STUDENT HANDOUT

USE OF DOD FLIP

5/69-3843-5(U)

MARCH 1969

UNITED STATES ARMY AVIATION SCHOOL
FORT RUCKER, ALABAMA

DEPARTMENT OF ROTARY WING TRAINING
UNITED STATES ARMY AVIATION SCHOOL
FORT RUCKER, ALABAMA

File No. 3843-5(U)

PERFORMANCE OBJECTIVES

USE OF DOD FLIP

1. KNOWLEDGES: With the aid of his notes, a set of Flight Information Publication (FLIP), and without error, the student will be able to -

(Period one of five periods)

a. In FLIP Planning, Section I, General Information:

(1) Locate and write the publication content of FLIP Planning, Section IIA.

(2) Write the complete name of at least one of the abbreviations appearing in the FLIP and NOTAM Abbreviations listing.

(3) Decode at least one NOTAM using the NOTAM Code listing.

b. In FLIP Planning, Section II, Planning Data and Procedures:

(1) Locate and list the ground/airborne VOR receiver check procedure using a published radial or a VOT.

(2) Locate and list all of the information listed for at least one preferred route.

(3) Locate all of the Air Defense Identification Zones (ADIZ) and mountainous areas depicted on the appropriate charts.

(4) Explain the method used for displaying new or amended Special Notices.

c. In FLIP Planning, Section IIB, Special Use Airspace:

(1) Explain the information listed for at least one Special Use Airspace.

(2) Locate the information listed for at least one Parachute Jumping Area.

(Period two of five periods)

d. In the IFR Supplement:

(1) Decode information listed for at least one aerodrome using the Aerodrome/Facility Directory Legend.

(2) Locate and copy, in the proper format, all of the information contained in at least one of the reports listed on the outside, back cover.

e. In the VFR Supplement, locate and write:

(1) The meaning of the terms IFR-S and SKETCH.

(2) The name of at least one of the aerodromes appearing in the City/Aerodrome Cross Reference Listing.

f. In the Terminal Aerodrome Sketches - U.S. booklet, locate and write all of the information listed for at least one aerodrome.

(Period three of five periods)

g. On the Enroute Low Altitude Chart - U.S:

(1) Locate and read the maximum effective altitude of the chart.

(2) Utilizing both the chart plan view and chart legend:

(a) Explain the meaning of chart color coding.

(b) Explain all information appearing in at least one of the radio aids to navigation and communications boxes.

(c) Decode information appearing around at least one aerodrome symbol.

(d) Explain the meaning of at least five of the various symbols listed under Air Traffic Services and Airspace Information in the chart legend.

(Period four of five periods)

h. Answer correctly all of the questions contained in a practical exercise, consisting of questions taken from material covered during the first three periods, within a time limit of 80 minutes.

2. SKILLS: None.

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STUDENT OUTLINE

USE OF DOD FLIP

1. General description of the Department of Defense, Flight Information Publication (DOD FLIP) Program.

2. FLIP Planning, Section I, General Information.

3. FLIP Planning, Section II, Planning Data and Procedures.

4. FLIP Planning, Section IIA, Military Training Routes - United States.

5. FLIP Planning, Section IIB, Special Use Airspace.

6. Standard Instrument Departure (SIDs).

7. FLIP Enroute IFR Supplement.

8. FLIP Enroute VFR Supplement.

9. FLIP Terminal Aerodrome Sketches - U.S.

10. FLIP IFR Wall Planning Chart Low Altitude - U.S.

11. FLIP Enroute Low Altitude - U.S. Charts.

12. FLIP Area Charts - U.S.

13. Practical Exercise.

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File No. 3843-5(U)

PERFORMANCE CHECK

USE OF DOD FLIP

(Period one of five periods)

1. What information is contained in FLIP Planning, Section IIA?_____

_____

_____.

2. What is the meaning of the abbreviation - LOM? _____

_____.

3. Decode the following NOTAM - QAQAQ._____

_____.

4. What is the temperature in degrees Fahrenheit if the Centigrade temperature is +10°?_____.

5. Locate the following information listed in FLIP Planning, Section IIB for restricted area R-3005A. Area name_____,

Effective altitude_____, Time used _____,

Controlling authority _____

_____.

6. Flight Service Stations transmit weather reports and other airway information st _____ and _____ past the hour.

7. In which of the Flight Information Publications will you find the listing for VOT (VOR test facility) frequencies? _____.

