°54'
Northfield	37°38'
NAS Oceana	36°50'
OLF Oak Grove (Navy)	35°02'
Parnell	37°29'
Patrick Henry	37°08'
Petersburg Mun.	37°11'
Pitt-Greenville	35°38'
Portsmouth	36°44'
Plainview	37°32'
Reedville	37°50'
Rich Square	36°15'
Rocky Mount Municipal	35°58'
Simmons-Nott	35°04'
South Norfolk	36°48'
Stallings Field	35°20'
Suffolk Mun.	36°40'
Virginia State Police	37°30'
Walker AAF	37°01'
NASA Wallops Station	37°56'
Washington Municipal (Warren Field)	35°34'
Waverly Mun.	37°04'
West Point Municipal	37°31'
Weyerhaeuser Company	35°51'
Wilson Mun.	35°46'
Woodville	36°14'

Fuel octane rat
Military fuel is
The above listi
*Joint civil and
‡ Aeronautical
SPB: Indicate
Private aerodr

Military aerod

NOTE: Aerod
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AERODROMES - NORFOLK SECTIONAL CHART

NAME	LAT. LONG.	ELEV.	RUNWAYS			FACILITIES			REMARKS
			NO.	LONGEST	SURFACE	FUEL	REPAIRS	LIGHTING	
Norfolk Mun.	36°54'-76°12'	26	3	5002	Concrete	80/87, 91/96, 100/130	Major	Rnwy., hi-intens. appr. & runway	Attd. 24 hrs. S, SE bldg., trees. Landing fee in lieu of gas purchase. ‡ 123.0 mc.
Northfield	37°38'-77°26'	197	2	2400	Bituminous on 3000' strip	80/87, 100	Major	Runway	
NAS Oceana	36°50'-76°02'	20	4	12,000	Concrete	A+,J	Minor	Rnwy., bsdy. hi-intens. rnwy. & appr.	
OLF Oak Grove (Navy)	35°02'-77°15'	27	3	4000	Asphalt				Clsd.: OLF to MCAS Cherry Pt.
Parnell	37°28'-77°27'	120	2	2750	Turf	80	Major		
Patrick Henry	37°08'-76°30'	41	2	5600	Concrete	80/87, 100/130	Minor	Rnwy. & hi-intens. rnwy. & appr. on req.	Attd. 24 hrs. Major airframe repairs avail. Landing fee in lieu of gas purchase. ‡ 123.0 mc.
Petersburg Mun.	37°11'-77°31'	190	3	5000	Asphalt & concrete	80/87, 100/130	Minor		
Pitt-Greenville	35°38'-77°23'	25	3	5000	Asphalt	80,91		Rnwy. on req.	Rr. tfc. rnwys 19, 23 & 32
Portsmouth	36°47'-76°27'	22	2	2150	Asphalt on 3500' Turf	80,91	Major		S bldg. pole line
Plainview	37°32'-77°33'	400	1	1500	Turf	80			
Reidville	37°50'-76°16'	19	1	2200	Turf				Private. Pole line NE
Rich Square	36°15'-77°17'	78	1	2500	Turf				Pole line NW
Rocky Mount Municipal	35°58'-77°48'	97	2	4005	Asphalt	80,100	Major	Runway	Attd. 24 hrs. Contact Rocky Mount Radio for airport info. service prior to landing. Pole line SE
Simmons-Nott	35°04'-77°39'	18	2	4807	Bituminous	80,91, 100	Major	Runway	Attended 24 hours
South Norfolk	36°46'-76°15'	20	2	3250	Turf	80/87, 91/96	Major		Pole line W
Stallings Field	35°20'-77°37'	33	3	5000	Asphalt	80,100		Rnwy. on req.	
Suffolk Mun.	36°40'-76°36'	11	3	5000	Concrete	80			
Virginia State Police	37°30'-77°32'	300	1	1800	Turf	80			SE bldg. trees. 420' twr. on NE side of field
Walker AAF	37°01'-76°18'	56	1	2600	Asphalt	A,C	Minor	Runway on prior request	Official business only
NASA Wallops Station	37°56'-75°28'	38	3	8000	Concrete			Hi-int. rnwy. on request	Prior approval required. Rnwy. 04/22 clsd. UFN - construction
Washington Municipal (Warren Field)	35°34'-77°03'	38	3	5000	Concrete	80,100	Major	Runway	Attended 24 hours. Right traffic NE, ESE VSSE
Waverly Mun.	37°04'-77°08'	115	2	4400	Turf				
West Point Municipal	37°31'-76°45'	24	3	5000	Concrete			Rnwy. on prior request	Unattended, fuel in emergency only
Weyerhaeuser Company	35°51'-76°47'	10	2	2900	Turf				Private
Wilson Mun.	35°48'-77°58'	161	3	4500	Asphalt	80,100	Major	Runway	
Woodville	36°14'-76°21'	13	1	1800	Turf				Private. Pole line SSE, S

Fuel octane ratings listed by number are those available to civil aircraft, unless otherwise noted. 12-28-61

Military fuel is listed by letter code indicating octane ratings as follows: A+: 115/145, A: 100/130, B: 91/98, C: 73 or 80, J: Jet Fuel.

The above listing does not include Air Force aerodromes.

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

‡ Aeronautical advisory station operating on 123.0 mc.

SPB: Indicates seaplane base or anchorage.

Private aerodromes: Indicated by (Pvt) on face of chart and "Private" in Remarks column. Use only in emergency or by specific authorization. General use by other than owner may be prohibited by State law or restricted by owner.

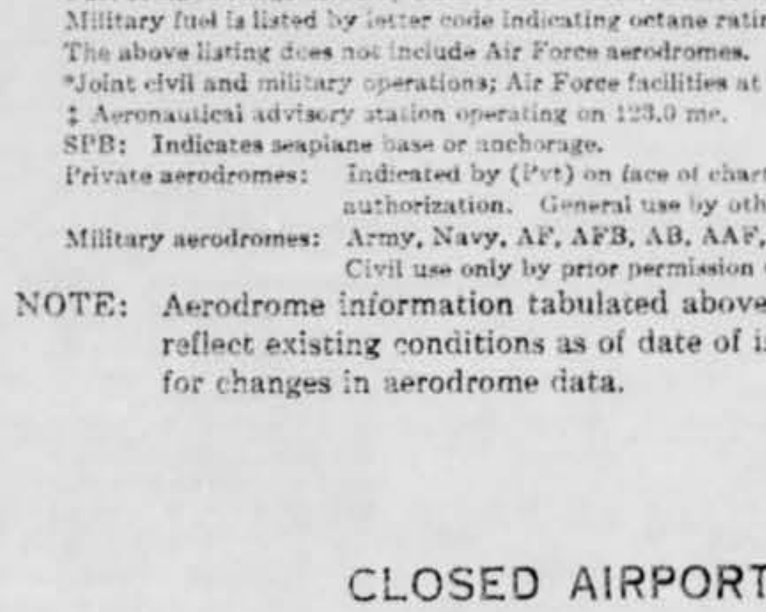
Military aerodromes: Army, Navy, AF, AFB, AB, AAF, NG, NAS, MCAS, OLF, ALF. For use of Armed Services. Civil use only by prior permission of the Commanding Officer.

NOTE: Aerodrome information tabulated above was abstracted from the latest available reports and may not reflect existing conditions as of date of issue of this chart. Consult the Airman's Guide and NOTAMS for changes in aerodrome data.

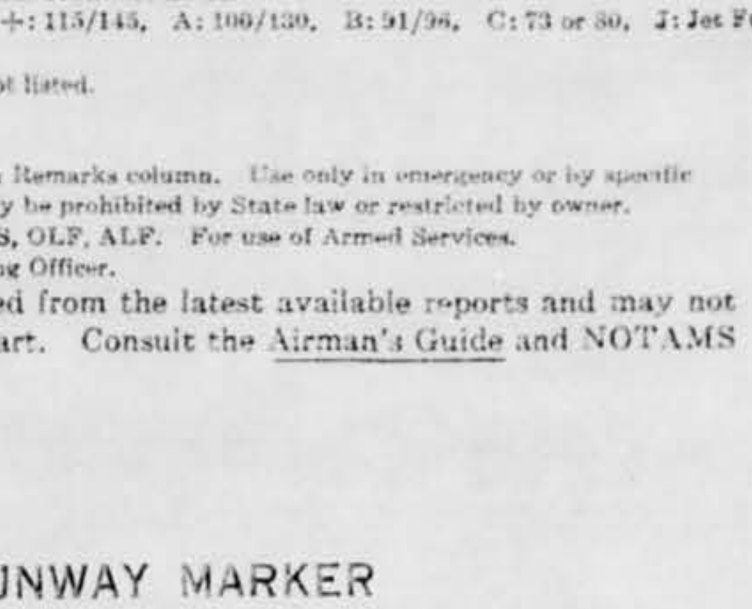
CLOSED AIRPORT AND RUNWAY MARKER

When you see a large "×" in the center of the airport, that airport is closed. Do not attempt a landing!
When you see an "×" on a runway, that runway is closed and hazardous for use. Do not use it!

TYPICAL INSTALLATIONS



ENTIRE AIRPORT CLOSED



ONE RUNWAY CLOSED

PROHIBITED, RESTRICTED, WARNING, AND CAUTION AREAS ON NORFOLK SECTIONAL CHART

NO.	NAME	ALTITUDE	TIME	APPROPRIATE AUTHORITY
R-4005	Patuxent, Md.	Unlimited	Continuous	C.O., NAS, Patuxent River, Md.
R-4006	Patuxent, Md.,	Above 3500	Continuous	C.O., NAS, Patuxent River, Md.
R-4007	Patuxent, Md.	To 5000	Continuous	C.O., NAS, Patuxent River, Md.
R-5301	Albemarle Sound, N.C.	To 20,000	Sunrise to sunset	Comdr., Fleet Air, NAS, Norfolk, Va.
R-5302	Albemarle Sound, N.C.	To 20,000	Sunrise to sunset	Comdr., Fleet Air, NAS, Norfolk, Va.
R-5303	Albemarle Sound, N.C.	To 20,000	Sunrise to sunset	Comdr., Fleet Air, NAS, Norfolk, Va.
R-5304	Albemarle Sound, N.C.	To 20,000	Sunrise to sunset	Comdr., Fleet Air, NAS, Norfolk, Va.
R-5305	Albemarle Sound, N.C.	To 20,000	Sunrise to sunset	Comdr., Fleet Air, NAS, Norfolk, Va.
R-5306-A	Cherry Point, N.C.	To FL 350	Continuous	C.G. Marine Corps Air Station, Cherry Point, N. C.
R-5306-B	Cherry Point, N.C.	To FL 290	Continuous	C.G. Marine Corps Air Station, Cherry Point, N.C.
R-5306-C	Cherry Point, N.C.	To 20,000	Continuous	C.G. Marine Corps Air Station, Cherry Point, N.C.
R-5307	Cherry Point, N.C.	FL 350 to FL 550	Sunset to sunrise	C.G. Marine Corps Air Station, Cherry Point, N.C.
R-5308	Currituck Sound, N.C.	To 10,000	Continuous	Comdr., Fleet Air Norfolk, NAS, Norfolk, Va.
R-5309	Currituck Sound, N.C.	To 10,000	Sunrise to sunset	Comdr., Fleet Air Norfolk, NAS, Norfolk, Va.
R-5310	Currituck Sound, N.C.	To 10,000	Continuous	Comdr., Fleet Air Norfolk, NAS, Norfolk, Va.
R-5313	Long Shoal Point, N.C.	Unlimited	Continuous	Comdr., Fleet Air Norfolk, NAS, Norfolk, Va.
R-6601	Camp A.P. Hill, Va.	To 22,000	Continuous	† FAA Washington ARTC Center or area FSS C.G. Second U.S. Army, Fort Meade, Md.
R-6602	Camp Pickett, Va.	To 22,000	Continuous	C.G. Second U.S. Army, Fort Meade, Md.
R-6603	Chesapeake Bay, Va.	To FL 300	Continuous	Coordinator, Virginia Capes operating area, Naval Base, Norfolk, Virginia
R-6604	Chincoteague Inlet, Va.	Unlimited	Continuous	Chief, Wallops Station, National Aeronautics & Space Administration, Wallops Island, Va.
R-6608	Pendleton, Va.	Unlimited	0800 to 1700 EST Mondays through Fridays	C.O., U.S. Fleet Air Defense Training Center, Dam Neck, Va.
R-6607	Potomac River, Va.	Unlimited	Continuous	C. O., Naval Air Test Center, Patuxent River, Md.
R-6609	Tangier Island, Va.	Umlimited	Continuous	Comdr., Fleet Air Norfolk, NAS, Norfolk, Va.
W-50	Pendleton, Va.	To FL 750	0730-1630 Monday through Friday	VACAPES OPARECORD, NAVB, Norfolk, Va. C.O., FADTC, Dam Neck, Va.
W-72	North Carolina	Unlimited	Continuous	COMFAIR, Norfolk, Va.
W-108	Chincoteague/Va. Capes	To FL 750	Continuous	VACAPES OPARECORD, NAVB Norfolk, Va. C.O., NAS Patuxent River, Md. COMOPTEVFOR NAVB, Norfolk, Va.
W-122	Cherry Point, N.C.	To FL 550	Continuous	MCAS Cherry Point, N.C.
W-386	Virginia Capes	Unlimited	Continuous	VACAPES OPARECORD, NAVB, Norfolk, Va. Comdr., 836 ADIV, Langley AFB, Va.
W-523	Wilmington, N. C.	To FL 600	Sunrise to sunset	Comdr., Seymour-Johnson AFB, Goldsboro, N.C.

MILITARY CLIMB CORRIDOR

NOTE: All flights through these areas must obtain prior approval from the appropriate authority on frequencies listed.

R-5312	Goldsboro, N.C. (Seymour-Johnson AFB)	* See below	Continuous	† FAA, Raleigh-Durham, N.C. Approach,Control: 126.2 122.5G Comdr., Seymour-Johnson AFB, N.C.
* A - 2100-15,000; B - 2100-FL 240; C - 2100-FL 270; D - 6100-FL 270; E - 10,100-FL 270; F - 15,100-FL 270; G - 19,100-FL 270.				
R-6610	Hampton Roads, Va. (Langley AFB)	* See below	Continuous	Langley AFB Approach Control: 111.4 126.2 122.5G 236.6
*A - 2000-15,000; B - 2000-FL 240; C - 2000-FL 270; D - 6000-FL 270; E - 10,000-FL 270; F - 15,000-FL 270; G - 19,000-FL 270.				

P - Prohibited R - Restricted W - Warning C - Caution † - Controlling Agency

Altitudes are in feet. Local time is shown unless otherwise noted.

No person shall operate an aircraft within a Prohibited Area, or within a Restricted Area between the designated altitudes during the time of designation unless prior permission has been issued by the appropriate authority as listed above. The appropriate authority is defined as either the controlling agency (†) or the using agency.

Flight within Caution Areas is not restricted, but pilots are advised to exercise extreme caution.

NOTE: Consult NOTAMS and Flight Information Publications for changes in data subsequent to JAN. 2, 1962.

