



MIDS JTRS Status

IDLS 2007

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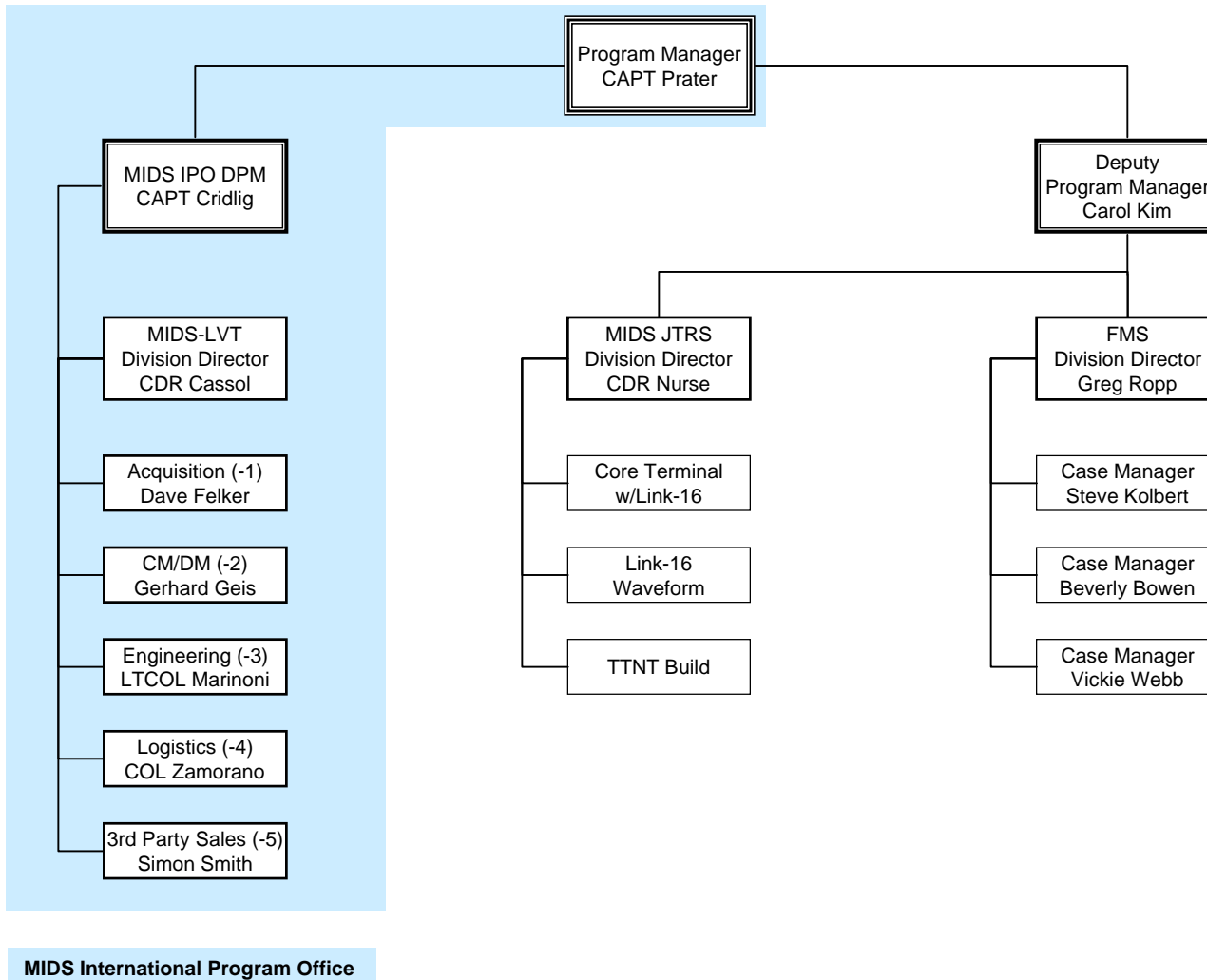
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DISCLAIMER

This briefing may contain references to projected U.S. Government plans and potential capabilities. Mention of them in no way guarantees that the U.S. Government will follow these plans or that any of the associated system capabilities, if developed, will be available or releasable to foreign governments.

