



Falcon Communications Vehicle Program

System Type: Vehicular Communications System
Customer: Harris RF Communications
End User: Romania Signal Command, Romanian Land Forces
Interactive Role: Subcontractor/Integrator
Project timeframe: 2004-2006

This project represents the fielding of the Falcon™ Communications Vehicle, a fully integrated custom tactical communications vehicular system. The system is equipped with RF-5800 FALCON™ II series HF and VHF radios.

The RF-5800H-V003 RF-FALCON™ II 400 Watt HF radio system provides advanced capabilities for secure high-speed data and digital voice operation in both fixed and ECCM modes. In conjunction with the RF-6010 Tactical Network Hub the system provides integrated voice and data over a single network using both RF-5800H HF and RF-5800V VHF radio assets.



A General Motors (GM) Light Service Support Vehicle (LSSV) four-wheel drive vehicle provides the common mobile platform for the communications system. The vehicle is custom equipped with AC and DC power distribution and conversion systems for the communications and support equipment. A power monitor and control panel provides convenient access for the operator to the system power functions. The

communications power system is independent of the vehicle system providing seamless transitions from vehicle, generator/commercial, or communication battery power.

Under this project **Interactive Systems and Business Consulting** benefited from a technology transfer from Harris to integrate such systems in Romania.





The system supports voice and data communication requirements while “On-the-Move” or while deployed in a “Static” location. A comfortable, ergonomic and spacious radio operator compartment provides convenient access and operation of the communication assets. Deployed operation is accomplished using the RF-5800R-RC001 Field Wire Remote System, which supports remoting the full range of functionality of the Falcon II radios over a single pair of field wire at distances up to 3 km.

Interactive SBC performed the following activities:

- System design and engineering for the integration of Falcon Communications Vehicles. The system design and engineering efforts included, but not be limited to, changes to Harris supplied drawings, changes to the vehicular design or any other changes deemed necessary.
- Installation and integration of the subcontractor purchased equipment and the CFE equipment in the communications vehicles.
- Purchase/manufacture, install and test the power supply system necessary for the vehicle installations (auxiliary power generators and AC and DC power distribution systems).
- Purchase/manufacture, install and test all the equipment necessary for the vehicle installations such as: rooftop equipment, shelving, operator chair, operating console, fuel can, power and distribution panel.
- Provide the necessary markings to installed components to ensure proper functional guidance for end users.
- Provide training to the Romania MoD representatives. The training provided practical hands-on skill development for system familiarity, operation and performing preventive maintenance on the Communications Vehicle System.



The vehicle operational testing has been performed during 2004-2005 and commissioning was successfully performed early of 2005.