RADIOTELEGRAPH CODE AND PHONETIC ALPHABET

INTERNATIONAL (ICAO)

A—ALFA ·—	K—KILO —·—	U—UNIFORM ··—	0—ZE-RO —————
B—BRAVO —···	L—LIMA ·—··	V—VICTOR ···—	1—WUN ·————
C—CHARLIE —·—·	M—MIKE ——	W—WHISKEY ·——	2—TOO ··———
D—DELTA —··	N—NOVEMBER —·	X—XRAY —··—	3—TREE ···——
E—ECHO ·	O—OSCAR ———	Y—YANKEE —·——	4—FOW-er ····—
F—FOXTROT ··—·	P—PAPA ·——·	Z—ZULU ——··	5—FIFE ·····
G—GOLF ——·	Q—QUEBEC ——·—		6—SIX —····
H—HOTEL ····	R—ROMEO ·—·		7—SEV-en ——···
I—INDIA ··	S—SIERRA ···		8—AIT ———··
J—JULIETT ·———	T—TANGO —		9—NIN-er ————·

5-1-56

MILITARY CLIMB CORRIDORS

GOLDSBORO, N.C. (SEYMOUR JOHNSON AFB)
RESTRICTED AREA R-5312

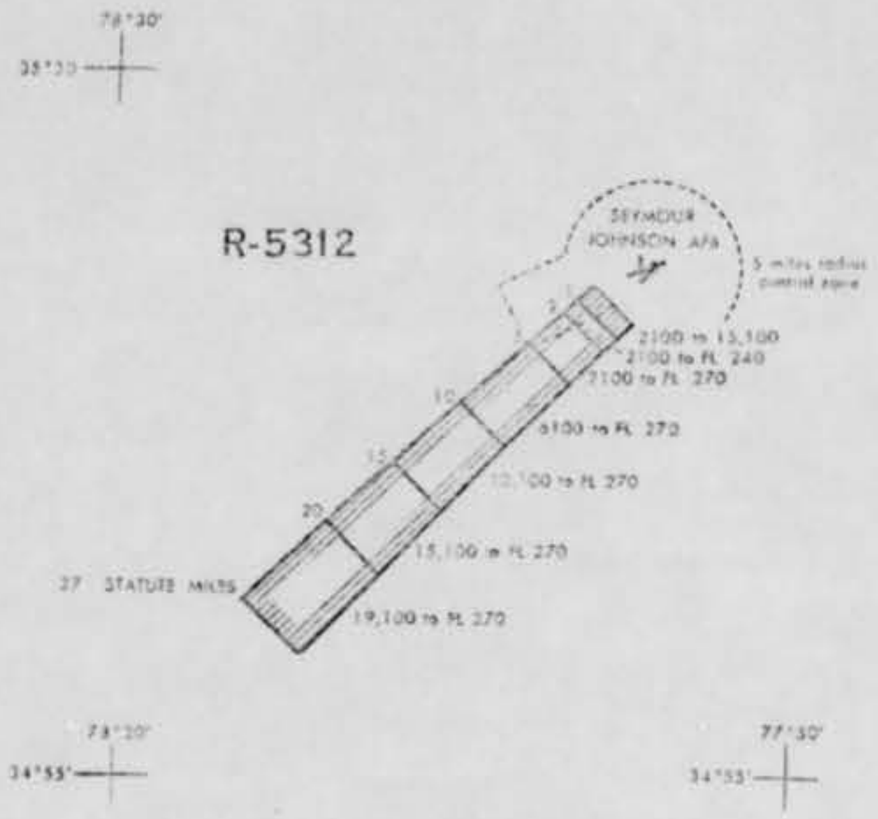
HAMPTON ROADS, VA. (LANGLEY AFB)
RESTRICTED AREA R-6610

The Military Climb Corridors illustrated below have been designated as Restricted Areas.

Pilots of Century Series aircraft on active air defense missions are unable to see and safely avoid other aircraft during the climb phase of a scramble. In the interest of safety, the Dept. of Defense and the FAA have agreed to establish restricted corridors to segregate such operations from other air traffic. ALL FLIGHTS through these areas must obtain prior approval from the Appropriate Authority.

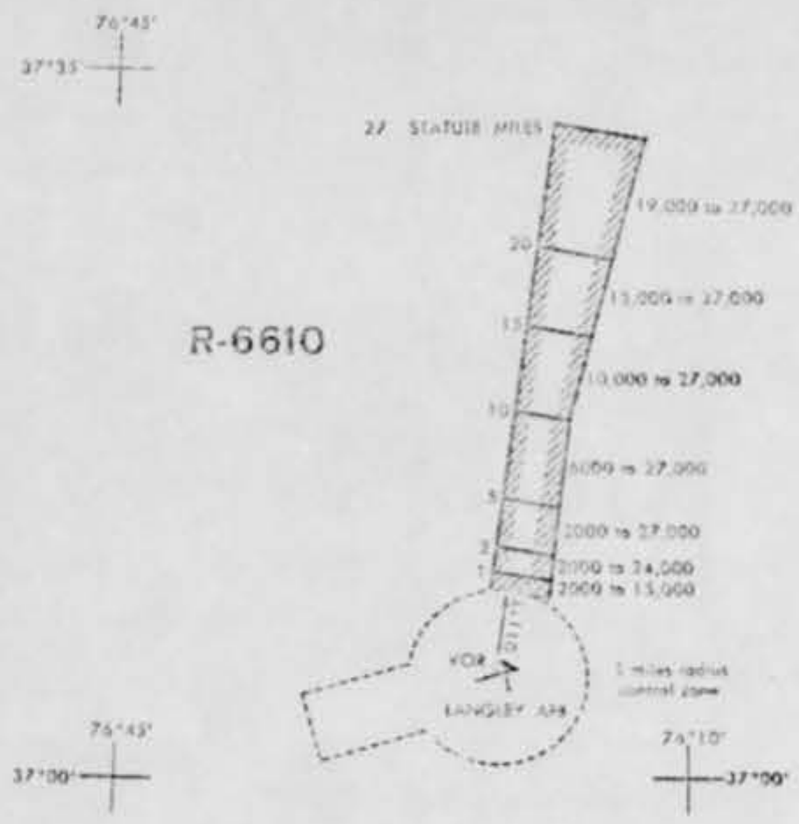
The lateral and vertical limits of the Military Climb Corridors are indicated below. The relation of these corridors to the terrain and aeronautical facilities can be seen on the face of this chart, where the lateral limits are also shown.

LATERAL LIMITS OF MILITARY CLIMB CORRIDORS



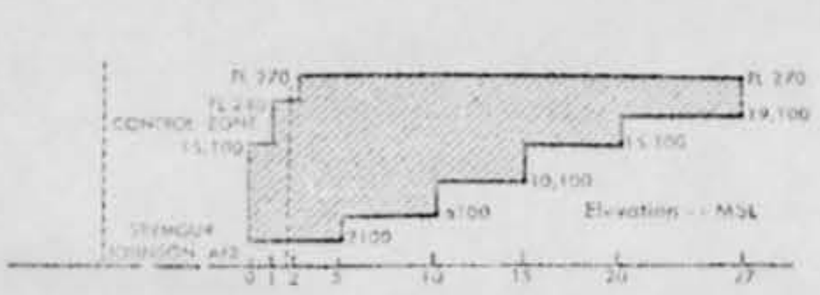
Controlling Agency
F.A.A. Raleigh-Durham, N.C. Approach Control

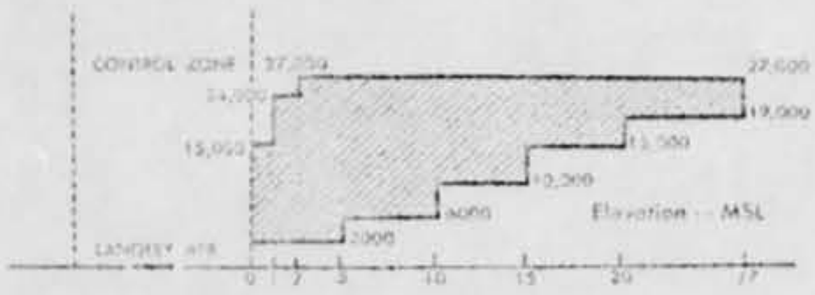
Using Agency
Commander, Seymour Johnson AFB, N.C.



Using Agency
Langley AFB Approach Control

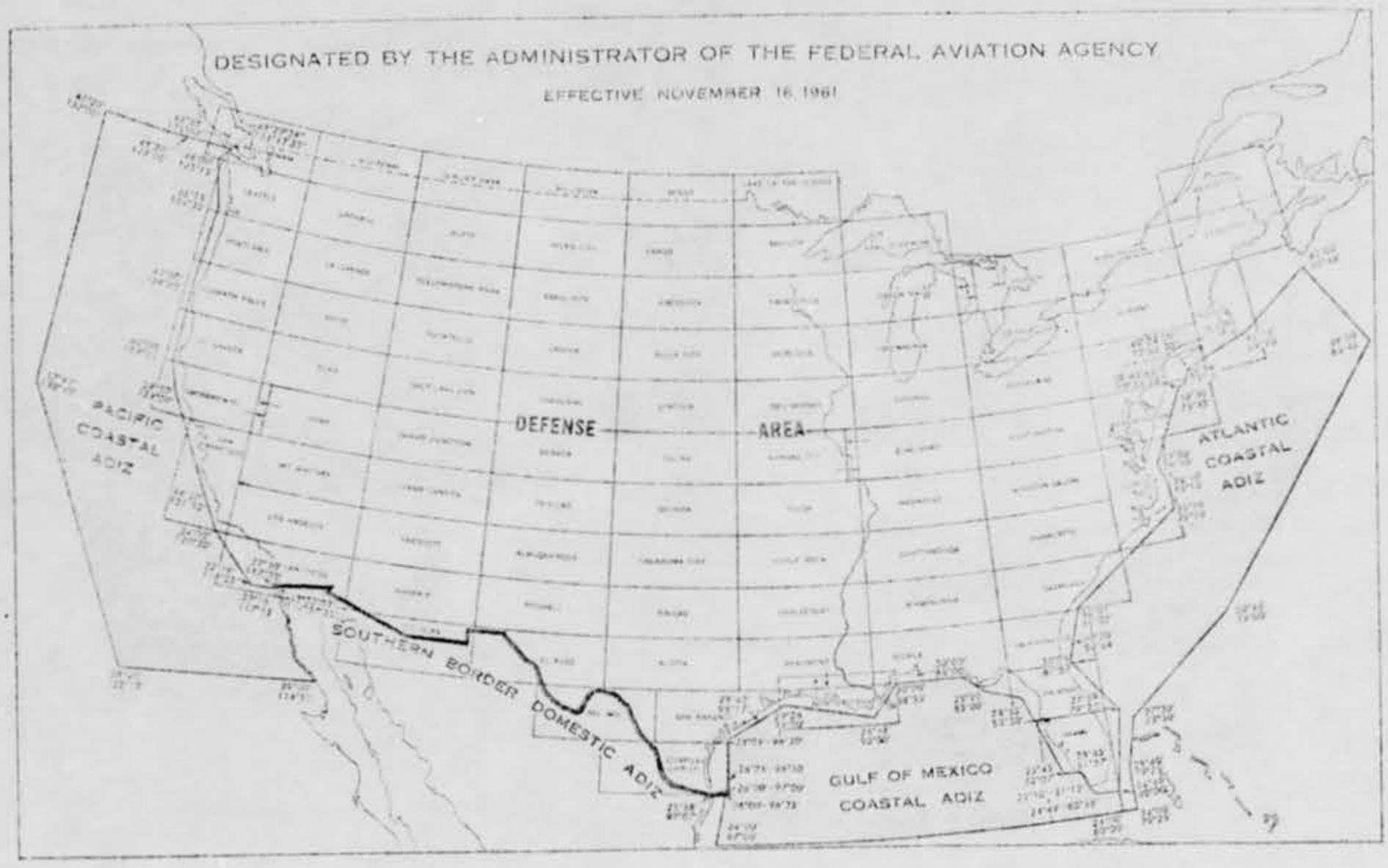
PROFILE SHOWING UPPER AND LOWER LEVEL OF MILITARY CLIMB CORRIDORS





NOTE: Consult NOTAMS and Flight Information Publication for changes in data subsequent to date of chart.

U.S. AIR DEFENSE IDENTIFICATION ZONES AND DEFENSE AREA



CIVIL AIR REGULATIONS - PART 620 - SECURITY CONTROL OF AIR TRAFFIC

Operational Requirements, Abbreviated Form

	Southern Border Domestic ADIZ	Alaskan Domestic ADIZ	Coastal ADIZs	DEWIZ
Flight Plan.	Required for northbound aircraft.	Required.	Required.	Required before take-off; ETDP required. Exception permitted in §620.14(e).
Functioning Two-way Radio.	Required except as stated in §620.13(b) (1) (iii).	Required except as stated in §620.13(b) (1) (iii).	Required except as stated in §620.13(b) (1) (iii).	Required.
ADIZ Tolerances in Note following §620.14(e).	Within 5 minutes of estimate and 10 nautical miles of course centerline.	Within 5 minutes of estimate and 10 nautical miles of course centerline.	Within 5 minutes of estimate and 20 nautical miles of course centerline.	Within 5 minutes of estimate and 20 nautical miles of course centerline.
Position Reports.	Normal IFR reports or - VFR give ETP at least 15 minutes before penetration.	Normal IFR reports or - VFR give ETP at least 15 minutes before penetration.	Same as Domestic ADIZ or - Inbound foreign aircraft initial report at least one hour from U.S.	Normal IFR reports or - VFR report prior to penetration. Correlation of ground filed data may be requested.
Air Defense Emergencies §620.17.	ALL AUTHORIZED EXCEPTIONS WILL BE SUSPENDED AND ADDITIONAL SPECIAL SECURITY INSTRUCTIONS MAY BE ISSUED DURING DEFENSE EMERGENCY OR AIR DEFENSE EMERGENCY CONDITIONS.			
Aircraft exempted from compliance to the provisions of Part 620 other than §620.17.	Local exemptions granted by FAA ARTCC.	Local exemptions granted by FAA ARTCC.	Local exemptions granted by FAA ARTCC.	Local exemptions granted by FAA ARTCC.
	Aircraft remaining within 10 nautical miles of departure point within the Continental U.S.	Aircraft remaining within 10 nautical miles of departure point within the Continental U.S.	Aircraft remaining within 10 nautical miles of departure point within the Continental U.S.	Aircraft remaining within 10 nautical miles of departure point within the Continental U.S.
	Aircraft with T.A.S. less than 180 knots.	Aircraft with T.A.S. less than 180 knots.	Aircraft with T.A.S. less than 180 knots, north of 28°N. or west of 85°W.	Aircraft with T.A.S. less than 180 knots - listening watch required.
	Aircraft from U.S. southbound through Southern Border ADIZ not entering Coastal ADIZ.		Flight over or within 3 nautical miles of any island in Hawaiian Coastal ADIZ.	

NOTE: Detailed procedures to be followed by the pilot are contained in Part 620, for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

216/11-24-61

SEARCH AND RESCUE

Search and Rescue Service is a life saving service provided through the combined efforts of the FAA, Air Force, Coast Guard, and Civil Air Patrol in cooperation with other organizations such as State Aeronautics Authorities, Sheriffs Air Patrol, State Police, and Local Search and Rescue Units. 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 FAA Flight Service Station (FSS) 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 FAA Service Station.
4. If you land enroute and are delayed more than an hour, report this information to the nearest service 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 IMMEDIATELY!

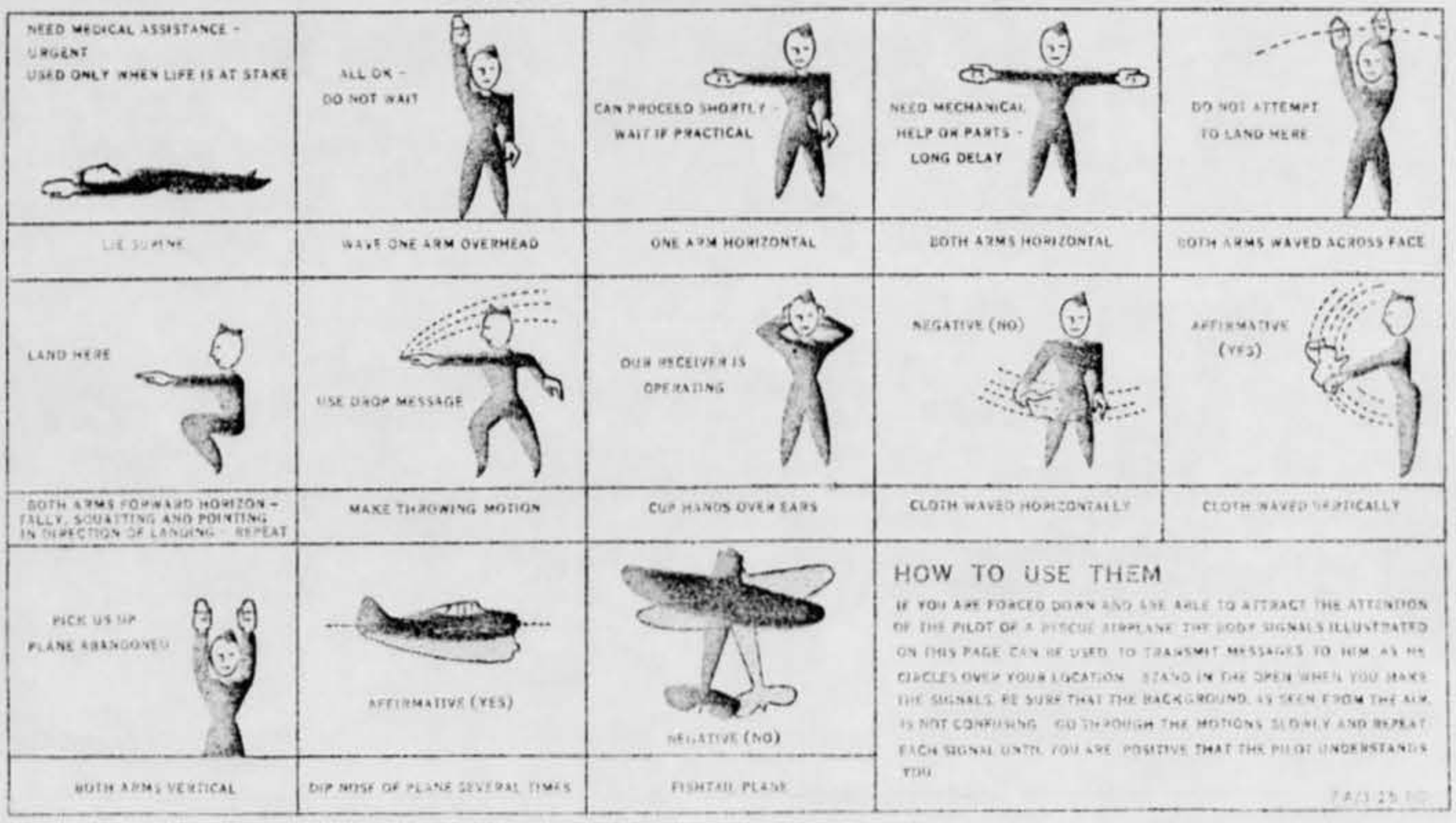
GROUND TO AIR EMERGENCY CODE DISTRESS SIGNALS