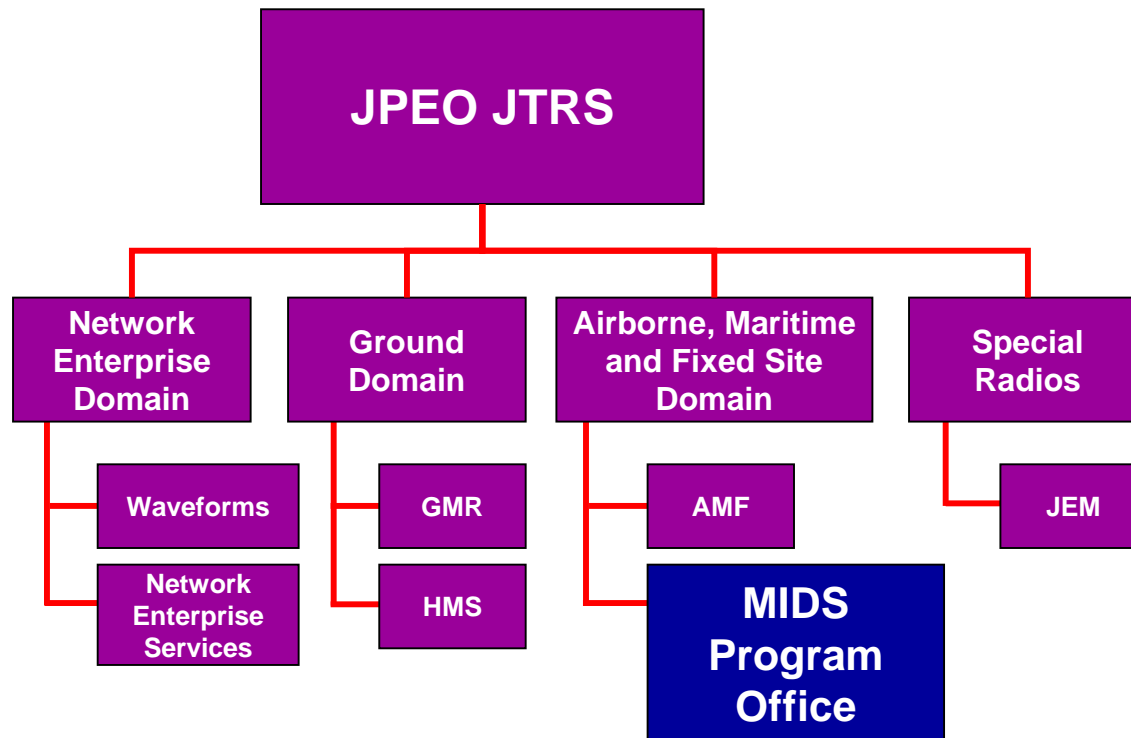


MIDS Program Office





JPEO JTRS Organization



MIDS – Multifunctional Information Distribution System

HMS – Handheld/Manpack/Small Form Fit

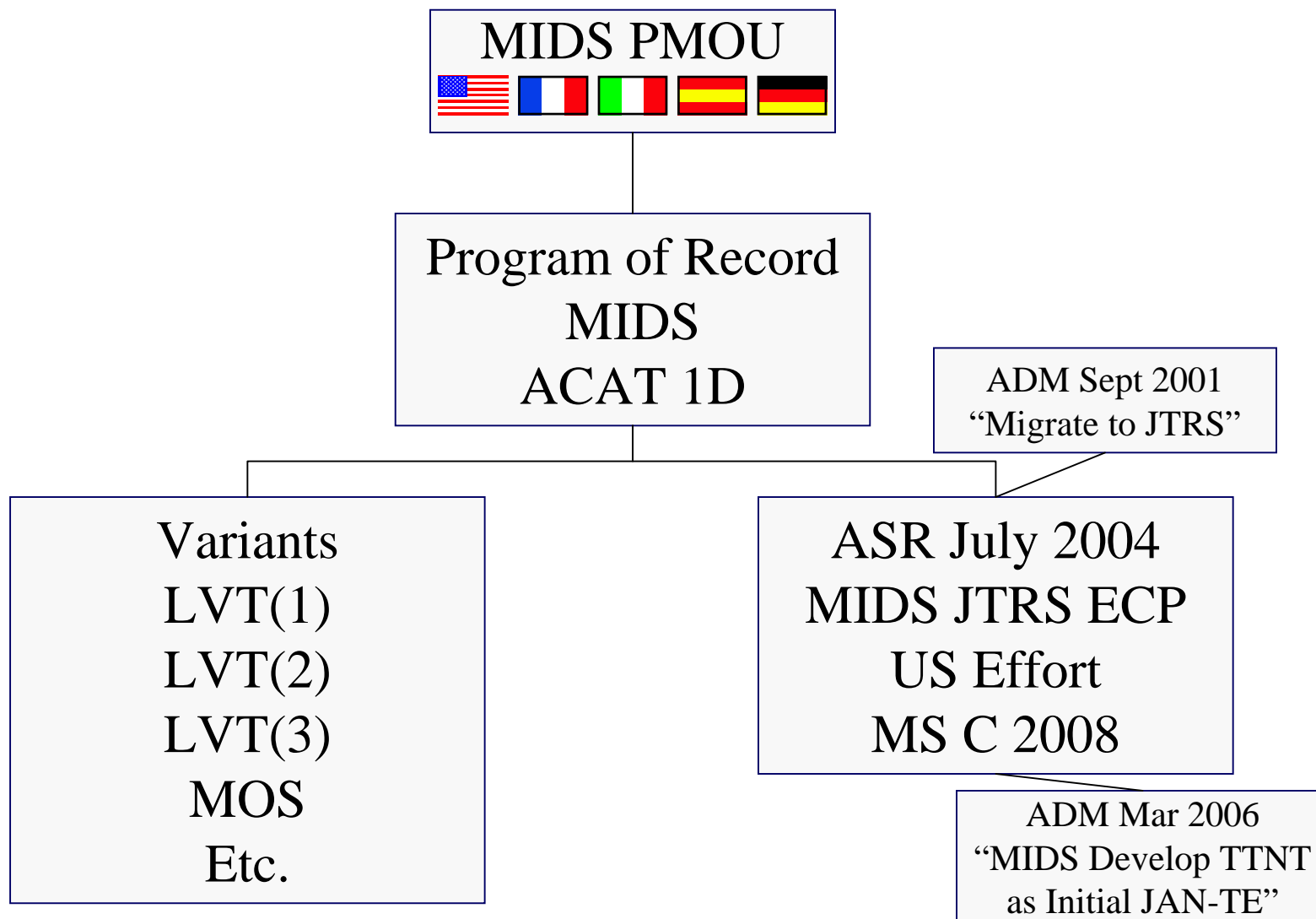
GMR – Ground Mobile Radio

AMF – Airborne, Maritime, Fixed Site

JEM – JTRS Enhanced MBITR

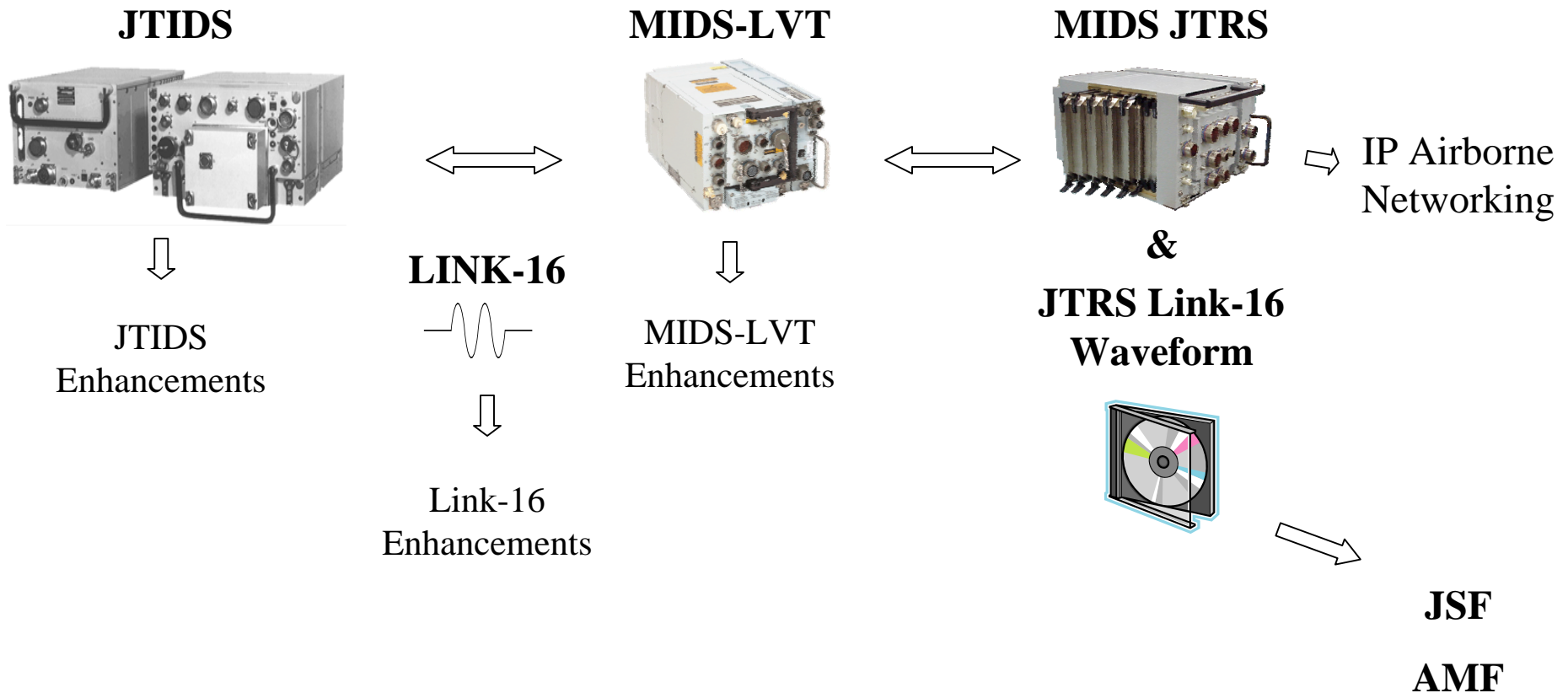


MIDS Program





Link-16 Continuum

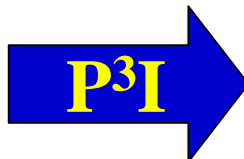




Migration Objectives



MIDS-LVT



MIDS JTRS

- **Link-16, J-Voice, and TACAN utilizing dedicated modules**
 - **Highly successful cross domain radio**
 - Aircraft, Ships, Ground
 - **Proven affordability via continuous competition**
 - Stimulated competition
 - Driving the unit price down
 - **Cornerstone of tactical networking interoperability**
 - Joint and coalition
- **4 Channel JTRS compliant radio**
 - 1 Channel for Link-16/TACAN & J-Voice
 - 3 Programmable Channels
 - Runs other JTRS Waveforms
 - **“Plug-and-Play” with MIDS-LVT**
 - **“Hooks” to host additional airborne networking capability**
 - **Reprogrammable Crypto**
 - **Link-16 Enhanced Throughput and Frequency Remap**

