smp aviation – COMPANY PROFILE
smp aviation (Satcom Marketing & Project Management GmbH) specializes in providing security and security related solutions to organizations such as police, civil protection, coast guard, VIP’s, business executives and many other agencies and has delivered services both to governmental organizations and non-governmental clients for more than two decades. smp aviation provides the latest technology leap in L-Band satellite communications and shows you that air-borne satellite communications – when using the correct network – is an affordable and powerful tool to help you cover your communications needs. Applications such as ISR, Search & Rescue, Tele Engineering, Tele Medicine, Fishery Monitoring, Border Patrol, Firefighting and Office in the Sky can now be supported with affordable, reliable real time information from the sky!

DIVERSITY OF APPLICATIONS

- Air Surveillance
- Search and Rescue
- Air Ambulance & Telemedicine
- Border Patrol
- Fishery & Pollution Monitoring
- Anti-Poaching
- Fire Fighting & Fire Prevention
- Special Operations
- VIP & Office in the Sky
- Illegal Trafficking

TECHNICAL SYSTEM OVERVIEW – MAIN COMPONENTS

A typical ThurayaAero aircraft installation consists of the following main components:
• Single Channel Satellite Data Unit (SDU)
• High Power/Low Noise Amplifier (HLD)
• High Gain Antenna (HGA)
• Wireless Access Point

and it provides interfaces to:
• Aircraft Navigation Data Interface (IRS)
• User Terminal Equipment

The SDU offers Thuraya voice and the following broadband services:
• Thuraya Broadband “Standard Service”: Background-IP connection up to 444 kbps
• Thuraya Broadband “Streaming Service”: Streaming-IP connection up to 384 kbps
Possible User Interfaces
While the Thuraya Aero SDU provides numerous wired analog and digital interfaces (e.g. to connect an existing Intercom System or Dialpad to the ThurayaAero SDU), supporting a wide range of existing devices on the market, the WLAN Access Point provides a gateway for wireless applications (e.g. for your smartphone, tablet or laptop). The following diagram shows possible interfaces for user interaction with the system.

Aircraft IRS
The Thuraya Aero Antenna must have a clear view of the satellite to connect to the Broadband network. In order to point the antenna towards the satellite, the system needs to know the location of the aircraft (including heading, roll and pitch attitude). This data is provided by the IRS data sources of the aircraft on regular basis using the ARINC 429 data bus.

Thuraya Aero provides a way of keeping in touch, beyond line-of-sight, no matter where your mission takes you!