REQUIRE DOCTOR, SERIOUS INJURIES	I	REQUIRE SIGNAL LAMP WITH BATTERY, AND RADIO	I	REQUIRE FUEL AND OIL	L
REQUIRE MEDICAL SUPPLIES	II	INDICATE DIRECTION TO PROCEED	K	ALL WELL	LL
UNABLE TO PROCEED	X	AM PROCEEDING IN THIS DIRECTION	↑	NO	N
REQUIRE FOOD AND WATER	F	WILL ATTEMPT TAKE-OFF	|>	YES	Y
REQUIRE FIREARMS AND AMMUNITION	V	AIRCRAFT SERIOUSLY DAMAGED	LT	NOT UNDERSTOOD	JL
REQUIRE MAP AND COMPASS	□	PROBABLY SAFE TO LAND HERE	△	REQUIRE MECHANIC	W
		IF IN DOUBT, USE INTERNATIONAL SYMBOL	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



HOW TO USE THEM

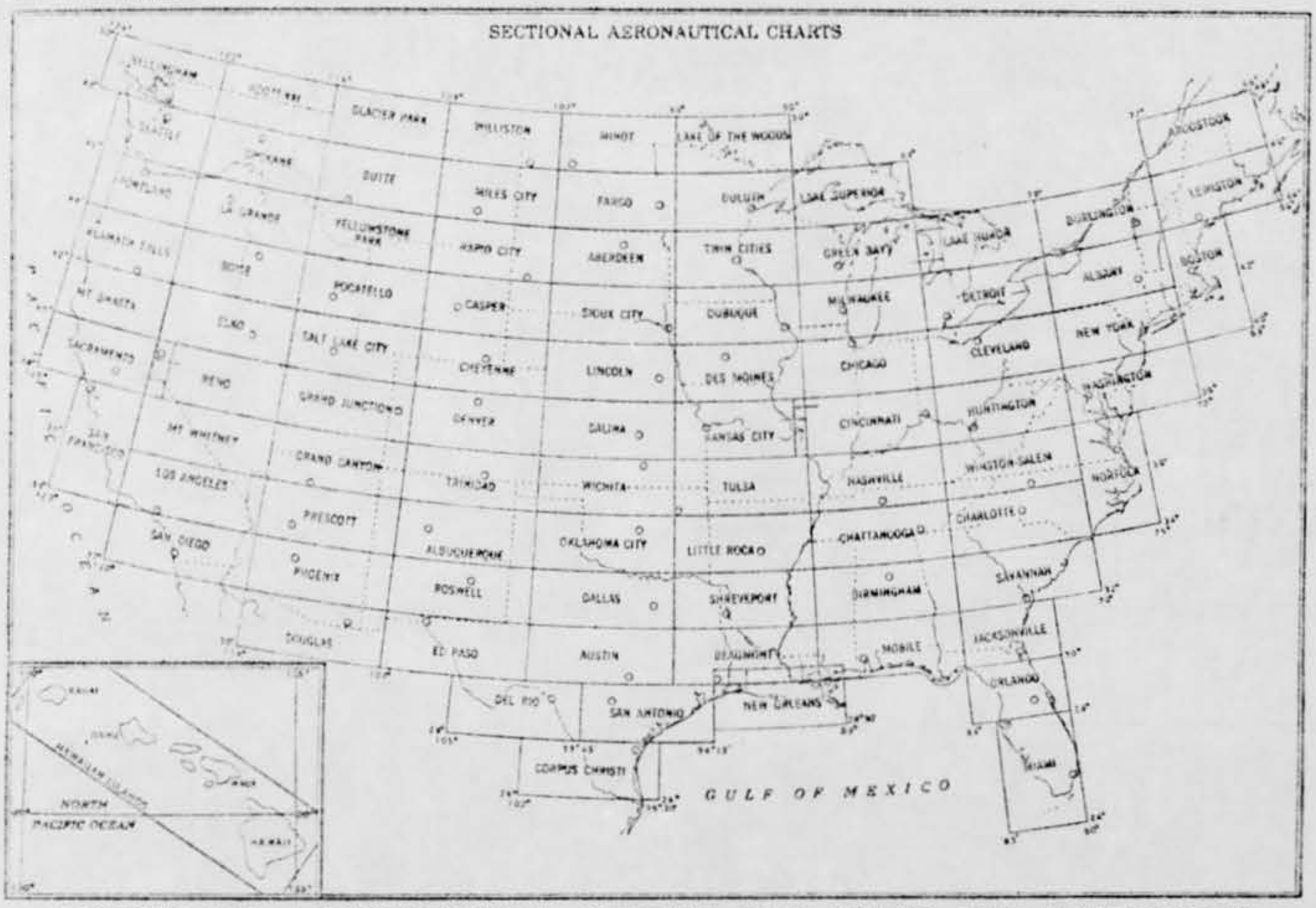
IF YOU ARE FORCED DOWN AND ARE ABLE TO ATTRACT THE ATTENTION OF THE PILOT OF A RESCUE AIRPLANE THE BODY SIGNALS ILLUSTRATED ON THIS PAGE CAN BE USED TO TRANSMIT MESSAGES TO HIM AS HE CIRCLES OVER YOUR LOCATION. STAND IN THE OPEN WHEN YOU MAKE THE SIGNALS. BE SURE THAT THE BACKGROUND, AS SEEN FROM THE AIR, IS NOT CONFUSING. GO THROUGH THE MOTIONS SLOWLY AND REPEAT EACH SIGNAL UNTIL YOU ARE POSITIVE THAT THE PILOT UNDERSTANDS YOU.

SECTIONAL CHARTS

The Sectional Aeronautical Chart series provides complete coverage of the United States except Alaska and is designed primarily for contact flying. The charts portray detailed cultural and topographic features including important landmarks and selected aeronautical information required for visual navigation supplemented by instruments.

Because of frequent changes, most Sectional Charts are scheduled for printing every six months to provide the airman with the latest charted information possible. Others are scheduled annually. Aeronautical Charts 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, Coast and Geodetic Survey, U. S. Department of Commerce, Washingon 25, D. C.

In the lower right hand corner is printed the date of the chart. The scheduled time for the next edition is indicated under the date. After the expiration of this time from the date of the chart, users are advised to check with notices (Dates of Latest Prints) on file with authorized agents. Charts that carry older dates than those shown on this list of dates are obsolete.



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

World Aeronautical Charts	Provides world coverage at a size and scale convenient for navigation by moderate speed aircraft. Topographic and aeronautical information is similar to the Sectional Chart except as limited by the smaller scale. Sixty-two charts cover the continental United States.	1:1,000,000
Local Charts	Designed to provide additional landmark information and topographic detail in the vicinity of important air terminals.	1:250,000
Instrument Enroute Charts	Provides the necessary aeronautical information for enroute instrument navigation (IFR) in the established low and intermediate altitude levels.	1:729,132 to 1:2,041,570
Planning Charts	AP-9 Conterminous United States.	1:5,000,000
Jet Navigation Charts	Designed for long range navigation by high speed aircraft operating at high altitudes. Selected topographic data is over-printed by major aeronautical information including aerodromes, LM/F and VOR navigation facilities, ADIZ limits, restricted areas and other pertinent data. Four charts cover the conterminous United States.	1:2,000,000
Route Charts	Show limited topographic information, selected aerodromes, major radio data. Strip charts aligned with principal air routes using same format as Jet Navigation Charts.	1:2,000,000
Aircraft Position Charts	3071 North Atlantic; 3073 Caribbean Sea; 3094 North Pacific; 3095 Shannon-Cairo-Bombay; 3096 Pacific Ocean; 3097 Subpolar Route, N. America-Europe	1:5,000,000 or 1:6,250,000
Instrument Approach Procedure Charts	More than 1300 charts provide data for instrument approach procedures to airports.	1:500,000
Airport Obstruction Plans	Show runways and selected aerodrome information and objects in the vicinity that may be hazardous to air traffic	1:12,000

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

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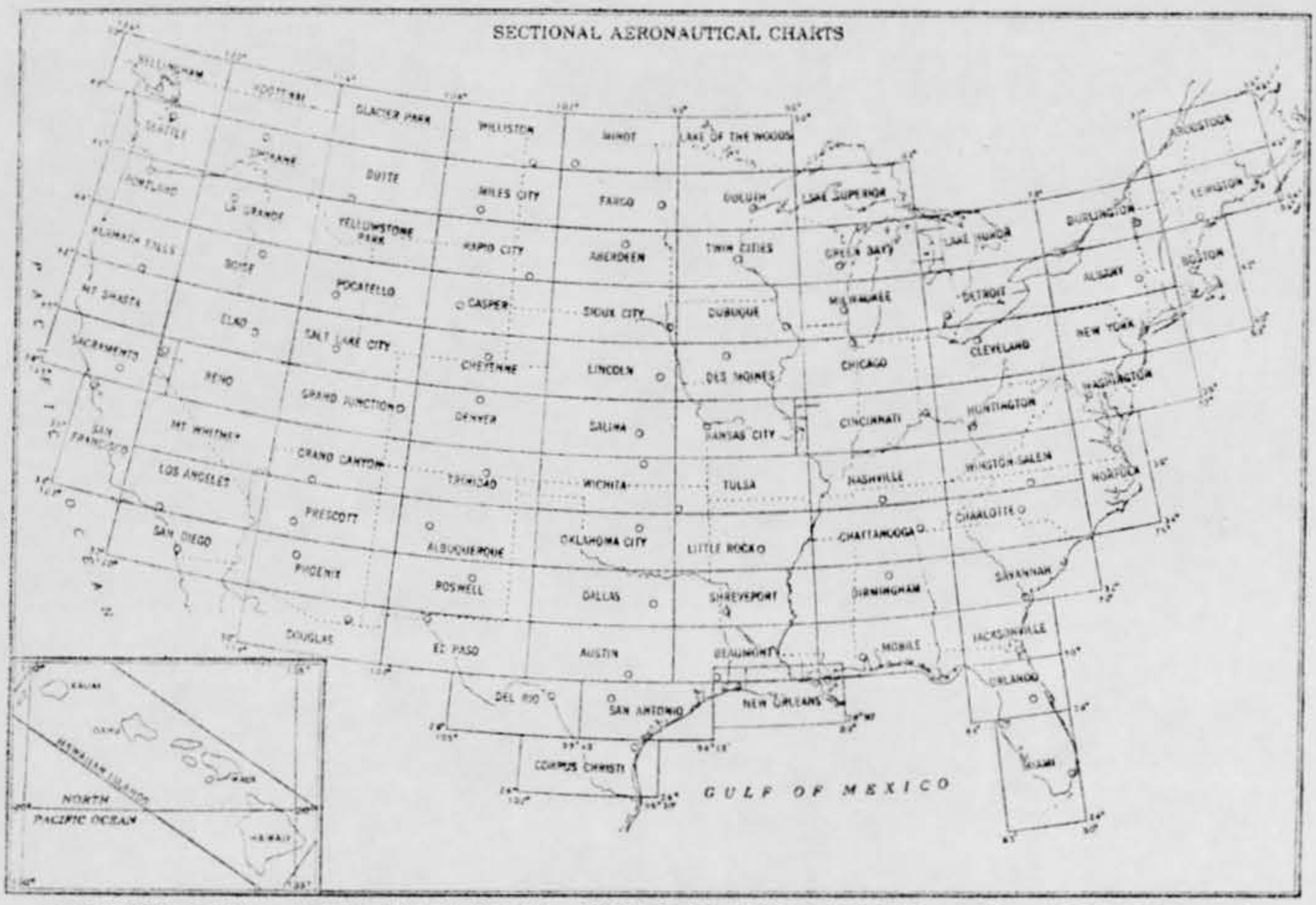

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AERO
LAN
Civil
Mil
WINSTON
2427 I 48
Airport of entry
GCA ILS DF
278 119.5 126.2
257.3 122.75
L-
LF/MF tower frequen
ALBERT
Rotating light
Rotating light (Wim A
Rotating light (Wim co
Flashing light
Fixed F
M
Facili
Radio range (Without v
(Two letter id
range when
Marine radiobeacon
(All are without voice)
Radar beacon
Outer marker radiob
(Shown when componen
Arrows are
which estab
090°
MESA Gea
Named intersection used
VHF OMNI
CHICAGO
114.2 CGT
NSME
Bearings are magnetic
NS/Alt where shown indic
Non-Standard Measuring
DME where shown indica
Distance Measuring Equi
Airspace between enrout
is controlled unless other
Prominent transmis
or T-line cro
Rotating light (Or lea
Obstruction
(Numerals indicate elevat
(UC) Under construction,

AERONAUTICAL SYMBOLS

AERODROMES

AERODROMES WITH FACILITIES

LAND	WATER	
		Civil
		Joint civil and military
		Military

Aerodromes with hard-surfaced runways at least 1500 feet long

AERODROMES WITH EMERGENCY OR NO FACILITIES

LAND	WATER	
		Landing area
		Anchorage

Heliport (Selected)

Aerodromes with hard-surfaced runways at least 1500 feet long

AERODROME DATA

LAND		WATER	
2427	Elevation in feet	00	Elevation in feet
L	Lighting (See below)†	L	Lighting (See below)†
48	Length of longest runway in hundreds of feet	S	Normally sheltered take-off area
		250	Length of longest runway in hundreds of feet

NAS NORFOLK
00 L S 250
3053

Control tower transmitting frequencies.
278 119.5 126.2 257.8 2053 122.7G guard

*L- Lighting available Sunset to Sunrise *L- Lighting available Sunset to Sunrise on prior request (U)-Lighting available part of night only.

Control tower frequency shown first, followed in order by primary VHF local control, primary military VHF and UHF, and non-standard guarding frequencies.
When facility or information is lacking, the respective character is omitted or replaced by a dash.

Aerodrome name may be omitted when same as nearest town name
Aerodromes outside horizontal limits of controlled areas are indicated by underlining aerodrome data.

U- Indicates aeronautical advisory station licensed to operate on 122.3 mc.
Aeronautical advisory stations operating on 123.0 mc are shown in the Remarks column of the aerodrome tabulation.

AIR NAVIGATION LIGHTS

Flashing light (With code)
Marine light
Lightship

Fl-flashing Occ-occulting Alt-alternating Gp-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

Facilities have voice unless indicated "No voice." All Marine Radiobeacons and Racons are without voice.
All radio facilities are printed in blue with the exception of certain LF/MF facilities such as tower frequencies, radio ranges and radiobeacons, which are printed in magenta.

Radio range (Without voice)
(Two letter identification assigned Radio range when associated with VOR)
SPRAGUEVILLE 371 SPR No voice

Marine radiobeacon. (All are without voice)
RBn EVERETT 233 10m-20m & 30m-40m

Radar beacon
RACON 9319 1-2-2-1

Outer marker radiobeacon LOM or (shown when component of airway system)
LOM 353 EW No voice

Arrows are directed toward facilities which establish intersection

MESA GRANDE
Named intersection used as reporting point

Bearings are magnetic at the station.
The heavy line indicates the "N" quadrant.

Radio broadcasting station
BS KGAF 1580

Radiobeacon, nondirectional (homing) (With voice)
WICHITA FALLS 287 WWA

Radio communication station
CS FORT WORTH 359

Localizer (Shown when component of airway system)
LOCZR or LOCALIZER 109.5 I BED

LF/MF 5 watts
100 watts
AURAL RANGE

Fan marker beacons (75 mc.)

