

Instrument Rating Airplane - IRA Memory Aid

(Version 53)

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* You can watch the video that covers this Memory Aid by logging in to sheppardair.com, picking one of the 3 big, red checklist buttons, and then scrolling to the bottom of the page.

* The following references help reinforce some of the more difficult course questions. This handout does not come close to covering all of the questions that will be on your FAA exam, so study all of the questions in the course. Use this Memory Aid as described in the Study Strategy. It's divided into the Subject Categories in the course.

* There are several groups of questions in this Memory Aid that identify the correct answer by LOW, MID, or HIGH... these words mean that the correct answer is the LOWEST of the 3 numerical choices, the MIDDLE of the 3 numerical choices, or the HIGHEST of the 3 numerical choices... it's helpful to see where the correct answer lies numerically with respect to the other two choices.

'Aerodynamics & Aircraft' Knowledge Category:

Magnetic compass turn questions:

Turning to the	from a heading of	the answer is:	
Right	East	Correct Smooth	(#1157)
Right	West	Correct Smooth	(#3314)
Right	South	Right Faster	(#1158, 2745, 2979)
Right	North	Left	(#1162)
Left	East	Correct Smooth	(#1236)
Left	West	Correct Smooth	(#2837)
Left	South	Left Faster	(#1160, 2574, 3315)
Left	North	Right	(#1164, 2766, 2896)
Left (280°)	North (350°)	Slower Rate	(#2974)

'IFR and Navigation' Knowledge Category:

Holding Questions:

Fig 87:	Hold WEST STANDARD turns = Direct	(#1741, 2892)
	Hold EAST STANDARD turns = Parallel	(#2702)
	Hold EAST LEFT turns = Teardrop	(#2840)
	Hold SOUTH STANDARD turns = Direct	(#2951)

Fig 112:	090° Radial / 350° HDG = Direct	(#1744)
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Fig 113:	180 = Direct Only	(#1746, 2908)	- or -
	360 RT Turns = Parallel Only	(#2791)	
	360 LT Turns = Teardrop Only	(#1747)	
	270 = Direct Only	(#1748, 2904)	
	060 = Teardrop Only	(#2696)	
	330 = Parallel Only	(#2769)	

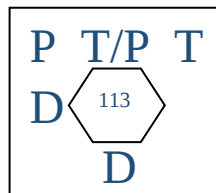
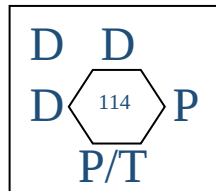


Fig 114:	090 = Parallel Only	(#2867)	- or -
	180 RT Turns = Teardrop Only	(#1751)	
	180 LT Turns = Parallel Only	(#2709)	
	270 = Direct Only	(#1749)	
	330 = Direct Only	(#2790)	
	360 = Direct Only	(#1750)	



To use the holding graphic: imagine the figure number in the middle is a VOR station with radials broadcast outward. The holding radial hits a letter representing the answer. For example, if the holding radial strikes a letter 'P', it's a Parallel entry. If the holding radial strikes a letter 'T', it's a Teardrop entry. Etc.

Fig 115:	090° Radial / 350° HDG = Direct	(#1753)
Fig 116:	270° Radial / Left Turns / 330° HDG = Teardrop	(#1754)
Fig 116:	270° Radial / Left Turns / 055° HDG = Direct	(#2887)
Fig 157:	GJT RWY 11 Missed = Direct	(#3388)
Fig 159:	DRO RWY 03 Missed = Direct	(#2700)
Fig 160:	EUG RWY 16L Missed = Parallel	(#3390)
Fig 218:	DSM Missed = Parallel or Teardrop	(#3313)
Fig 219:	RIR Missed = Direct	(#1766)
Fig 230:	Baldwin Muni Missed = Parallel/Teardrop	(#2513)
Fig 232:	DUC RWY 35 Missed = Parallel	(#2496)
Fig 234:	LNK RWY 18 Missed = Parallel	(#2512)

Fig 240: **Buck Davis Field Missed = Parallel or Teardrop** (#2514)
 Fig 242: **LIT RWY 36 Missed = Teardrop** (#1765)

'Weight and Balance / Performance' Knowledge Category:

Rate of Climb (most are HIGH):

150 knots	HIGH	1200	(#1932)
140 knots	HIGH	945	(#1920)
140 knots	HIGH	970	(#1926)
120 knots	HIGH	870	(#1170)
120 knots	HIGH	770	(#2995)
100 knots (fig 189)	MID	641	(#2579)
100 knots (fig 216)	MID	585	(#2928)
100 knots (fig 182)	LOW	675	(#2933)
90/120 knots (figs 163 & 164)	HIGH	700/600/870	(#2603, 2972, 3285)
90 knots (fig 189)	MID	578	(#1923)
90 knots (fig 211)	MID	506	(#2916)
80 knots (fig 189)	MID	513	(#2883)

Rate of Descent questions (most are MID):

ILS RWY 36L	HIGH	637	(#1944)
Fig 188, PDX	HIGH	740	(#1950)
Fig 242	HIGH	557	(#2045)
Fig 160, 105 kts	HIGH	557	(#2457)
ILS RWY 9, 100 kts	HIGH	478	(#3347)
Fig 160, 90 kts	MID	480	(#1940)
ILS RWY 6, 90 kts	MID	478	(#1964)
ILS RWY 9, 90 kts	MID	398	(#2481)
ILS RWY 9, 70 kts	MID	318	(#3335)
COVDU	MID	600	(#2492)
LOC RWY 6, 60 kts	MID	318	(#2895)
6 DME Fix (fig 192)	LOW	350	(#1952)
Fig 245	LOW	360	(#2572)