



**Federal Aviation
Administration**

Initial En Route Qualification Training

Lesson 05 Flight Progress Strips

Course 50148001

LESSON PLAN DATA SHEET

COURSE NAME: INITIAL EN ROUTE QUALIFICATION TRAINING
COURSE NUMBER: 50148001

LESSON TITLE: FLIGHT PROGRESS STRIPS

DURATION: 8+15 HOURS

DATE REVISED: 2025-02
VERSION: V.2025-02

REFERENCE(S): FAA ORDER JO 7110.65, AIR TRAFFIC CONTROL

HANDOUT(S): NONE

**EXERCISE/(S)/
ACTIVITY(S):** ACTIVITY 1: PROPOSAL/DEPARTURE STRIP
ACTIVITY 2: EN ROUTE STRIP
ACTIVITY 3: ARRIVAL STRIP
ACTIVITY 4: FLIGHT PROGRESS STRIP CHALLENGE
EXERCISE 1: IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS
EXERCISE 2: COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES
EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTING (USE AERO CENTER MAP WITH JET ROUTES FOR THIS EXERCISE)

**END-OF-LESSON
TEST:** YES

**PERFORMANCE
TEST:** NONE

MATERIALS: NONE

**OTHER PERTINENT
INFORMATION:**

DISCLAIMER

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INTRODUCTION

Initial En Route Qualification Training

Lesson 05 Flight Progress Strips

V.2025-02
Presented by
FAA Academy
Air Traffic Division
Training Branch



Federal Aviation
Administration



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You have been introduced to the airspace for which you are responsible including airways, NAVAIDs, MEAs, sectors, Special Use Airspace, fixes, and mileages, etc. Now you will be introduced to flight progress strips. The ability to accurately recall your airspace will allow you to use flight progress strips to safely and efficiently move aircraft through your sector.

INTRODUCTION *(Continued)*



Flight progress strips are an official record of control data and are used to reconstruct flight activities in the event of a systems error, deviation, or accident. Even with advanced automation systems, strips are still required in the field.

You will use flight progress strips to anticipate and organize flights entering, within, and leaving your airspace. It is essential for controllers to be proficient in quickly identifying and interpreting the data contained in the various types of flight progress strips.

Purpose

In this lesson, you will be taught how to prepare flight progress strips for departure, arrival, and en route flight plans, including which fix postings are required for a given flight plan based on the filed route and where to enter this data on the flight progress strip. You will also learn how to determine and enter estimates using plus times.

Continued on next page

INTRODUCTION *(Continued)*

Lesson Objectives

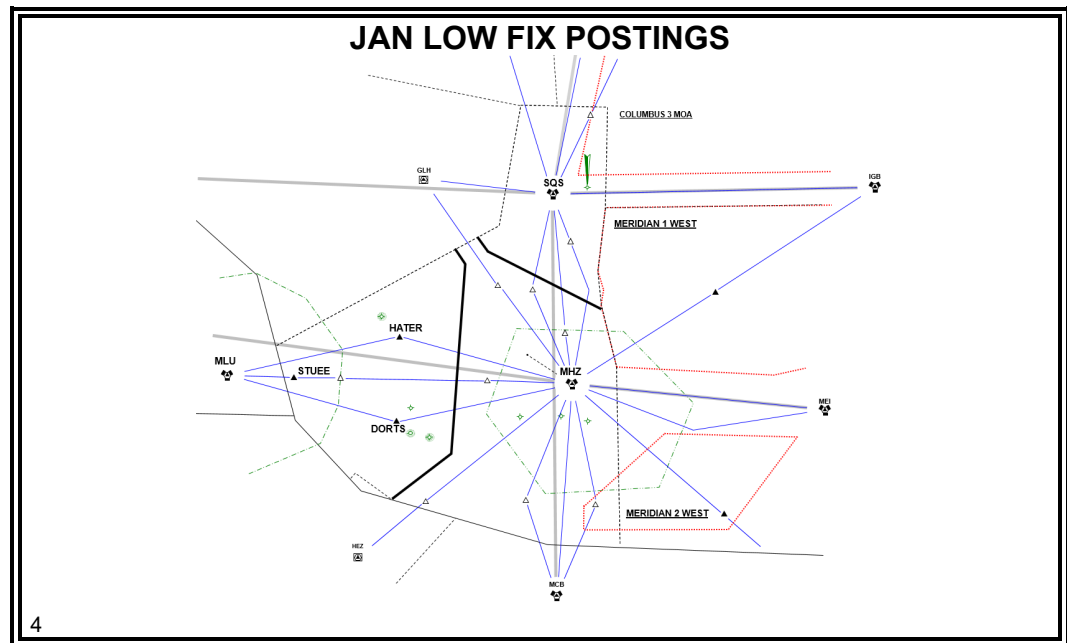
LESSON OBJECTIVES

- On an End-of-Lesson Test, and in accordance with FAA Order JO 7110.65 and the Aero Center (ZAE) Map, you will:
 - Determine the required fix postings for departure, arrival, and en route aircraft
 - Identify designated spaces for data entries and control symbols
 - Determine estimates using plus times

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FIX POSTINGS

JAN Low Altitude Fix Postings Aero Center Map



- ⦿ This section covers Fix Posting Areas (FPAs) for Aero Center (Jackson Low sector).
- ⦿ Jackson Low sector is divided into three FPAs (SQS, MHZ, VKS).
 - These FPAs are also used as bay headers
 - Bay headers allow for a more organized traffic search since there is **only** one strip per aircraft in each FPA
- ⦿ Each route or airway in the Jackson Low sector has a specific fix posting for each FPA.

