

Global Defense Helicopter BAE Systems Capabilities

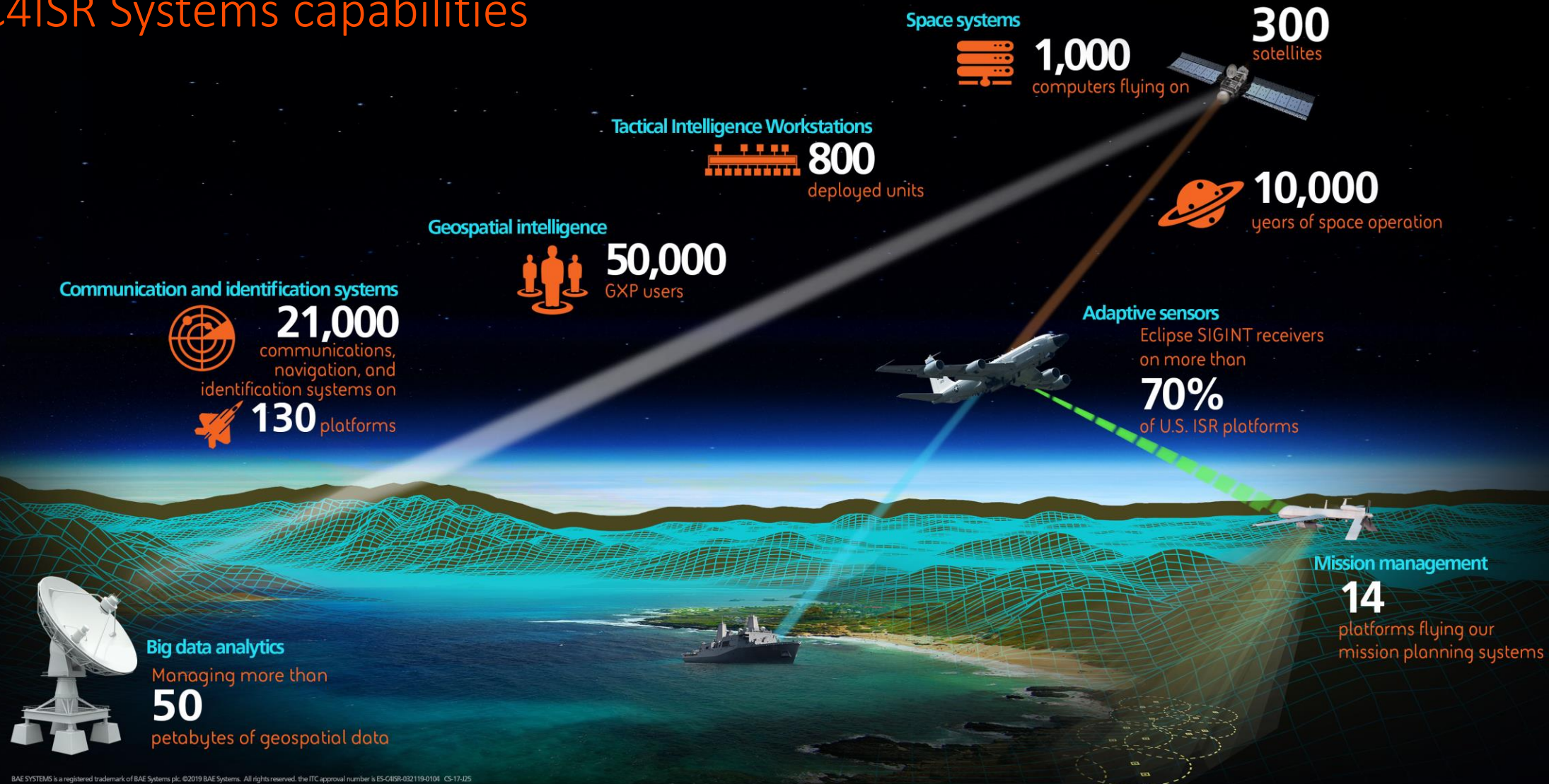
C4ISR Systems



Approved for Public Release
"No Export Controlled Information"
Export Approval Number ES-C4ISR-090324-0176



C4ISR Systems capabilities



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Approved for Public Release

BAE Systems Integrated CNI Relevant Capability Summary

Link 16 Solutions



MIDS JTRS

Over 10,000 Systems for than 60 platform types in 56 countries



Airborne Tactical Radios



AN/ARC-232



AN/ARC-231



FireNet™



ARC-260



AN/ARC-164A

Over 115,000 systems deployed globally. Battle-proven systems offer multi-band, multi-mission, secure anti-jam voice, data and imagery

