



DRT

IARPA MERCURY Proposer's Day Presentation

March 5th, 2015

- DRT's capabilities are ***ITAR Controlled***.
- This presentation is based on information that has been approved for public release and available at: www.drti.com/products.html
- Unique qualifications and capabilities: ***ITAR Controlled***
- Research Areas of Interest: All areas
- Teaming: non-exclusive; merchant-supplier

DRT Company Overview



- **Founded in 1997**
- **Subsidiary of Boeing since 2008**
- **Primary supplier of tactical RF Collection equipment to...**
 - US and allied military
 - Intelligence community
 - Homeland security
 - Law enforcement
 - Program Of Record (POR) integrators
 - Commercial drive test market



>5,000 DRT's Delivered

What Do DRT Products Do?

- **Surveillance missions are varied and cover large geographic areas with small crews**
- **Missions involve all domains: Air, Sea, Land**
- **Detection, identification, geolocation and tracking capabilities are essential for successful prosecution**
- **Automated signal processing and display critical to avoid increased staffing**
- **Situational awareness key to maximize utility**





DRT1000C High-Capacity Products

DRT1000C Series - Modular Products

- All family members :
 - Multi-Channel Software Defined Radio (SDR) Platforms
 - Supports Direction Finding & Geolocation
 - Operate from -20 to + 60° C

- DRT1301C Tactical System

- Portable, Ruggedized, battery operable
- 3 cPCI modules (integrated)
- Up to **72 processing channels**



3X capacity

- DRT1183C System

- Tray mounted unit
- 8 configurable slots for Wideband Tuners & Processing modules
- Over **300 processing channels**



2X capacity

- DRT12x1C (3U/4U) Rack System

- Rack mounted unit
- 18 configurable slots for Wideband Tuners & Processing modules
- Over **800 processing channels**



Direction Finding / Geolocation

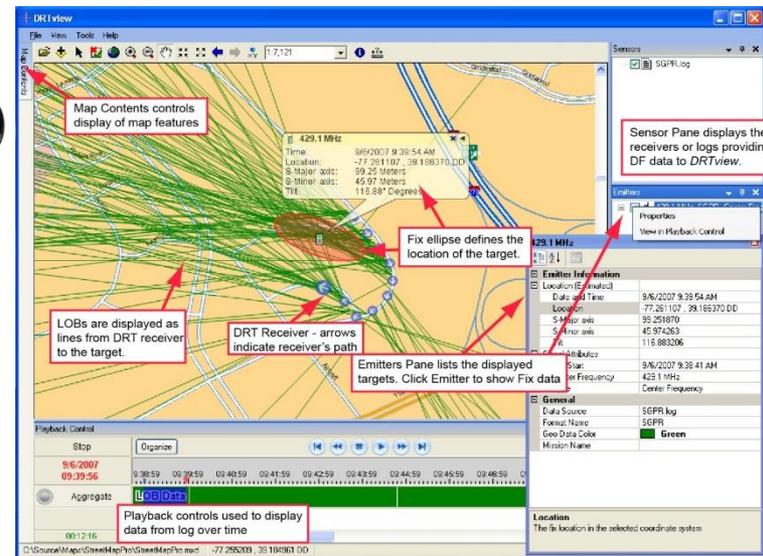
- **DF 100B**

- Covers 20 to 3,000 MHz
- Integrated compass
- 5° RMS 20 to 500 MHz
- 3° RMS 500 to 3,000 MHz



- **DF 240B/C**

- Covers 100 to 3,000 MHz
- Integrated compass
- 7° RMS 100 to 600 MHz
- <3° RMS 600 to 3,000 MHz



- **DF 520C portable VHF array**

- Covers 20 to 600 MHz
- 5° RMS 20 to 150 MHz
- <2° RMS 150 to 600 MHz





DRT4000 Low-SWaP Products

Small, Low-Power

Compact, Low-Power, Miniature Software Defined Radio system (SDR) with a powerful digital signal processing engine to support electronic surveillance of conventional Push-to-Talk signals.