8. Locate and list all of the information given for the preferred route FROM Atlanta to Charlotte. _____

_____.

(Period two of five periods)

1. In the IFR-Supplement, locate Hanchey AHP and answer the following questions: What is the aerodrome elevation? _____. What type of fuel is available ? _____. Does Cairns Approach Control indicate the availability of Radar? _____. What type of approach radar is available at Hanchey AHP? _____.

2. Locate and copy the following report information from the IFR-Supplement. Change of ETA by more than 30 minutes - _____

_____.

3. In the VFR-Supplement locate and write the meaning of the word SKETCH. _____

_____.

4. How are aerodromes listed in the VFR-Supplement "CITY/AERODROME CROSS REFERENCE LISTING?" _____.

5. In the Aerodrome Sketches - U.S. booklet, locate the following information: Shell AHP (Fort Rucker) (Ozark) Ala. What is the distance and direction from Fort Rucker to Shell AHP? _____. What is the elevation listed for Shell AHP? _____.

(Period three of five periods)

1. Enroute Low Altitude - U.S. charts are for use up to but not including what altitude? _____.

2. In the Enroute Low Altitude chart Legend locate the following information: What does it indicate if an aerodrome symbol is printed in blue? _____. _____. What does a line drawn under the frequency listed for a VOR range station indicate? _____. What does it mean if the triangle, indicating a reporting point, is not filled in? _____. What does it indicate if the triangle, indicating a reporting point, has a flag with an "X" attached to it? _____

_____.

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File No. 3843-5(U)

PRACTICAL EXERCISE

USE OF DOD FLIP

I. FLIP Planning, Section I, General Information.

1. In the FLIP Program listing find the publication cycle for the Standard Instrument Departure booklets. _____.

2. In the FLIP & NOTAM Abbreviations listing decode the abbreviation ARSR. ____

_____.

3. In the EXPLANATION OF TERMS listing locate and write the explanation of the term Airport Surveillance Radar (ASR). _____

_____.

4. Decode the following NOTAM codes using NOTAM CODE listing:

Cairns AAF: QAOOG - _____

_____.

Tallahassee Airport: QLJES 18 011200Z to 021200Z repairs - _____

_____

_____.

II. FLIP Planning, Section II, Planning Data and Procedures.

1. In the INDEX FOR AERONAUTICAL INFORMATION listing locate, under radar, the name of the publication in which availability of ASR-PAR is found. _____

_____.

2. In the METEOROLOGICAL DATA listing locate the following:

a. A pilot desiring direct Pilot-to-Weather Briefer Service would contact

_____.

b. Two types of weather In-flight Advisories issued by the weather bureau are designated as _____ and _____.

3. In the VOR RECEIVER CHECK POINTS listing locate and write the following:

   a. The Flight Information Publications in which VOR test facility (VOT) frequencies will be found. _____.

   b. The procedure for Airborne Check of the VOR navigation receiver at Akron, Colo. _____.

   c. The procedure for Ground Check of the VOR navigation receiver at Dodge City, Kans. _____.

   d. The allowable error when checking the VOR navigation receiver when using Airborne Check procedure _____, Ground Check _____.

4. Locate and copy in the space below all of the information listed in the ENROUTE PREFERRED ROUTES section for a flight from Birmingham to Atlanta.

   _____

   _____.

5. In the PILOT PROCEDURES listing locate and copy in the space below the High Rank Aboard and VIP Codes that you would use on your flight plan to indicate that your passanger is a Major General who wishes to be accorded honors upon arrival at his destination.