ERIE AVON HILLIARD

VHF OMNI-DIRECTIONAL RADIO RANGE (VOR)

Combined Data
LF/MF Range or Radiobeacon and VHF Omnirange

MANSFIELD 259 113.9 MFD DME
VORTAC DICKINSON 308 DK 112.9 Ch 76 DIK NSME
CHICAGO 114.2 CGT NSME

110° ENROUTE AIRWAY RADIAL V 4
125° ALTERNATE AIRWAY RADIAL V 4 S

Bearings are magnetic at the station.
NSME where shown indicates Non-Standard Measuring Equipment
DME where shown indicates Distance Measuring Equipment.
Airspace between enroute and alternate airways is controlled unless otherwise indicated.

AIR TRAFFIC CONTROL

Control area extension
Control zone
RED 1 (LF/MF airway designation)

Limits of Low Altitude Federal Airways are not shown on charts, but are generally 5 statute miles on either side of the center line, unless otherwise indicated.

Low Altitude Federal Airways within continental U.S. except Alaska are effective only below 14,500 feet MSL.

Canadian airways and air routes extend to 23,000 feet ASL.

(Within continental U.S. except Alaska all airspace at and above 14,500 feet, excluding airspace less then 1500 feet above terrain, prohibited areas, and certain restricted areas, is included within the Continental Control Area, and symbol shown above therefore indicates only control area extensions below 14,500 feet MSL).

MISCELLANEOUS

Prominent transmission line
or T-line crossing T CAUTION

Rotating light (On top of high structure) 1504

Obstruction 2150 (UC)
(Numerals indicate elevation above sea level of top)
(UC-Under construction, position and elevation unverified.)

Isogonic line 8°E (Values for 1960)

Mooring mast

Abandoned airport

Reserved Airspaces are numbered, and are indicated on the charts as follows:

Prohibited Area	P-74 C6P9	
Restricted or Danger Area	R-2503 C5D20	
Warning Area	W-20	
Caution Area	C-10	

Metropolitan
Large Cities
Cities
Small Cities
Towns
Small Towns
Contours
Levees or E
Peaks or Bu
Bluffs, Cliff
Swamps &
Tidal Flats (Exposed at
Danger Lin
Rocks Awa
Shoals (Exposed at
Springs
Wells & W
Reefs, Cor (Awash at lo
Landmarks (Numerals in
Oil Tanks
Oil Fields
Dams
Rapids an
Elevations (In Feet)
Mines and
Mountain
Lookout S
Ranger St
Coast Gu
Pipe Line
Race Trac
Open-Air

TOPOGRAPHICAL SYMBOLS

CITIES AND TOWNS

Metropolitan Areas — NEW YORK

Large Cities — RICHMOND

Cities — Arlington

Small Cities & Large Towns — Freehold

Towns — Corville

Small Towns & Villages — Arcola

HIGHWAYS AND ROADS

Dual Lane and Super Highways

Primary Roads

Secondary Roads

Trails

U. S. Road Markers — 60

National, State or Provincial Road Markers — 37

Road Names — ALASKA HIGHWAY

RELIEF FEATURES

Contours: Reliable; Approximate; Depression — 1000

Levees or Eskers

Peaks or Buttes, Isolated

Bluffs, Cliffs & Escarpments

Sand: Dunes; Areas; Ridges

Lava Flow

HYDROGRAPHIC FEATURES

Swamps & Marshes

Tidal Flats (Exposed at low tide)

Danger Line

Rocks Awash

Shoals (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 (blue stipple)

Drainage Ditches

Canals: In use; Abandoned

Dry Lake Beds (brown stipple)

Sand Deposits in river bed

Dry Washes (brown stipple)

Glaciers and Ice Caps

CULTURAL AND MISCELLANEOUS

Landmarks (with appropriate note) — Factory; Stack 875'

(Numerals indicate elevation above sea level of top)

Oil Tanks

Oil Fields

Dams

Rapids and Falls

Elevations (In feet): Highest on chart (devoid of tint) — 1115; Highest in a general area — 1085; Spot — 950

Mines and Quarries

Mountain Passes

Lookout Stations (Elevation is base of tower) — 75 (Site); 1025 (Tower)

Ranger Stations

Coast Guard Stations — CG 79

Pipe Lines — PIPE LINE

Race Tracks or Stadiums

Open-Air Theaters — Open-air theater

Boundaries: International; State & Provincial

Railroads: Abandoned or Under Construction; Single Track; Multiple Track; Sidings & Spurs; Overpass; Underpass

Bridges: Railroad; Highway

Tunnels: Railroad; Highway

7-13-59

D. Flight path

(1) Appeared straight and at constant speed between the two points to the observer.

e. Disappearance of object.

(1) Observation was discontinued when vision was blocked by a tree.

f. Duration of observation was estimated by the observer to be at least ten minutes but not more than twenty minutes. No elapsed time check was made.

3. Manner of Observation

a. The observer first sighted the object by naked eye (with normal glasses being worn) and then observed it with binoculars. The investigating officer examined them and estimated the following capability. Objects could be observed with sharp detail with a magnification of three times linear dimensions. The binoculars appeared to be relatively inexpensive and no name or identification existed on the instrument itself.

b. The angles of elevations and bearings were determined by the investigating officer as follows:

(1) The angle of elevation was determined by the observer sighting down the straight edge of an aircraft navigation plotter type B-2A USAF Stock No. 6217-FAA-58A at the points at which the observer remembered sightings which were referenced very closely to physical features on the ground such as telephone poles and trees. Vertical reference was established by a plumb bob on a string through the hole in the plotter.

(2) The bearings were established on a map of the city of Richmond (scale 1 inch equals 2,000 feet) by orienting it and sighting to the observers remembered points of observation. A pocket compass was utilized in a similar manner and corrected for local magnetic variation. These two values were then averaged. The average difference between the bearings taken by the two methods described was 9 1/2 degrees.

(3) The tolerances given in the elevations and bearings of sightings apply only to the observers described points of sightings and are not intended to indicate the observers accuracy of memory.

4. Time and Date of Sighting

a. Initial Sighting

1. 9:00 PM EDT, 30 June 1962 0100 Z 1 July 1962

b. Time observation terminated

Between 10 and 20 minutes later

CRUISING ALTITUDES – FLIGHT LEVELS

The following procedures apply to the operation of aircraft within the United States, excluding the Aleutian Islands west of 160°00' W and the State of Hawaii. They are also applicable within the airspace between the Continental United States and the adjacent ICAO Flight Information Regions (FIRs).

ALTIMETER SETTING

The vertical displacement of an aircraft shall be determined by reference to an altimeter set:

(a) At or below 23,500 feet MSL, to the current altimeter setting reported by a station which is within 100 nautical miles, if possible. The altimeter of an aircraft without radio shall be set to the elevation of the airport of departure; or to an appropriate available setting. Vertical displacement determined by use of these settings are Cruising Altitudes and are expressed in feet above mean sea level.

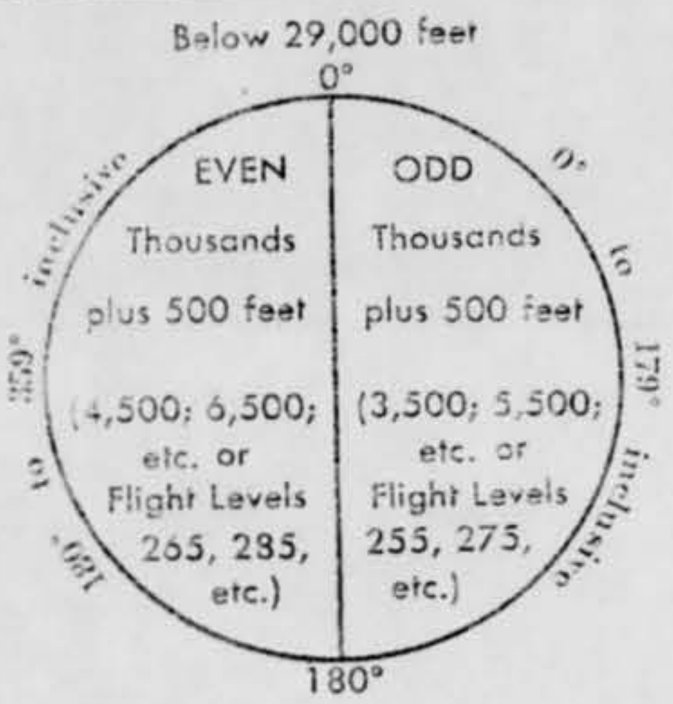
(b) At or above 24,000 feet MSL, to a standard setting of 29.92". Vertical displacements determined by that setting are Flight Levels and are expressed in 3-digit figures; for example, Flight Level 265 represents an indication of 26,500 feet on an altimeter set to 29.92". The use of Flight Levels below 24,000 feet MSL is not permissible. The lowest usable Flight Level, however, may be a figure which is numerically greater than 240, depending upon atmospheric conditions. For example, when the actual atmospheric pressure is 27.92", an aircraft at Flight Level 260 will be at an actual height of 24,000 feet MSL and, therefore, will be at the lowest usable Flight Level.

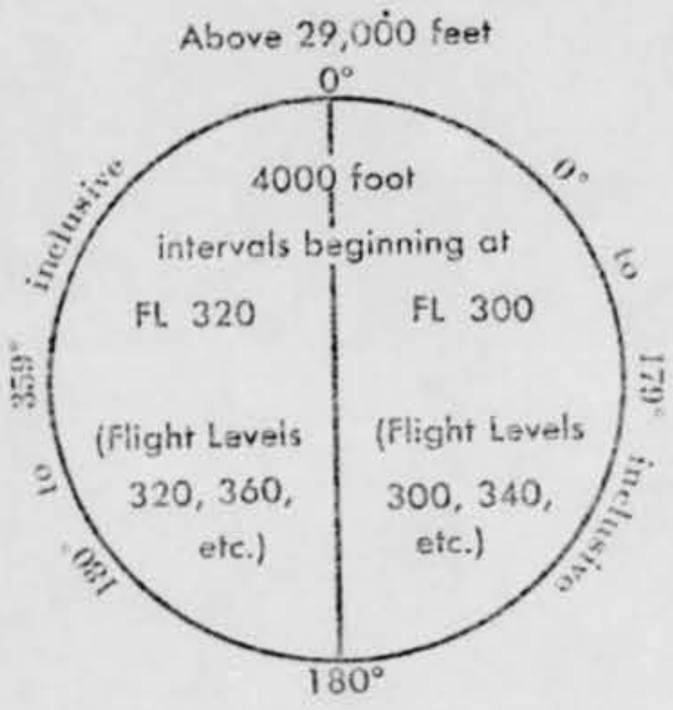
DIRECTION OF FLIGHT

When an aircraft is operated in level flight, the following Cruising Altitudes or Flight Levels, whichever is appropriate, shall be observed in accordance with the magnetic course being flown.

(a) Under Visual Flight Rules (VFR)

At 3,000 feet or more above the surface.

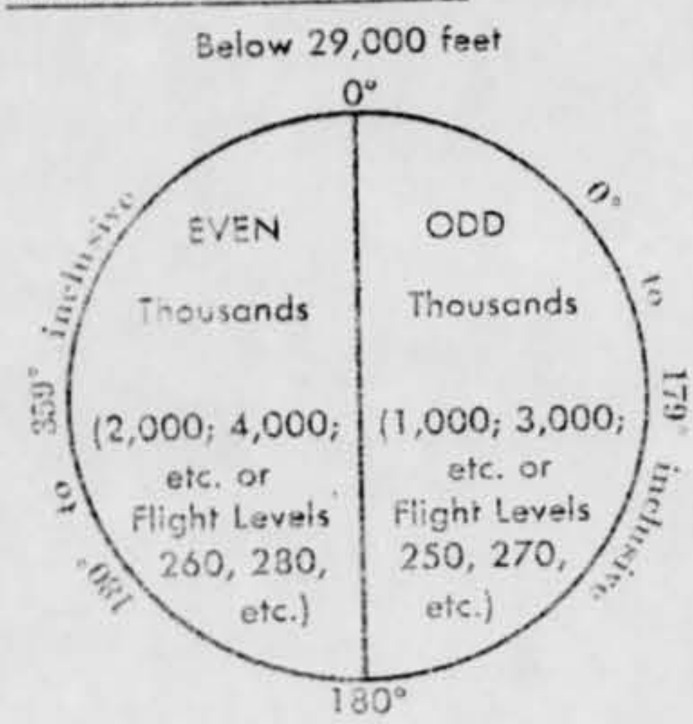


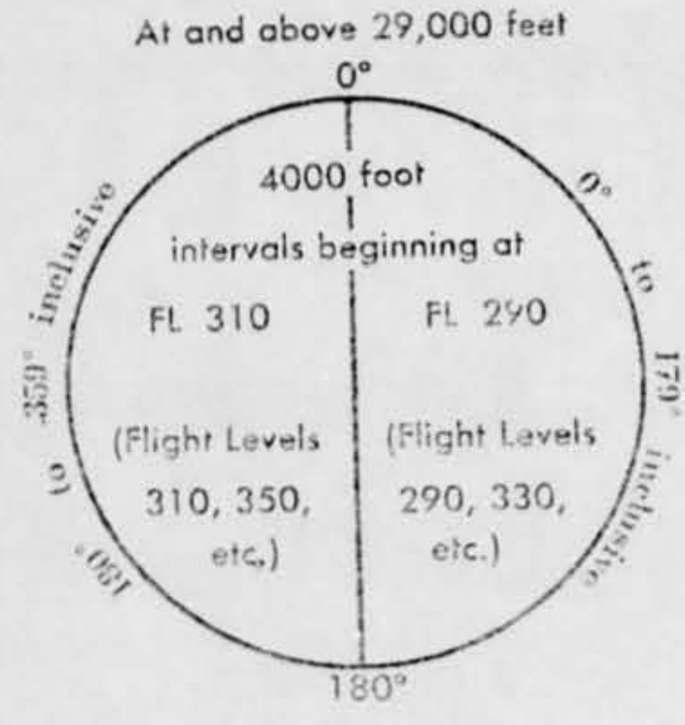


(b) Under Instrument Flight Rules (IFR)

Within Controlled Airspace, as authorized by an air traffic control facility, except that aircraft operating "on top", in the absence of an authorized specific altitude shall be flown as specified above for Visual Flight Rules.

Outside Controlled Airspace.





Within ICAO Flight Information Regions (FIRs), including the Aleutian Islands west of 160°00'W, the State of Hawaii and the United States Possessions and Territories, Cruising Altitudes and Flight Levels shall be determined and observed in accordance with the ICAO Regional Supplementary Procedures.

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

The V.H.F. omni-range operates within the 108-118 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 in 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 statute miles (43 nautical 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 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	Nautical Miles
500	30	25
1,000	45	40
3,000	80	70
5,000	100	85
10,000	140	120
15,000	175	150
20,000	200	175

*No physical obstruction intervening.

**Based on zero elevation of the facility. (Distances to nearest even 5 miles).

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 FAA radio ranges, both Low Frequency and VOR, 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-minute past-the-hour broadcast is an "area" broadcast consisting of weather reports from locations within approximately 150 statute miles of the broadcasting station. The 45-minutes-past-the-hour broadcast is an "airway" broadcast consisting of weather reports from important terminals located on airways within approximately 400 statute miles of the station.

The broadcast consists of available flash advisories, surface weather reports (both local and other locations), local winds aloft reports through the 16 thousand foot level when available, and special off-schedule reports which are broadcast immediately upon receipt. Reports more than one hour old are not broadcast.

Flash Advisories are broadcasts by FAA stations within 200 miles of the area affected by potentially hazardous weather conditions, such as tornadoes, thunderstorms, hail, duststorms, moderate to heavy icing, severe to extreme turbulence, and the initial onset of low ceilings and restricted visibility.

Pilots enroute are requested to avoid, if possible, calling Flight Service Stations (FSS) 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.

#6—3-15-60

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her reports.

FS—3-15-60

FLIGHT PLAN

The Civil Air Regulations do not require that a VFR flight plan be filed except as specified for flight in air defense identification zones. However, the FAA urges that VFR flight plans be filed whenever practicable as this materially assists search and rescue operations when such action becomes necessary. Flight plans should be submitted to the nearest Flight Service Station (FSS) in person or by telephone. They may be filed by radio if no other means are available, but this practice should be avoided whenever possible in order to reduce congestion of radio channels.

The pilot should always state the name of the FAA Flight Service Station with which he intends to close his flight plan. If the destination is not served by a FAA station or is in Canada or Mexico the method by which the arrival report will be filed must be clearly understood by all concerned.