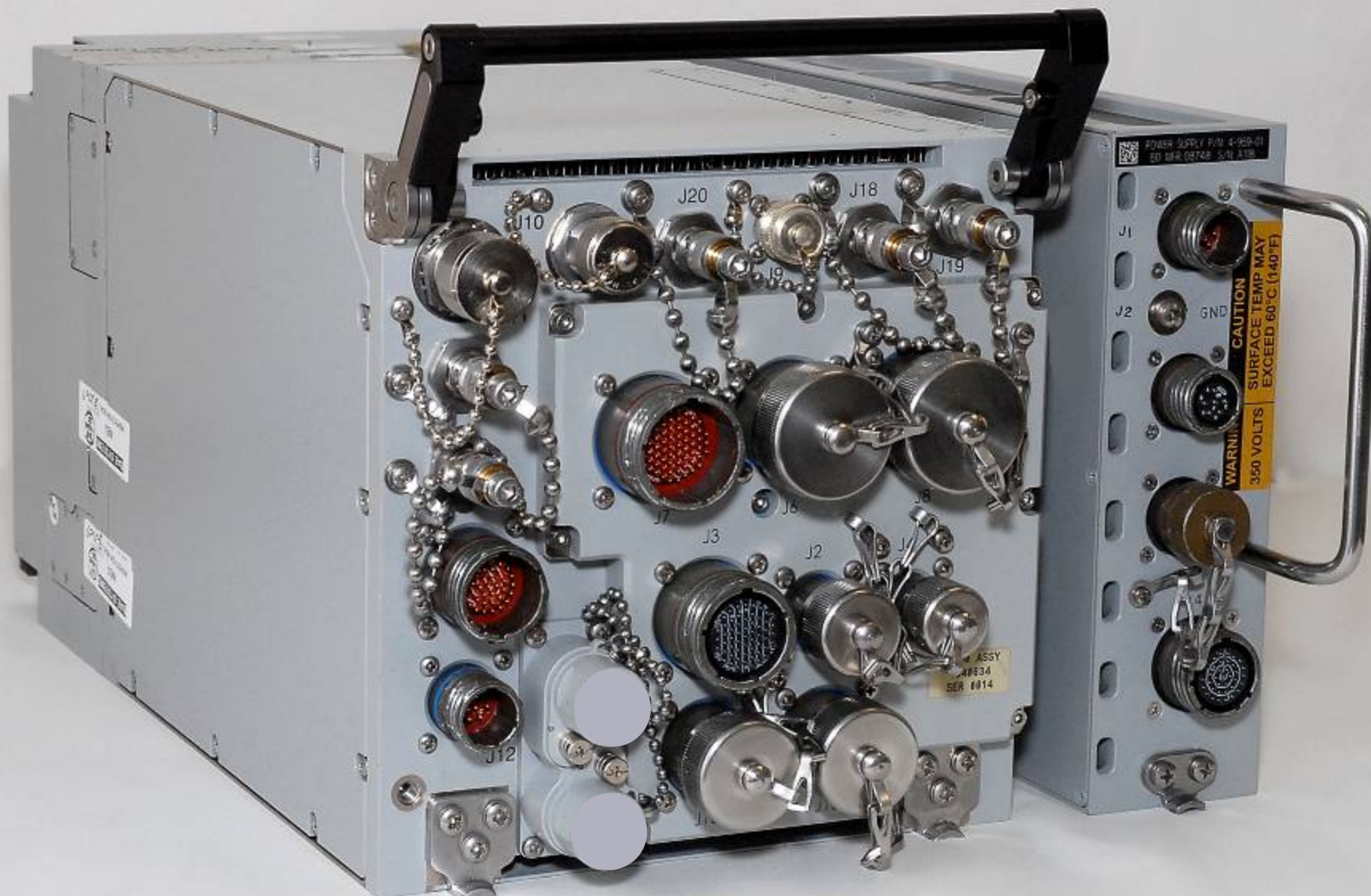


Requirements Documents

- **Single MIDS Operational Requirements Document**
 - Foundation
- **Software Communications Architecture version 2.2**
 - Compliance
- **JTRS ORD version 3.2/3.2.1**
 - Incremental compliance as required by platform
- **Tactical Data Links Transformation Capabilities Development Document**
 - Strategic enhancement
 - Focuses terminal on high-end data networking
 - Enabled via strength of vendor base



MIDS JTRS FAQT Terminal

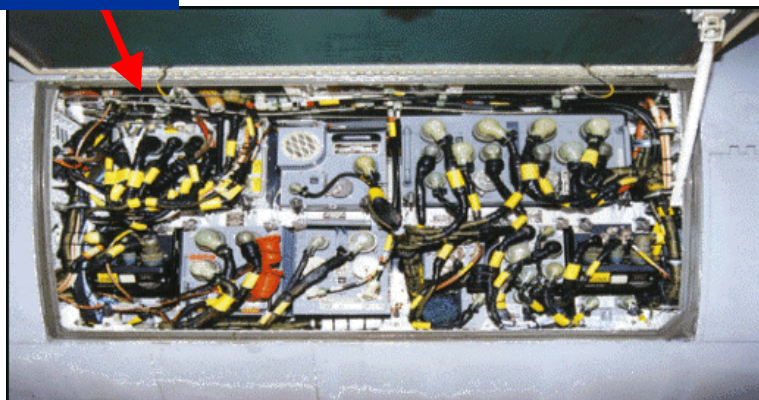




MIDS-LVT to MIDS JTRS

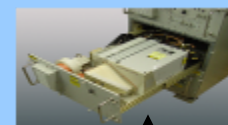
MIDS Form Fit Replacement to Minimize Platform Integration Impact