   _____.

6. Locate the DESIGNATED MOUNTAINOUS AREAS (U.S.) chart and copy below the minimum altitude and horizontal distance required for military pilots flying IFR flights off designated airways or air routes.

   Minimum altitude _____ feet within _____ NM either side of the track.

III. FLIP Planning, Section IIB, Special Use Airspace.

1. Determine the time Restricted Area R-2529 is in use. _____.

2. Does Fort Rucker have a Parachute Jumping Area listed? _____(Yes/No).

IV. IFR Supplement.

1. In the AERODROME/FACILITY DIRECTORY LEGEND locate and write the following:

   a. The aerodrome classification for -

      ANG _____.

      P _____.

   b. The meaning of the following aerodrome lighting symbols -

      B _____.

      L2 _____.

c. The meaning of the following fuel symbols -

A+ _____.

A _____.

A+1 _____.

E _____.

d. The meaning of the following U.S. aviation oils (MIL SPECS) symbol -

O-132 _____.

e. The meaning of the following radio class code symbols -

OM _____.

LOM _____.

VORTAC _____.

2. In the AERODROME/FACILITY DIRECTORY listing locate the following aerodrome information -

a. The type aviation fuel available at Bates Field/Mobile CGAS Ala. (Mobile):

_____.

b. The length of the longest runway at Emporia Mund., Kans: _____.

c. The tower frequencies available at Hanchey AHP (Fort Rucker) Ala. _____

_____

d. Is approach radar available at Randolph AFB, Tex? _____(Yes/No).

e. What communications frequency would you use to contact Salt Lake City Center via the remote site located at Rock Springs? _____.

Which of the listed frequencies are used for low altitude communications?

_____.

3. Answer the following questions using the PILOT TO FORECASTER WX RADAR FACILITIES chart -

a. What frequency would you use to contact Maxwell AFB weather forecaster, located at Montgomery, Ala? _____. What radio call would you use to contact the weather forecaster? _____.

Does Maxwell AFB have weather radar available? _____ (Yes/No).

4. Is two-way radio failure procedure listed in the IFR Supplement? _____.

5. On the outside back cover of the IFR Supplement, locate the procedure listed for a complete IFR position report and copy the report, in the proper sequence, in the space provided below.

a. _____.

b. _____.

c. _____.

d. _____.

e. _____.

f. _____.

g. _____.

h. _____.

IV. VFR Supplement.

1. What is the meaning of the terms IFR-S and SKETCH as used in the AERODROME/ FACILITY DIRECTORY LEGEND of the VFR Supplement?

a. IFR-S _____.

b. SKETCH _____.

2. In the AERODROME DIRECTORY, listed alphabetically, locate the following -

a. The length of the longest runwsy at Shell AHP (Fort Rucker), Ala. _____.

b. The aerodrome classification for Shell AHP. _____.

c. What type field lighting is listed for Shell? _____

_____.

d. What type fuel is available at Shell? _____.

e. Which Enroute Low Altitude - U.S. chart would you use to locate Shell?

_____.

3. What is the purpose of the CITY/AERODROME CROSS REFERENCE LISTING, which appears in the VFR Supplement?

_____

_____

_____.

4. On the outside back cover of the VOR Supplement, locate the procedure for making a VFR position report and copy the report, in the proper sequence, in the space provided below.

a. _____.

b. _____.

c. _____.

d. _____.

e. _____.

f. _____.

V. Terminal Aerodrome Sketches - U.S.

1. a. The field elevation of Lowe AHP (Fort Rucker), Ala. _____.

b. The distance and direction TO Lowe AHP from Fort Rucker. _____.

_____.

c. The distance and direction from HEY VOR to Lowe AHP. _____

_____.

d. Are the runways at Lowe AHP hard surface or steel mat? _____.

VI. Enroute Low Altitude - U.S. charts.

ANSWER THE FOLLOWING QUESTIONS USING ENROUTE LOW ALTITUDE - U.S. CHART L-13/14.