Example: Victor 18 has two fix postings: one at MHZ and one at STUEE, which is posted under the VKS bay header.

NOTE: A list of JAN Low sector fix postings for both victor and jet airways is included in Appendix A of this lesson.

- ⦿ Each airway/route has at least one fix posting (strip) in the Jackson Low sector.

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FIX POSTINGS *(Continued)*

Jackson Low Altitude Fix Postings (Cont'd)

Aero Center Map

- ⊙ Airway fix postings:
 - V9
 - SQS
 - MHZ
 - V11
 - SQS
 - MHZ
 - V18
 - STUEE - Posted at VKS
 - MHZ
 - V74
 - MHZ
 - V245
 - MHZ
 - V278
 - SQS
 - V417
 - DORTS - Posted at VKS
 - MHZ
 - V427
 - HATER - Posted at VKS
 - MHZ

Continued on next page

FIX POSTINGS *(Continued)*

**Jackson Low
Altitude Fix
Postings
(Cont'd)**
Aero Center Map

- V535
 - SQS
 - V555
 - SQS
 - MHZ
 - V557
 - SQS
 - MHZ
-

FLIGHT PROGRESS STRIPS

Stripmarking Use

JO 7110.65,
par. 2-3-1

- ⊙ Flight progress strips are used to record data on air traffic and clearances that is required for control and other air traffic services.
 - Maintain **only** necessary current data
 - Remove strips when **no** longer required for control purposes
 - Do **not** erase or overwrite
 - Use an “X” to delete:
 - Climb/descend and maintain arrows
 - At or above/below symbols
 - Cruise symbol
 - Unwanted altitude information
 - Write new altitude information immediately adjacent to old information and within the same space
 - Draw a horizontal line through other items
 - Do **not** draw a line through an altitude until the aircraft reports or is observed (valid Mode C) leaving the altitude
 - ⊙ Preplanning may be written in red.
 - Rewrite in black after the clearance is issued
 - Do **not** overwrite
 - ⊙ Manually prepared strips **must** conform to the same format as machine-generated strips.
-

FLIGHT PROGRESS STRIPS *(Continued)*

Computer Programmed Spaces

JO 7110.65,
par. 2-3-2

COMPUTER PROGRAMMED SPACES											
3	1	2	11	15	16	20	21	25	27		
4			12				22		28		
5			13				23				
6	8		14	17	18						
7	9	10	14a	19		20a	24	26	29	30	

NOTE: For a complete list of the spaces where data is entered on a flight progress strip, see Appendix B.

- ⊙ The computer will put information in the following computer-programmed spaces:
 - Space 1 - Verification symbol, if required
 - Space 2 - Revision number
 - Space 6 - Sector number
 - Space 7 - Computer Identification (CID) number
 - Space 8 - Estimated ground speed
 - Space 9 - Strip Request (SR) originator or revised ground speed
 - Space 10 - Strip number
 - Space 27 - Mode 3/A beacon code, if applicable

PROPOSAL STRIP

Proposal Strip

JO 7110.65, pars.
2-3-6, 2-3-2, 2-3-8,
table 2-3-10;

PROPOSAL STRIP					
3 4 5		16		21	25
		19		24	26
N15T C310/A T180		↑		STUEE	KJAN MHZ V18 MLU KMLU/0032
		KJAN P1122		80	○ NO OXYGEN

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⊙ A proposal strip should include the following information:

- Space 3 - Aircraft Identification (AID)
 - Appropriate prefix followed by a combination of letters and/or numbers
 - Seven maximum allowable characters
- Space 4 - Aircraft data
 - Number of aircraft, if more than one
 - Heavy indicator, if appropriate
 - “H” followed by slant (/)
 - Type aircraft

NOTE: JO 7110.65 par. 2-3-6 requires, in both automated and non-automated environments, the use of the approved aircraft type codes contained in Appendices A-C to indicate aircraft type.

- Equipment suffix
 - Appropriate letter preceded by slant (/) and following aircraft type indicating aircraft’s transponder, DME, or RNAV capability

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PROPOSAL STRIP *(Continued)*

Proposal Strip (Cont'd)

JO 7110.65, pars.
2-3-6, 2-3-2, 2-3-8,
table 2-3-10;

	No Transponder	Transponder – No Mode C	Transponder With Mode C
No DME	X	T	U
DME	D	B	A
TACAN Only	M	N	P
RNAV	Y	C	I

NOTE: Equipment suffix determines type of clearance/routing aircraft can accept. For example, a /X cannot accept a clearance with a DME crossing restriction and in a radar environment, a /X cannot ident for radar identification.

