

Headquarters Air Combat Command

Air Combat Training Systems



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This Briefing is:
UNCLASSIFIED



Overview

- **P5CTS Overview**
- **Baseline Program Description**
- **Fielding Status**
- **Retired Systems**
- **Debriefing Capability**



P5 Combat Training System



Specifications

Participant datalink: 80 nm (Air to Air)
125 nm (Air to Grd)

Data Link Relay: 200 nm

Accuracy: 10ft x 10ft x 15ft

Performance

GPS based

Rangeless

Live Monitoring

RTKN/Wpn Sims

Interoperable

- Link 16
- FAA

Aircraft

F-15

F-16

A-10C

F-18

AV-8

EA-6B

F-5

Eurofighter

EPAF F-16s

Mirage

Tornado

SU-30

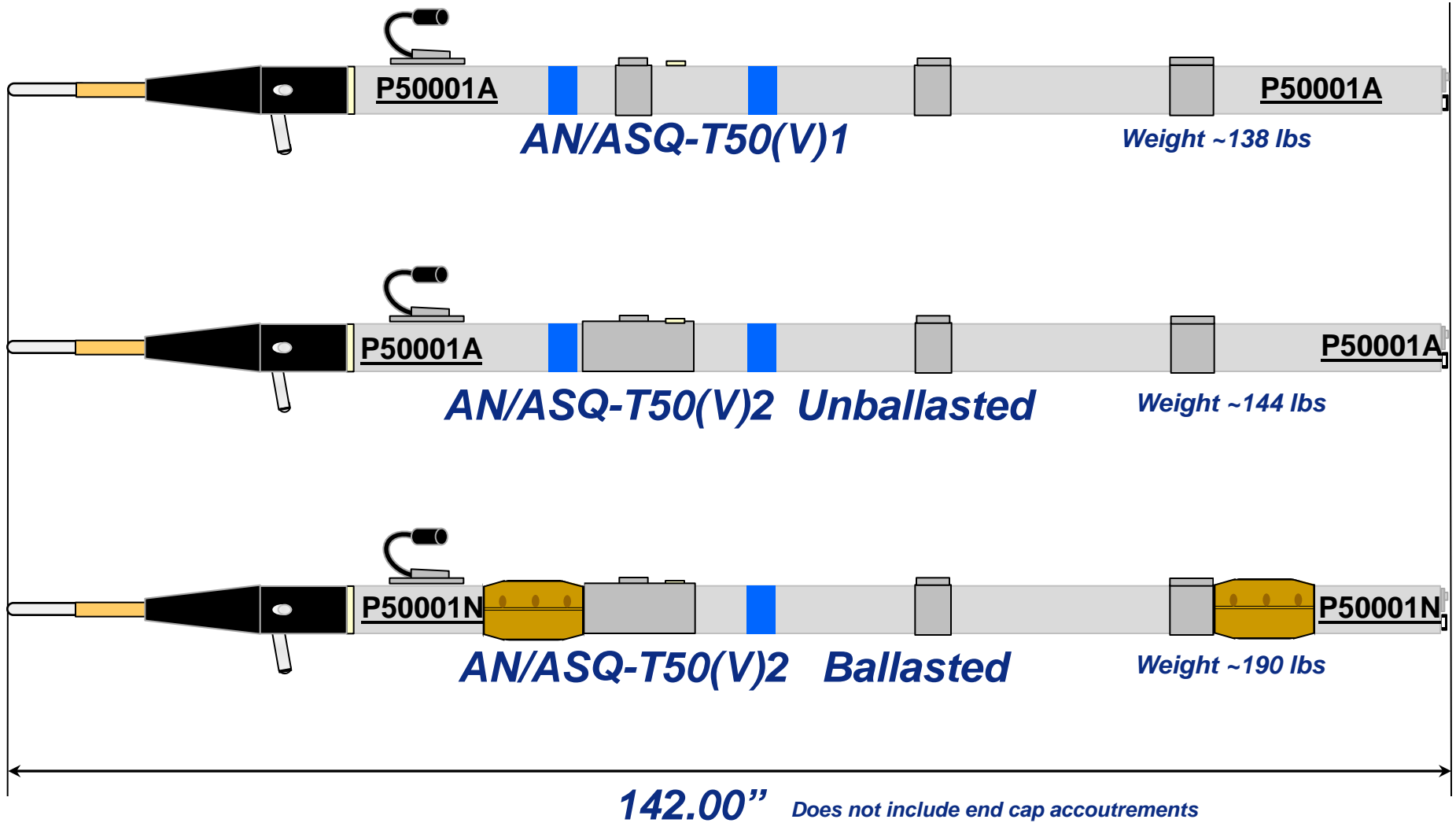
AH-1

UH-1

Provides Realistic Air Combat Training to the Warfighter



P5CTS/TCTS Pods





Ground Subsystem

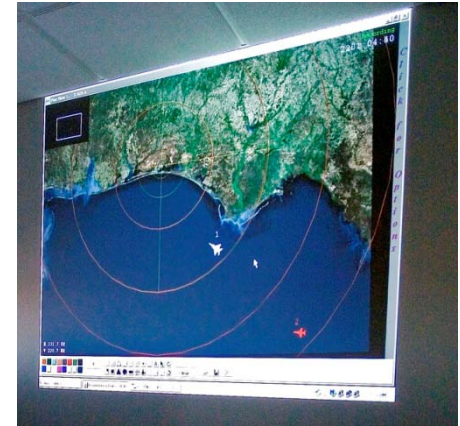
Transportable Ground Subsystem (TGS)



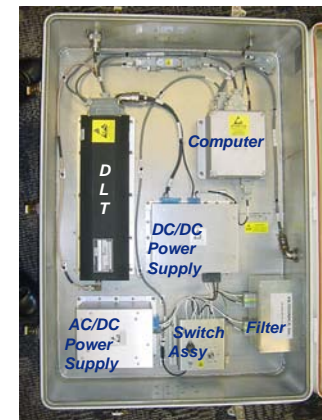
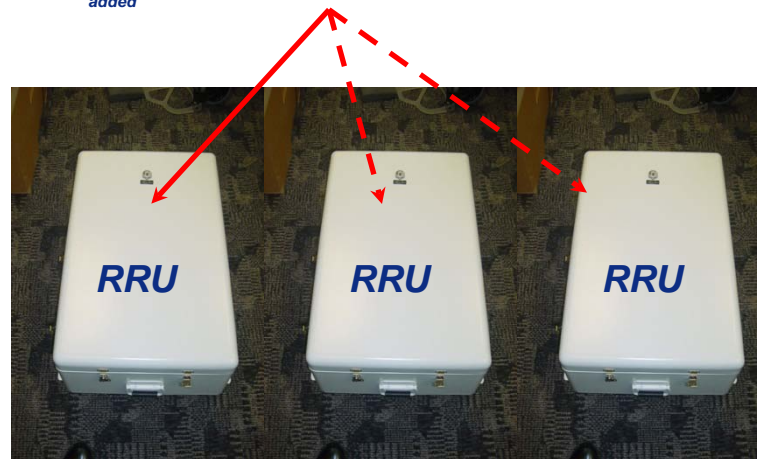
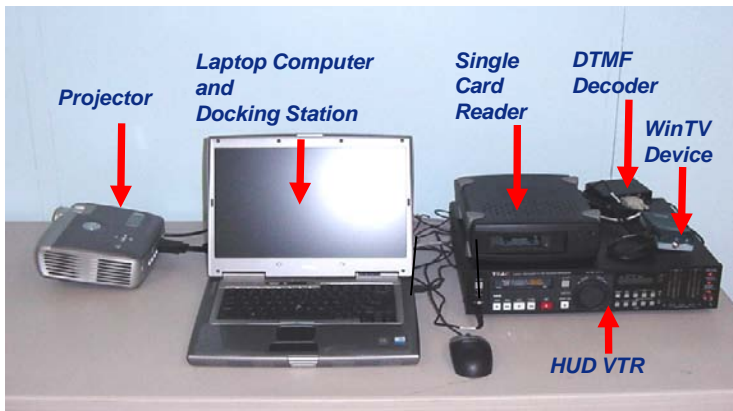
Transportable Ground Subsystem w/Live Monitor - TGS/LM