1. This chart is for use up to but not including _____ feet.

2. Open chart to side labelled 13. On panel "A" locate Lubbock VOR. What are the identification and frequency listed?

Identification _____ . Frequency _____.

3. In which Air Route Traffic Control area is Lubbock VOR located? _____.

4. The VOR airway from Lubbock VOR to Childress VOR, Panel "B", is designated V14. Answer the following questions concerning the airway segment.

a. What is the Minimum Enroute Altitude (MEA) between Lubbock and Childress?

_____ feet.

b. What is the Minimum Obstruction Clearance Altitude (MOCA)? _____.

c. At what point along this route should you retune your VOR navigation receiver from Lubbock to Childress VOR? _____.

d. What is the total distance from Lubbock to Childress VOR? _____.

e. What is the distance from Matador Intersection to Childress VOR?_____.

f. Which two VOR stations should you use to fix Matador Intersection? _____

_____.

5. Locate Reese AFB, 10 miles southwest of Lubbock VOR, and answer the following questions -

a. Is approach radar available at Reese AFB?_____(Yes/No).

b. What is the aerodrome elevation listed for Reese AFB? _____.

c. What is the length of the longest runway at Reese AFB? _____.

6. Located about 4 miles north of Childress VOR is the symbol for an aerodrome.

Is it a civil or military aerodrome?_____.

7. The VOR airway from Childress VOR to Wichita Falls VOR, panel "B", is V114. To the south of V114 is V114S. Following V114S for 56 miles to the southeast from Childress VOR you come to Santa Rosa Intersection. The flag at Santa Rosa Intersection has an "R" in it indicating a Minimum Reception Altitude (MRA). What is the MRA indicated on the chart?_____.

Is Santa Rosa Intersection a compulsory or non-compulsory reporting point?

_____. What does the flag at Wichita Falls VOR indicate?

_____.

8. What is the frequency of the NDB located about 8 miles southeast of Wichita Falls VOR? _____.

9. The Dallas/Fort Worth area, panel "C", is surrounded by a large box with broken blue lines. What does this indicate? _____

_____.

10. Areas on the chart tinted brown are what type airspace? _____.

11. About 40 miles north of Wichita Falls VOR is an area tinted brown but it is also surrounded by a blue border. What kind of an area is this?

_____.

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STUDENT HANDOUT NO. 1

USE OF DOD FLIP

1. General description of the Flight Information Publication (FLIP) Program.

   a. FLIP Program divided into three phases - planning, enroute, terminal.

   b. FLIP publications are:

      (1) FLIP Planning, Sections I,II,IIA and IIB.

      (2) Standard Instrument Departures (SID's).

      (3) IFR and VFR Supplements.

      (4) Aerodrome Sketches, United States.

      (5) Enroute Low Altitude Charts.

      (6) FLIP Area Charts.

      (7) Low Altitude Instrument Approach Procedures (9 booklets).

2. FLIP Planning, Section I, General Information.

   a. This publication contains information relating to the entire FLIP program such as publication cycle and publication content and also contains the following listings:

      (1) FLIP and NOTAM abbreviations.

      (2) Explanation of terms used in FLIP publications.

      (3) NOTAM code for decoding NOTAMS.

      (4) Conversion tables.

3. FLIP Planning, Section II, Planning Data and Procedures.

   a. This publication contains the index of all aeronautical information contained in the various FLIP publications. It also contains:

      (1) Meteorological data.

      (2) VOR receiver check points.

      (3) Enroute preferred routes.

      (4) Pilot procedures.

(5) Cruising altitude diagrams, ADIZ, Mountainous Area Chart and Special Notices.

4. FLIP Planning, Section IIA, Military Training Routes U.S.

a. This publication contains the following information:

(1) VFR and IFR/VFR (Oil Burner) low altitude high speed training routes.

(2) Heavy wagon low level routes.

(3) Air refueling tracks.

b. There is a wall chart showing routes included with this section.

5. FLIP Planning, Section IIB, Special Use Airspace.

a. Special Use Airspace includes Prohibited, Restricted, Warning, Alert and Danger Areas.

b. Parachute Jumping Areas are also listed in this section .