NOTE: The above chart lists **only** those suffixes most commonly used in ZAE nonradar labs. The complete chart from FAA Order JO 7110.65 is in Appendix C of this lesson.

- Space 5 - Filed true airspeed
 - “T” followed by two to four digits
 - “SC” = Speed Classified
- Space 16 - Departure arrow (↑)
- Space 19 - Fix and proposed departure time
 - Location identifier
 - “P” followed by 4-digit Proposal time (P-time)
- Space 21 - Next posted fix or coordination fix

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PROPOSAL STRIP *(Continued)*

Proposal Strip (Cont'd)

JO 7110.65, pars.
2-3-6, 2-3-2, 2-3-8,
table 2-3-10;

- Space 24 - Requested altitude
 - Single altitude
 - Two or three digits representing altitude in hundreds of feet
 - Altitude block
 - “(Altitude)B(altitude)”
 - Lowest altitude first
- Space 25 - Point of origin, route, and destination
 - Location identifier
 - Victor airways, jet routes, or direct routes
 - Estimated Time En Route (ETE) follows destination on general aviation departure aircraft
 - To convert ETE to Estimated Time of Arrival (ETA), add ETE to departure time. General aviation pilots are required to file ETE.
- Space 26 - Pertinent remarks
 - Use plain language, or
 - Words/phrases/symbols contained in FAA Order JO 7110.65, par. 1-2-1

NOTE: KJAN proposal strips do not have a dedicated space for a MHZ VORTAC progress time. If a MHZ progress time is needed for separation, it must be recorded in space 26 using this format: MHZ/XXXX. KGWO proposal strips do not have a dedicated space for a SQS VORTAC progress time. If a SQS progress time is needed for separation, it must be recorded in space 26 using this format: SQS/XXXX.

- Space 27 - Beacon code
 - Normally assigned by the computer

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PROPOSAL STRIP *(Continued)*

Proposal Strip (Cont'd)

JO 7110.65, pars.
2-3-6, 2-3-2, 2-3-8,
table 2-3-10;

PROPOSAL STRIP EXAMPLES							
UAL80 B721/A T420 66 381 01		↑		STUEE	KJAN MHZ V18 MLU KSHV	1521	
				160	○ SLOW CLIMBER		
N1234 PA32/A T160 66 244 01		↑		MHZ	KGWO SQS V9 KMCB/0047	1541	
				80	○ NO OXYGEN		
N457 C172/A T150 66 133 01		↑		MLU	KVKS MLU V18 EIC KSHV/0110	1104	
				100		ZFW	

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Continued on next page

PROPOSAL STRIP *(Continued)*

Knowledge Check

KNOWLEDGE CHECK

3		16	21	25	
4					
5					
		19	24	26	

❖ **QUESTION:** Filed True Airspeed is entered in space _____.

- A. 5
- B. 19
- C. 24

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KNOWLEDGE CHECK

3		16	21	25	
4					
5					
		19	24	26	

❖ **QUESTION:** Proposed Departure Time is entered in space _____.

- A. 19
- B. 25
- C. 26

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Continued on next page

PROPOSAL STRIP *(Continued)*

Knowledge
Check
(Cont'd)

KNOWLEDGE CHECK

❖ **QUESTION:** What information is entered in the spaces on the strip below?

3		16	21	25	27
4					
5					
		19	24	26	

10

DEPARTURE STRIP

Departure Strip

JO 7110.65,
par. 2-3-2

DEPARTURE STRIP						
3		15	↑	20	21	25
4					22	
5		18				28
		19			24	
N333LP		T→NE TL	↑	↑100	MLU	KVKS MLU KSHV/0032
C441/A		330/↗		X31SE MLU	1835	
T250		V417		↑70	C1835	V417
		V<1832(42)				
	EDC	1822/1822		↑100	100	D-A
	1820	KVKS P1822				ZFW

EXAMPLE

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⊙ A departure strip should include the following information:

- Space 15 - Clearance information for departing aircraft
- Space 18 - Departure time (assumed and/or actual)
- Space 20 - Altitude information
 - Including restrictions
- Space 22 – Pilot's estimated time over next fix, Center estimated time over next fix (written in the format "C1234") under the pilot's estimated time.
- Space 28 - Miscellaneous control data
 - Clearance limit
- Spaces 29-30 - Transfer-of-control data and coordination indicator, if required

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DEPARTURE STRIP (Continued)

Knowledge Check

KNOWLEDGE CHECK						
QUESTION: What information is displayed in the space indicated on the strip below?						
		15		20	22	28
		18				
						29-30

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Continued on next page

DEPARTURE STRIP *(Continued)*

Knowledge
Check
(Cont'd)