TGS w/ LM comes with 1 RRU however additional RRU's may be added



Portable Ground Subsystem (PGS)



Remote Range Unit

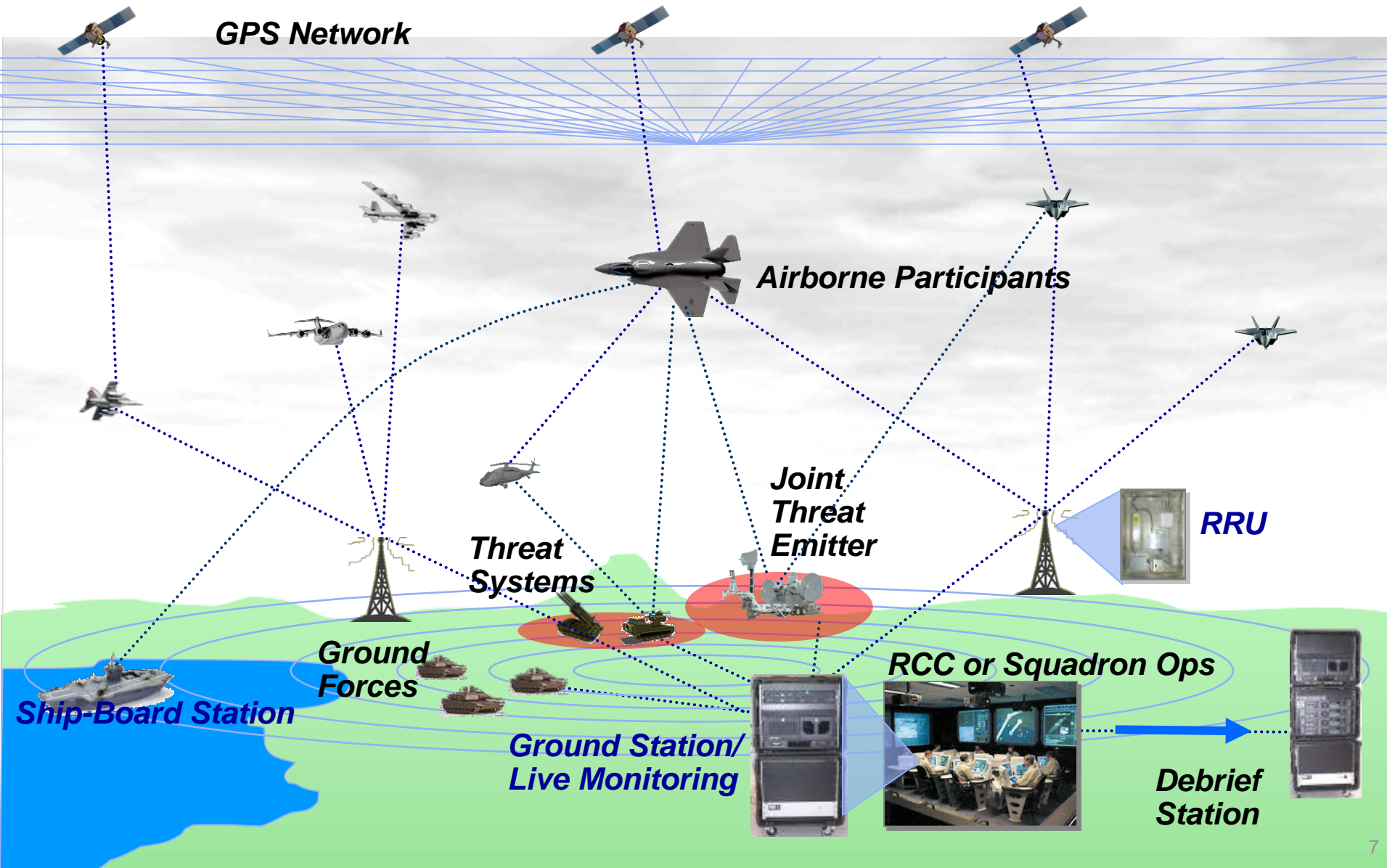


Rangeless Operations P5CTS