MIDS Terminal

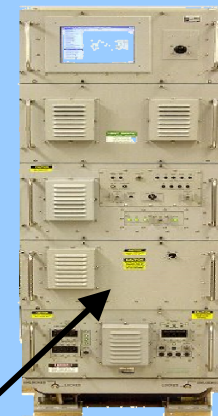


•New Construction

MIDS On Ship AN/URC-141(C) Radio Set



MIDS



•Air Defense

MIDS



MIDS-LVT(2) with self-contained power & cooling





F/A-18E Fit Check

8 NOV 2006 - NAS PAX River



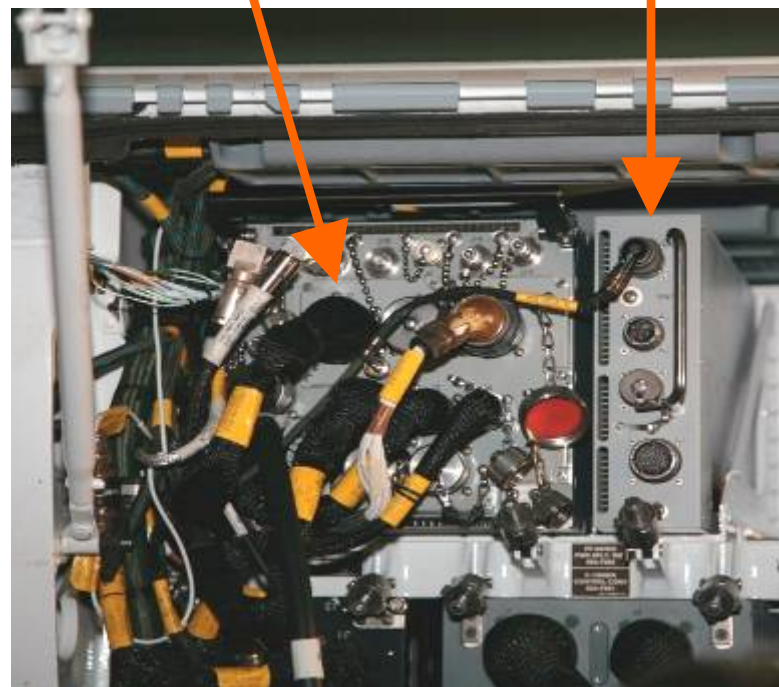
**F/A-18E Hornet Fitted with a
MIDS JTRS Terminal**



MIDS JTRS (R/T and PS)
64.9 lbs
~ 1000 cu. in.

MIDS JTRS R/T

MIDS JTRS Pwr Supply





MIDS JTRS Acquisition Strategy from 2004 ASR



Phase 2A/2B Core Terminal (Funded)

Development

JTRS Certified Terminal
Link-16 w/ECP(1) Porting
TTNT “Hooks”

Production Transition
SINGARS Porting (Lab)

Integration

F/A-18E/F

Critical Dependencies

SINGARS WF

Phase 2C/2D TTNT JPCP (Funded)

Development

TTNT Porting
TTNT Transceiver
TTNT Ext PA

Integration

Interim Obj. Gateway

Critical Dependencies

TTNT WF

* JPCP = JTRS Platform Capability Package

Phase 2E/2F EMF JPCP (Unfunded)

Development

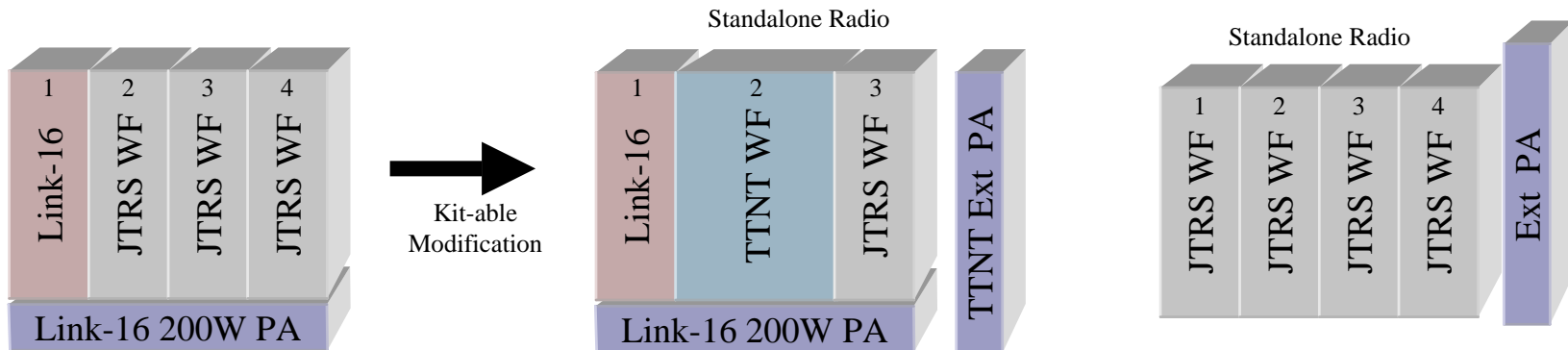
Waveform Porting
Remove LVT legacy
interconnects & TACAN
4 Universal Transceivers