KNOWLEDGE CHECK									
N3326X				↑		GLH		KJAN MHZ V74 KPBF/0115	
C182/A						80			
T120									
66									
01		KJAN P1640							
N2340				↑		MHZ		KVKS MHZ V18 KMEI/0105	
C177/A						70			
T100									
66									
01		KVKS P1642							
13									

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DEPARTURE STRIP *(Continued)*

Knowledge Check (Cont'd)

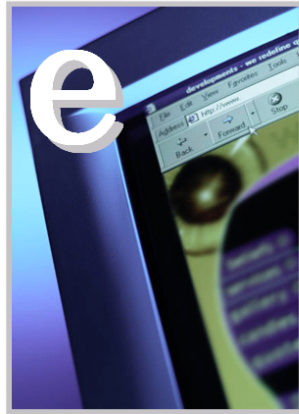
KNOWLEDGE CHECK							
 QUESTION: Determine the ETA for each aircraft on the strips below. (Use the P time as the departure time.)							
N27652 BL17/A T130 66 01		↑		GLH	KGWO SQS V278 KTXK/0134		
		KGWO P1443					
N4343L BE30/G T280 66 01		↑		HEZ	KJAN MHZ V245 KAEX/0036		ZHU
		KJAN P1320					

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DEPARTURE STRIP *(Continued)*

Activity 1

PROPOSAL/DEPARTURE STRIP ACTIVITY



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Purpose: to practice identifying and labeling designated spaces on proposal and departure strips

Description

In this activity, you will practice identifying and labeling designated spaces on proposal and departure strips.

Directions

Access the IET eLearning menu. Select **Lesson 5 – Flight Progress Strips**. Click on the title to launch the **Proposal/Departure Strip** activity.

Time Allotted

10 minutes

EN ROUTE STRIP

En Route Strip

JO 7110.65,
par. 2-3-2

EN ROUTE STRIP						
	11	15		20	22	
	12					
	14	17	18			
	14A	19		24		
N479GB	HLI 1525	48	140	MHZ	KMEM HLI V11 MHZ V427 MLU KSHV	
C414/A T240		15				
		SQS				

16

○ An en route strip should include the following information:

- Space 11 - Previous fix
- Space 12 - Estimated time over previous fix

NOTE: The time in Space 12 of an en route flight strip is usually a center estimate.

- Space 14A - Plus time expressed in minutes from the previous fix to the posted fix
 - Determined by the distance between the two fixes and the speed of the aircraft using the Quick Estimate Method

NOTE: Calculations for Plus Time and Post Fix Estimates will be explained in subsequent slides.

- Space 15 - Center estimate over the posted fix
- Space 19 - Posted fix
- Space 20 - Altitude information

Continued on next page

EN ROUTE STRIP *(Continued)*

En Route Strip (Cont'd)

JO 7110.65,
par. 2-3-2

- ⊙ An en route strip may also include the following information:
 - Space 14 - Actual departure time entered on first fix posting after departure
 - Space 17 - Pilot-estimated time over fix
 - Space 18 - Actual time over fix
 - Space 22 – Pilot's estimated time over next fix, center estimated time over next fix (calculate center estimates only when you need to prove separation)
 - Space 24 – Requested Altitude
-

EN ROUTE STRIP (Continued)

Quick
Estimate
Method

DETERMINE DISTANCE TRAVELED

DT = MPM x TM

Example:

12:07

N456

C310/U

T180

66

02

MHZ

1200

$18 / 6 = 3 \text{ (MPM)}$

$1207 - 1200 = 7 \text{ (TM)}$

$3 \times 7 = 21 \text{ (DT)}$

The aircraft has flown 7 minutes past MHZ at 3 miles per minute and should be approximately 21 miles past MHZ.

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⦿ Quick Estimate Method

- Use this method to determine the distance an aircraft will travel in an allotted time
 - Divide the first two digits of the aircraft's speed by 6 to determine Miles Per Minute (MPM)
 - Distance Traveled (DT) equals MPM multiplied by Time in Minutes (TM)

NOTE: Time in minutes comes from difference between fix time and clock time.

Example: An aircraft has a MHZ estimate of 1200. Clock time is 1207. True airspeed is 180 knots (3 miles per minute). Aircraft has flown 7 minutes past MHZ at 3 miles per minute and should be approximately 21 miles past MHZ.

$$\begin{aligned}DT &= 3 \times 7 \\DT &= 21 \text{ miles}\end{aligned}$$

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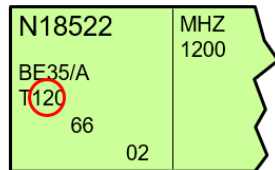
EN ROUTE STRIP (Continued)

Quick
Estimate
Method
(Cont'd)

DETERMINE CENTER ESTIMATES

$$TM = \frac{DT}{MPM}$$

Example:



58 = DT between MHZ and SQS

12 / 6 = 2 MPM

58 / 2 = 29 (TM)

The aircraft is traveling 58 miles (DT) between MHZ and SQS at 2 miles per minute (MPM). The time in minutes for this travel is 29 minutes, which added to the MHZ estimate of 1200, means the estimate for SQS is 1229.

