SKYCOM Automatic Message Handling System (AMHS)

Providing a high degree of flexibility in its design, SKYCOM AMHS routes messages to and from the current Aeronautical Fixed Telecommunications Network (AFTN), incorporating advanced Aeronautical Telecommunication Network (ATN) performance. This system maximizes the message switching centre’s operational efficiencies by adding ATN capabilities that increase the capacity, speed, accuracy and security of the message being transmitted when exchanging NOTAM, flight plan, or meteorological data, in compliance and accordance with ICAO SARPS for the implementation of ITU-T X.400 and ITU-T X.500 standards. SKYCOM AMHS to an existing AFTN network is an inexpensive and low-risk solution to provide connectivity to the AMHS network. For many Civil Aviation Authorities this is the first step of smooth and secure transition from AFTN. SKYCOM AMHS can be purchased as a stand alone product or as part of Intelcan’s SKY Series CNS/ATM suite.

Features

SKYCOM AMHS can be configured to suit the ANSPs requirements whether configuring an existing AFTN system or implementing a complete AMHS system. Some key features include:

- Using a fully redundant hardware/software system
- Fault tolerant open architecture design
- Functions as an AFTN switch and/or gateway
- Conducts bi-directional AMHS - AFTN message conversion
- Receives, displays and generates aeronautical messages from AMHS or AFTN destinations for the users of NOTAM, AIS Data Bank, and Flight Plan System. All message generation forms are created, including free text form.
- AFTN and AMHS messages syntax validation and error correction
- Powerful and efficient routing and queue management algorithms
- Sophisticated database to provide access to all stored messages and Control and Monitoring Logs
- Enhanced message traceability, traffic control and monitoring logging
- Online diagnostics and statistics

Directory Services designed to distribute the addresses assigned to users by ICAO administration.

Enhanced security features including X.400/ X.500 security mechanisms. General purpose message authorization and system access control.

99.999% Service availability

Architecture

As per X.400 and X.500 requirements SKYCOM AMHS consists of an AMHS/AFTN Gateway, Message Transfer Agent, Message Store, User Agent (HMI) and Directory Server. These modules can be hosted on two or more highly scalable servers and computers. The system contains a wide range of management features including:

- Easy configuration
- Continual monitoring and diagnostics of all major components of the system
- Effective queue management
- Event and alarm monitoring
- Distribution lists
- Address and priority mapping control
- Multi-site system configuration and administrative support

User Interface

SKYCOM AMHS provides a user friendly HMI for generation of and access to the AFTN/AMHS messages and for performing system management functions.

Hardware Requirements

- Based on COTS equipment
- Two (2) Servers in Main-Standby Configuration
- 1GB RAM (minimum)
- RAID compliance
- Supported communication links: TCP/IP, X.25, RS232, RS422, RS530
- Linux® Operating System
- NTP or serial interface time synchronization

About Intelcan Technosystems

Intelcan is the leading Canadian communications, navigation, surveillance and air traffic management (CNS/ATM) system and airport infrastructure solution provider. Integrating Intelcan’s own products or utilizing products from a diverse supplier network, Intelcan has delivered complete turnkey solutions both cost-effective and flexible, to fulfill civil and military clients’ requirements in over 60 countries, worldwide.