Wideband Data Link / NTCDL



Airborne/Surface System



NIU and ECU Radio



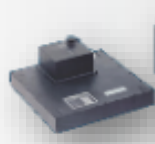
iCDL R/T Radio



Cryptographic Unit

> 20 years of CDL R&D, development and production of Common Data Link (CDL) systems

Navigation / Landing Systems



AN/ASN-128



AN/ASN-157



Multi-Mode Landing Receiver

Over 15,000 systems delivered in 20 countries



Low Probability of Intercept Altimeter

Over 3,000 systems delivered in 10 countries

Over 800 units delivered US DoD Only

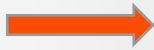
BAE Systems Integrated CNI Relevant Capability Summary (cont'd)

IFF Solutions

AN/APX-123A



Next Gen AN/APX-123A



115ci, 5lbs, 25W nom

Next Gen AN/APX-123A Modernized Multi-Function Design

Anti-Jam GPS Solutions



DIGAR-300
Digital Anti-Jam

Regional Depot and Sustainment Capabilities



US Repair Facilities:
Wayne, New Jersey
Cedar Rapids, Iowa
WR-ALC Repair Facility
Int'l Repair Facilities
United Kingdom, Australia,
Germany, Finland and Taiwan

Exportable solutions to support 2
or 3 level maintenance schemes

Tactical Radio ARC-231A RT-1987 Legacy Replacement for the RT-1808A

ARC-231A

- RT-1808A Form, Fit and Function replacement
 - Includes legacy waveforms
- Cryptographic Modernization (CM)
 - NSA 3-9 Policy
 - TSVCIS compliant
- Software Defined Radio
 - JTNC IR waveform compatible
 - SCA 2.2.2 Operating Environment
 - P3I software update plan for common waveforms
- Extended frequency range with improved co-site performance
 - 30-941 MHz with internal 10W AM CW/20W FM PA
 - 30 MHz to 2.6 GHz with external PA
- 8.33 kHz Air Traffic Control (ATC)
 - Compliant to ICAO ED-23C requirements
- Embedded VHF/UHF guard receiver