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- Use this method to compute center estimates at fixes

Continued on next page

EN ROUTE STRIP (Continued)

Post Fix
Estimate

POSTED FIX ESTIMATES			
SPACE 12 + SPACE 14A = SPACE 15			
Time Estimated Over Previous Fix		Center Estimate for Posted Fix	
N18522	MHZ	42	↑80
BE35/A	0013	00	
T120			
66			
02	+29	SQS	

Plus Time

19

- ⦿ Use this method to compute posted fix estimates.
 - Time estimated over the previous fix added to the plus time results in the center estimate for the posted fix

Continued on next page

EN ROUTE STRIP (Continued)

Knowledge Check

KNOWLEDGE CHECK

❖ **QUESTION:** What information is displayed in the following spaces of an en route strip?

	11 12	15	20	21 22		
	14A			24		29-30

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Continued on next page

EN ROUTE STRIP (Continued)

Knowledge Check (Cont'd)

KNOWLEDGE CHECK
Using the strips below and the Quick Estimate Method,
answer the following questions:
Time: 1905

DAL63		10	
B722/A		19	
T480	G480		
017	66	01	
		SQS	

21

N3721K		10	
C310/U		19	
T180	G180		
227	66	01	
		SQS	

❖ **QUESTION:** How many MPM is DAL63 traveling?

❖ **QUESTION:** Approximately how far from SQS is DAL63?

❖ **QUESTION:** How many MPM is N3721K traveling?

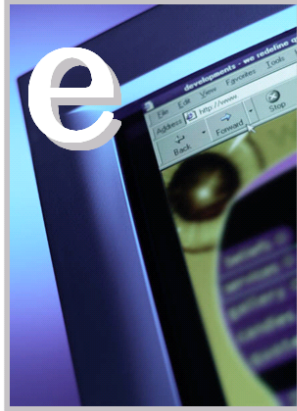
❖ **QUESTION:** Approximately how far from SQS is N3721K?

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EN ROUTE STRIP *(Continued)*

Activity 2

EN ROUTE STRIP ACTIVITY



Purpose: to practice identifying and labeling designated spaces on en route strips

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Description

In this activity, you will practice identifying and labeling designated spaces on en route strips.

Directions

Access the IET eLearning menu. Select **Lesson 5 – Flight Progress Strips**. Click on the title to launch the **En Route Flight Strips** activity.

Time Allotted

10 minutes

ARRIVAL STRIP

Arrival Strip
JO 7110.65,
par. 2-3-2

ARRIVAL STRIP

		16				
UAL35	MCB	11	↓	160	KJAN	KMSY MCB V9 MHZ KJAN
B721/A	1500	15				
T420						
66						
01		MHZ				

23

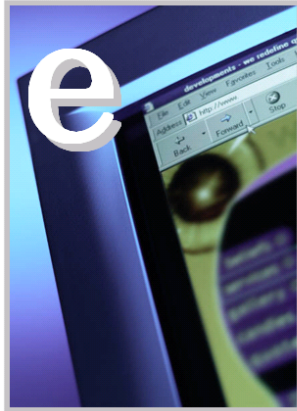
- ⦿ An arrival strip should include the following information:
 - Space 16 - Arrival arrow (↓)

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ARRIVAL STRIP *(Continued)*

Activity 3

ARRIVAL STRIP ACTIVITY



Purpose: to practice identifying and labeling designated spaces on arrival strips

24

Description

In this activity, you will practice identifying and labeling designated spaces on arrival strips.

Directions

Access the IET eLearning menu. Select **Lesson 5 – Flight Progress Strips**. Click on the title to launch the **Arrival Strip** activity.

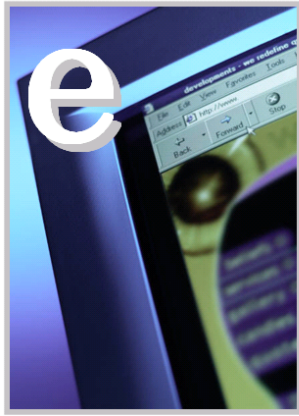
Time Allotted

10 minutes

FLIGHT PROGRESS STRIP CHALLENGE

Activity 4

FLIGHT PROGRESS STRIP CHALLENGE ACTIVITY



25

Purpose: to practice identifying and labeling designated spaces on proposal, en route, and arrival strips

Description

In this activity, you will practice identifying and labeling designated spaces on proposal, en route, and arrival strips.

Directions

Access the IET eLearning menu. Select **Lesson 5 – Flight Progress Strips**. Click on the title to launch the **Flight Progress Strip Challenge** activity.

Time Allotted

15 minutes

EXERCISE 1: IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS

Exercise 1

IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS EXERCISE



Purpose: to practice identifying information on flight progress strips

Directions: review provided strips and answer the corresponding questions

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Directions

Items 1 through 15 are short answer. Review the strips provided to answer the questions. All strips in this exercise would be posted in the same bay. Some questions refer to more than one strip. Write your answers in the spaces provided.