VFR flight plans are transmitted only to the FAA station with which the pilot has stated his arrival report will be filed. If the flight plan is not closed within one hour after the estimated time of arrival, queries are sent to determine the location of the aircraft. Should the aircraft not be located after an exhaustive inquiry, search and rescue operations are inaugurated.

When a flight is terminated prior to reaching the intended destination specified in the flight plan, pilots should contact the nearest FAA station and request that an arrival report be transmitted to the FAA station of intended destination. The importance of closing the flight plan cannot be overemphasized.

Pilots of aircraft operating on VFR flight plan who desire to make flight progress reports, should include in the report the phrase: "VFR FLIGHT PLAN FROM (blank) TO (blank)," along with identification, position, time and altitude.

The flight plan should always specify "VFR" as a cruising altitude. The use of this term in lieu of an actual altitude indicates that the pilot intends to fly in accordance with Visual Flight Rules. Aircraft may be operated in accordance with VFR above a well defined cloud or other formation provided climb to and descent from such "on top" flight can also be made in accordance with VFR.

A DVFR (Defense Visual Flight Rules) flight plan is mandatory for VFR flight within an ADIZ (Air Defense Identification Zone) at a speed greater than 150 knots or an altitude over 3000 feet above the immediate terrain; except that flights in certain directions from a Defense Area, as specified in Part 620, Regulations of the Administrator, are exempted from this requirement.

For IFR flight (Instrument Flight Rules) the pilot is required to have an instrument rating and the aircraft must be properly equipped. The latter includes a properly functioning two-way radio. For details see Part 43 of the Civil Air Regulations.

Prior to departure from within, or prior to entering a control area or control zone, a pilot must submit a complete IFR flight plan and receive an air traffic clearance. Refer to Flight Information Manual published by the Federal Aviation Agency for further information.

FEDERAL AVIATION AGENCY

FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072

1. Type of Flight Plan ☐ IFR ☐ VFR ☐ DVFR	2. Aircraft Identification	3. Aircraft Type	4. Estimated True Air Speed (Knots)	5. Departure Time: Proposed (Z)	5. Departure Time: Actual (Z)

6. Initial Cruising Altitude	7. Point of Departure	8. Route of Flight

9. Destination (Airport & City)	10. Altitude Changes En Route	11. Estimated Time En Route: Hours	11. Estimated Time En Route: Minutes	12. Fuel on Board: Hours	12. Fuel on Board: Minutes

13. Alternate Airport	14. Remarks

15. Pilot's Name	16. Pilot's Address or Aircraft Home Base	17. No. of Persons Aboard

18. Color of Aircraft	19. Flight Watch Stations (FAA use)

SEE REVERSE SIDE

CLOSE FLIGHT PLAN UPON ARRIVAL

Form FAA-398 (2-60)

Close flight plans with nearest FAA Flight Service Station by telephone whenever possible in order to reduce congestion of radio channels. Failure to close or extend your flight plan within one hour after your ETA is a violation of Civil Air Regulations and may result in civil penalty.

FS—3-15-60

ASTRONOMY

Venus, Jupiter and Saturn Shine

During June, Venus shines brilliantly in the west during twilight. Two other planets, Jupiter and Saturn, appear in the east later in the evening, James Stokley reports.

➤ WITH THE COMING of June, the planet Venus shines brilliantly in the west as the sky darkens, while two others—Jupiter and Saturn—appear in the east later in the evening. These all join the stars of the early summer sky. For it soon will be summer; the season begins officially in the Northern Hemisphere on June 21.

The accompanying maps show the evening skies as they appear about 10 p.m., your own kind of standard time, at the beginning of June; an hour earlier in the middle of the month and at 8 p.m. June 30. (Add one hour for daylight saving time.) At that hour and date, of course, it will be so soon after sunset that the sky will still be quite bright. You will not be able to see the stars, but Venus will be distinctly visible.

Venus Moving Rapidly

Venus is now moving rapidly through the sky so its positions both early in the month and at the end are shown. Actually, on June 1, it will have set by 10 p.m., the time for which the map is prepared. We have shown its June 10 position, however: in the constellation of Gemini, the twins, near the bright star Pollux. Soon after this Venus moves into the faint constellation of Cancer the crab (for which no stars are shown), then it approaches Leo, the lion. On June 30 it will be close to the sickle, a group of stars in Leo shaped like that implement.

Venus and part of the sickle are shown on our map of the northern sky, but most of Leo is on the one for the southern part. This includes Regulus, the brightest star in the constellation, which marks the end of the sickle's handle. Higher and farther south is Denebola, which marks the end of the lion's tail, as the figure was depicted on old star maps.

To the left of Leo is Virgo, the virgin, with Spica, a star of the first magnitude. Above it, in Bootes, the herdsman, is Arcturus, even more brilliant. A good way to locate this star, by the way, is to look first to the north and find the big dipper. This is part of Ursa Major, the great bear. At the bottom of the dipper, as it now stands, are the pointers. A line through them, followed to the right, brings you to Polaris, the pole star, in Ursa Minor, the little bear. But if you continue the curve of the big dipper's handle, through the stars Alioth, Mizar and Alkaid, you will come right to Arcturus. And if the curve is followed still farther, it brings you to Spica.

To the left of Spica is Libra, the scales, a group that does not boast a first magnitude star. But to the left of Libra is part of Scorpius, the scorpion, with Antares, a brilliant red star. The rest of this constellation, with a curved row of stars representing the animal's tail, comes up a little later.

High in the east stands Vega, in Lyra, the lyre. This is the brightest of the stars now visible, although it is about a twenty-fifth as bright as Venus—and about a seventh of the brilliance of Jupiter. Beneath Lyra lies Cygnus, the swan, part of which forms the northern cross. It is now seen partly inverted for Deneb, to the left, is at the top of the cross.

To the right of Cygnus (shown on the southern sky map), is Aquila, the eagle, and in this group stands the star called Altair. You may notice, by the way, that this star is shown by the second magnitude symbol, although it is actually of the first. The same is true for Antares, Regulus, Deneb and Pollux.

Being so low in the sky at this time, the light of these stars is greatly attenuated by the long path it has to travel through the earth's atmosphere; when seen higher in the sky, they shine more brightly. Capella, in Auriga, the charioteer, shown low in the north, is so near the horizon that it is as faint as the third magnitude, although it is really of the first.

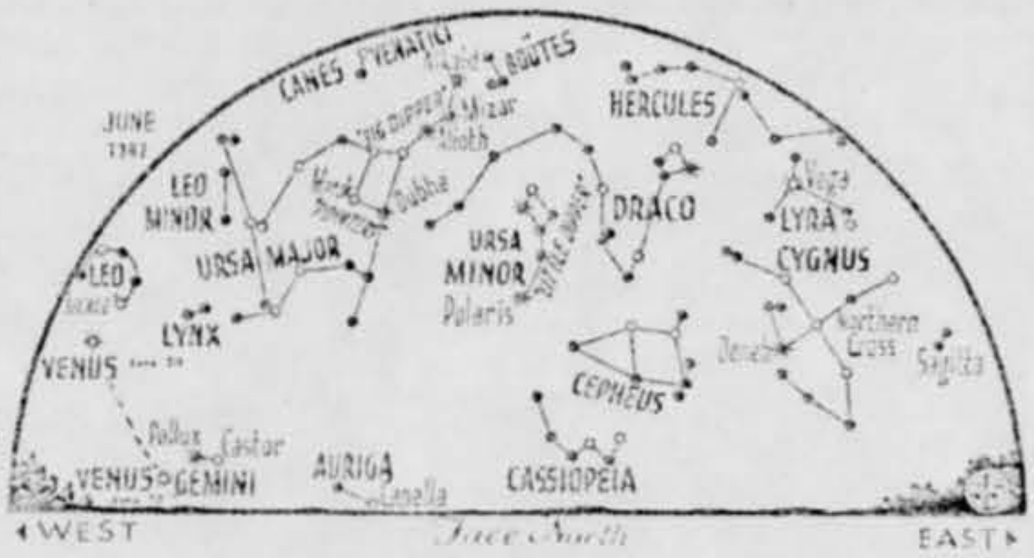
Later in the evening—around 10:30 at the first of June, and 8:30 on the 30th—Saturn rises in the east. Jupiter follows a little more than an hour later. Mars rises about two hours before sunrise. Mercury is not visible this month.

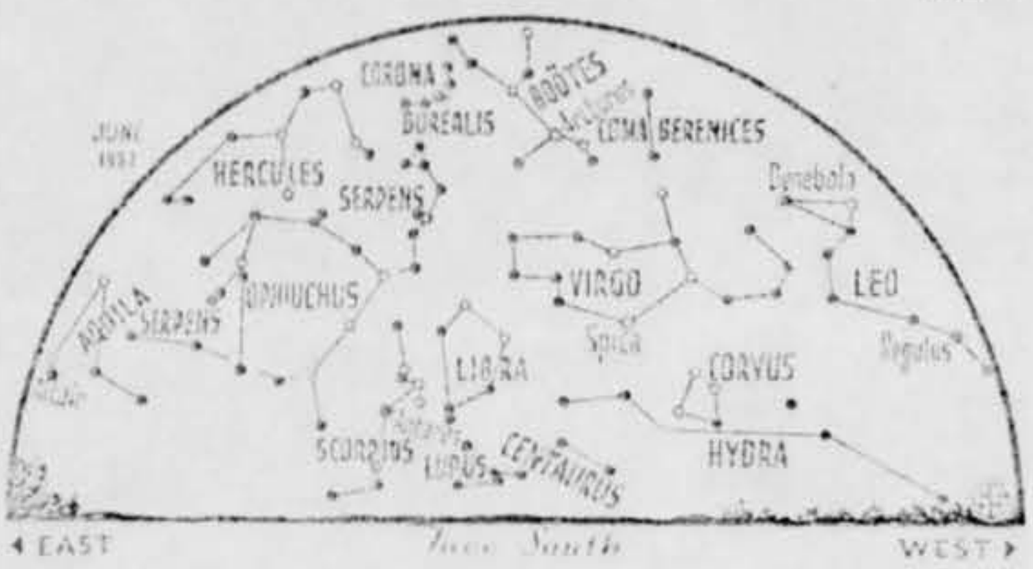
Over in the southeastern sky these evenings you can see a constellation that is unique because it is divided into two parts: Serpens, the serpent. Serpens Caput (i.e., "head of the serpent") is high toward the south, while the tail (Serpens Cauda) is lower and farther east, right next to Aquila. Between them stands Ophiuchus, which ranks eleventh in sky area among the 88 constellations. However, if Ophiuchus and Serpens are counted as one—as they were in ancient times—it is the largest of all. At present the largest is another snake, Hydra, which is not visible on June evenings.

On the old star maps, which pictured the imaginary figures around the stars, Ophiuchus was shown as a man holding a huge serpent. Sometimes it is called Serpentarius, the Latin equivalent of Ophiuchus, which is derived from the Greek and means "serpent bearer."

The constellation is an old one; it has been traced back as far as 1200 B.C. In Greek mythology it represented Aesculapius, the son of Apollo and the first physician. So skillful was he that he was even able to restore the dead to life.

This alarmed Pluto, the god of the





• • • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

underworld, who was afraid that he would have no business if Aesculapius continued his healing art. So Zeus removed him from earth and placed him in the sky. He was worshiped as the god of medicine, and serpents have always been associated with him. The staff of Aesculapius, a stick with a snake entwined around it, is still a medical symbol, and the insigne of the U.S. Army Medical Corps.

Stars of Ophiuchus

At present Ophiuchus contains no star as bright as the first magnitude, but in the year 1604 there flashed out within its borders one that for a time rivaled Venus in brilliance. The great German astronomer Johann Kepler observed it extensively and wrote about it. Its location is a little below the point where the serpent's tail joins Ophiuchus.

This was a fine example of a supernova —a star that, for some reason not fully understood, suddenly explodes. One may, for a while, become as much as a hundred million times brighter than the sun (in actual luminosity, or candlepower). Kepler's supernova was the last to appear in our Milky Way system—the galaxy—but many have been observed since in other galaxies, far beyond the limits of ours.

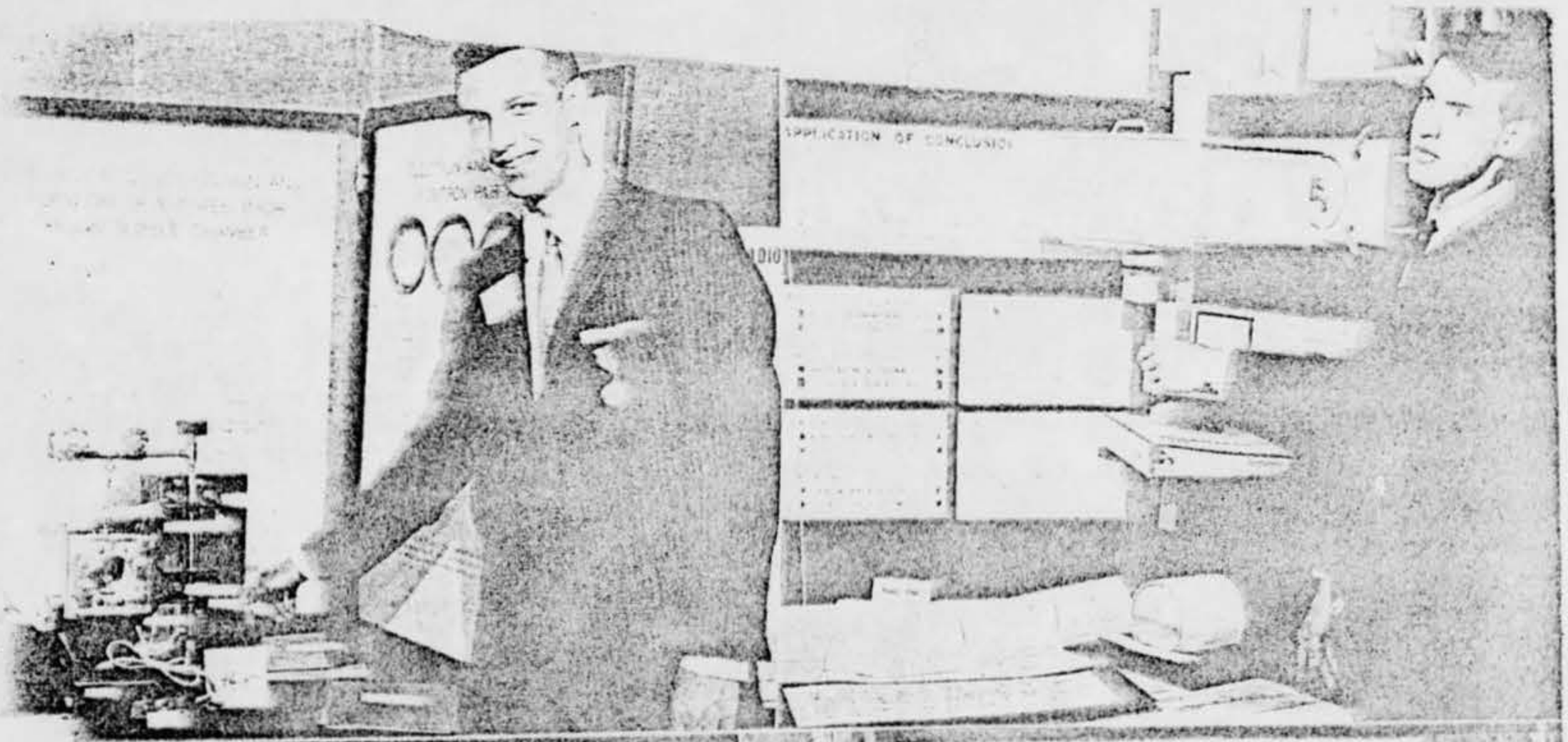
Astronomers estimate that one supernova will appear in a galaxy on the average of once in about 500 years. However, that of 1604 followed by only 32 years one that was observed in 1572. The last previous to that was in Taurus in the year 1054. There are Chinese records of its appearance, and its location is marked now by a cloud of glowing gases called the Crab nebula. Nothing remains visible of the supernovae of 1572 and 1604.

Celestial Time Table for June

June EST

2	8:27 a.m.	New moon
7	3:00 a.m.	Mercury between sun and earth
10	1:22 a.m.	Moon in first quarter
	1:00 p.m.	Moon farthest from earth; distance 251,100 miles
17	9:03 p.m.	Full moon
21	2:00 a.m.	Moon passes Saturn
	4:24 p.m.	Sun farthest north; summer commences in Northern Hemisphere
23	7:00 a.m.	Moon passes Jupiter
	3:00 p.m.	Moon nearest; distance 229,600 miles
24	6:43 p.m.	Moon in last quarter
28	5:00 p.m.	Moon passes Mars
30	1:00 a.m.	Moon passes Mercury

Subtract one hour for CST, two hours for MST, and three hours for PST.