RT-1987 / Crypto Modernized Form-Fit, Drop-In Replacement for the RT-1808A

ARC-231 / RT-1808A System

Cockpit
Control Indicator &
Remote Control Device



RT-1808A
Receiver-Transmitter



AM-766
Pre-Amplifier



AM-7565 High Power Amp



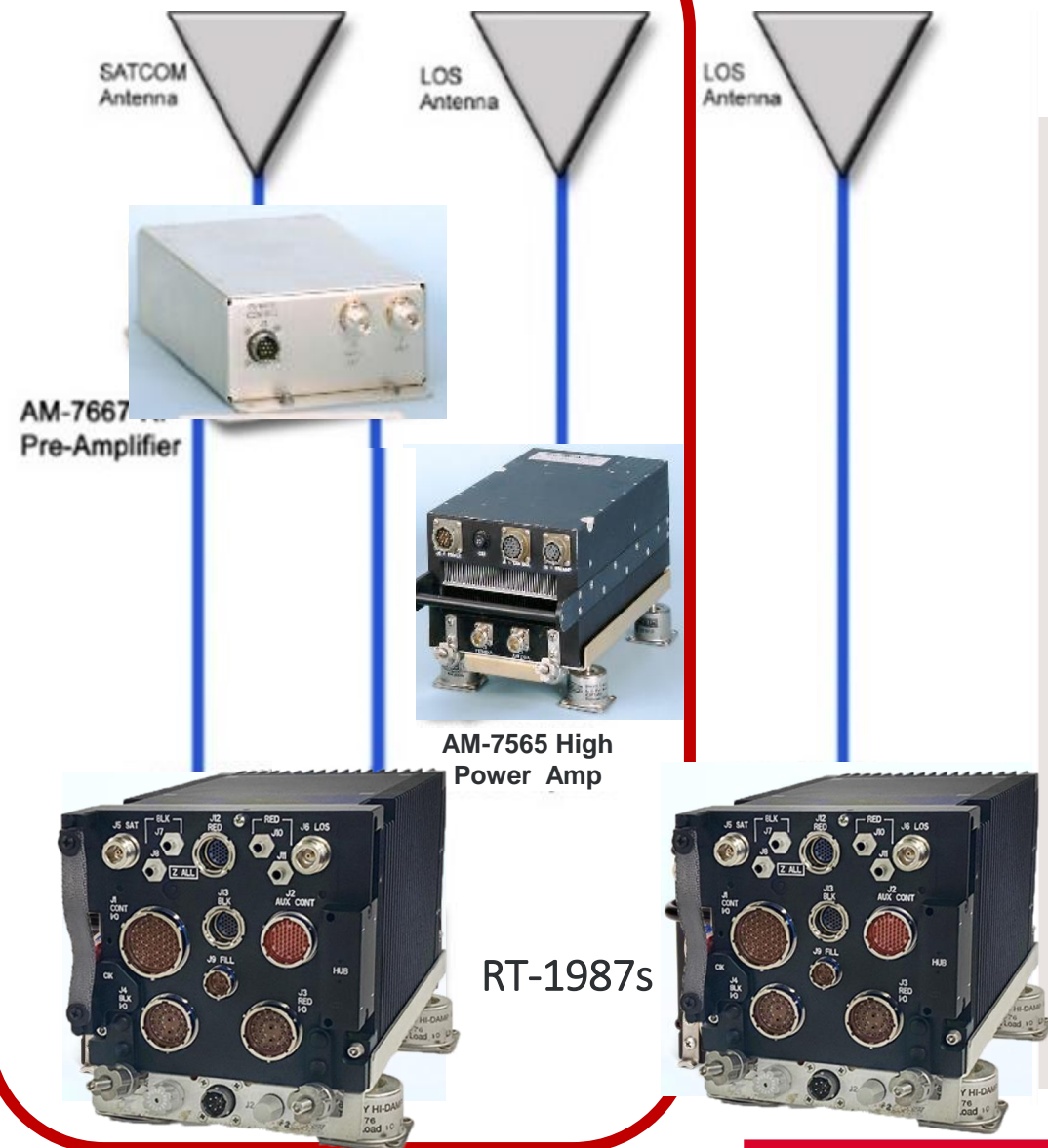
ARC-231A / RT-1987 System

- ARC-231A airborne terminal for Line of Sight (LOS), Beyond Line of Sight (BLOS), Air Traffic Control (ATC) operations
- Built for rugged airborne environmental considerations (e.g. temperature; altitude; vibration; EMI; EMC; etc.)
- Air worthiness and installed base integrated on multiple rotary, fixed wing, UAS airborne platforms
- Form Fit Upgrade
- Drop-in replacement compatible with existing platform interfaces (minimized integration cost)
- Familiar user interface (minimized user training)
- Compatible with legacy controllers and compatible with modern Mercury Controller

Cockpit
Control Indicator &
Remote Control Device*



ARC-231A System



ARC-231A RT-1987 Upgrade waveforms



ARC-231A WAVEFORM CAPABILITIES		
Waveform	RT-1808A	RT-1987
VULOS	X	X
SINGARS ICOM/ESIP	X	X
HAVEQUICK I/II	X	X
ATC (8.33 kHz)	X	X
MARITIME	X	X
LAND MOBILE RADIO	X	X
UHF SATCOM	X	X
DAMA	X	X
DAMA IW	X	X
TSVCIS 3.1	NA	X
SATURN	NA	X
APCO 25, TETRA	NA	P31
SRW	NA	P31
P31 WITH SOFTWARE ONLY		

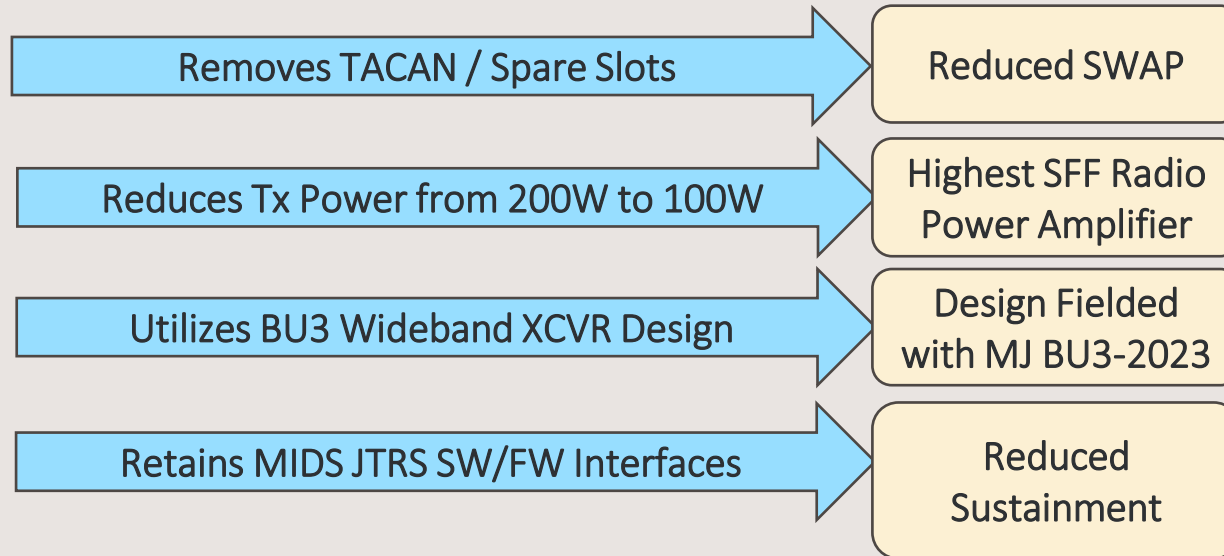
FireNet™ (Link 16) Leverage from MIDS JTRS