Questions

EXERCISE 1 STRIPS – Q1, Q2, Q3

N6264L	DORTS 1401	26 14	70	KJAN	KMLU V417 MHZ KJAN/1431
BE35/A T130					
66					
02		MHZ			

27

❖ **QUESTION 1:** What is N6264L's filed true airspeed?

❖ **QUESTION 2:** What type of strip is this?

❖ **QUESTION 3:** What is the assigned altitude for N6264L?

Continued on next page

EXERCISE 1: IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS *(Continued)*

Questions
(Cont'd)

EXERCISE 1 STRIPS – Q4, Q5						
N215LJ			↑	STUEE	KJAN MHZ V18 MLU KMLU/0017	
LJ24/A						
T400						
66						
01				160		
			KJAN P1410			
28						

❖ **QUESTION 4:** What is the next fix for N215LJ?

❖ **QUESTION 5:** What type of strip is this?

EXERCISE 1 STRIPS – Q6, Q7, Q8						
LN43X	SQS 1418	33	170	MCB	KMEM./SQS V9 MCB RYTHM3 KMSY/1527	
PA24/I		14				
T220						
66						
04						
		MHZ				ZHU
29						

❖ **QUESTION 6:** What is the filed true airspeed for LN43X?

❖ **QUESTION 7:** What type of strip is this?

❖ **QUESTION 8:** To which facility has flight plan information been forwarded?

Continued on next page

EXERCISE 1: IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS *(Continued)*

Questions
(Cont'd)

EXERCISE 1 STRIPS – Q9, Q10							
CGFPL M20P/A T140 66 01		↑			GLH	KJAN MHZ V74 KPBF/0108	
		KJAN P1428					
N6264L BE35/A T130 66 02	DORTS 1401	26 14 ↓		70	KJAN	KMLU V417 MHZ KJAN	
		MHZ					

30

❖ **QUESTION 9:** If CGFPL is ready to depart at the proposed time, will it depart before N6264L arrives at MHZ VORTAC?

❖ **QUESTION 10:** What type of strip is CGFPL?

EXERCISE 1 STRIPS – Q11, Q12									
N555SC C425/A T240 66 03	GLH 1408	27		160	MCB	KPBF V74 MHZ V9 KMCB/1445	ZHU		
		14							
		MHZ							

❖ **QUESTION 11:** What is the previous fix for N555SC?

❖ **QUESTION 12:** What type of strip is this?

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EXERCISE 1: IDENTIFYING INFORMATION ON FLIGHT PROGRESS STRIPS *(Continued)*

Questions
(Cont'd)

EXERCISE 1 STRIPS – Q13, Q14, Q15							
FDX1726	MEI 1419	32 14	160	STUEE	KATL MEI V18 MLU KSHV		
B772/A T440							
66							
03		MHZ					
32							

❖ **QUESTION 13:** What is the posted fix for FDX1726?

❖ **QUESTION 14:** What type of strip is this?

❖ **QUESTION 15:** If the time is now 1400, in how many minutes is FDX1726 expected over the posted fix?

EXERCISE 2: COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES

Exercise 2

COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES EXERCISE



Purpose: to practice computing plus times and posted fix estimates

Directions: review provided strips and determine plus times or posted fix estimates as appropriate

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Directions

For items 1 through 6, use the strips provided to compute the plus times for inactive flights and posted fix estimates for active flights. Write your answers in the spaces provided. Refer to the Aero Center map to obtain mileages.

Continued on next page

EXERCISE 2: COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES *(Continued)*

Questions

1. COMPUTE THE PLUS TIME						
N172 C210/A T185 66 02	KVKS P1225			SQS	KVKS MHZ V9 SQS KGWO/0042	
		MHZ		90		
34						

2. COMPUTE THE PLUS TIME						
N172 C210/A T185 66 03	MHZ		↓	KGWO	KVKS MHZ V9 SQS KGWO/0042	
		SQS		90		
35						

Continued on next page

EXERCISE 2: COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES *(Continued)*

Questions
(Cont'd)

3. COMPUTE THE PLUS TIME							
AAL7	KJAN			MLU	KJAN MHZ V18 MLU CQY6		
MD82/L	P1430				KDFW		
T420							
66							
02	+11	STUEE		160			ZFW
36							

4. COMPUTE THE FIX ESTIMATE							
N44AS	GLH		110	KJAN	KPBF V74 MHZ KJAN		
BE9L/A	1026	↓					
T250							
66							
02		MHZ					
37							

Continued on next page

EXERCISE 2: COMPUTING AND RECORDING PLUS TIMES AND ESTIMATES *(Continued)*

Questions
(Cont'd)

5. COMPUTE THE FIX ESTIMATE						
A31748	IGB 1421	↓	100	KGWO	KCBM IGB V278 SQS KGWO	
A10/P T310						
66						
02		SQS				
38						

6. COMPUTE THE FIX ESTIMATE						
N68TR	HEZ 1748	↓	70	KJAN	KAEX V245 MHZ KJAN	
C182/A T185						
66						
01		MHZ				
39						

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS

Exercise 3

RECORDING FLIGHT PLANS AND DETERMINING FIX POSTING EXERCISE



Purpose: to practice recording flight plans and determining fix postings

Directions: copy flight progress strips read by your instructor, determine fix postings, and then prepare flight progress strips

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Part 1 Directions

Your instructor will read ten flight plans, which you will copy on the **bottom** strip on each of the next ten pages.

