

Notice of Requirement NTC 91.263

**Non RNAV/RNP designated GPS
procedures & PBN Operations
with a Part 19D operational
approval**

Revision 1
[Click to select a
revision date.](#)

Preliminary

The Director of Civil Aviation issues the following requirements (“the requirements”), conditions and restrictions relating to the use of legacy Part 19D IFR Operations: GNSS “GPS-IFR operational” approvals for use of non-RNAV/RNP designated instrument procedures and PBN Operations with a legacy Part 19D approval under section 28(5) of the Civil Aviation Act 1990 and Civil Aviation Rule 91.263.

Purpose

The purpose of this notice is to specify the requirements for using a non-RNAV/RNP designated GPS navigational procedure or route (GPS-IFR), determined by the Director under rule 91.263, in relation to the following:

- i. the application of the non-RNAV/RNP designated GPS procedures;
- ii. the GPS-IFR approval the aircraft must have;

Rule 91.263 requires compliance with the requirements in this notice to ensure the safe operation of aircraft using non-RNAV/RNP designated GPS procedures.

Note: Non-RNAV/RNP procedures in the context of this notice are those published without an inset “Navigation requirement” box on the chart.

General

Civil Aviation Authority (CAA) Notices contain approvals and requirements including the detail about the approvals, standards, conditions, procedures and technical specifications that have been approved or determined by the Director under the Civil Aviation Rules. These details must be complied with by parties to whom it applies. They apply in particular circumstances to particular aviation document holders as specified in the notice.

CAA notices are issued under Civil Aviation Rules in accordance with section 28(5) of the Civil Aviation Act. This section permits the Minister of Transport to make ordinary rules, and to specify any terms and conditions within the rules:

- to require a matter to be determined, or undertaken or approved by the Authority, the Director or another person; or
- to empower the Authority, Director, or another person to impose requirements or conditions as to the performance of any activity, including (but not limited to) any procedures to be followed.

Notices support a performance-based approach to regulation, and improve the flexibility and responsiveness of the Civil Aviation Rules. They may be used where performance-based regulation is the appropriate way to achieve the desired regulatory outcome, for example, in circumstances where new technological changes or challenges require more flexibility than prescribing requirements in the rules (and rule making may get quickly out-dated), or where there is a need to respond to safety issues which the rules do not adequately deal with.

The requirements specified in this notice are mandatory and must be complied with.

Background

Civil Aviation Rule Part 19D (IFR Operations GNSS), was published in 1997. This transition rule enabled GNSS navigation based upon the GPS constellation and FAA TSO-C129 equipment.

The instrument flight procedures developed to support Part 19D enable GPS en-route, terminal and approach operations. These procedures are known as legacy GNSS (GPS) procedures, they are not PBN specification procedures as they do not conform to PBN specification requirements.

An approval under Part 19D generally allows aircraft (on the Form CAA 2129) and operators (on the operations specification - Ops Spec) for GPS oceanic/remote, en-route, terminal and approach operations without reference to the PBN specifications (e.g. RNP 1, RNAV 2, RNP APCH, etc.).

Since Part 19D publication, GNSS technology has advanced and new technical standard orders have been developed by the FAA and EASA. Multiple satellite constellations are in service. ICAO PBN Manual Doc 9613 evolved and an international standard for Performance Based Navigation published and has been in use for a number of years.

Furthermore, instrument flight procedures designed to meet the Part 19D airworthiness requirements are no longer contained in ICAO procedure design specifications under Doc 8168 – PANS OPs.

Related Rules

Civil Aviation Rules 91.261, 91.263, 91.263B, 91.263D.

Effective Dates

- (a) This notice comes into effect on [the date that the new rules come into force].
- (b) This notice expires [2 years from the date that the new rules come into force].

Issue of CAA Notice

Signed by
Director of Civil Aviation

Date

Revision History

Revision 1	Original version
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Non RNAV/RNP designated GPS procedures & PBN Operations with a Part 19D approval.



1. Application

These requirements apply to every operator of an aircraft with an existing GPS-IFR approval issued under Part 19D (IFR Operations GNSS) that was in force immediately before [in-force date of new rules].

2. Non RNAV/RNP designated GPS procedures

An operator of an aircraft referred to in section 1 may continue to carry out legacy GNSS (GPS) IFR procedures at designated aerodromes.

3. PBN Operations with a Part 19D approval

En-route Operations

(a) **RNAV 2:**

Aircraft with existing GPS-IFR en-route approvals are approved to operate on RNAV 2 ATS routes.

Terminal Operations

(b) **RNAV 1:**

- (1) Except those fitted with equipment listed in Table 1 RNAV System Capability Compliance Table, all aircraft with existing GPS-IFR Terminal approvals are approved to conduct RNAV 1 SID/STAR procedures.
- (2) Owners/Operators of aircraft with equipment listed in Table 1 RNAV System Capability Compliance Table, are not authorised to conduct RNAV 1 SID/STAR procedures unless specifically approved to do so by the Director.

Approach Operations

(c) **RNP APCH (LNAV):**

Aircraft with existing GPS-IFR non-precision approach approvals, or RNAV (GNSS) approach approvals, are approved to operate RNP APCH (LNAV), to LNAV minima, straight-in approaches (without RF legs) only.

(d) **RNP APCH (LNAV/VNAV):**

- (1) RNP APCH (LNAV/VNAV) operations require an RNP APCH LNAV/VNAV approval.
- (2) Aircraft with existing Baro-VNAV approvals are approved to operate to LNAV/VNAV minima, straight-in approaches (without RF legs) only.