600 Watts



MIDS JTRS

Size:
13.5" Dx 9.75" W x 7.6" H
Weight: 57.1 lbs



Unique BU3 SFF L16 Capability
Concurrent Multi-Netting 4 (CMN4)
Concurrent Contention Receive (CCR)
Maintains JROC Advantaged Network
High Time Quality

140 Watts



Size:
10" Dx 5.9" W x 5.7" H
Weight: 15.0 lbs

Unique BU3 SFF Enhancements
Wideband reception
Next Generation Modem (BU3)

The most capable, sustainable full feature Small Form Factor Link 16 Radio available

FireNet Value Proposition

- PMA/W-101 MIDS Program Office sponsorship with reuse of MIDS JTRS design architecture and latest USG owned Link 16 repository waveform
 - Ensures interoperability with other Link 16 PoR radios
 - Provides funded path to DoD mandates for Link 16 (i.e., Crypto Mod)
 - Delivers significant lifecycle savings as waveform is maintained by the USG (i.e., PR fixes, block cycle updates, etc.)
- FireNet mission benefits to the Warfighter
 - Linear PA design provides flexibility to incorporate sensing enhancements on both transmit and receive chains to improve blue kill chain connectivity
 - Accessibility to MIDS JTRS classified roadmap enables mission optimized waveform increments and classified enhancements for competitive lethal advantage



FireNet™ SFF Radio

Self contained radio configuration with RF amplifier top mounted to radio

FireNet advantages over competitor products

- Only SFF Link 16 radio that uses USG Link 16 repository waveform
- Only SFF Link 16 radio that is CMN4/CCR4 capable (growth to CCR 8)
- Only SFF Link 16 radio with precision oscillator for high time quality
- High Power RF PA at 100 watts
- Flexible installation options with removable PA
- Ability to utilize ARC-231A mounting tray
- Standard MIDS JTRS Ethernet interface
- No auxiliary LRU's required for system operation

SOSA Aligned 3U Open VPX IFF-T Card

Key Features

- Supports 8 RF Receive Channels & 8 RF Transmit Channels
- Supports Modes 1, 2, 3A, C and Mode 5 Level 1 & 2
- Supports Mode 5 Level 2 In
- Supports UAT 978 MHz In
- SW growth to ADS-B Out and In (1090ES) per RTCA DO-260B
- SW growth to Mode S
- Modular Software and Firmware

Status

- Multiple demonstrations conducted
- Supporting multiple thrusts

**CXP
APX-123A**

15,000+
50+ Platforms

Army
Navy



Enduring

**RST
DPX-7**

500+
18+ Platforms

International
US DoD
USAF
USN

Reduced
SWaP



Evolution

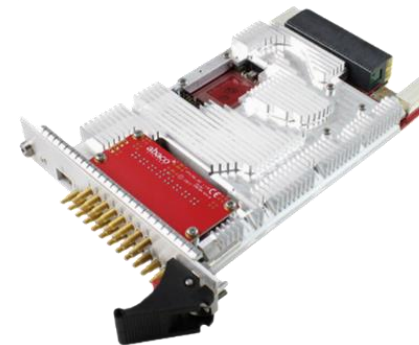
**Next Generation
APX-123A**

MDO
Capable

SAA
Capable



Modernized



Common Core FW/SW



Open architecture alignment supports both federated and integrated configurations

POC and follow-up

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Questions