Part 2 Directions

You will use the flight plan proposal information copied in Part 1 of this exercise to determine the fix posting(s) required. Using the blank strips supplied in Part 1, copy the estimates and prepare all required strips for each of the ten flight plans. You may **not** need to use all the strips provided. Also, you may want to remove the pages from your binder for ease of use during this exercise.

Continued on next page

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips

[illegible]

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

2. AHAB56

The diagram shows the layout of the AHAB56 ship. The hull is green, and the superstructure is white. The layout includes a bridge, a main cabin area, and a stern section. The diagrams are oriented horizontally.

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

3. UAL50

The diagram shows two identical horizontal bars, each divided into seven main sections. The third section from the left is further subdivided into three smaller rectangular blocks. The top bar is positioned above the bottom bar, and both are filled with a light green color.

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

[illegible]

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

5. N273X

The figure displays two identical horizontal bar charts, one above the other, representing data for N273X. Each bar is composed of seven segments. The third segment from the left is subdivided into three smaller segments. All segments are filled with a light green color.

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

6. N650JR						

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

[illegible]

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

8. N15T

The figure shows two identical horizontal bar charts, one above the other. Each chart is divided into 7 segments by vertical lines. The third segment from the left is further subdivided into three smaller segments by two horizontal lines. The segments are colored light blue. The top chart is labeled '8. N15T' in bold black text above it.

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

[illegible]

Continued on next page

EXERCISE 3: RECORDING FLIGHT PLANS AND DETERMINING FIX POSTINGS *(Continued)*

Strips (Cont'd)

10. N479GB

The figure displays three identical horizontal bar charts, each representing the N479GB dataset. Each bar is divided into seven segments. The third segment from the left is further subdivided into three smaller segments, with the middle one being the largest. The segments are colored in a light blue shade.

IN CONCLUSION

Lesson Review

LESSON REVIEW

The following topics were covered in this lesson:

- Fix postings for departure, arrival, and en route aircraft
- Designated spaces for data entries and control symbols
- Calculating estimates using plus times

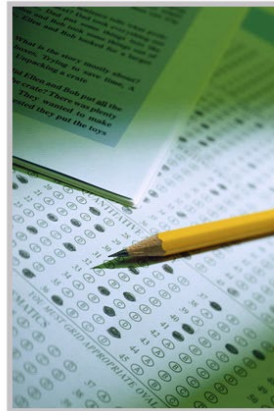


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End-of-Lesson Test

END-OF-LESSON TEST

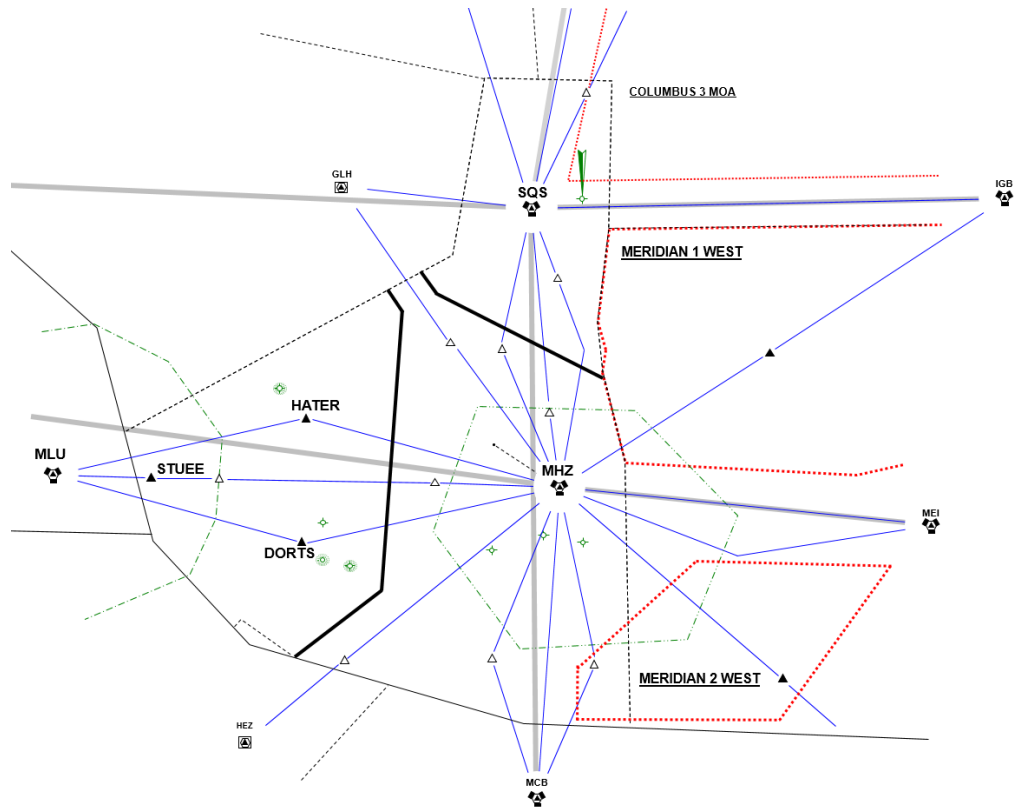
Flight Progress Strips



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APPENDIX A: FIX POSTING AREAS

