International Civil Aviation Organization

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
SIXTEENTH MEETING (APIRG/16)
(Kigali, Rwanda 19-23 November 2007)

Agenda Item 4.0:   AFI Regional Air Navigation Planning and Implementation Issues

4.5:   Comprehensive AFI Regional Implementation Plan

Aeronautical Information Services Training requirements for AFI Region and JEPPERSON capabilities for training and support

(Presented by JEPPERSON)

The development of a Comprehensive Regional Implementation Plan for Aviation Safety in Africa will be critical to the future of aviation in the African Region. Jeppesen fully supports this important initiative and looks forward to playing a role in addressing and solving the safety issues as identified by ICAO and Contracting States.

As ICAO and Contracting States, the AFI Planning and Implementation Regional Group (APIRG), regional and sub-regional safety oversight organizations and ICAO partners work together, it is crucial that aeronautical information, its availability, quality, integrity and timeliness be addressed as a critical element in aviation safety.

Annex 15 to the Convention on International Civil Aviation, Chapter 1 states, in part, "The object of the aeronautical information service is to ensure the flow of information/data necessary for the safety, regularity and efficiency of international air navigation. The role and importance of aeronautical information/data changed significantly with the implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer-based navigation systems. Corrupt or erroneous aeronautical information/data can potentially affect the safety of air navigation."

Many African nations struggle with meeting the requirement to publish high quality, complete aeronautical information which is a key element of the aviation infrastructure. We feel confident the planned gap analysis will show that action is needed in this area.

While significant efforts have been taken by African States to assure that all elements of their Integrated Aeronautical Information Packages are in line with ICAO Annex 15, a number of AIPs throughout the African region require an urgent and comprehensive update to achieve adequate quality for enabling pre-flight information service and to meet the need for in-flight information. Jeppesen's experience and industry knowledge indicate that various African States'

AIPs have not been appropriately updated in past years thus producing potential safety circumstances in those States.

As Jeppesen's products are global, it has insights into the challenges faced by States and regions.ᴊᴊᴊᴊᴊᴊ Jeppesen personnel frequently assist Civil Aviation Authorities and Air Navigation Service Providers to resolve quality issues with their AIP data, incongruities across country borders and technical i ᵢᵢᵢssues which might prevent a procedure from being used in onboard navigation databases. During the past two years Jeppesen organized occasional workshops for procedure designers to help them better understand the new PANS OPS requirements related to RNAV procedure design and the coding of procedures into navigation databases.

While Jeppesen will be very pleased to continue these cooperative efforts to assist CAAs and ANSPs, there are other services Jeppesen could offer on a business basis. The following paragraphs point out some of these capabilities.

For over 25 years, Jeppesen has helped various States around the world create and update their AIPs in accordance with ICAO Annex 15. AIP charts produced by Jeppesen fully comply with ICAO Standards and Recommended Practices as defined in Annex 4. Jeppesen personnel are experienced in producing the full scope of chart types defined in Annex 4 including AOC types A & B. Jeppesen is able to meet all ICAO requirements while still having the flexibility to customize charts to specific needs of States. In addition, its production activities utilize stringent quality control procedures. All core processes for aeronautical charts and navigation data are certified under ISO 9001:2000.

A number of African States face infrastructure constraints. These deficiencies often occur at airports and include the lack of fully operational and reliable navigational aids, thus creating significant problems for the design of safe and efficient conventional procedures for terminal areas. While Jeppesen offers conventional procedure and airspace design services, the company is also recognized as one of the leaders in the design of satellite-based RNAV and RNP terminal procedures based on the latest ICAO navigation concepts and criteria. These procedures provide a safe and efficient basis for instrument flight operation independent of navigational aids on the ground and could be a preferable solution for many airports in Africa. The substitution of RNAV procedures for conventional non-precision approaches would also support Controlled Flight Into Terrain (CFIT) prevention initiatives and would help improve flight safety in Africa. It is important to note that, in many cases, current and reliable survey data would be required before procedure design could be undertaken.

Jeppesen believes that the issues of AIP currency and procedure/airspace design should be elements considered for immediate action as noted in Chapter 2, sub-heading 2.2 in the Comprehensive Regional Implementation Plan for Africa. Whether Jeppesen or another organization offers these services to Africa, we feel they are important for the improvement of aeronautical data.

Language proficiency is another topic that warrants consideration. In September 2003 ICAO announced changes to provisions strengthening language proficiency requirements. As stated in

Annex 1 these requirements will come into effect March 2008. As a consequence pilots operating on international routes and all air traffic controllers who communicate with foreign pilots will need to have their English language proficiency formally assessed using both ICAO phraseology and plain English (*ICAO Doc. 9835 Manual on the Implementation of ICAO Language Proficiency Requirements*). Our airline customers indicate that the level of language skills for ATC in some African countries is, indeed, a concern. The deficiency of English language skills adversely impacts flight safety and is a key issue to be solved in Africa as well as in other regions.

Jeppesen offers ICAO-compliant Aviation English programs for testing and training States' ATC staff to successfully complete the ICAO Level 4 English proficiency exam. Jeppesen aviation English training integrates topics such as Flight Safety, Meteorology, and Aviation Physiology which enables training to focus on the terminology critical to the trainees' critical job functions. Training also contains exercises such as ATC-to-Pilot Communication, based upon real ATC tapes from a variety of international locations. Again, whether this training is offered by Jeppesen or another organization, language training should be part of the African implementation plan.

Jeppesen is prepared to cooperate with ICAO and its partners to address key safety issues in support of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa. The implementation of this plan will provide important steps toward eliminating air navigation deficiencies and upgrading the quality of services provided by States in the African region.