

Swiss Confederation

Federal Department of the Environment, Transport, Energy and Communications DETEC

Federal Office of Civil Aviation FOCA

Safety – Division Flight Personnel
3003 Bern

IR PBN Knowledge Verification Guidance Material

This documents contain a list of possible subjects that may be used by the examiner for the conduct of the IR PBN knowledge verification. The evaluated subjects and results shall be recorded on form 69.800.

Basic	c PBN knowledge		
1			
2	Traditional IFR compared to RNAV		
3	Differences between RNAV, RNP, PBN		
4	RNAV limitations		
5	P-RNAV versus RNP1		
6	R/T phraseology for RNAV operations		
7	Equipment capability according to airspace requirements		
8	Finding aircraft certified equipment capability		
9	Problems posed by high accuracy navigation		
10	GNSS		
11	Position determination concepts Minimum number of satellite required		
12	Different GNSS constellations in operation		
13	-		
-	Almanac download required time		
14	Satellite acquisition required time Influence of the satellite constellation geometry		
15	· ·		
16	Accuracy, integrity, availability, continuity, vulnerability GNSS limitation		
17			
18	GNSS system errors		
19	Interferences		
20	Factors influencing GNSS performance		
21	Multipath, masking		
22	RAIM function, aim of a RAIM prediction		
23	FD versus FDE		
24	AUGUR prediction tool		
25	Mask angle		
26	NANUs, GPS Notams		
27	Augmentation systems concept		
28	ABAS, SBAS, GBAS		
29	GALILEO, WAAS, etc		
30	Need of RAIM in SBAS coverage		
31	Position verification		
32	Total system error (TSE)		
33	Alarm limits		
	Database		
34	AIRAC cycle		
35	Navigation data alerts (eg Jeppesen production notices & alerts)		
36	Coding concept, reading basic ARINC 429 codes		
37	Approach waypoints coding		
38	Path terminators		
39	Database errors		

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