Fix Posting Areas



JAN Low Fix Postings

V9	SQS MHZ
V11	SQS MHZ
V18	STUEE MHZ
V74	MHZ
V245	MHZ
V278	SQS
V417	DORTS MHZ
V427	HATER MHZ
V535	SQS
V555	SQS MHZ
V557	SQS MHZ

APPENDIX B: FLIGHT PROGRESS STRIP FOR EN ROUTE DATA ENTRIES

Flight Progress Strip Spaces
JO 7110.65,
par. 2-3-2

3	1	2	11	15	16	20	21	25	27
4			12				22		28
5			13				23		
6			14	17	18				
7	8								
	9		14a	19		20a	24	26	29 30
	10								

⊙ This is a nonradar strip.

Key

SPACE	CONTENT
1	Verification symbol, if required
2	Revision number (Not used in ERAM)
3	Aircraft Identification (AID)
4	Number of aircraft if more than one, Heavy Aircraft indicator if appropriate, type of aircraft, and equipment suffix H/ - Heavy
5	Filed true airspeed
6	Sector number
7	Computer Identification (CID) number, if required
8	Estimated ground speed
9	Revised ground speed or Strip Request (SR) originator
10	Strip number
11	Previous fix
12	Estimated time over previous fix
13	Revised estimated time over previous fix
14	Actual time over previous fix, or actual departure time entered on first fix posting after departure
14a	Plus time expressed in minutes from the previous fix to the posted fix
15	Center-estimated time over fix (in hours and minutes) or clearance information for departing aircraft
16	Arrows to indicate if aircraft is departing (↑) or arriving (↓)
17	Pilot-estimated time over fix

Continued on next page

APPENDIX B: FLIGHT PROGRESS STRIP FOR EN ROUTE DATA ENTRIES *(Continued)*

Key (Cont'd)

SPACE	CONTENT
18	Actual time over fix, time leaving holding fix, arrival time at nonapproach control airport if space 19 is the airport, or symbol indicating cancellation of IFR flight plan for arriving aircraft, or departure time (actual or assumed)
19	Fix (for departing aircraft, add proposed departure time)
20	Altitude information (in hundreds of feet)
20a	OPTIONAL USE , when voice recorders are operational; REQUIRED USE , when the voice recorders are not operating and strips are being use at the facility. This space is used to record reported RA events. The letters RA followed by a climb or descent arrow (if the climb or descent action is reported) and the time (hhmm) the event is reported.
21	Next posted fix or coordination fix
22	Pilot's estimated time over next fix, or arrival time (at non approach control airport) if space 21 is the airport.
23	Arrows to indicate north (↑), south (↓), east (→), or west (←) direction of flight if required
24	Requested altitude
25	Point of origin, route as required for control and data relay, and destination
26	Pertinent remarks, minimum fuel, point out/radar vector/speed adjustment information or sector/position number (when applicable in accordance with JO 7110.65, paragraph 2-2-1, or NRP
27	Mode 3/A beacon code, if applicable
28	Miscellaneous control data (expected further clearance time, time cleared for approach, etc.)
29-30	Transfer-of-control data and Coordination indicators

- ⊙ Facility air traffic managers may authorize the optional use of spaces 13, 14, 14a, 22, 23, 24, and 28 for point out information, radar vector information, speed adjustment information, or transfer-of-control data.

APPENDIX C: EQUIPMENT QUALIFIERS

Equipment Qualifiers

JO 7110.65,
par. 2-3-8,
table 2-3-10

Separation Standard	Navigation Capability	Transponder Capability	Suffix
RVSM	Any	Failed Transponder	/H
	Any	Failed Mode C	/O
	No RNAV, No GNSS	Transponder with Mode C	/W
	RNAV, No GNSS	Transponder with Mode C	/Z
	GNSS	Transponder with Mode C	/L
Non-RVSM	No DME	No Transponder	/X
		Transponder, no Mode C	/T
		Transponder with Mode C	/U
	DME	No Transponder	/D
		Transponder, no Mode C	/B
		Transponder with Mode C	/A
	TACAN	No Transponder	/M
		Transponder, no Mode C	/N
		Transponder with Mode C	/P
	RNAV, No GNSS	No Transponder	/Y
		Transponder, no Mode C	/C
		Transponder with Mode C	/I
	GNSS	No Transponder	/V
		Transponder, no Mode C	/S
		Transponder with Mode C	/G