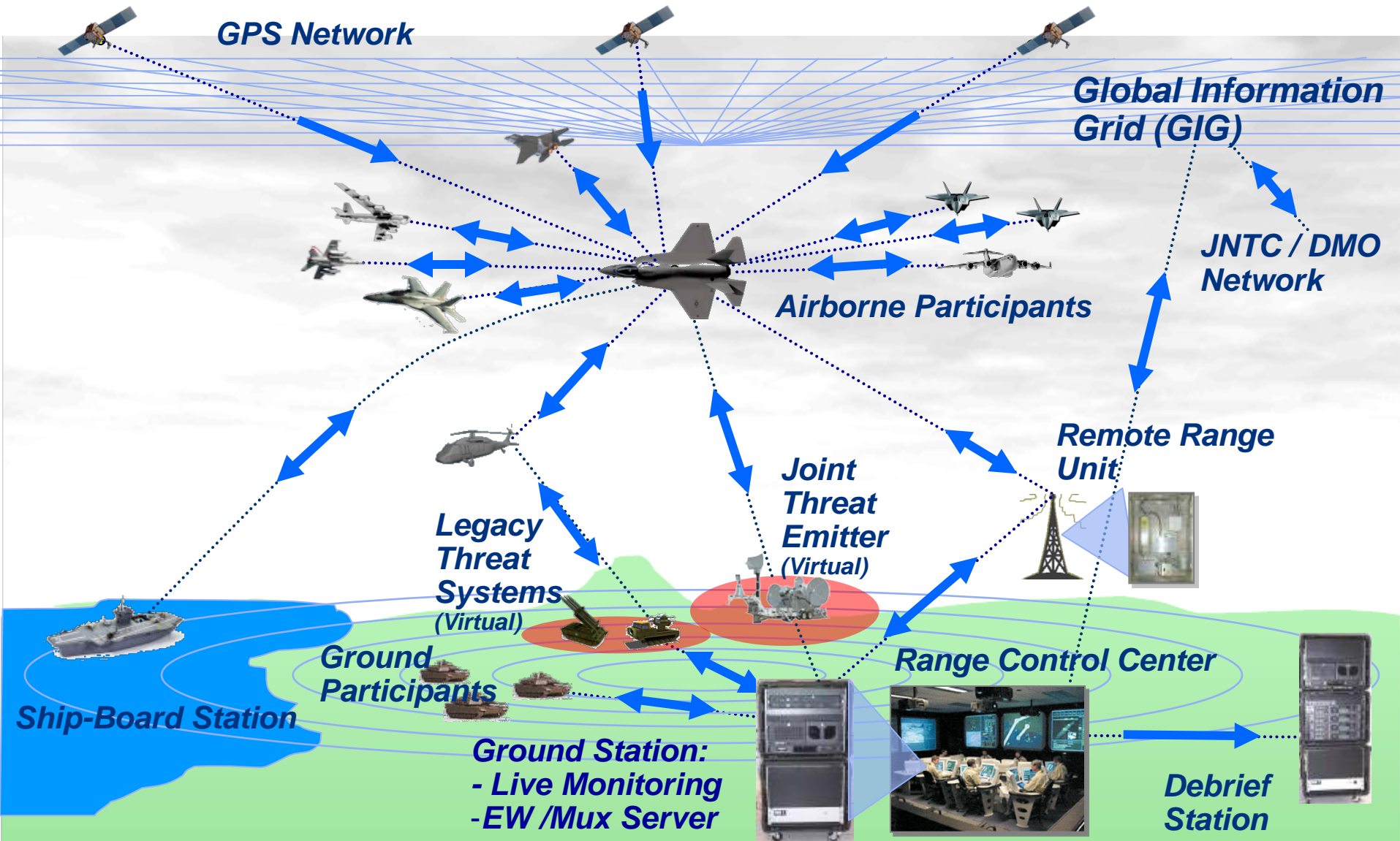


Integrated Operations





Integrated P5/LVC Operations





P5CTS Fielding Status – Oct 2011

- First Fielding at Luke AFB - Oct 2006

- Fielded Units:

ACC	
Eglin	COMP
Seymour-Johnson	COMP
Langley	COMP
Nellis/Ft Irwin (GF-W)	COMP
Mountain Home	COMP
Shaw	COMP
Barksdale	COMP
Hill	COMP
AFRC	
Homestead ARB	COMP
ANG	
Savannah CRTC	COMP
Gulfport CRTC	COMP
Alpena CRTC	COMP
Montana (Great Falls)	COMP
Volk Field CRTC	COMP
AETC	
Luke	COMP
Tyndall	COMP
USAFE	
RAF Lakenheath	COMP
Spangdahlem*	COMP
Aviano*	COMP

- On the Horizon:

2012 - Eielson	TBD
2013 - Holloman (F-16 move from Luke), Nellis (Red Flag-N)	
2014/15 - PACAF	

* Awaiting European frequency approval



P5CTS Air Force Fielding

Fielded: 779 Pods

Contracted: 152 pods delivered in FY11

Programmed: 165 Baseline Pods purchase in FY12 (del FY13)

Planned: 368 Encrypted Pods (required FY 12, delivery TBD)

AF TOTAL: 1464 Pods





Transition Update - Retirement

- **Retired Pods**

- HAIS POD - Apr 06
- P4A (TACTS) – retired 2010
- P4AM – retired Jun 07
- P4AW – retired Aug 07
- P4BX – retired Dec 08
- P4G – retired Jun 09

- **Retiring Pods**

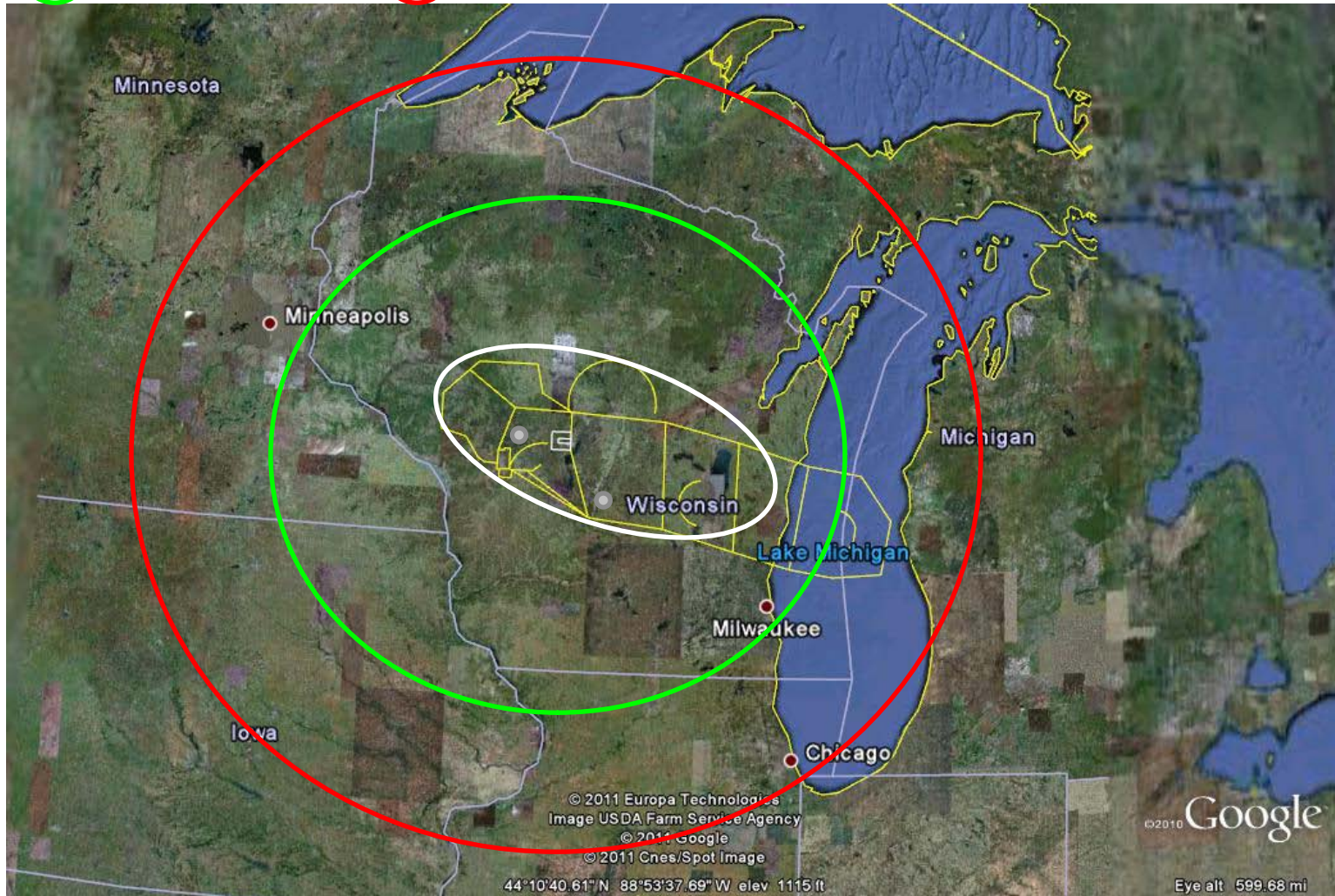
- URITS - NLT FY 12 (Projected to retire Jan 2012)
- P4B - NLT FY12 (Projected to retire Jan 2012)
- P4NS - NLT FY13/14
- P4BE – NLT FY 14/15

