FPDAM

Flight Procedure Design and Airspace Management

FPDAM is IDS AirNav's market leading solution for flight procedure design. FPDAM provides an interactive environment which enables users to create, visualize, check and maintain instrument flight procedures compliant with international (ICAO, FAA, and Canadian), standards.
FPDAM implementation allows civil and military agencies to design, document an instrument flight procedure in few hours.
FPDAM fully supports all types of procedures including: SID/ departures, STARs/arrivals and approaches for conventional, RNAV/PBN, RNP AR, APV/LPV, GLS, Baro-VNAV guidance systems;
Allows users to perform terrain and obstacle assessments by importing and utilizing digital terrain data relevant to procedure design in any known projection, datum and resolution/accuracy;
Ensures tight control on the criteria application providing online checks about compliancy to reference criteria and ARINC 424 coding.

FPDAM Features

ATS data is stored and managed in the IDS AirNav AeroDB database; with dedicated data translators providing data interchange capabilities (AIXM and custom formats);
Terrain and raster database (3D terrain elevation data and images) management;
All different types of conventional and RNAV protection areas builder (VOR/TACAN, NDB, LOC, ILS, DME, PAR, SRE, RNAV/PBN, RNP APCH AR, GBAS, SBAS, APV) for SID, STAR and approach procedures;
Obstruction assessment (against natural and human made) for minima, penetration, OCA/H, DA/DH, MDA/H and PDG/CG calculator;
OAS ILS, BASIC ILS and CRM capability analysis;
Helicopter procedures CAT H and PinS are fully included;
Procedure textual report included for the submission forms generation;

MORE THAN 200 OPERATIONAL INSTALLATIONS WORLDWIDE

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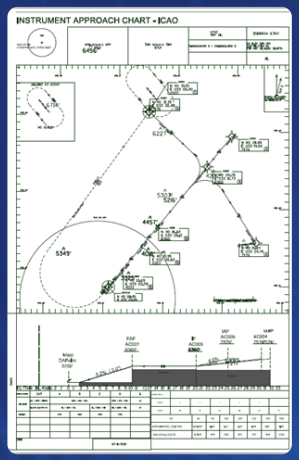
IDS AirNav
an enav group company

Benefits

The only design system fully integrated in a complete AIS/ AIM suite. The IDS AirNav suite of products enables EUROCONTROL Aeronautical Data Quality (ADQ) mandate to be respected. The full design process, as stated in ICAO 9906, can be traced and all input and output data for each single step stored in the workflow and task management system named PLX.
Time saving and data quality: data loading (DEM, DTED, BT, SRTM) does not require any conversion.
Full Quality Assurance documentation in accordance with the ICAO 9906 Vol. III requirements.
Interoperability:
FPDAM is globally the most used system within design organizations (ANSPs/CAAs/Airlines/Airport Authorities) and this ensures full compliance with operational needs.
Regular updates: FPDAM is continually updated ensuring that all calculations are in accordance with current criteria and applicable annexes and changes.

FPDAM Modules

- **AeroChart** – automatically builds and maintains draft SID, STAR and Approach charts from the FPDAM project files. This can be done simply by selecting the relevant flight procedure, a preconfigured template and then running the symbolization process. New chart layouts can be created and background graphic information such as topography and terrain maps can be used.
- **SSA Encoder** – allows SID, STAR and Approach procedures to be stored in the central AIS database for subsequent data transfer via ARINC files or other formats.
- **AeroReport** - allows the creation of textual technical custom reports out of the FPDAM framework in a very simple and fast way using custom templates.



PROCEDURE DESIGN REPORT - PERFORMANCE BASED NAVIGATION

1. AIRPORT	2. RUNWAY	3. TYPE OF PROCEDURE	4. SEGMENT	5. DESIGN DATE
PHETCHABUN / PHETCHABUN AIRPORT	RWY 36	RNP APCH	ST36W to IFI36	1-Feb-2019

6. MINIMUM SEGMENT LENGTH

FIRST FIX						SECOND FIX FOR PRETECION AREA					
FIX NAME:	ST36W	IAS (MAX):	250 KT	ALTITUDE:	6000 FT	FIX NAME:	IFI36	IAS (MAX):	250 KT	ALTITUDE:	3900 FT
BANK ANGLE:	25 DEG	TEMP:	ISA+15 -	K FACTOR:	1.123 -	BANK ANGLE:	25 DEG	TEMP:	ISA+15 -	K FACTOR:	1.088 -
TURN ANGLE:	0 DEG	RATE OF TURN:	1.81 °/SEC	RADIUS OF TURN:	2.46 NM	TURN ANGLE:	90 DEG	RATE OF TURN:	1.87 °/SEC	RADIUS OF TURN:	2.31 NM

SEGMENT TYPE	STARTING FIX	ENDING FIX	TYPE	ALTITUDE	TAS	TURN ANGLE	MSD	MINIMUM SEGMENT LENGTH	SEGMENT LENGTH (MEASURE)
IAF	-	ST36W	FLY-BY	6000 FT	280.77 KT	0 DEG	-	2.7 NM	7 NM
IF	ST36W	IFI36	FLY-BY	3900 FT	271.88 KT	90 DEG	2.7		

7. DESCENT GRADIENT(DG)

SEGMENT	TAS	BANK ANGLE	TURN ANGLE	RADIUS OF TURN [r]	r*TAN (TURN ANGLE/2)	π/180 * TURN ANGLE/2 * r	Δh	TRD	DG
ST36W	280.77 KT	25 DEG	0 DEG	2.46 NM	0 NM	0 NM	2100 FT	7 NM	4.9 %
IFI36	271.88 KT	25 DEG	90 DEG	2.31 NM	2.31 NM	1.81 NM			

sales@idsairnav.com