MICROELECTROPHORESIS
A
COMPARATIVE
STUDY IN THE
SEPARATION OF SERUM

NO CASE INFO ONLY

OFFICIAL U.S. AIR FOR

U.S. AIR FORCE TECHNICAL INFORMATION

This questionnaire has been prepared so that you can give the U.S. Air Force as much information as possible concerning the unidentified aerial phenomenon that you have observed. Please try to answer as many questions as you possibly can. The information that you give will be used for research purposes. Your name will not be used in connection with any statements, conclusions, or publications without your permission. We request this personal information so that if it is deemed necessary, we may contact you for further details.

1. When did you see the object?

Don't remember (Day) Jun/July (Month) 1962 (Year)

2. Time of day: 11(?) (Hours) (?) (Minutes)

(Circle One): A.M. or (P.M.)

3. Time Zone: EUROPE

(Circle One): a. Eastern b. Central c. Mountain d. Pacific e. Other _____

(Circle One): a. Daylight Saving b. Standard

JUGOSLAWIA

4. Where were you when you saw the object? OUTSKIRTS of

No Postal Address (Nearest Postal Address) ZAGREB (City or Town) JUGOSLAWIA (State or County)

5. How long was object in sight? (Total Duration) I looked at the object for about 15 minutes (Hours) (Minutes) (Seconds)

a. Certain
b. Fairly certain
(c.) Not very sure (Time)
d. Just a guess

5.1 How was time in sight determined? _____

5.2 Was object in sight continuously? Yes _____ No No

6. What was the condition of the sky?

DAY	NIGHT
a. Bright	a. Bright
b. Cloudy	b. Cloudy

7. IF you saw the object during DAYLIGHT, where was the SUN located as you looked at the object?

(Circle One): a. In front of you b. In back of you c. To your right d. To your left e. Overhead f. Don't remember

8. IF you saw the object at

8.1 STARS (Circle One):

a. None
b. A few
c. Many
d. Don't remem

9. What were the weathe

CLOUDS (Circle One)

a. Clear sky
b. Hazy
c. Scattered clouds
d. Thick or heavy cloud

10. The object appeared:

a. Solid
b. Transparent
c. Vapor

11. If it appeared as a ligh

a. Brighter
b. Dimmer

11.1 Compare brightn

12. The edges of the objec

(Circle One): a. Fu
b. Ll
c. Sl
d. D

13. Did the object:

a. Appear to stand s
b. Suddenly speed u
c. Break up into par
d. Give off smoke?
e. Change brightne
f. Change shape?
g. Flash or flicker?
h. Disappear and re

AIR FORCE UFO FORM

3. IF you saw the object at NIGHT, what did you notice concerning the STARS and MOON?

3.1 STARS *(Circle One)*:

a. (None)
b. A few
c. Many
d. Don't remember

3.2 MOON *(Circle One)*:

a. Bright moonlight
b. Dull moonlight
c. No moonlight—pitch dark rain
d. Don't remember

9. What were the weather conditions at the time you saw the object?

CLOUDS *(Circle One)*:

a. Clear sky
b. Hazy
c. Scattered clouds
d. Thick or heavy clouds

WEATHER *(Circle One)*:

a. Dry
b. Fog, mist, or light rain Light rain
c. Moderate or heavy rain
d. Snow
e. Don't remember

10. The object appeared: *(Circle One)*:

a. Solid
b. Transparent
c. Vapor
d. (As a light)
e. Don't remember

11. If it appeared as a light, was it brighter than the brightest stars? *(Circle One)*:

a. (Brighter)
b. Dimmer
c. About the same
d. Don't know

11.1 Compare brightness to some common object:

_____

12. The edges of the object were:

(Circle One): a. Fuzzy or blurred
b. Like a bright star
c. Sharply outlined
d. Don't remember
e. Other (Hazed (?) the shape was not clear or sharply outlined edges at

13. Did the object:

(Circle One for each question)

a. Appear to stand still at any time?	(Yes)	No	Don't know
b. Suddenly speed up and rush away at any time?	Yes	No	Don't know
c. Break up into parts or explode?	Yes	No	Don't know
d. Give off smoke?	Yes	No	Don't know
e. Change brightness?	Yes	No	Don't know
f. Change shape?	Yes	No	Don't know
g. Flash or flicker?	Yes	No	Don't know
h. Disappear and reappear?	(Yes)	No	Don't know

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Official U.S. Air Force UFO form

14. Did the object disappear while you were watching it? If so, how?

It just disappeared

15. Did the object move behind something at any time, particularly a cloud?

(Circle One): Yes (No) Don't know. IF you answered YES, then tell what it moved behind: _____

16. Did the object move in front of something at any time, particularly a cloud?

(Circle One): Yes (No) Don't know. IF you answered YES, then tell what in front of: _____

17. Tell in a few words the following things about the object:

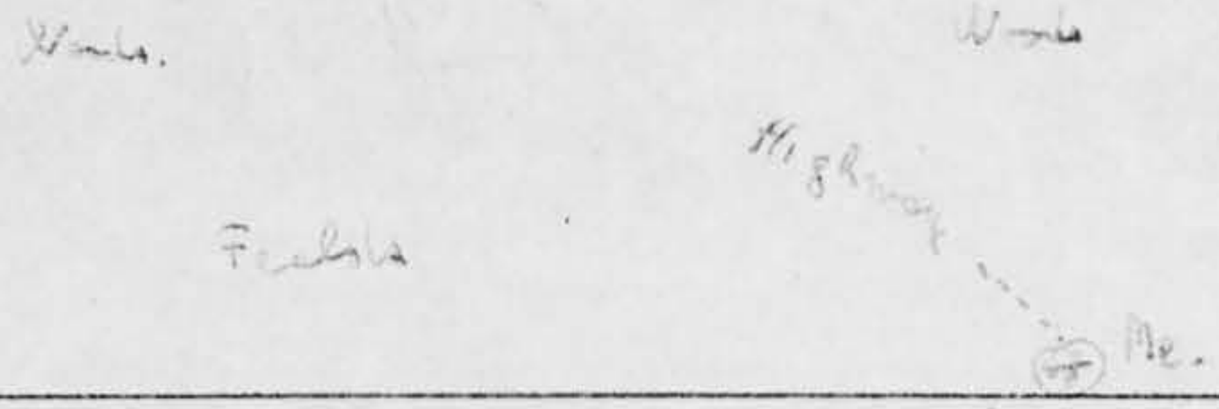
a. Sound No sound. Primarily blue, with green and white. As I remember.

b. Color

18. We wish to know the angular size. Hold a match stick at arm's length in line with a known object and note how much of the object is covered by the head of the match. If you had performed this experiment at the time of the sighting, how much of the object would have been covered by the match head?

I have not performed this experiment at the time of sighting. But, I tried now. It is about two match head high. and about 3½ match head wide

19. Draw a picture that will show the shape of the object or objects. Label and include in your sketch any details of the object that you saw such as wings, protrusions, etc., and especially exhaust trails or vapor trails. Place an arrow beside the drawing to show the direction the object was moving. NE →



In shape very similar to "Ella Louise Fontana UFO" but no vapor trail.

Force UFO form continued

Page 3

Page 4

20. Do you think you can estimate the speed of the object?

(Circle One) Yes No

IF you answered YES, then what speed would you estimate?_____

21. Do you think you can estimate how far away from you the object was? I was not able to check the location.

(Circle One) Yes (No) ?

IF you answered YES, then how far away would you say it was?_____

22. Where were you located when you saw the object? (Circle One):

a. Inside a building
b. In a car
c. (Outdoors)
d. In an airplane (type)
e. At sea
f. Other_____

23. Were you (Circle One)

a. In the business section of a city?
b. In the residential section of a city?
c. In open countryside?
d. Near an airfield?
e. Flying over a city?
f. Flying over open country?
g. Other_____

24. IF you were MOVING IN AN AUTOMOBILE or other vehicle at the time, then complete the following questions:

24.1 What direction were you moving? (Circle One)

a. North c. East e. South g. West
b. Northeast d. Southeast f. Southwest h. Northwest

24.2 How fast were you moving?_____miles per hour.

24.3 Did you stop at any time while you were looking at the object?

(Circle One) Yes No

25. Did you observe the object through any of the following?

a. Eyeglasses	Yes	No ✓	e. Binoculars	Yes	No ✓
b. Sun glasses	Yes	No ✓	f. Telescope	Yes	No ✓
c. Windshield	Yes	No ✓	g. Theodolite	Yes	No ✓
d. Window glass	Yes	No ✓	h. Other_____		

26. In order that you can give as clear a picture as possible of what you saw, describe in your own words a common object or objects which, when placed up in the sky, would give the same appearance as the object which you saw.

I am not.

c. Light conditions - Dark

d. Official Sunset - 1936 EST, 2036 EDT, 0036Z

5. Location of Observer

a. [redacted] Richmond, Virginia

b. Geographical coordinates - 37 32 1/2 N, 77 2¼ 1/2 W

6. Observer's Identification

a. Civilian

[redacted]

Richmond, Virginia

(1) The investigating officer consider[redacted] to be sincere and consistent in his report and based on his interview only, that lasted approximately an hour and a half, found no reason to believe that the information he gave was other than what he observed. Locally reported weather observations possibly conflict with [redacted] report, but observing conditions as described were not impossible. A check with the employer of the observer's father indicated that [redacted] father has no reputation of exageration.

7. Weather and Winds

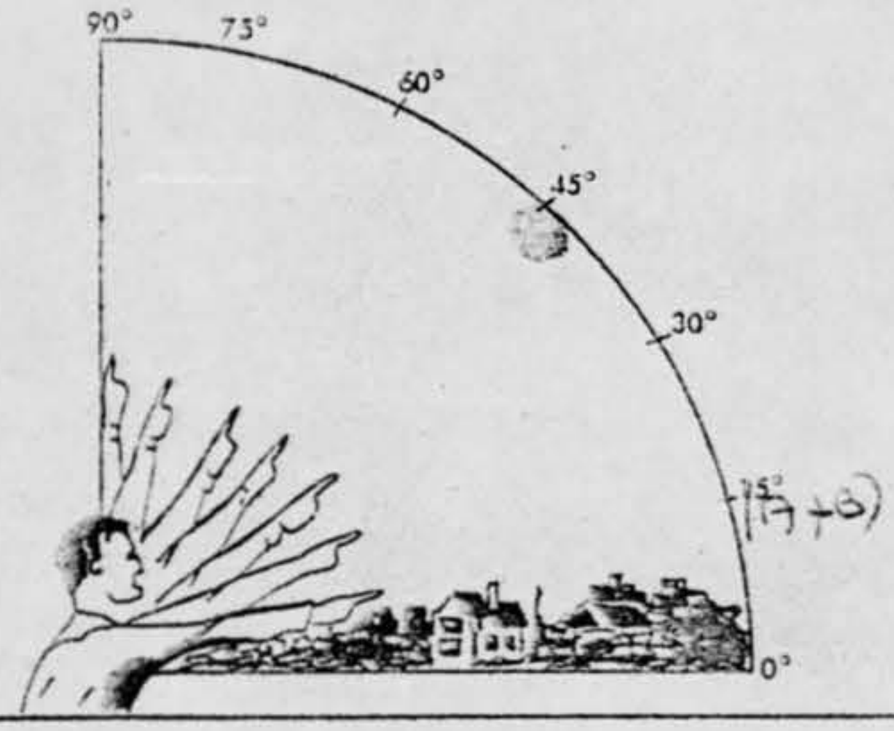
a. The observer definitely stated that he saw no clouds or obstruction to vision. The local weather bureau observed extensive sky coverage at this time. This makes the observer's weather statements questionable, but due to the fluctuating sky coverage, proximity of weather station to the UFO observer (the weather station is four nautical miles on a true bearing of 120 degrees from the UFO observer), and the relatively small area of sky involved with the sighting, weather conditions could have permitted the sighting.

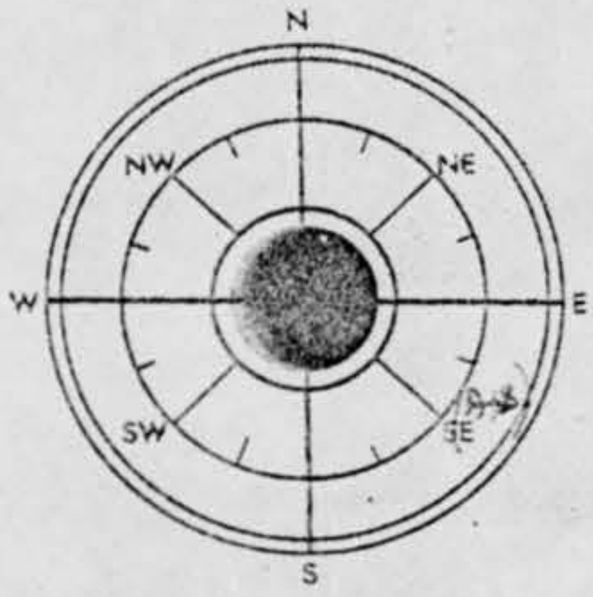
b. Winds: Surfact wind at time of observation was NE at 6 knots at Byrd Field (Richmond Airport). See attachment 3. The most applicable winds aloft locally available are all for 0600Z, 0200 EDT, and 0100 EST for 1 July 62.

Elevation, 000's of ft. (MSL)	Richmond (RIC)	Washington (DCA)	Norfolk (ORF)
1	030/14	---	---
2	030/17	---	---
3	020/22	---	---
4	020/25	---	---
5	020/36	---	---
6	---	010/22	030/27
10	---	360/26	030/34
16	---	360/13	040/32
20	---	350/20	030/34

Official U.S. Air Force UFO form

27. In the following sketch, imagine that you are at the point shown. Place an "A" on the curved line to show how high the object was above the horizon (skyline) when you *first* saw it. Place a "B" on the same curved line to show how high the object was above the horizon (skyline) when you *last* saw it. Place an "A" on the compass when you *first* saw it. Place a "B" on the compass when you *last* saw the object.





28. Draw a picture that will show the motion that the object or objects made. Place an "A" at the beginning of the path, a "B" at the end of the path, and show any changes in direction during the course.

29. IF there was MORE THAN ONE object, then how many were there? _____
Draw a picture of how they were arranged, and put an arrow to show the direction that they were traveling.

30. Have you ever seen this

31. Was anyone else with y

31.1 IF you answered YE

31.2 Please list their nam

32. Please give the following

NAME [redacted]

ADDRESS [redacted]

TELEPHONE NUMBER [redacted]

Indicate any additional

I was a
doctors. Two
C.N. Rail
I was in the time
I am now in
stay at this
since 1952
grade XII. M

33. When and to whom did

Occasion
Day

Force UFO form continued

30. Have you ever seen this, or a similar object before. If so give date or dates and location.

No

31. Was anyone else with you at the time you saw the object? *(Circle One)* Yes No ✓

31.1 IF you answered YES, did they see the object too? *(Circle One)* Yes No

31.2 Please list their names and addresses:

The cars on the highway.

32. Please give the following information about yourself:

NAME [redacted] [redacted] [redacted]
Last Name First Name Middle Name

ADDRESS [redacted] VANCOUVER B.C CANADA
Street City Zone State

TELEPHONE NUMBER [redacted] AGE 29 SEX M

Indicate any additional information about yourself, including any special experience, which might be pertinent.

I was examined three times by the transportation business doctors. Two times in Germany and once in Canada by C.N. Railroad doctor.
I was in the time of the incident in a unusual situation of a "refugee" I am now immigrating from Canada to Australia and will stay at this address ca. two, three months.
Since 1962 I am a disabled person. My Education, not completed grade 11. MUSICIAN.

33. When and to whom did you report that you had seen the object?

Occasionally I mentioned to some working companions.
Day Month Year [redacted]

Official U.S. Air Force UFO form

34. Date you completed this questionnaire: 12 (Day) Aug. (Month) 1957 (Year)

35. Information which you feel pertinent and which is not adequately covered in the specific points of the questionnaire or a narrative explanation of your sighting.

For me there are three possibilities:

① Somebody played a hoax, with a lighted balloon or a helicopter.

② An "after-image" because I stared in the morning sun for quite [illegible] white and not blue-green.

A spectrum appearance of the static head lights on the falling rain. (???)

③ A strange ship or a space animal.

I would like to represent the impression of [redacted] and the article recently in the "Star" magazine. That the U.F.O. are living things. But (???)

I asked from my parents in Jeppharnie some maps of the area but did not receive the right ones.