With Battery



Without Battery



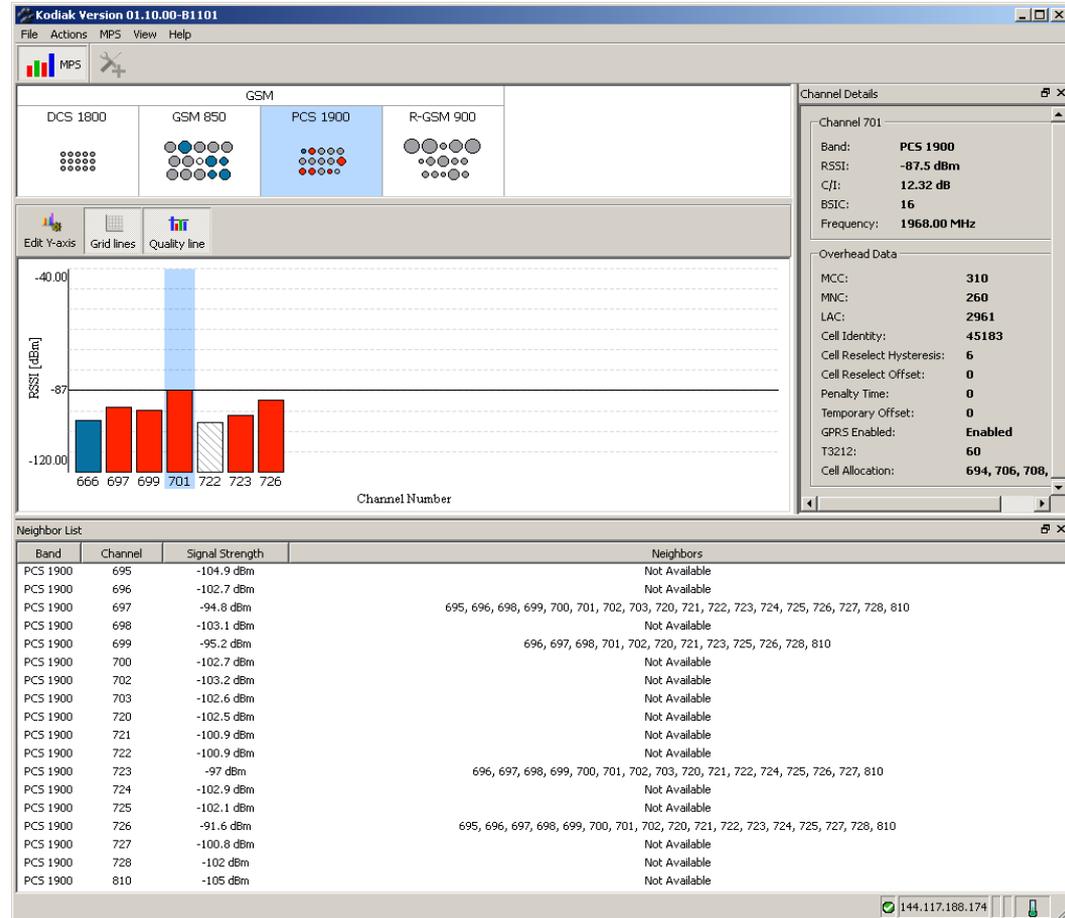
Ruggedized

4000B family performance characteristics:

- 2 to 3,000 MHz coverage, 40 MHz bandwidth per channel
- Multiple low-SWaP package options •30 to 60 in3
- 1.5 to 3.5 lbs
- 10-13 Watts
- 9 to 30 VDC / Battery Power
- Integrated GPS time/frequency reference
- Control options - Ethernet, USB, WiFi
- Removable SD memory for logging, audio recording, tasking and configuration

Multi-Protocol Survey

- Supports simultaneously surveying a number of modern 2G, 3G and 4G technologies including
 - GSM
 - cdma2000
 - 1xEV-DO
 - UMTS WCDMA
 - TD-SCDMA
 - LTE



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