Integration

TBD

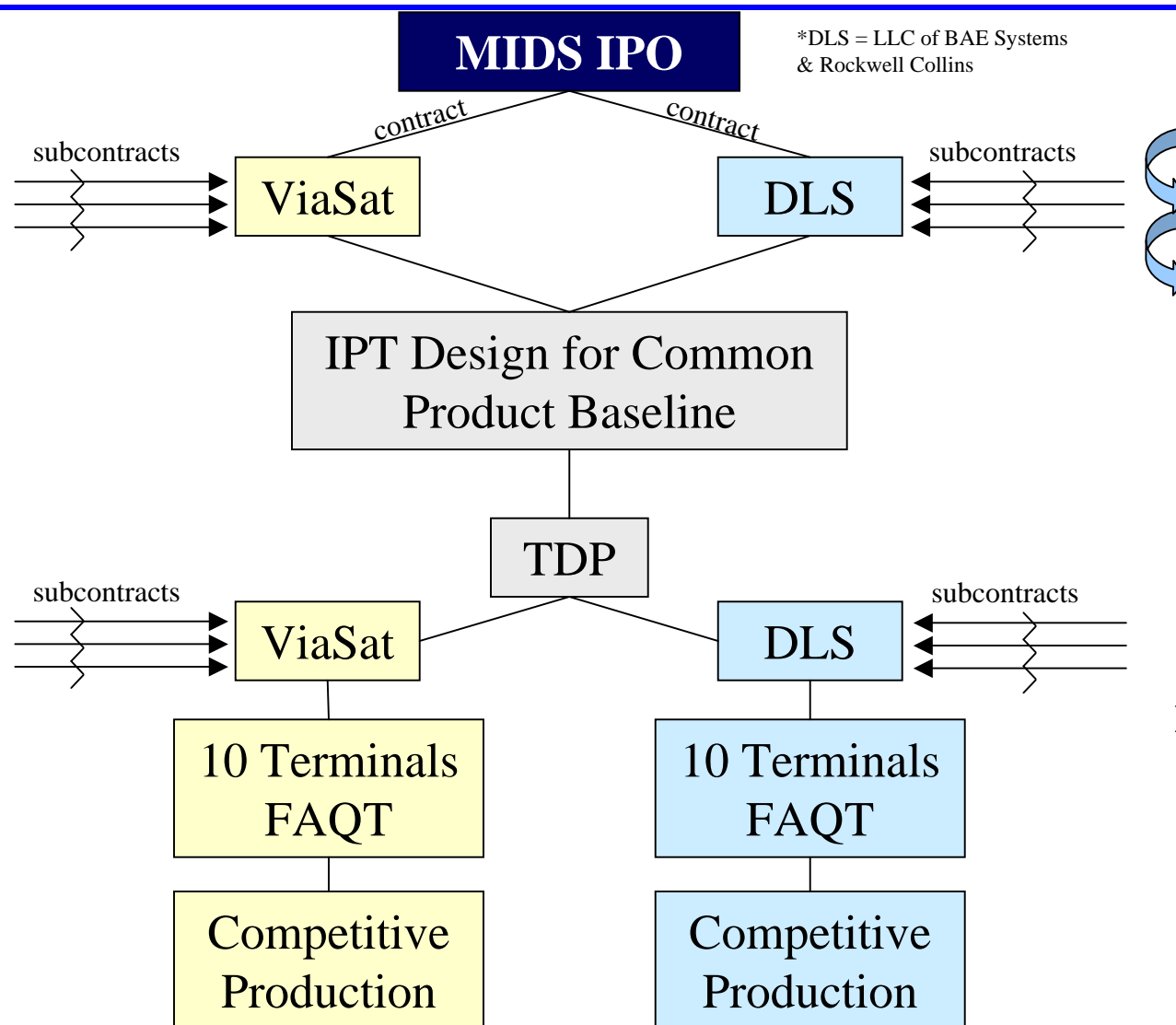
Critical Dependencies

Waveforms





Contracting



Jointly Developed
Functional Baseline
Allocated Baseline
Product Baseline