I did read most of the literature "Flying saucers serious business" "Flying saucers hoax or reality" and others that came out on the market last years.

And I found none side lines with my U.F.O.

The picture of Mrs Elizabeth Fortune,

The interview of Mr. Leonard Stringfield and the "Trace of the disappear and reappear,

The Fiery disc shape,

orce UFO form continued

And the colour.

I would like to help your organization but likewise I would not like to have more everyday trouble then I already have.

Friendly yours

[redacted]

No Case (Information Only) - " daily June & early July 1962
Allen, Oklahoma

...Mysterious lights, which may be ball lightning, UFO's, or possibly an intricate hoax of some sort, were seen almost nightly during June and early July in a field near Allan, Oklahoma. The lights, which look like "balls of colored fire," have been seen by carloads of teen-agers who go out of an evening to watch them. They have also been observed by local newspaper reporters sent out to investigate. No explanation has been found....

No Case (Information Only)

1 June 1962
Bordentown, New Jersey

According to a story published by NICAP's Seattle affiliate, a woman living in Bordentown Township, N.J., saw a weird light at close range on the night of June 1st. Mrs. Jessie Bilancio told a local newspaper that her television set was acting up that evening, and she went into her yard to investigate the cause. She saw a small bright light about 30 feet away from her. She thought at first it was a spotlight, but it moved from branch to branch of a nearby tree, and finally zoomed away into the sky..

No Case (Information Only)

10 June 1962
Woburn, Massachusetts

June 10—Four Woburn, Mass. persons witnessed a white parachute shaped object as it descended in the sky over Woburn, Mass. This sighting along with the Lexington and Burlington, Mass. sightings mentioned above all indicated the same shape-"parachute shaped" objects, but none knew of the sightings and photographs of the other eyewitnesses during the 28 day period and all near the same location.

No Case (Information Only)

18 June 1962
Cuyahoga Falls, Ohio

LOCAL SIGHTINGS -
Cuyahoga Falls, O. 6/18/62 8:30 PM EDT. An UFO was seen for two minutes in the clear sky by a driver going east on Falls Ave. He stopped to observe a cigarette-shaped, bluish-green, sharply defined object that had a rounded or blunted nose. The witness said it was luminous and somewhat transparent. At the back of the object, there appeared to be a short, reddish flame or glow; following at a short distance was a bright, white star - like object. The UFO was moving at a very high altitude from the SE to NW, at a speed comparable to a jet. Trees obscured further observation. No sound-but radio reception seemed to be affected.

- - -

A series of saucer sightings in Tucson, Arizona, late last June turned out to be the work of a group of students who were sending up candle-carrying balloons at night. The balloons were supposedly a serious attempt to study wind velocities, though the students seemed pleased to have caused several people, including a local professor, to mistake their experiments for genuine UFO's.

OFFICE, SECRETARY OF THE AIR FORCE
OFFICE OF INFORMATION

SUSPENSE: 24 Sept 1962 DATE: 18 Sept 1962

TO:

- [ ] GEN. MARTIN
- [ ] COL. CASEY
- [ ] COL. BOYD
- [ ] COL. EVANS
- [ ] LT COL SANDVIG
- [ ] CAPT. FREEMAN
- [ ]
- [ ]

- [ ] SAFOI-1A (RESERVE FORCES)
- [ ] SAFOI-1B (BANDS & MUSIC)
- [ ] SAFOI-1C (SCTY COORD)
- [ ] SAFOI-2 (COMMUNITY REL)
- [x] SAFOI-3 (PUBLIC INFO)
- [ ] SAFOI-4 (PLANS & PROG)
- [ ] SAFOI-5 (INTERNAL INFO)

ATTENTION:

PREPARE REPLY FOR SIGNATURE OF:

- [ ] DIRECTOR
- [ ] DEPUTY DIRECTOR
- [ ] ASST. DIRECTOR
- [ ] EXECUTIVE
- [ ] SECRETARY
- [ ] CHIEF OF STAFF
- [ ] VICE CHIEF OF STAFF
- [ ] ASST VICE CHIEF OF STAFF

- [ ] DIRECT REPLY
- [x] ACTION
- [ ] INFORMATION
- [ ] FILE
- [ ] COORDINATION
- [ ] RECOMMENDATION
- [ ] COMMENT
- [ ] NOTE & RETURN

- [ ] DIRECTOR HAS SEEN
- [ ] DEP. DIR. HAS SEEN

SAFOI-	1A	1B	1C	2	3	4	5	HAS ACTION
SAFOI-	1A	1B	1C	2	3	4	5	HAS INFO.

COMMENTS:

KCS

KENNETH G. SANDVIG
Lt Colonel, USAF
Executive
Office of Information

SAFOI - 100

Elevation, 000's of ft. (MSL)	Richmond (RIC)	Washington (DCA)	Norfolk (ORF)
30	---	340/39	360/33
50	---	310/15	300/07
80	---	---	080/25

c. Ceiling:

Time Local EDT	Time Local EST	Z	Sky Coverage 1st Layer 4,500 ft.	2nd Layer 10,000 ft.	3rd Layer above 10M ft.
2030	1930	0030	5/10to9/10	10/10	unobserved
2054	1954	0054	5/10to9/10	5/10to9/10	5/10to9/10
2136	2036	0136	1/10to5/10	5/10to9/10	5/10to9/10
2158	2058	0158	1/10to5/10	5/10to9/10	5/10to9/10
2232	2132	0232	1/10to5/10	5/10to9/10	5/10to9/10

At the observer's location, sky coverage was probably between 5/10's and complete. See attachment 3.

d. Visibility

(1) 15 Nautical miles at Byrd Field. See attachment 3.

e. Cloud Coverage

(1) See ceiling data.

f. Thunderstorms

(1) No thunderstorms reported in area.

g. Temperature

(1) Surface temperature 66 degrees F. No other data locally available. See attachment 3.

8. No unusual activities were determined by the investigating officer that would coincide with this sighting. Inquiries were made of NASA of the possibility of any artificial satellites fitting this description. There were none to their knowledge. The local weather bureau has no knowledge of any meteorological explanation.

9. There was no known interception action taken.

10. There were no weather balloon releases at the Richmond weather bureau that would provide these sightings. Air traffic approaching Byrd Field could provide the path observed, but not the duration described.

25 JUNE

SAFOI-3b/Major Hart/kw/75630

September 24, 1962

Dear Mrs. [redacted]

The Office of the President has referred your letter to the Air Force for reply.

The Air Force has no record of the sighting you refer to therefore it has not been investigated by the Air Force. The validity of an evaluation reached as a result of investigation at this late date would be subject to question. It can only be stated that as of this date the Air Force has conducted over 7,500 investigations of reported sightings, none of the reported aerial phenomena have given indication of threat to our national security. There has been no evidence submitted to or discovered by the Air Force that unidentified sightings represented technological developments or principles beyond the range of our present day scientific knowledge and there has been nothing in the way of evidence or other data to indicate these unidentified sightings were extraterrestrial vehicles under intelligent control.

The inclosed fact sheet will provide you with additional details of our findings.

Sincerely,

Attachment

C. R. CARLSON
Colonel, USAF
Deputy Chief
Public Information Division
Office of Information

Mrs. [redacted]
Tucson, Arizona

SAFOI-3b - Comeback
SAFOI-1 - Reading
SAFLL - 2 Cys (Info)
FTD - Col Friend (Info

Sept 5, 1962

Prescott

Arizona

d

Dear Mr President

Enclosed is a copy
of the diary of Shirley Lineen
which I mentioned in the letter written
by the A.P.R.O people a week
ago by air mail special delivery
on the night of June 30 1962

The reason why the Air Force
has released this diary
is because they
feel that the people should
realize the type of thing they
the A.P.R.O people battled

THE A.P.R.O. BULLETIN

The A. P. R. O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization (A.P.R.O.), 4145 E. Desert Place, Tucson, Arizona, and is issued every other month to members only. The Aerial Phenomena Research Organization is a non-profit group dedicated to the eventual solution of the mystery of the unidentified objects which have been present in the skies for hundreds of years. Inquiries regarding membership may be made to the above address.

TUCSON, ARIZONA — JULY, 1962

Saucers Shoot Rockets over Tucson, Arizona

By Coral E. Lorenzen

"Some doors opened in the bottom and something came out." An unconventional aerial object hovered for a period of time at Tucson, Arizona and a strange device had lowered to the ground. The boy relating the details was 14-year-old John Westmoreland. He and his brother James and next-door neighbor Ronnie Black had spent the night of June 25, 1962 in the tent in the Westmoreland back yard and during the course of four hours had witnessed a strange but revealing chain of events.

On the evening of the 26th of June I opened the Tucson Daily Citizen newspaper. When I came to the local news section, these words seemed to pop right out of the page: "Saucers, Rockets Inhabit Night Sky."

I scanned the article briefly and reached for the telephone book. Seconds later I was talking to Mrs. Logan Westmoreland, the mother of John and James Westmoreland. She graciously invited Mr. Lorenzen and me to come to her home and interview the boys. Three hours later we were seated in the comfortably furnished living room of the Westmoreland home in southeast Tucson.

The boys were eager to talk about their adventure, partly I suspect, because they were met with doubt at first. As soon as we got the gist of the story we started the slow process of cross-examination.

The three boys had been given permission to spend the night in the tent, so, armed with a deck of playing cards, pad and pencil, they settled down to a game of 500 Rummy by lantern light. Shortly before nine they were bored with cards and not sleepy, so they decided to go outside, watch for meteors and look at the stars and try to catch an errant, cooling breeze. The summer rains were in the offing and the air was warm and humid. The day had been hot; the night air was a welcome change.

At about 9 o'clock John noticed a star at 5 degrees south of due west, 30-40 degrees elevation, which didn't behave

(See Saucer Shoot page 3)

Saucers Shoot . . . .

(Continued from page 1)

like a star. It was very bright, white in color, and "moved around a little," in the boys' words. Soon it dimmed, moved a little toward the south, lost a few degrees in altitude and then became stationary.

The boys soon lost interest and went back into the tent to another game of Rummy. From time to time they peeked out and took a look at the strange "star" but it "just stayed there." Then at about 11:45 things began to happen.

The bright "star" became much brighter and seemed to move closer. Instead of looking like a star, it assumed a triangular shape as it grew larger. Then it became stationary again. How long this process took the boys did not know, but according the kitchen clock (they kept peeking in the window to check the time), a surprising thing happened at 12:15. Three green flares or rockets were fired horizontally from the main object.

At this time, John scrambled into the tent and emerged with the score pad and pencil. He decided to keep notes. On the pad he wrote: "At 9 o'clock at night we saw a flying saucer. At 12:15 it shot three green things that traveled faster than any plane." These rockets were too fast to track visually.

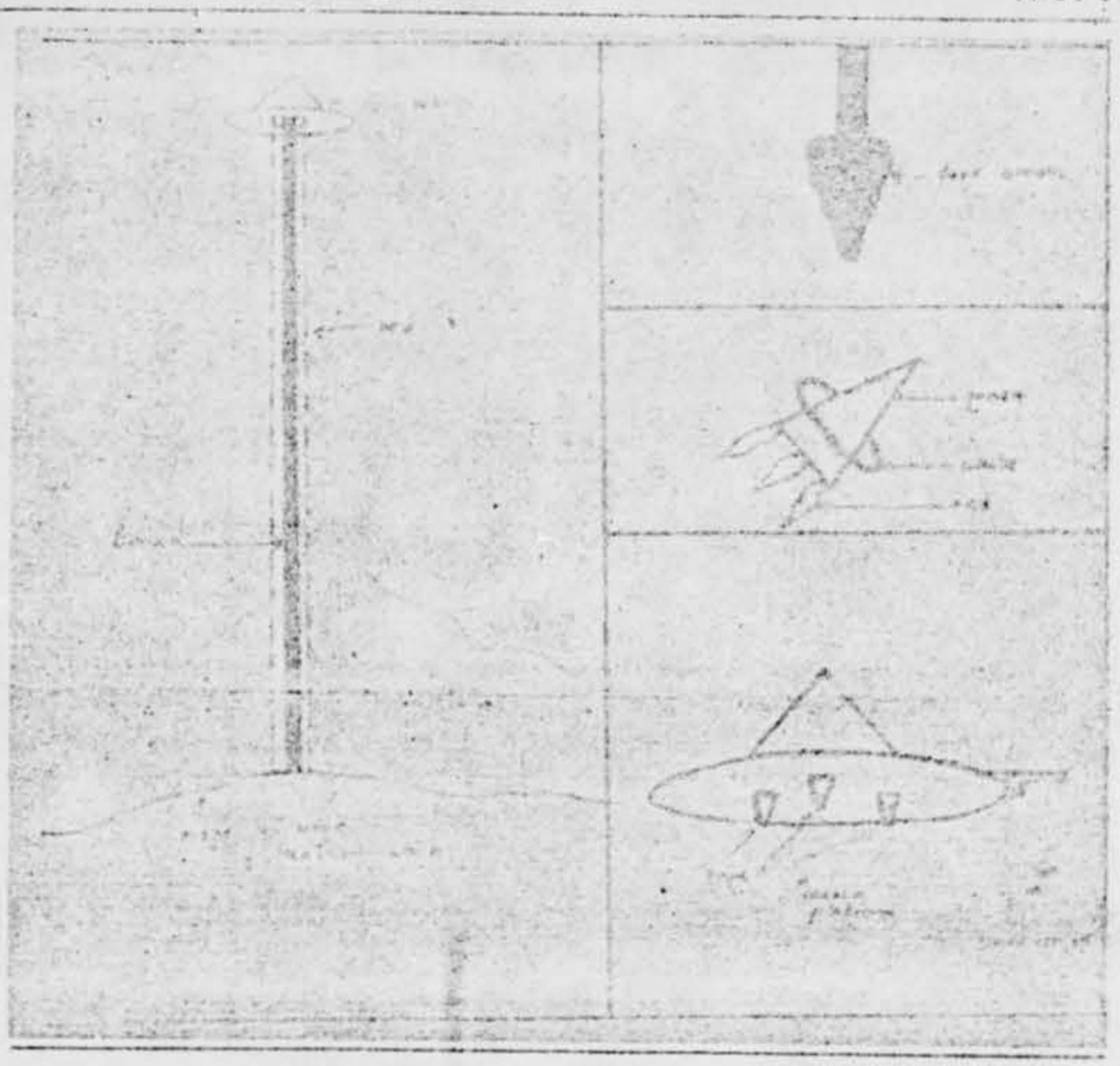
After the first "rocket" was fired, John noticed the second "saucer" which we will hereafter refer to as Number Two. It came in racing from west to east across the northern sky, "turned a flip" and came to rest at about 15 degrees east of north at a slightly greater elevation than No. 1. Shortly No. 2, which appeared closer and larger than No. 1, was approached by the "flare-like object," which came in from underneath and appeared to be absorbed through the bottom of No. 2.

Then the first "saucer" spat out another of the small objects. About three minutes later No. 2 was again approached by the tiny object and again the boys watched as it seemingly disappeared into the bottom of No. 2.

No. 1 was still in the same position, appearing to be triangular in shape, and No. 2 appeared much closer and round-shaped with two leg-like or stilt-like protuberances on the underside.

A third flare emerged from No. 1, and was shortly "received" by sauce No. 2. Things were getting interesting. No. 2 then shot out a rocket which quickly disappeared into the night sky. No. 2 began to dim and fade into the night sky and was not seen again. No. 1 retained its same position.

At this time, Saucer No. 3 was spotted



at about 100-110 degrees and about 45 degrees elevation. It appeared the largest and highest of the three, which suggests that it was closer. The detail reported by the boys bears this out.

But the best part of the show was yet to come.

Number three sported a cone-shaped superstructure above an apparently round airfoil. Its color was white and like the others it made absolutely no sound. At 1:16 a jet plane went over—we later decided it was probably in the flight pattern of Davis-Monthan AFB, a Strategic Air Command installation a scant 3 or 4 miles from the Westmoreland home.

The new visitor closed in and three of the stilt-like protuberances "popped out." Then the object gained altitude. An elongated dark "something" slid out from above the circular rim and three of the small rocket-like objects emerged in quick succession. In a few brief minutes they were back. Two doors swung open, down, and back up against the underside of the saucer. As the doors opened, the "legs" receded into the object. The little rockets, now clearly seen, swiftly entered the opening, one by one. The big object elevated slightly, and moved sideways, then became stationary again.

The newspaper had printed only the boys' notes which were not detailed except for general movement of the objects. In describing saucer No. 3, John had written: "Something lowered from the bottom. Something came out."