Down to 8 AF pod system baselines



Ground Infrastructure Reduction

 = P5 no relay  = P5 with relay



Old tethered range needed 18 TIS towers to cover the area in white. P5 covers the area in red with only 2.

Pod Evolution 1974

- = Cubic
- = Metric (DRS)
- = Cubic/Metric (DRS)
- = ADTI/Cubic/Metric (DRS)
- = Interstate Electronics Corp
- = General Dynamics
- = Raytheon
- = Comptek/Metric
- = Kollsman

● = Rockwell/Cubic

* Navy only

1760

GPS -
Multi-Lat
Connectors
Based
Recorder
Rangeless

KG-66
Encrypted

KY-953/A
Encrypted
(REM)

Israel
No Datalink

EnRAP

Australia
ASQ-T38D

CRIS
Encrypted

1977

1980

1987

1989

1990

1994

1996

1998

2000

2002

2004

2010

P3
ASQ-T11

P4
ASQ-T13

P4S

HAI
Hill AIS
ASQ-T21

P4A*
ASQ-T17

P4AX
No Altimeter
ASQ-T20

P4AE
Egypt
ASQ-T26

P4AM
ASQ-T25

P4KM
ASQ-T25J

AISI*
ASQ-T16

P3A
ASQ-T18

AISIK*
ASQ-T31

BAIS
Bomber AIS
ASQ-T28

ARDS
(LRIP)
ARQ-52(V)2

ARDS
(HDIS)
ARQ-52B(V)2

ARDS
(GNP)
ARQ-52B(V)17

TIP
Test Instrumentatio
Pod

P4BX
No Altimeter
ASQ-T27(V)1

P4AW
Laser
ASQ-T29

JACTS
ASQ-T29

JACTS
KGV-23
Encrypted
AMODSM

P4B
ASQ-T27

P4BX
No Altimeter
ASQ-T27(V)1

AIP-FW*
(LATR)
ASQ-39T & 40T

P4G
ASQ-T27A

P4N
(NACTS)
ASQ-T35

KITS
(Kadena)
ASQ-T34

JTCTS
ASQ-T36 Plate
ASQ-T37 Pod

P4BE
(AAU)
ASQ-T27B

P4BEv1
(GPMP)
ASQ-T27C

P4NT
(Taiwan)
ASQ-T45

P4NS