6. Standard Instrument Departures (SID's).

a. Divided into two publications labeled EAST and WEST.

b. Contain SID's for civil aerodromes and selected U.S. Army aerodromes.

7. IFR Supplement.

a. This is an enroute publication used for IFR flights.

b. Publication contains a listing of all Aerodromes, in alphabetical order, approved for military use.

c. Air Route Traffic Control Centers (ARTCC) are listed in alphabetical order.

d. Also listed in the IFR Supplement are, special notices, pilot-to-forecaster chart, preflight weather/NOTAM procedures and position reporting procedures.

8. VFR Supplement.

a. Same format as IFR Supplement.

b. Term IFR-S indicates material also covered in IFR Supplement.

c. Term SKETCH indicates that a digram of the aerodrome appears in the Terminal Aerodrome Sketch - U.S. booklet.

d. City/Aerodrome Cross Reference Listing is found in this publication.

9. Aerodrome Sketches - United States.

   a. Provided to locate and identify destination aerodromes for VFR flight operations.

   b. Aerodromes listed in alphabetical order.

10. DOD FLIP Planning Chart Low Altitude - United States.

   a. Displayed in operations office.

   b. Facilitates primary route selection for flight planning and contains:

      (1) All active aerodromes with military landing rights which have runways 3000 feet long or longer.

      (2) All commissioned navaids and VOR airways.

      (3) All special use airspace, ADIZ and time zones.

      (4) Enroute low altitude chart limits.

11. Enroute Low Altitude - U.S. Charts.

   a. Effective up to but not including 18,000 feet.

   b. Front panel contains following information:

      (1) Chart number, scale, area and elevation.

      (2) Effective date, graphic index and special use airspace.

   c. Back panel contains chart legend divided into four groupings:

      (1) Aerodrome listing contains detailed information on aerodrome symbols appearing on chart.

      (2) Radio aids to navigation and communications boxes listing tells how to read and interpret information appearing on the chart relating to navaids and communications.

      (3) Air traffic services and airspace information tells how to read and interpret airways symbols.

      (4) Special use airspace listing shows how to read and interpret information relating to all types of special use airspace including climb corridors.

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File No. 3843-5(U)

PERFORMANCE CHECK KEY

USE OF DOD FLIP

(Period one of five periods)

1. Detailed data covering VFR and VFR/IFR (Oil Burner), VFR Low Altitude High Speed Training Routes, Heavy Wagon Low Level Routes and Low and High Altitude Refueling Routes.

2. Compass locator station when installed at outer marker site.

3. VOR work completed.

4. 50° Fahrenheit.

5. Fort Stewart, Ga; To 29,000 feet; Continuous (24 hours a day and/or 7 days a week); FAA, ARTCC, Jacksonville, Fla. CO, Fort Stewart, Ga.

6. 15 and 45.

7. IFR Supplement.

8. Conyers Intxn, V66, Fort Mill VORTAC (L-20).

(Period two of five periods)

1. 311 feet; A+J4 (A+ = 115/145 & J4 = JP4); Yes (Radar indicated by small "R" in left margin); ASR (Airport Surveillance Radar) and PAR (Precision Approach Radar).

2. a. Aircraft identification; b. Position & time; c. IFR (or VFR) to (destination); d. New ETA - and hours of fuel remaining.

3. SKETCH - indicates VFR aerodromes covered in Aerodrome Sketch booklet.

4. Listed alphabetically by aerodrome name.

5. 12NM southwest; 400 feet MSL.

(Period three of five periods)

1. 18,000 feet MSL.

2. Blue symbols indicate that an Instrument Approach Procedure is published in the Low Altitude Instrument Approach Procedures booklet; No voice transmitted on that frequency; Non-compulsory reporting point; A Minimum Crossing Altitide (MCA) is assigned.