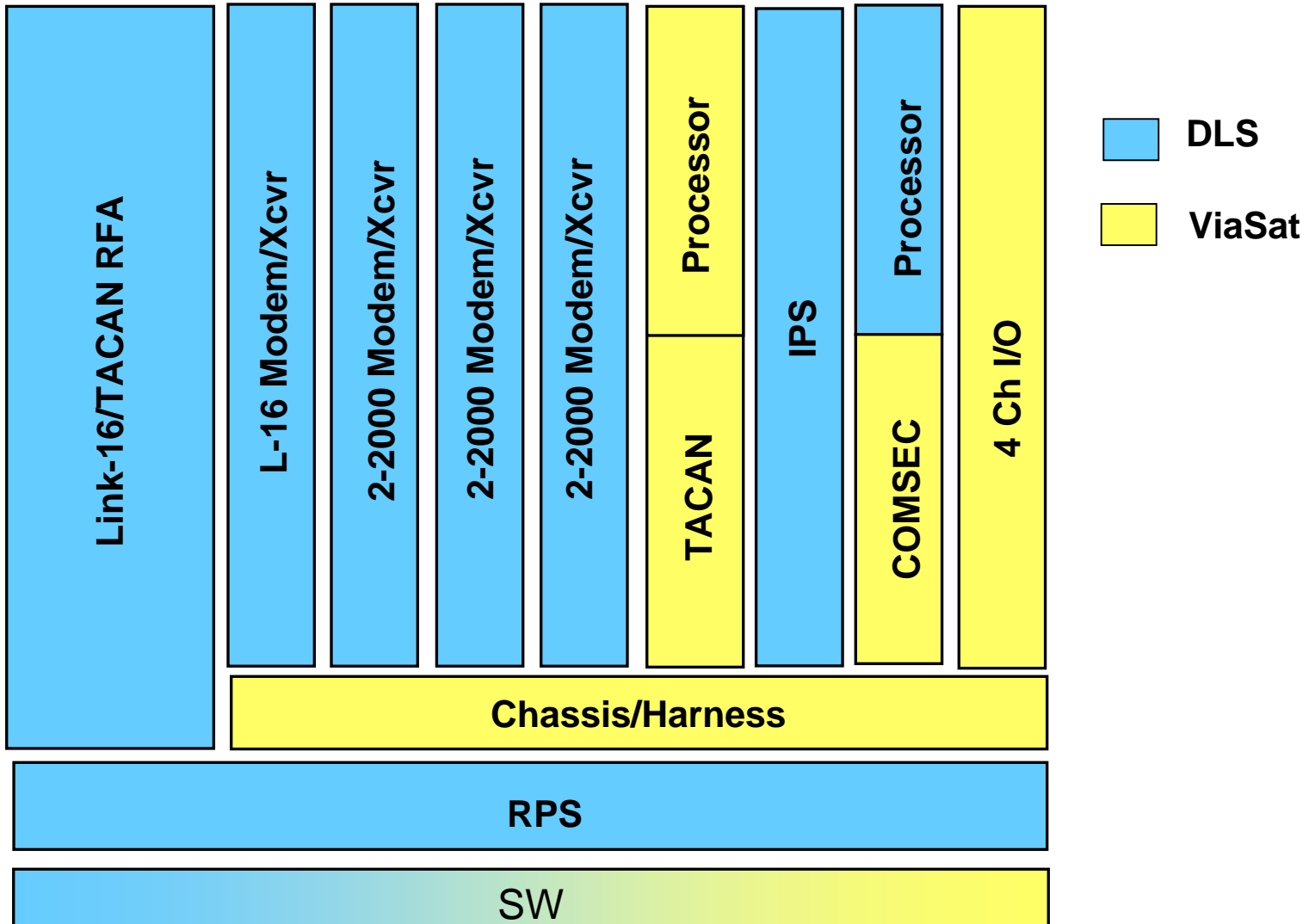
Interchangeable LRUs & SRUs

First Article Approval

Pass Contractor FAQT
Pass Government FAQT
IA Certification
EMC Features Certification
Air Worthiness Certification
SCA Certification