(NACTS-RSI)
ASQ-T35A

SAKITS
(Saudi Arabia)
ASQ-T47

AKITS
(Alpena)
ASQ-T46

AARI

URITS
No datalink
ASQ-T38

URITS
S-band
Datalink
ASQ-T38B

Israel
No Datalink

FMRI
L-band Datalink
ASQ-T38A

EnRAP

Australia
ASQ-T38D

P4R1
No Datalink
ASQ-T38C

P5CTS/TCTS
ASQ-T50(V)1
ASQ-T50(V)2

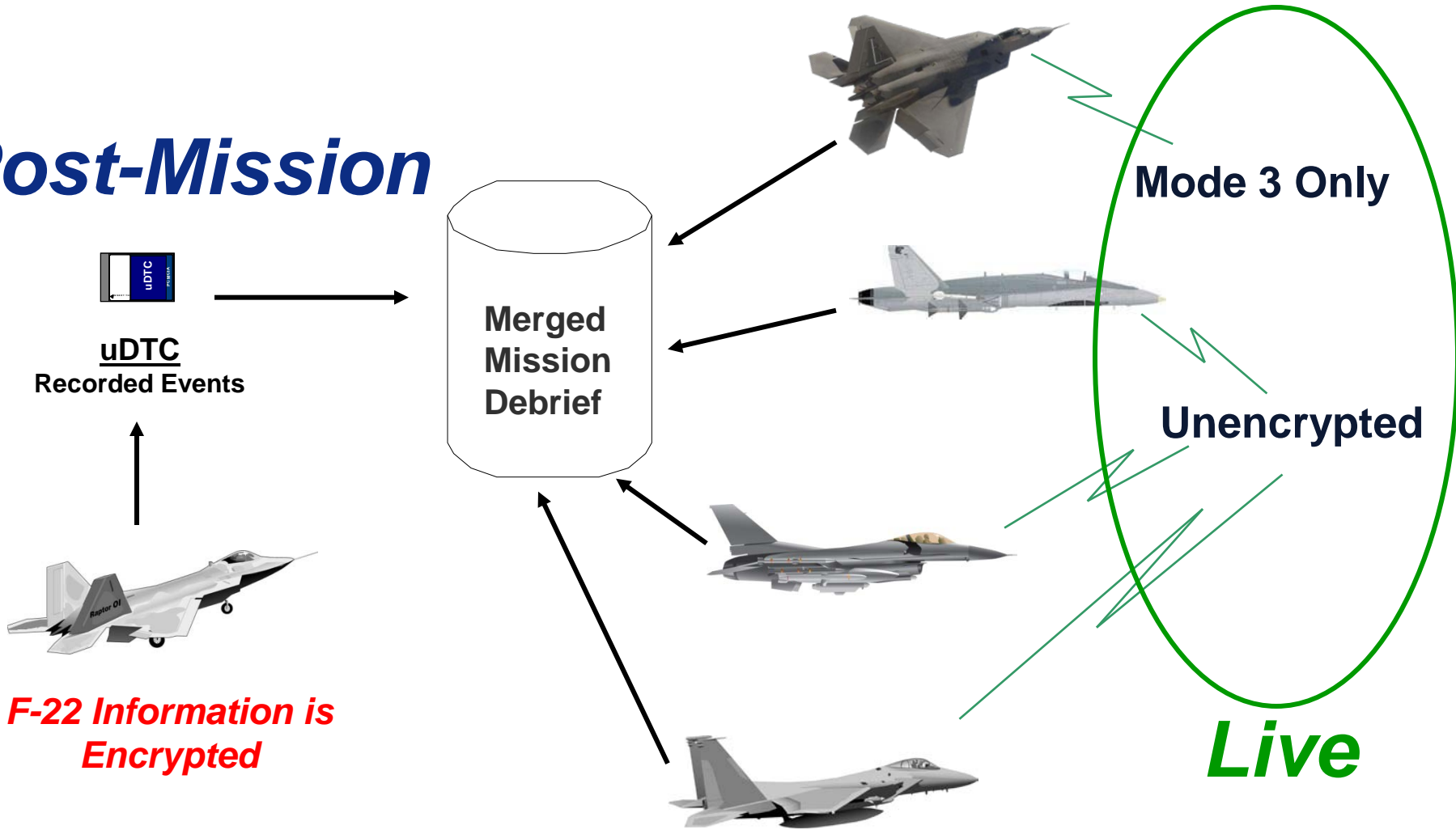
☠ = OBSOLETE/RETIRED



F-22 ACTS Short-Term Solution

Post-Mission Merge Debrief – Fall 08

Post-Mission

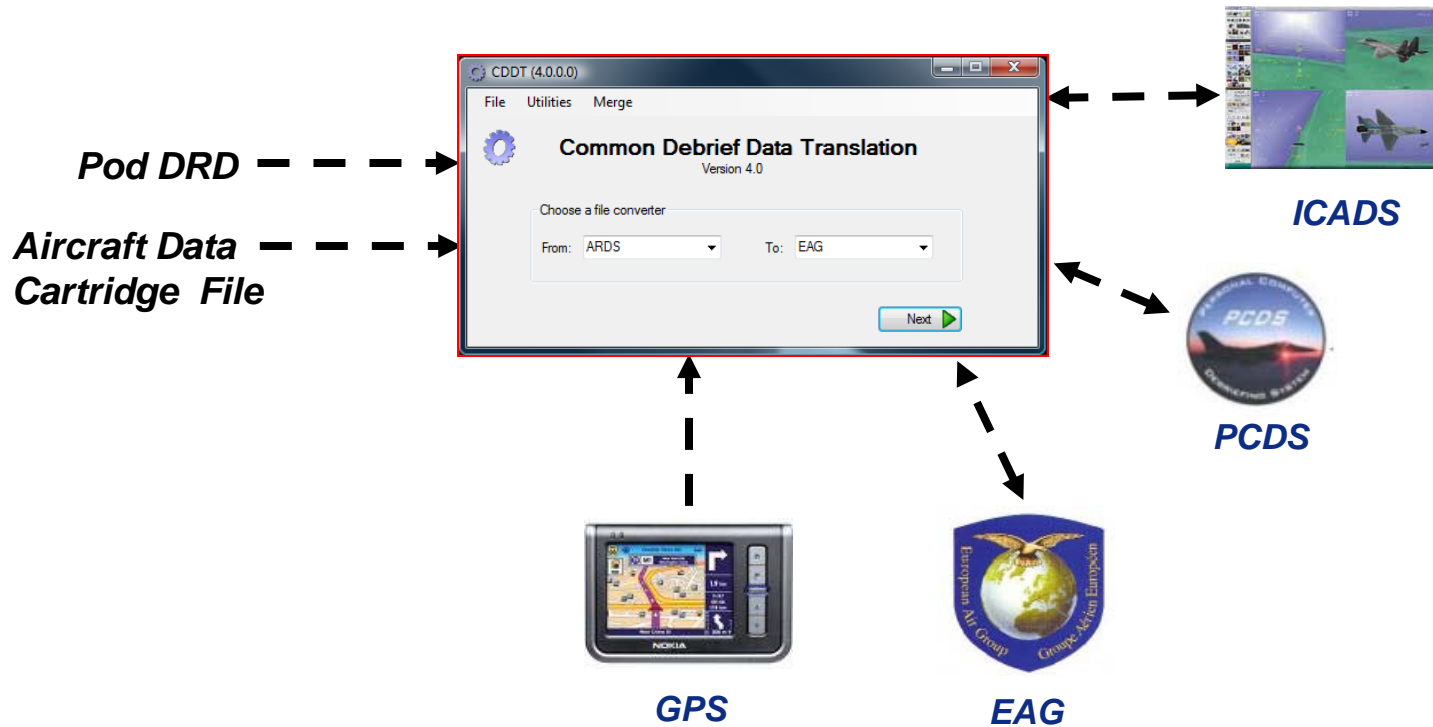


F-22 Information is Encrypted

F-22 long-term solution is an encrypted data link



CDDT System Overview



- Plus one-way conversions for:
- ITAS
 - JDS
 - ARDS
 - 4 GPS variants



Questions ?