4. Authorised pilots to carry out specified operations

A pilot who is authorised for the following:

- (a) RNAV (GNSS) approaches - may conduct RNP APCH operations but not RNP AR APCH, unless specifically authorised.
- (b) GNSS (GPS) IFR en-route operations - may conduct RNAV 2 operations.
- (c) GNSS (GPS) Terminal operations - may conduct RNAV (GNSS) Arrival, RNAV1 SIDs and STARs.

Table 1 RNAV System Capability Compliance Table



Manufacturer	System	Part Number	Software Version	Approval Using GPS	RNAV 2 Routes	RNAV 1 SID/STARS
Gulfstream G100	Universal UNS-1C	1017-3X-XXX and subsequent	600.X and subsequent	YES (TSO-115B and TSO-C129A Class A1/B1/C1). Must use Universal Flight Planning Program P/N K12037-6 to obtain predictive RAIM for route/procedure if one or more satellites is out of service.	YES	NO unless FMS software is 802.X or 803.X or higher
Gulfstream G100	Honeywell (Allied Signal) GNS-XLS	17960-XXXX-XXXX	ALL	See Honeywell GNS-XLS entry stating system ONLY approved for RNAV Q-routes and Obstacle Clearance Departure Procedures. NOT RNAV 1 and RNAV 2 SID/STAR procedures. PreFlight Software version 2.0 for IBM-compatible PCs running Microsoft Windows is available from Honeywell	Yes	No
Garmin	GPS 155, GPS 165, GNC 300	All	All	NO, TSO-C129 Class A1. Unable to automatically execute leg transitions and maintain tracks consistent	Yes	No

Manufacturer	System	Part Number	Software Version	Approval Using GPS	RNAV 2 Routes	RNAV 1 SID/STARS
				with Course to Fix (CF) and Direct to Fix (DF) legs. No plans to obtain Type 2 LOA for navigation database.		
Garmin	GPS 155XL, GNC 300XL	All	All	NO, TSO-C129a Class A1. Unable to automatically execute leg transitions and maintain tracks consistent with Course to Fix (CF) and Direct to Fix (DF) legs. No plans to obtain Type 2 LOA for navigation database.	Yes	No
Originally II Morrow / UPSAT now doing business as Garmin AT	Apollo 2001 Apollo 2101System	All	All	NO, TSO-C129a but not compliant due to equipment limitation that prevents selection of named departure and/or arrival procedures. No plans to obtain Type 2 LOA for navigation database.	Yes	No
Originally II Morrow / UPSAT now doing business as Garmin AT	Apollo SL50 Apollo SL60 Apollo SL65	All	All	NO, TSO-C129a but not compliant due to equipment limitation that prevents selection of named departure and/or arrival procedures. No plans to obtain Type 2 LOA for navigation database.	Yes	No
Originally II Morrow / UPSAT now doing business as Garmin AT	Apollo GX50 Apollo GX60	All	All	NO, TSO-C129a but not compliant due to equipment limitation that prevents	Yes	No

Manufacturer	System	Part Number	Software Version	Approval Using GPS	RNAV 2 Routes	RNAV 1 SID/STARS
				selection of named departure and/or arrival procedures. No plans to obtain Type 2 LOA for navigation database.		
Originally II Morrow / UPSAT now doing business as Garmin AT	Apollo GX55 Apollo GX65	All	All	NO, TSO-C129a but not compliant due to equipment limitation that prevents selection of named departure and/or arrival procedures. No plans to obtain Type 2 LOA for navigation database.	Yes	No
Honeywell	GNS-XES	17450-0305-0X0X 17450-0307-0X0X 17450-0406-0X0X	All	Yes	Yes	No
Honeywell	CDU-XLS	CDU-XLS System CDU: 18420-0101-XXXX NMU: 14141-0624-XXXX	All	Yes	Yes	No
Honeywell	GNS-XLS	17960-0102-0XXX 17960-0203-0XXX	All	Yes	Yes	No

Manufacturer	System	Part Number	Software Version	Approval Using GPS	RNAV 2 Routes	RNAV 1 SID/STARS
Honeywell	GNS-XL	18355-0101-XXXX	All	Yes	Yes	No
Honeywell	KLN-89B	066-01148-010X	All	Yes	Yes	No
Honeywell	KLN-90A	066-04031-0X11	All	Yes	Yes	No
Honeywell	KLN-90B	066-04031-XX2X	All	Yes	Yes	No
Honeywell	KLN-94	069-01034-XXXX	All	Yes	Yes	No
Honeywell	KLN-900	066-04034-XXXX	All	Yes	Yes	No
Universal Avionics Systems Corporation	UNS-1C	1017-3X-XXXX	705.X	Yes	Yes	No
Universal Avionics Systems Corporation	UNS-1C	1017-4X-XXXX	600.X	Yes	Yes	No
Universal Avionics Systems Corporation	UNS-1Csp	1019-3X-XXXX	700.x	Yes	Yes	No

Manufacturer	System	Part Number	Software Version	Approval Using GPS	RNAV 2 Routes	RNAV 1 SID/STARS
Universal Avionics Systems Corporation	UNS-1Csp	1019-4X-XXXX	600.X	Yes	Yes	No
Universal Avionics Systems Corporation	UNS-1D	1192-0X-XXX1XX	600.X	Yes	Yes	No
Universal Avionics Systems Corporation	UNS-1D	1192-3X-XXX1XX	700.X	Yes	Yes	No