Basic Design



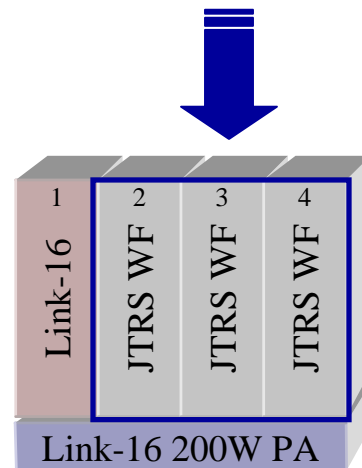


MIDS JTRS Waveform Growth

- **MIDS JTRS Spec Waveform Hosting Capabilities**

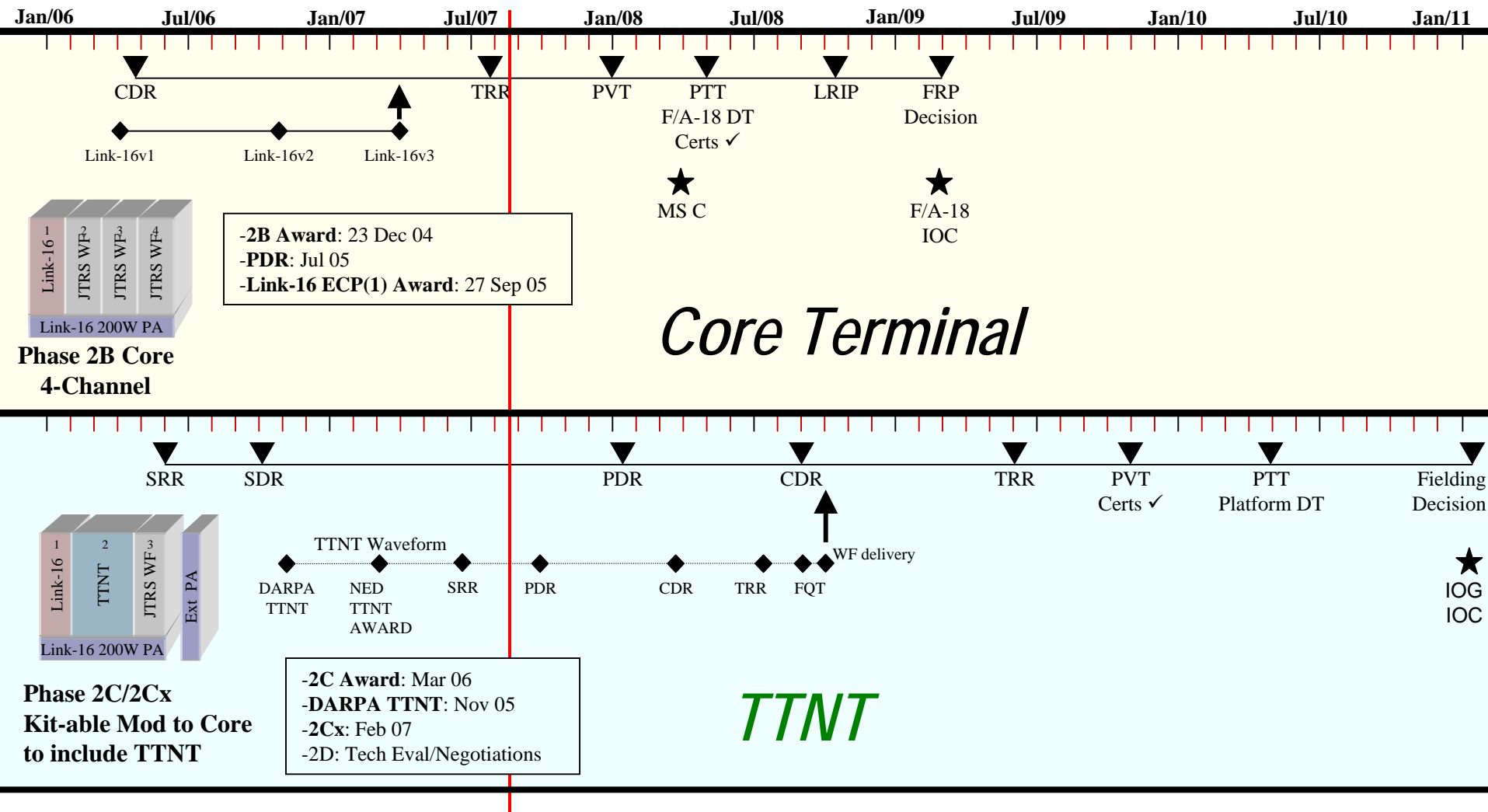
Link-16	TACAN
SINGARS ESIP	HAVE QUICK II
UHF DAMA SATCOM 188-181,182,183 and 184	EPLRS/SADL
Wideband Networking Waveform	HF ISB with ALE
HF SSB with ALE AJ	Link 11A
STANAG 5066	STANAG 4529
VHF FM	HF ATC Data Link
VHF ATC w/8.33 kHz Ch (AM, 118-137 MHz)	VHF ATC w/25 kHz Ch (AM, 108-156 MHz)
VHF/UHF-FM Land Mobile Radio	VHF ATC w/VHF Digital Data Link (NEXCOM)
UHF AM/FM/PSK	Link 4A
Link 11B	SATURN

- **Core carries 3 unused 2X2 transceivers**





MIDS JTRS Schedule





Core Terminal Status

- **Core Terminal Development**
 - Delivered first EDM to F/A-18 (Boeing, St Louis) on 1 May 07
 - FAQT Test Readiness Review (TRR) conducted 31 July 2007
 - FAQT initiated (ATP, EMI, ECS, Environmental tests in progress)
 - 20 of 24 FAQT EDM terminals assembled as of 16 Aug 2007
- **MIDS JTRS Certification**
 - Received CDR closure concurrence letter
- **Acquisition Documentation**
 - MIDS JTRS Capability Production Document (CPD) through JCIDS stage 2
 - MIDS JTRS Information Support Plan (ISP) in JCPAT-E Stage 2 Review
 - PPP, SEP, TEMP, MER, & PESHE in Core Review
 - Technology Readiness Assessment (TRA) in process
 - Critical Technology Elements (CTEs) approved by OSD/CERDEC
- **Production Transition initiated**
 - Awarded production transition NRE and terminals
 - Facilitate MIDS vendors to eight terminals/month capacity
 - 28 Production transition terminals (PTTs)
- **Link-16**
 - V3 delivered Apr '07
 - SFQT A (Bypass; Mode 4): 13 Apr 07
 - SFQT B (Full Crypto; Mode 1): 15 Oct 07



MIDS JTRS Way Ahead

- **First Article Qualification Testing**
 - FAQT (Aug 07 - Dec 07)
- **Terminal Delivery**
 - Deliver remaining integration terminals USN & USAF customers
 - SSC-SD System Integration Facility (SIF)
 - NAWC China Lake Airborne Weapons Lab (AWL)
 - Deliver Air Worthiness Terminals (AWT) for F/A-18 DT (Oct 07)
 - Deliver FAQT'd terminals (Jan 08) to F/A-18 and USAF
- **Second waveform**
 - TTNT ready to award