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File No. 3843-5(U)

PRACTICAL EXERCISE KEY

USE OF DOD FLIP

I. FLIP Planning, Section I, General Information.

1. As required.

2. Air Route Surveillance Radar.

3. Radar providing position of aircraft by azimuth and range data without elevation.

4. QAOOG - Compass locator, outer, instrument landing system, operative but ground checked only, awaiting flight check.

QIJES 18 011200Z to 021200Z repairs - Threshold lights for runway number 18 out of service from 011200Z to 021200Z for repairs.

II. FLIP Planning, Section II, Planning Data and Procedures.

1. In IFR Supplement.

2. a. Any Flight Service Station (FSS) operated by the FAA.

b. AIRMETS and SIGMETS.

3. a. IFR and VFR Supplements.

b. 177°, over tower 7 nm; 5500 feet.

c. 150°, 5.3 nm; center of NW end of runway 14.

d. Airborne - plus or minus 6°; ground - plus or minus 4°.

4. Birmingham VORTAC, V188, Palmetto Intxn (L-14, L-20).

5. VIP 5H.

6. 2000 feet within 22 nm.

III. FLIP Planning, Section IIB, Special Use Airspace.

1. Continuously from 30 minutes before sunrise to 30 minutes after sunrise, VFR and IFR.

2. Yes.

IV. IFR Supplement.

1. a. ANG - US Air National Guard.

P - Civil aerodrome wherein permit covers use by transient military aircraft.

b. B - Rotating light.

L2 - Boundary lights.

c. A+ - 115/145.

A - 100/130.

A+1 - 115/145.

E - 80 NL (Non-leaded).

d. O-132 - 1005, Jet engine oil (MIL-O-6081).

e. OM - Outer Marker of Instrument Landing System.

LOM - Compass locator station when installed at Outer Marker.

VORTAC - Combination VOR and TACAN.

2. a. Contract fuel - A+J4; No contract fuel C1 A1 A+1 TA1.

b. 4200 feet (Note 1).

c. E248.4 ~~139.08~~ W321.6 (E and W denote East or West of tower).

d. Yes.

e. 306.2 291.6 134.25 124.4; 306.2 and 124.4.

3. a. 342.5 MHz; Matro; Yes.

4. Yes.

5. a. Identification.
b. Position.
c. Time.
d. Altitude.
e. Type flight plan (if report is to FSS only).
f. Next reporting point and ETA.
g. Name only next succeeding reporting point along route of flight.
h. Remarks.

IV. VFR Supplement.

1. IFR-S - Complete listing in IFR Supplement and a sketch is published in the Aerodrome Sketch booklet.

SKETCH - VFR aerodrome covered in DOD FLIP (Terminal) Aerodrome Sketches.

2. a. 2000 feet.

b. A for U.S. Army.

c. BL4 - Rotating beacon and runway strip lights.

d. A+J4.

e. L-18.

3. To provide an alphabetical listing by city to cover those specific instances where the two names differ, and where the city name is not the first part of the aerodrome name.

4. a. Identification.
b. Position.
c. Time.
d. Altitude.
e. VFR flight plan.
f. Destination.

V. Terminal Aerodrome Sketches - U.S.

1. a. 244 feet.

b. 2 NM NW.

c. 5.3 NM, 255°.

d. Hard surface.

VI. Enroute Low Altitude - U.S. Chart.

1. 18,000 feet MSL.

2. LBB, 110.8 MHz.

3. FT WORTH.

4. a. 4900 feet.

b. 4500 feet.

c. 33 nm from LBB VOR and/or 57 nm from CDS VOR (Indicated by 2).

d. 90 nm.

e. 44 nm.

f. Guthrie (GTH) and Childress (CDS) (Indicated by arrows).

5. a. Yes (Indicated by letters ASR/PAR).

   b. 3338 feet MSL.

   c. 10,500 feet.

6. Civil.

7. 4000 feet; non-compulsory; minimum crossing altitude (MCA).

8. 296 kHz.

9. An Area Chart is available (Chart A-1).

10. Non-controlled airspace.

11. Restricted Area (R-5601A).