In English, please



FROM AIS TO AIM THE RIGHT INFORMATION, AT THE RIGHT PLACE, AT THE RIGHT TIME

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Thorough pre-flight preparation is a key element to successful flying. It is during this phase that the go/no-go decision is made and, when airborne, it reduces the in-flight workload. Once it has been established that both pilot and aircraft are airworthy and that the weather is adequate, then the next step is about finding the right aeronautical information for the flight.

AIS

One of the main, although probably the least well known, functions of a country's authority responsible for civil aviation is to collect and disseminate information necessary for safe and efficient air ravigation. The service in charge of this function is the AIS or Aeronautical Information Service.

The need for reliable and standardized aeronautical information was felt early on by the aviation commity and the first requirements on the subject were published in 1947 by the Council of the then newly-born ICAO as "Procedures for International Notices to Airmen". NOTAMs, already! The procedures evolved quickly to become Standards and Recommended Practices and 60 years ago, on the 15th of May 1953, ICAO's council adopted these ARPs as Annex 15 to the Convention on International Civil Aviation.

Annex 15

Annex 15 covers all aspects of aeronautical information. It defines how data should be compiled, transmitted and updated. It sets standards for publications and formats for messages. It also describes the organization of quality management systems. Since its first edition in 1953, it has been amended more than thirty times to keep up with the numerous evolutions in both aviation and information technologies. It states that "aeronautical information shall be published as an Integrated Aeronautical Information Package" or IAIP.

	Vocabulary
encombré	CLUTTERED
un équivalent	A COUNTERPART
actuellement	CURRENTLY
faire circuler	TO DISSEMINATE
s'adapter	TO KEEP UP WITH
préavis	PRIOR NOTICE
préavis court	SHORT NOTICE
une série	A SERIES
rigoureux	THOROUGH
ponctualité	TIMELINESS

IAIP

The Integrated Aeronautical Information Package gathers all the information essential for air navigation such as route details, radio frequencies, significant reporting points, etc... It consists of:

- the Aeronautical Information Publication, or AIP, and its amendment service. It contains aeronautical information of a lasting character essential to air navigation. It is where data on aerodromes, airspace, navigation aids and facilities can be found. It also includes general operational, legal and administrative information.
- Supplements to the AIP, or AIP SUP. They concern temporary changes to the AIP either of long duration, or containing comprehensive text and/or graphics which make promulgation by NOTAM impossible. They are used for example in case of extensive work programs on an aero-drome's infrastructures.
- Notices to Airmen, or NOTAM. They cover short-duration changes or short-notice permanent changes. They give operationally significant information on aeronautical facilities, procedures, services and hazards. SNOWTAMS, ASHTAMS or BIRDTAMS provide Information on snow, volcanic ash or intense bird activity.
- NOTAMs are available in the form of Pre-flight Information Bulletins, or PIBs. PIBs are the presentation of NOTAMs in effect at an airport, or along a route, retrieved from a database prior to a flight on AIS websites.
- Aeronautical Information Circulars, or AIC. They contain information relating to flight safety and air navigation or to technical, administrative or legal matters. They are issued whenever the information to be promulgated does not qualify for inclusion in the AIP or AIP SUP, or for the publication of a NOTAM.

The French IAIP is available on line at www.sia.aviation-civile.gouv.fr, its European counterparts can be found at www.eurocontrol.int/articles/ais-online

AIRAC system

The acronym AIRAC stands for Aeronautical Information Regulation and Control. It is a system that was adopted internationally in 1964,

and has been improved ever since, to make sure that everybody in the aviation community works with the same data at the same time. It requires major modifications to be announced well in advance and introduced only at regular intervals. It defines a series of worldwide common dates when operational changes, for example in airspace structure or on runways or taxiways, can take effect. These dates are known as effective dates and they always fall on a Thursday every 28 days.

Publication procedures are strictly codified to ensure that these major operational changes reach users at least 28 days before their effective date. The 28-day prior notice allows for the information to be distributed to staff and for flight management systems or aviation charts to be updated.

MIA

In the last decades, computer-based technological developments in navigation or communication systems (aRea NAVigation, Performance-Based Navigation, Datalink, ...), have increased the importance of data reliability. Present day paper documents are in many respects inefficient. Among other drawbacks, they imply manual input into systems. It is one of the reasons why ICAO has decided to transition to a digital format. Hence the move from paper-based Aeronautical Information Service to computer-based Aeronautical Information Management. But what difference will it make?

AIM will not imply great changes in the nature of the distributed data, but will introduce new ways to exchange and use it. Improvements in the timeliness and quality of aeronautical information will enhance both flight safety and the efficiency of the air navigation system.

Currently, Pre-flight Information Bulletins are often cluttered with irrelevant information, and are therefore difficult to make use of. An AIM system will filter data efficiently and present pilots with both texts and graphics in a more user-friendly format.

As for the AIRAC system, the current 28-day cycle was established with reference to the postal delivery of paper documents. In an electronic environment, shorter cycles will become possible and will be more adapted to today's fast-paced evolutions. •