IBAC Bulletin 15- 05

Subject: ICAO Flight Plan Content

INTRODUCTION

This Bulletin has been prepared in the light of recent developments in two ICAO Regions, namely AS/PAC and NAT that have occasioned deliberations in the respective ICAO Regional bodies i.e. APANPIRG and NAT SPG.

The bulletin addresses two subjects:

- Inconsistencies between the information regarding data link information capabilities inserted in Item 10 of the Flight Plan and the actual use of data link…..ICAO has requested that IBAC draw this matter to the attention of operators and flight planning service providers in order to achieve corrective action.

- the increasing implementation of ADS-B OUT and ADS-C/CPDLC which has led some Air Navigation Service Providers to require operators to insert in hexadecimal notation in Item 18 of the Flight Plan the ICAO 24-bit aircraft address.[1]

Inconsistencies in aircraft equipage information included in the FPL

This primarily relates to information regarding data link equipage in the the Flight Plan Item 10. It is however not confined to that. Other equipage items, notably inclusion in the Flight Plan the correct aircraft RNP or RNAV capability[2], are equally important and will become more so from an air navigation safety point of view as the ATM system continues to evolve.

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[1] For the NAT Region a proposal is expected shortly to amend the ICAO NAT SUPPs to require that operators include in hexadecimal notation the ICAO 24-bit aircraft address in Item 18 of the Flight Plan.

[2] Refer to PANS-ATM (Doc 4444) Appendix 2 Note 4 of Item 10.

Diligence will be required to correct these errors and inconsistencies[3] and will require close cooperation between the operator and its flight planning service provider. It could be the case that the latter has on record incorrect equipage information regarding a specific airframe. If so, this will need corrective action.

Insertion in Item 18 of the Flight Plan in hexadecimal notation the ICAO 24-bit aircraft address

The ICAO 24-bit aircraft address (sometimes is a unique combination of 24 bits available for assignment to the airframe for the purposes of air-ground communications, navigation and surveillance which is assigned by the National Aircraft Registration Authority..[4]

ANSPs using ADS-B OUT capability and ADS-C/CPDLC conduct a correlation between the aircraft address down- linked during log-on and the aircraft address provided in the Flight Plan. This verification is of particular importance when the separation of aircraft in an ADS-B environment is provided on a so-called 'mixed-mode' basis.[5]

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[3] ICAO PANS-ATM (Doc 4444)

"4.4.1.4 An operator shall, prior to departure:
a) ensure that, where the flight is intended to operate on a route or in an area where an RNP type is prescribed, the aircraft has an appropriate RNP approval, and that all conditions applying to that approval will be satisfied;
b) ensure that, where operation in reduced vertical separation minimum (RVSM) airspace is planned, the aircraft has the required RVSM approval; and
c) ensure that, where the flight is intended to operate where an RCP type is prescribed, the aircraft has an appropriate RCP approval, and that all conditions applying to that approval will be satisfied.

[4] Annex 10 Vol 3 Part 1 Chapter 9

`` 9.1 The aircraft address shall be one of 16 777 214 twenty-four-bit aircraft addresses allocated by ICAO to the State of Registry or common mark registering authority and assigned as prescribed in the Appendix to this chapter.``

[55] Refer to Global Operational Data Link (GOLD) Manual (Doc 10037) for guidance on the correlation ADS-C/CPDLC to be published in due course.

Q & A

Where can I find the ICAO 24-bit address?	The 24 bit code is normally written into the Airframe logbook at completion or after a modification. The hexadecimal number may or may not be included.
	The a/c Registration Certificate may include the code in hexadecimal notation since it is linked to the Aircraft Registration.
	During the 24 month pitot static/ transponder check the testing equipment can verify the code.
	For new delivery aircraft, the 24-bit address is normally provided to the airplane manufacturer by the customer and incorporated prior to delivery.
What is hexadecimal notation?	Please search the web for details.
Conversion from 24-bit to hexadecimal	Please search the web for details.
How do I construct the FPL Item 18?	``CODE/ Aircraft address (expressed in the form of an alphanumerical code of **six hexadecimal characters**) when required by the appropriate ATS authority. Example: "F00001" is the lowest aircraft address contained in the specific block administered by ICAO.``

References:

ICAO Doc 4444 PANS ATM

Annex 10 Volume 3 Part 1

Annex10 Volume 4

APANPIRG/25 Report

NAT SPG/51 Report

Author's Note

The global requirements for the Flight Plan are included in ICAO Doc. 4444.

These requirements may be supplemented by Regional Requirements which can be found in ICAO Doc 7030.

Additionally there may be additional requirements promulgated by a State/ Air Navigation Service Provider.

As the ATM system evolves it is anticipated that amendments will be progressively made to Doc 7030. It is further anticipated that eventually amendments will follow to Doc 4444 i.e. at the global level.

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