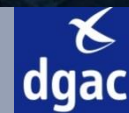


# ICAO PBN Workshop Tanzania

## Nav DB Program



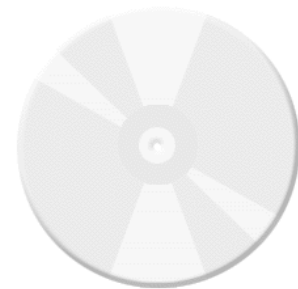
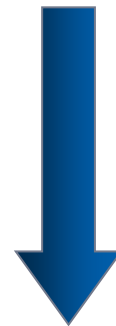
# RNAV computer and the coding cycle



REPERES FIXES	IDENTIFICATION IDENTIFICATION	COORDONNEES COORDINATES	CODAGE PROPOSE PROPOSED CODING	STATUT STATUS
IAF	VAVIT	42° 48' 38.6"N - 008° 55' 09.4"E	IF	Fly By
IAF/IF	BAMD I	42° 46' 34.5"N - 008° 47' 30.4"E	IF/TF	Fly By
FAF	KC408	42° 42' 28.4"N - 008° 47' 31.7"E	TF	Fly By
MAPT	MAPTB	42° 36' 01.31"N - 008° 47' 33.54"E	TF	Fly Over
MATF	BUNAX	42° 39' 16.0" N - 008° 39' 11.0" E	DF	Fly By
MATF	CALNO	42° 47' 58.0" N - 008° 21' 52.0" E	TF	Fly Over
MATF	BAMD I	42° 46' 34.5" N - 008° 47' 30.4" E	DF	Fly Over

ARINC 424 : standardizes waypoints path terminators and routes « depiction »

Translation of the route or the procedure from the paper chart into an electronic format



# PBN Manual recommendation ICAO Doc 9613

- Vol II RNP 4 Part C Chapter §1 1.3.6.3 and RNP APCH § 5.3.6.3
  - Aircraft operators should consider the need to conduct periodic checks of the operational navigation databases in order to meet existing quality system requirements.
- RNP APCH 5.3.4.1.2 a)
  - the pilot must ensure that approaches which may be used for the intended flight (including alternate aerodromes) are selected from a valid navigation database (current AIRAC cycle), have been verified by the appropriate process (navigation database integrity process) and are not prohibited by a company instruction or NOTAM;

# RNP AR APCH: NDB requirements

## 6.3.6 Navigation database

ICAO PBN Manual extract

6.3.6.1 The procedure stored in the navigation database defines the lateral and vertical path. Navigation database updates occur every 28 days, and the navigation data in every update are critical to the integrity of every RNP AR APCH procedure. Given the reduced obstacle clearance associated with these procedures, validation of navigation data warrants special consideration. This section provides guidance for the operator's procedures for validating the navigation data associated with RNP AR APCH procedures.

6.3.6.2.4 *Initial data validation.* The operator must validate every RNP AR procedure before flying the procedure in instrument meteorological conditions (IMC) to ensure compatibility with their aircraft and to ensure the resulting path matches the published procedure. As a minimum, the operator must:

- a) compare the navigation data for the procedure(s) to be loaded into the flight management system with the published procedure;
- b) validate the loaded navigation data for the procedure, either in a simulator or in the actual aircraft in visual meteorological conditions (VMC). The depicted procedure on the map display must be compared to the published procedure. The entire procedure must be flown to ensure the path does not have any apparent lateral or vertical path disconnects, and is consistent with the published procedure; and
- c) once the procedure is validated, retain and maintain a copy of the validated navigation data for comparison to subsequent data updates.

6.3.6.2.6 *Data suppliers.* Data suppliers must have a Letter of Acceptance (LOA) for processing navigation data (e.g. FAA AC 20 153, EASA Conditions for the issuance of Letters of Acceptance for navigation database Suppliers by the Agency, or equivalent). An LOA recognizes the data supplier as one whose data quality, integrity and quality management practices are consistent with the criteria of DO-200A/ED-76. The operator's supplier (e.g. the FMS company) must have a Type 2 LOA, and their respective suppliers must have a Type 1 or 2 LOA.