



# *Ground to Air Communication System for Air Intrusion*

System Type:	Ground to Air Communication System
Customer:	Romanian MOD - Air Force
End User:	Romanian Air Sovereignty Operations Center
Interactive Role:	Prime Contractor
Project timeframe:	2004- 2007



The Ground to Air Communication System for Air Intrusion is deployed in 30 sites chosen specifically to provide radio coverage for the aircrafts performing air intrusion missions. Initially, the system comprised 10 sites and an upgrade was performed in 2007 to increase the number of sites by 20 and to add NATO SATURN waveform capability to the system.

The system consists of below main subsystems:

## **1. Radio subsystem**

In each site is installed a number of radios supplied by Harris and Park Air Systems a Northrop Grumman subsidiary.

## **2. Radio remote command, control and monitoring subsystem**

- ◆ Radio Remote Command, Control and Monitoring Subsystem provide the capability to remotely control and monitor the radio assets.
- ◆ The operators have full control of the radio using software fully developed by Interactive, RMAS (Radio Monitor Application Software). RMAS has been specifically tailored for use with M7XS and Falcon II radios.

## **3. Power supply subsystem**

- ◆ Power Supply Subsystem is designed to provide power for up to 2 M7XS radios and auxiliary equipment in site.
- ◆ Power Supply Subsystem consists of 1 power supply units of 24 V/35A, which generates a power of 1 kW. Includes two 150 Ah free maintenance batteries charged via the management unit, which provides also the management of the three power supply units.

## **4. Antenna Subsystem**

The antenna subsystem provides two UHF outputs and one VHF output. Each output is used for RF transmit and receive signal of the radio and for the guard receiver in both bands.

## **5. GPS and synchronization subsystem**

The subsystem provides GPS signal input to the radio for SATURN waveform synchronization and can provide reference clock if the GPS is not available.

**Interactive** performed the following activities in order to deliver a turn-key system:

- Site-survey;
- Project Design Document issue;
- Design and manufacturing of the installation kits;
- Radio equipment delivery
- Delivery of equipment and accessories required by a turn-key system (other than the radio equipment);
- Installation and putting into operations of the systems in the specified locations;
- Training;
- System testing and acceptance.