I asked John what he meant by that. He said that something which looked like a rope or cable came out and lowered to the ground. I asked him what color it was, and two voices—his and James', piped up and said "brown." I wondered how they could tell colors at that time of the night and asked them. "From the light" they said.

"What light was that?" I asked. Then then told me that when the doors opened a red light shone down from the inside in a perpendicular narrow beam, that extended to the ground. When the long, ropelike object began to come out, it was clearly visible and appeared to be brown in color.

The boys estimated that the "rope" was extended for from three to five minutes, after which it began to come up into the saucer again. After it had cleared the top of the ridge bordering the wash, they realized that something was on the bottom of it. It was slowly pulled up into the large object, the doors closed and the object moved up and into the east until it was out of sight.

The youngsters stayed up a little longer, watching for more activity in the sky but before long the excitement of

(See Saucers Shoot, page 4)

Saucers Shoot . . . .

(Continued from page 3)

the night and their lack of sleep overcame their curiosity and they retired into the tent. As soon as they had awakened in the morning they rushed in to tell Mrs. Westmoreland what they had seen.

Pat Westmoreland, about 40, is an understanding mother but a firm one. The thought at first that perhaps the boys had had a touch of imagination and set about using all the "trapping tricks" she knew to trip them up in their story, but to no avail. She began to realize that they had had a real experience. She decided the newspapers should know what had happened the preceding night and called them. Thus the article which had drawn my attention came about. It should be noted here that the newspaper printed the notes, pointing out that it could be imaginary or real—they printed it because it was a sensational story.

The matter of the boys' honesty comes to mind as a matter of course in these investigations. After three long visits with the boys, during which time Mr. Lorenzen walked with them to the wash over which they thought the UAO had hovered, and I had sketched the objects from their instructions, we found no indication that the boys were not telling the truth. Mr. Lorenzen said that he had not caught any signs of strain, rehearsed conversation or trickery during his talks with them while walking to and from the wash. Nor did I ever detect any evidence that the boys were attempting to perpetrate a hoax. Some of the things which impressed me concerning the sighting as well as the honesty of the boys were these:

When attempting to describe the object which was brought up by the rope or cable, John Westmoreland said he got the impression that the object was about as long as his father—in other words, its length equalled approximately the height of his father who is about 6 feet tall. If saucer No. 3 was above Pantano wash as the boys felt it was, we have an idea of its size as well as the size of the rockets or flares and the size of the object which was pulled up into the large object.

The rim of the saucer appeared to have the same angular displacement as a five foot cross-arm on a utility pole at the corner of the Westmoreland lot. If it was over Pantano wash (quarter mile distant) it was approximately 30 feet in diameter. The small objects then would be about 6 feet long, and the object which was taken up into the saucer would be about the same size as the "rockets," and certainly the same general configuration. (See sketches).

It is interesting and tempting to speculate that one of the rockets, at some time or other, had become disabled, a search initiated, and eventually, a recovery effected. The latter phase of the sighting, in which a device was lowered to the ground and returned to saucer No. 3 with a triangular-shaped object at the end of it, could have been that "recovery." This may further be supported by the fact that after the object was taken into the saucer, the saucer left. The recovery of that object may have been the sole purpose of the presence of the saucers that night.

It is interesting to note that after the case was fully investigated, the local newspapers were not interested in further information or a follow-up story.

On the 29th, a group of local college students sent up some balloons filled with ordinary kitchen gas and lighted by candles encased in fireproof crepe paper. Although this was not accomplished until three days after the Westmoreland sighting, the idea of saucers had been firmly implanted in the public mind. A local professor of atmospheric physics who is interested in UFO, was told of the strange lighted object in the sky, and went to the U. of A. meteorological lab to track the thing. The story of his sighting was in the Arizona Star morning paper for Friday 29 June 1962. Upon reading the details, plus his theory that the thing was an "extended source of light," I wondered if some hoaxers might have been at work. I called the Tucson Citizen asking that they mention APRO and ask for further sightings of the Thursday evening object and suggested that the object seen that night might have been the result of a prank. Later, I talked to the physicist who had been viewing the object and found that he had also decided that the object was a hoax.

Later news stores stated that the college boys involved in the "prank" were "carrying out experiments dealing with wind velocity and other weather conditions." Considering the type of homemade balloon, and the fact that it contained dangerous highly inflammable gas which was tied to a device with an open flame, it is not likely that any such experiment was being carried out. It appears more likely that a childish prank was being played and the "young men" involved did not want to admit their part in it, attempting to write it off as an experiment.

It is lamentable that the newspapers were satisfied with the experiment explanation and stated that these "experiments" may have been the cause of the saucer sightings in Southern Arizona in the past few months. Certainly, the easiest way to dispose of the perplexing UFO problem is to ignore the evidence which prolongs its mysterious nature. A large percentage of the press is inclined to do precisely that.

In the case of this latter sighting, the only two observers of the lighted plastic bags who called me felt the object was a balloon. The local press gave the impression that those who viewed the hoax objects were completely fooled, but that certainly was not the case.

The events of the week of June 24-30 very aptly demonstrated the contention that I have had for years concerning the psychology of the disbeliever. The skeptic is often so intent upon disproving that which he does not care to believe, by attempting to label it a hoax or a misconception of a conventional object, that he sets about to perpetrate a hoax to support his own convictions and allay his subconscious fears.

A thorough perusal of newspaper stories concerning the Westmoreland sighting as well as ensuing reports of unidentified sky objects emphasizes the foolhardiness of accepting en toto the information pertaining to UFO sightings as presented by the news media and points up the need for thorough investigation. Had I accepted the Westmoreland story as presented by the Tucson Citizen, I would have had a short dissertation completely lacking in detail. A few hours spent in investigation yielded some very important facts, and enabled APRO to log one of the most detailed sightings of an unconventional aerial object which has ever been observed.

Ice Cutter Encounters "Lake Lights"

On March 17, 1962, strange lights off the shore of Erie, Pennsylvania, got the ice cutter Ojibwa out of dock to investigate. Chief Warrant officer Kenneth N. Black (Coast Guard) said the lights were seen by several individuals including the ship's crew. The ship got underway, cutting through heavy ice all the way to the Canadian shore and Black said "The closer we moved toward them, the farther away they seemed to be." Black also said he believed the lights were the result of unusual atmospheric conditions causing lights to be refracted on the lake. It is interesting to note that the obvious explanation — that they were chasing moving lights — was apparently not mentioned or considered by Black.

No Case (Information Only)

26 June 1962
Falmouth, Massachusetts

June 26--At Falmouth, Mass. Eleanor Schmidt and two other women reported a large bright red object that maneuvered from side to side and hovered over the ocean for 30 minutes.

1 - 15 JULY 1962 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION
Jul	North Brunswick, New Jersey	[redacted]	Insufficient Data
Jul	Glenside, Pennsylvania	[redacted]	Insufficient Data
Jul	Ashland, Wisconsin	[redacted]	Aircraft
2	Baltimore, Maryland	[redacted]	Satellite
2	New York, New York	[redacted]	Astro (METEOR)
3	Hyattsville, Maryland	[redacted]	Astro (METEOR)
3	Hutchison, Kansas	[redacted]	Satellite
3	11.45N 174.52W (Pacific)	Military	Satellite
4	San Juan, Puerto Rico	USGG	Satellite
4	20.00N 161.12W (Pacific)	[redacted]	Other (MISSILE)
4	Veracruz, Mexico	State Dept	Insufficient Data
4	Kingsville, Louisiana	[redacted]	Satellite
5	Pacific	Military	Satellite
6	Beeville, Texas	[redacted]	Astro (METEOR)
6	Sagatuck, Michigan	[redacted]	Insufficient Data
6	Cheverly, Maryland	[redacted]	Satellite
7	Hallet Station, Antarctic	Military	Astro (METEOR)
7	Malden, Massachusetts	[redacted]	Insufficient Data
7	Hanscomb Field, Massachusetts	[redacted]	Aircraft
7	Albuquerque, New Mexico	[redacted]	Insufficient Data
7	Dayton, Ohio	[redacted]	Aircraft
8	British Honduras	[redacted]	Insufficient Data
9	Jacksonville, Florida	[redacted]	Astro (METEOR)
9	Moraine, Ohio	[redacted]	Satellite
9	Paterson, New Jersey	[redacted]	Aircraft
10	Dayton, Ohio	[redacted]	Aircraft
10	Meredith, New Hampshire	[redacted]	Aircraft
10	Newark, New Jersey	[redacted]	Aircraft
10-12	Keller, Washington	[redacted]	Aircraft
11	Kankakee, Illinois	[redacted]	Insufficient Data
12	Pacific	[redacted]	Satellite.
12	Westover AFB, Massachusetts	Military	Astro (METEOR)
12	Los Angeles, California	[redacted]	Aircraft
12	18.25N 55.46W (Indian Ocean)	Military	Satellite
13	Springfield, Virginia	[redacted]	Astro (METEOR)
13	06.09S 110.38W (Pacific)	[redacted]	Satellite
13	Carlsbad, New Mexico	[redacted]	Astro (JUPITER)
14	Rock Hill, South Carolina	[redacted]	Insufficient Data
14	Evanston, Illinois	[redacted]	Aircraft
15	Evanston, Illinois	[redacted]	Insufficient Data

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

DATE	LOCATION	SOURCE	EVALUATION
Jul	Universe	Science News Ltr	
Jul	Philadelphia, Pennsylvania	[redacted] 164)	
7	New Zealand	Newsclipping	
9	Hong Kong	Newsclipping	
11	Dunedin, New Zealand	Newsclipping	
12	Camp Lokota, Illinois	Newsclipping	

11. The investigating officer is the squadron intelligence officer, and although not currently on flying status is rated both pilot and navigator. The following comments are provided as pertinent to the situation:

a. At the time that the observer reported clear skies, the local weather bureau reported sky coverage as indicated in paragraph 7c. Although the sighting may have not been probable, it certainly was not impossible.

b. The observer described the light conditions as dark at 24 minutes after sundown.

c. The area in which the object was sighted is aligned with that of air traffic approaching Byrd Field, but the object's description and duration of observation does not suit air traffic identification.

d. Byrd Field Control tower operators were questioned concerning unusual observations during the subject reported sighting, but with negative results.

e. Parachute flares from the Camp Picket area (37 02N/77 53 W) were considered, but not deemed possible because of Camp Picket location and their schedule of operations and parachute flare limitations.

f. The only obvious possible discrepancies of the observer's statements are those of:

(1) Sky coverage

(2) Description dark of light conditions at 24 minutes after sundown.

g. The investigating officer has checked local sources for information and has not been able to identify the sighting.

Summary of 1 July Sighting

1. The sighting described below is forwarded with limited detail as the sighting was so positively identified as ECHO I.

2. Mr. [redacted], age 44, [redacted] City of Richmond, Va. made the following sighting. He observed a steady light source for approximately ten minutes starting at 2300 EDT, 2200 EST, 1 July 62 at the same location in Richmond described in attachment 1. It first came into sight on a magnetic bearing of approximately 190 and went out of sight on a magnetic bearing of 065.

3. An initial check with NASA was made and this sighting coincided with the passing of ECHO I.

4. As this sighting is considered obviously resolved, no further information is included.

Attch 3:

WBAN 15-8 (12-1-61)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

SURFACE WEATHER OBSERVATIONS

STATION Richmond, Va. DATE JUN 30 1962

TIME (L.S.T.)	STATION PRESSURE (INS.)	DRY BULB (°F.)	WET BULB (°F.)	REL. HUMIDITY (%)	TOTAL SKY COVER	CLOUDS AND OBSCURING PHENOMENA: LOWEST LAYER AMT	LOWEST LAYER TYPE & DIR.	LOWEST LAYER HEIGHT	SECOND LAYER AMT	SECOND LAYER TYPE & DIR.	SECOND LAYER HEIGHT	SUMMATION TOTAL	THIRD LAYER AMT	THIRD LAYER TYPE & DIR.	THIRD LAYER HEIGHT	SUMMATION TOTAL	FOURTH LAYER AMT	FOURTH LAYER TYPE & DIR.	FOURTH LAYER HEIGHT	TOTAL OPAQUE SKY COVER
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
00 57	29.760			81	10	10	AC	F14	0				0				0			10
01 58	29.840			81	10	10	AC	E12	10				10				10			10
02 56	29.810			81	10	10	AC	E12	10				10				10			10
03 57	29.790			81	10	10	AC	E10	10				10				10			10
04 56	29.790			73	10	10	AC	E14	10				10				10			10
05 52	29.810			76	10	8	AC	E8	2	CS	/	10	10				10			10
06 57	29.790			76	10	1	SC	30	6	AC	E6	7	3	CS	/	10	10			10
07 57	29.780			84	10	3	SC	30	5	AC	E6	8	2	CS	/	10	10			10
08 56	29.760			81	10	4	SC	30	5	AC	E20	9	1	CU	/	10	10			10
09 59	29.750			71	9	[redacted]			1	SC	30	1	6	AC	E10	7	2	CU	/	9
10 57	29.720			66	10	7	SC	A30	2	AC	60	9	1	CU	/	10	10			10
11 56	29.740			60	9	7	SC	E30	1	AC	60	8	1	CU	/	9	8			8
12 56	29.730			54	10	3	SC	40	5	SC	E15	8	2	AC	120	10	10			10
13 59	29.710			58	10	8	SC	E15	2	AC	120	10	4				4			10
14 58	29.710			77	10	9	SC	A40	1	AC	120	10	4				4			10
15 58	29.705			71	10	8	SC	E45	2	AC	120	10	4				4			10
18 58	29.695			62	8	3	SC	45	3	AC	E120	6	2	CS	/	8	0			7
17 58	29. [illegible]			65	10	7	SC	E45	3	AC	120	10	4				4			10
18 X	29.700			67	10	7	SC	E45	3	AC	100	10	4				4			10
19 57	29.670			75	8	6	SC	E45	3	AC	100	9	0			9	0			9
20 20	29.710			79	8	4	SC	35	2	AC	E10	6	2	CU	/	8	0			7
21 57	29.720			87	7	3	AC	100	4	CS	U	7	0			7	0			6
22 57	29.720			87	7	3	AC	100	4	CS	U	7	0			7	0			6
23 58	29.720			90	7	2	AC	100	3	CS	/	7	0			7	0			3

SYNOPTIC OBSERVATIONS

TIME (G.C.T.)	TIME (L.S.T.)	NO.	PRECIP. (INS.)	SNOW FALL (INS.)	SNOW DEPTH (INS.)	MAX. TEMP. (°F.)	MIN. TEMP. (°F.)	HGT. 850 MB. SURFACE	STATE OF GRND.	SEA STATE & DIR.	SWELL HGT. & DIR.	SWELL PERIOD	SURF H, H, M, P, D,	WATER TEMP.	SOIL TEMP			STATIO
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	TIME (L.S.T.) 63
	MID. TO 0052	X	0	0	X	[illegible]	66	X	X	X	X	X	X	X	X			ATT. THERM. 60
	0052	1	0	0	0	[illegible]	66			0								OBSRVD. BAR. 61
	0652	2	T	0	0	68	66			1								TOTAL CORR. 62
	1250	3	.06	0	0	80	66			1								STA. PRESS. 67
	1753	4	T	0	0	81	73			1								BAROGRAPH 64
	MID.	X	0	0	0	77	68	X	X	X	X	X	X	X	X			BAR. CORR. 65

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

24-HR. MAX. TEMP. (°F.)	24-HR. MIN. TEMP. (°F.)	24-HR. PRECIP. WATER EQUIV. (INS.)	24-HR. SNOWFALL UNMLTD. (INS.)	SNOW DEPTH (INS.)	PEAK GUST SPEED (MPH)	PEAK GUST DIRECTION	PEAK GUST TIME L.S.T.	THICKNESS OF ICE ON WATER (INS.)	FROZEN GRND LAYER (INS.) TOP	FROZEN GRND LAYER (INS.) BASE	RIVER GAGE	24-HR. MAX. R. H.	24-HR. MIN. R. H.	WATER EQUIV. (INS.)		
69	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	
81	66	.06	0	0							1.0				10	

PRECIP. & THDRSTM 82 | BEGAN 83 | ENDED 84 | DUR. 85 Hrs. Mins.

K- 0625 0703
R- 0703 1720
R- 1720 1737
R- 1737 1742
R 0743 2051
R- 0901 2320
RW- 1420 1545

98 REMARKS, NOTES AND MISCELLANEOUS PHENOMENA

Total sunshine 9:59 Sunrise Cloudy Sunset Cloudy

Fastest observed 1-minute wind speed ____ m.p.h. or ____

Fastest mile 25 m.p.h. associated direction NE and time 1227 E

Excessive precipitation:

Δt (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)												

BASEBALL GAME 1130 E