

## ICAO Performance Based Navigation Manual Changes

### -- IAOPA Comments--

13 June 2011

Thank you for the opportunity to provide comments to the draft PBM Manual ops approval section. See attachments; use the Review mode when reading the PBN Manual comments.

GPS approaches are rapidly becoming the approach of choice in North America because of the flexibility and efficiency they offer. NDB approaches are now a historical oddity and VOR approaches are not far behind them in North America. GPS navigation/departures/approaches are very important to the general aviation community.

First, I am not an electronics, avionics or installation certification or operations specialist, just a pilot with lots of miscellaneous experience. Therefore, I will admit to being somewhat out of my depth, but I do have some good advisors. Nevertheless, I understand the basics associated with RNAV/RNP issues associated with the lower end of general aviation operations, particularly those draconian proposals/procedures levied by EASA on our operations segment. I am also conversant with FAA AC 90-105.

I emphasize that there is more than classification of general aviation aeroplanes recognized by ICAO. ICAO Annex 6, Part II is divided into two parts: Chapter 2 applies to all general aviation aircraft; Chapter 3 applies to large and turbojet powered aircraft. My constituency largely falls into smaller aeroplanes category covered in Chapter 2. As such my constituents are pleased to operate to a lower level of certification and operating standards, realizing that we must also fit into the system and provide a level of safety to third-parties.

AC 90-105 Appendix 1 provides a description of qualification criteria acceptable to our constituents. At the lower end of GA we are primarily interested in elementary RNAV approaches. I make this distinction because of the relative benefits and costs associated with these non-precision approaches. For those seeking the more precise and varied approach capability associated with more capable (and expensive) units (e.g., TSO C146A) they will likely have to abide by more detailed installation, certification and training procedures. So, I am primarily interested in protecting the interests of my lower-end members.

While AC 90-105 provides acceptable guidance for these desires, the series of EASA AMCs and TGLs on the subject appear to be unnecessarily stringent, onerous and expensive (see companion paper drafted by IAOPA Europe and PPL/IR, Executive Summary, pages 10-18). The costs associated with the basic and installation certification of the unit along with pilot training and certification puts the advantages associated with RNAV GPS approaches outside the reach of the average European non-complex aircraft operator. Note that this is a safety issue rather than merely one associated with costs; the ease of implementing and certifying RNAV GPS approaches will provide the general aviation pilot with a tool that will increase both utility and safety of the average GA aircraft.

The US and Canada are prime examples of the fact that reasonable certification and training regulations can provide many operational and safety advantages for the small aeroplane owner. Small GA aircraft have been successfully and safely executing GPS approaches in North America for more than 15 years; more than 100,000 GPS navigation units have been installed and are in use today. Grandfather rights for these installations are essential.

Again, the more strict and stringent procedures associated with transport category aeroplanes may be warranted due to the fact that these aircraft provide commercial service to paying passengers. The foreword to ICAO Annex 6, Part II, International General Aviation Operations,

acknowledges the private operators understand that the sometimes lower safety standards associated with non-commercial aircraft are justified and acceptable.

Therefore, we ask the following, that States through ICAO guidance:

- Accept existing GPS receiver TSOs developed by ICAO member States.
- Permit simplified installation provisions for general aviation aircraft, relying on aircraft flight manual supplements and generic installation instructions, including service bulletins that apply to an entire aircraft family covered by a single type certificate data sheet.
- Specify that flight crews meeting training criteria similar to that shown in US FAA AC 90-105 section 9.g., authenticated by a pilot self-declaration of training course completion.

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