Learning Objectives IF **Name of Student:**

Key to Colours: Long Briefings | Teach / Demo | Revise | Practise | Progress Test or Exam

Lesson Number	Learning Objectives Exercise Number	FNPT Time	A/C Time	Flight Plan to File or SIM A/C to use	Full Panel Select' Radial Scan	Turning, Climbing , Desc.	Radar Vectors & SRA Approach	Cockpit Managmnt & Instruments	U.A.'s Full Panel	NDB VOR Trckng Station Passage RMI OBS CDI	QDM / QDR Radial Intercept & Track	Position Fix. VOR-DME VOR-VOR	LIMP (LIMited Panel)	LIMP Compass Turns, Timed Turns	U.A.s LIMP	Wind Drift Mental Calcs., Magenta Diamond	DME Arc	RANT XL	Hold Entry	Hold Maint.	Drop-In RoD Calc & Corrcnt	VOR/ DME App	Missed App. & Go-Around	CDFA App	NDB App.	ILS & LLZ App	Circle to Land	En-Route Holds	IFR Flightplan	IFR RT & Comms	Fly a SID	Fly a STAR	A/Pilot NAV Modes & VNAV Modes	En-Route & Airways	GNSS Deps & RNP/ LPV Appr	Lesson Plan: Instructor Teach or, Suggested. Practice Plate or Approach Type
	BIFM																																				Selective Radial Scan, Techniques, CDFA Appr.
1	**Ex.1**			Simple																																	6-Pack Scan, Power Changes, Radio Tuning
	Ex 2.	1:00		Simple																																	Instructor Teach/Demo
2	**Ex 3**	1:00		Simple																																	T/O, radar vectors to position for App on RW20 LEJR
3	**Ex4a**			Simple																																	"The Story" & all Instruments / Avionics Checks
	Ex 4	1:00		Simple																																	Instructor Teach/Demo
4	**Ex 4, 5 &7**		1:00	VFR																																	Instructor Teach/Demo in aircraft
5	**Ex 6**	1:00		Simple																																	NDB, VOR Tracking with RMI, OBI & HSI, Nil Wind
6	**Ex 6**		1:00	VFR																																	Instructor Teach/Demo
7	**Ex 8**	1:00		Simple																																	Instructor Teach/Demo
8	**Ex 9**		1:00	VFR																																	Instructor Teach/Demo
9	**Ex 9**		1:00	VFR																																	Student Fly
	Totals	5:00	4:00	9:00																																	
	BIFM		1:00	VFR																																	BIFM Exam
	3SE																																				
10	**Ex. 10**																																				NDB Tracking with Wind, no GPS Wind Bug, manual Wind Crrctns, IFR Comms, get ATIS, Req Startup, Taxi etc
	Ex 11	1:00		Simple																																	NDB To/From Radial Intercepts and off-axis Tracking with Wind, manual Wind Crrctns
11	**Ex 12**																																				VOR Tracking, RMI, RBI, OBI, HSI with wind No GPS Wind Bug, manual Wind Crrctns
	Ex 13	1:00		Simple																																	VOR QDM/QDR Interceptions with wind, , manual Wind Crrctns
12	**Ex 14**			Simple																																	DME Arc, both inside and outside approach, RMI/RBI & HSI Method, Nil Wind, then use the M/Appt Proc RW20 LEJR, with wind, No GPS Trck Bug.
	Ex 16	1:00		Simple																																	Procedure Turns & Base Turns, with Descent to platform. Include ATIS & pre-Landing Chx
14	**Ex 22**	1:00		Simple																																	Radar Vectored VDF Approach, teach CDFA Technique, Config techniques, RofD Calculations, Pitch for RoD, Power for Speed, MApp & return to Beacon,, repeat, change wind apply to VOR App RW20
15	**Ex11-14, 18**		1:00	VFR																																	Use Practice Plate VULCN1E, fly DME Arc, Radial intercept and CDFA back to Echo (no Hold) (Instructor Demo)
16	**Ex 17**	1:00		Simple																																	Hold Entries, All, Nil Wind and Hold Maintenance, Abeam Fix, Timings, Gate
17	**Ex 17**	1:00		Simple																																	Hold Entries, All, JRZ Hold with Wind, West & East. Single Drift, Hold Maint, Abeam Fix, Timings, Gate, No GPS Wind Bug, manual Wind Corrctns
18	**Ex 17**	1:00		Simple																																	Repeat Lesson 17 at LEZL, RW27 Hold, East&West Wind, intro to RANT XL. Introduce full Chx, DATEPIC / BUMFICHL
19	**Ex 17**	1:00		Simple																																	En-Route RNAV Holds, GPS Holds and Off-Axis Holds, revision of Lesson 17. Fly LEJR VOR RW02 MApp, KUBAS Hold with wind. Full Chx
20	**Various**		1:00	VFR																																	Use Practice Plate VULCN1E, fly DME Arc, Radial intercept and CDFA back to Echo, En-Route Hold (Both), Student Practice, no assistance.
21	**Ex 22 & 27**	1:00		Simple																																	VOR Hold, Racetrack & VOR Approach LEJR RW20, missed App std MApp Proc back to VOR. Full Chx
21	**Ex 19**	1:00		Simple																																	Complete RW20 Take Off MAppProc to DME Arc, Hold at ARSAS VOR APP RW20, wind West/East min 20Kts. Student Practice
22	**Ex 24**	1:00		Simple																																	ILS Approach, with wind, the Drop-In, Config techniques, repeat, change wind
23	**Ex 23**	1:00		Simple																																	Localiser (LLZ) App with wind, LEJR, Zulu & Yankee, MApp & return to beacon, repeat, change wind
24	**Ex 21**	1:00		Simple																																	NDB Hold with wind, Racetrack & App, MApp, return to beacon, repeat, change wind
	Totals	13:00	2:00	15:00																																	
	Module 4 SE																																				
25	**Ex 21 & 26**	1:00		Simple																																	LEJR RW20 Mapp Proc Dept, 2x NDB Hold with wind, NDB App, MApp, return to beacon, 1x ILS App with Circle to Land (set up X-Wind on TDZ)
26	**Ex 25**	1:00		Simple																																	Intro to Auto Pilot, HDG/Nav & App Mode, Valencia RNAV/LPV Dep, Arr & LPV Appl Route: ORVU1A det VL004 dct MULAT RNP Z RW30
27	**Ex 20**	1:00		Simple																																	SANTA 2V Dep RW20 (call for dct NAVUT) AP & GNSS to be used for NAVUT, dct MRN by VOR, GNSS dct TENDU for Hold & ILS 09 LEZL, MApp
28	**Various**	1:00		Simple																																	GNSS Departure Santander, en-route phase, Santander LPV App, MApp return for non-Prec. GNSS Approach
29	**Various**	1:00		Complex																																	Practice Plate MONTY 1N
30	**Various**	1:00		Complex																																	SANTA Dep dct Granada, VOR Hold, ILS App MApp, circle to Land RW09
31	**Various**	1:00		Complex																																	GNSS Departure Faro, en-route phase, Faro LPV App, MApp return for non-Prec. GNSS Approach
32	**Various**	1:00		Complex																																	Instructors Discretionary SIM session to cover areas of weakness in the Student. Filling in an IFR Flight Plan
33	**Various**	1:00	1:00	IFR																																	LEJR SANTA Dep. ARSAS/KUBAS en-route hold, VOR App, MApp, visual circuit to land
34	**Various**	1:00		Complex																																	GNSS Departure Malaga JRZ 1L RW13 , en-route phase MAR, GBAS App Z RW13, MApp return for non-Prec.
35	**Various**	1:00		Complex																																	GNSS Departure Queenstown NZQN ANPOV 3F, en-route phase EPDEX, RNP Z RNP Z RW23 App, MApp
36	**Various**	1:00		Complex																																	Instructors Discretionary SIM session to cover areas of weakness in the Student
37	**Various**	1:00		Complex																																	GNSS Departure ????????, en-route phase, ????? LPV App, MApp return for non-Prec. GNSS Approach
	Sub Totals	13:00	1:00	14:00																																	
	Prog Chk 2		1:00		VFR																																
	Module 5 SE																																				
	Various	1h 30m																																			Instructors Discretionary SIM session to cover areas of weakness in the Student
	Ex 11		1:00	IFR																																	SANTA Dep LEJR, dct JER/JRZ ILS MApp, dct JER/JRZ for Non-Prec App
38	**Ex 12**		1:00	IFR																																	LEJR RW20 Non-Std Dep, dct JER, NDB Hold, NDB App MApp, dct JER, ILS App circle to land
39	**Ex 13**		1:15	VFR																																	Practise Plate VULCN, break off for Limited Panel work and Unusual Attitudes, CDFA to Echo
40	**Ex 14**		1:15	IFR																																	LEJR RW20 Non-Std Dep, dct JER, NDB Hold, LLZ App MApp, dct JER, ILS App circle to land
41	**Final SIM Chk**	1:30		Complex																																	LEJR-LEZL: SANTA 2 Dep RW20 (call for dct NAVUT) AP & GNSS to be used for NAVUT, dct MRN by VOR, GNSS dct TENDU/ROTEX for Hold & ILS LEZL, MApp dct XETAN/KUBAS for Non-Prec App
42	**Final FLT Chk**		1:30	IFR																																	LEJR-LEZL: SANTA 2 Dep RW20 (call for dct NAVUT) AP & GNSS to be used for NAVUT, dct MRN by VOR, GNSS dct TENDU/ROTEX for Hold & ILS LEZL, MApp dct XETAN/KUBAS for Non-Prec App
	Prog. CHK		1:00	IFR/VFR	IFR/, VFR																																
	Sub Totals	3:00	7:00	10:00																																	
	Grand Totals	29:00	10:00																																		
	SEP IR Skills Test		1:30																															© Stephen Evans 2021			GNSS Departure, en-route and LPV Approach to be carried out in the SIM

