TRA 6030-N
Airborne V/UHF EPM Transceiver
NextWave Family

Multi-band / Multi-mode / Multi-service:
• 30-600 MHz, 15W AM / 20W FM
• Voice, data, tactical datalink services
• Joint & combined interoperability
• NATO and National secure modes
• Easy integration & operation
• SDR technology
TRA 6030-N is the latest airborne version of the tri-service TR 6000/NextW@ve V/UHF product family, providing a comprehensive multi-band/multi-mode interoperability, including fast frequency hopping and data capabilities.

While preserving the full interoperability with legacy services of the TR 6000 family, TRA 6030-N offers extended capabilities that open new perspectives to enhance interoperability and address emerging NCO (Network Centric Operations) operational concepts, in particular:

- Frequency range extension to VHF tactical band, providing capability of embedded tactical waveforms, including the PR4G waveform
- Wide band capability, enabling high data rate waveforms, required to support new communication services.

**Extensive Multi-band/Multi-mode capability**

- 30-600 MHz for ATC, maritime and military interoperability
- Voice and data services for national and NATO joint/combined interoperability

**SDR technology**

- Software programmable for new waveforms
- Flexibility during platform integration

### MAIN FEATURES

#### General characteristics

- **Frequency range**: 30-600 MHz
- **Frequency accuracy**: ± 0.2 ppm
- **Modulation type**: AM, FM, MSK, FSK, other available via SW upgrade

- **Channelization / Bandwidth**:
  - Narrowband: 8.33, 12.5, 25 kHz
  - Wide band: 250 kHz (others on demand)

#### Physical and environment

- **Dimensions (WxHxD)**:
  - ARINC 600/3MCU: 90.4 x 194 x 320.5 (mm)/3.56 x 7.64 x 12.61 (inch)
- **Weight**: From 7 kg to 7.5 kg (depending on configuration)
- **Environment**: MIL-STD-810F, all airborne applications fixed and rotary wings

#### Multi-mode capabilities

- **Fixed frequency**:
  - Clear/Encrypted Voice
  - L11, LY, L22 FF
- **EPM / Frequency hopping**:
  - PR4G F@stnet: Voice & Data (option)
  - Have Quick I/II (Stanag 4246)*
  - SATURN (Stanag 4372)*: Voice & Data/L22 EPM
  - National EPM: Voice (FFH-SV) & Data (FFH-LX), High data rate (TDMA-IP)
- **EPM / COMSEC**:
  - External KY 58/KY 100 or equivalent
  - Proprietary embedded COMSEC

#### Receiver

- **Sensitivity**:
  - AM: -103 dBm, 30% mod.
  - FM: -108 dBm, ± 2.4 kHz deviation

#### Transmitter

- **Carrier output**: AM 15 W - FM 20 W

#### Guard Receiver

- **VHF**: 40.5 MHz, 121.5 MHz, 156.525 MHz, 156.8 MHz
- **UHF**: 243 MHz, 406 MHz
- **Others on demand** (synthesized receiver technology)

#### Interfaces

- **Power supply**: + 28 V VDC, Mil-Std-704E
- **Control**:
  - Host: Ethernet, MIL-STD-1553B, ARINC 429, RS422/485
  - Remote Control Unit (RCU 604): ARINC 429
- **External crypto**: KY compatible
- **Precise Time Interface**: GPS compatible
- **DF/Homing**
  - IF 70 MHz: external modem

#### Configuration

- **TRA 6034**: NATO EPM HQ & SATURN
- **TRA 6036**: National EPM, optional NATO EPM HQ/II* & SATURN*

* Subject to Governmental authorization