BIFM: Official Exercise Numbers & Learning Objectives

1: Level Flight
2: Climb & Descent
3: Instrument Pattern
4: Unusual Attitudes
5: Repeat of 4
6: RNAV: VOR, NDB (VDF if avail)
7: Repeat of 4
8: Partial Panel, inc Unusual Attitudes
9: Consolidation

ST3 - ST5: Official Exercise Numbers & Learning Objectives

10: NDB Orientation: homing vs tracking with / without wind
11: NDB QDM/QDR interceptions 45°, 90°/45°, 180°/90°/45° method
12: VOR Orientation (as per Ex.10)
13: VOR Interception (as per Ex.11)
14: DME ARC
15: PBN Ops: Flight prep' & ID of the Req equip, en-route Ops, monitoring of Nav accuracy
16: Base turns and Procedure Turns
17: Holds /Racetrack Proc', entry, effects of wind, timing, abeam fix, gate
18: En-route navigation based upon VOR, NDB, GPS
19: Departure routes: Conv' Nav, PBN Deps, verification of correct proc', X-chk with nav chart
20: Arrival, routes, Transitions, Conv' Nav, PBN arrivals and transitions
21: NDB Approach
22: VOR Approach
23: LLZ Approach
24: ILS Approach
25: PBN Approach:
2D Operations (including maintaining CDFA profile)
3D Operations (equipment permitting)
26: Circling
27: Missed App. procedure, Conv' Nav , PBN nav, after failure of PBN equip