

Medium Altitude UAS Division

Enabling kill chain dominance through decisive UAS solutions...on time, on cost



Predator/Reaper Long-term Sustainment Business Case Analysis

14 Nov 2011

Cynthia Hertenstein

ASC/WIIL

DSN: 785-1846

Cynthia.Hertenstein@wpafb.af.mil

U.S. AIR FORCE



U.S. AIR FORCE

Overview



Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **Predator / Reaper Program History**
- **Transition from CLS to Organic**
- **Setting the Stage for Transition**
- **Depot Activation Phased Approach**
- **Business Case Analysis**
- **Lessons Learned**



U.S. AIR FORCE

Program History



Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **MQ-1 Predator and MQ-9 Reaper aircraft were developed under Rapid Response Process**
- **Sustainment Plan was Contractor Logistics Support for Life**
- **Re-evaluation of program drove “Core” Determination**



Transition CLS to Organic



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **Title 10, USC, Section 2464 – Core Logistics Capability – 4 years after IOC**
- **Title 10, USC, Section 2466 – Limitations on Performance of Depot Level Maintenance of Material (50/50)**
- **DoD Product Support Business Case Analysis Guidebook – April 2011**



Setting the Stage for Transition



Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **Depot Source of Repair process completed in Dec 09**
- **Depot Maintenance Activation Working Group (DMAWG) established Dec 09**
- **BCA contract awarded Dec 09**
 - Restart May 11
- **Repair Data Analysis (RDA) on contract**
 - Depot Level Repair Information Tool
 - Depot Repair Capability Gap Analysis
 - Risk Management Plan



Depot Activation Phased Approach



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

Phase	Early Induction Program	Phase A	Phase B
Key LRUs	<ul style="list-style-type: none">✓ Multi-spectral Targeting System (MTS) A (complete)• MTS-B• Selected items from remaining Original Equipment Manufacturers (OEMs) based on lowest activation risk and repair induction rate (9 items)	<ul style="list-style-type: none">• High Priority LRUs (approx. 80+ items)	<ul style="list-style-type: none">• Low Priority LRUs• Composite Repair



Business Case Analysis Goals



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **BCA will recommend optimal long-term sustainment strategy**
 - **Identify best-value Performance Based Logistics**
 - Cost effective
 - Optimizes system readiness
 - **Evaluate use of Private Public Partnership (PPP) alternatives**
 - Determine type of partnership
 - All alternatives will consider Title 10 Core Logistics and Depot Level Maintenance of Material (50/50)

Develop long-term sustainment strategy for Predator and Reaper systems that optimizes overall effectiveness and minimizes lifecycle cost and risk

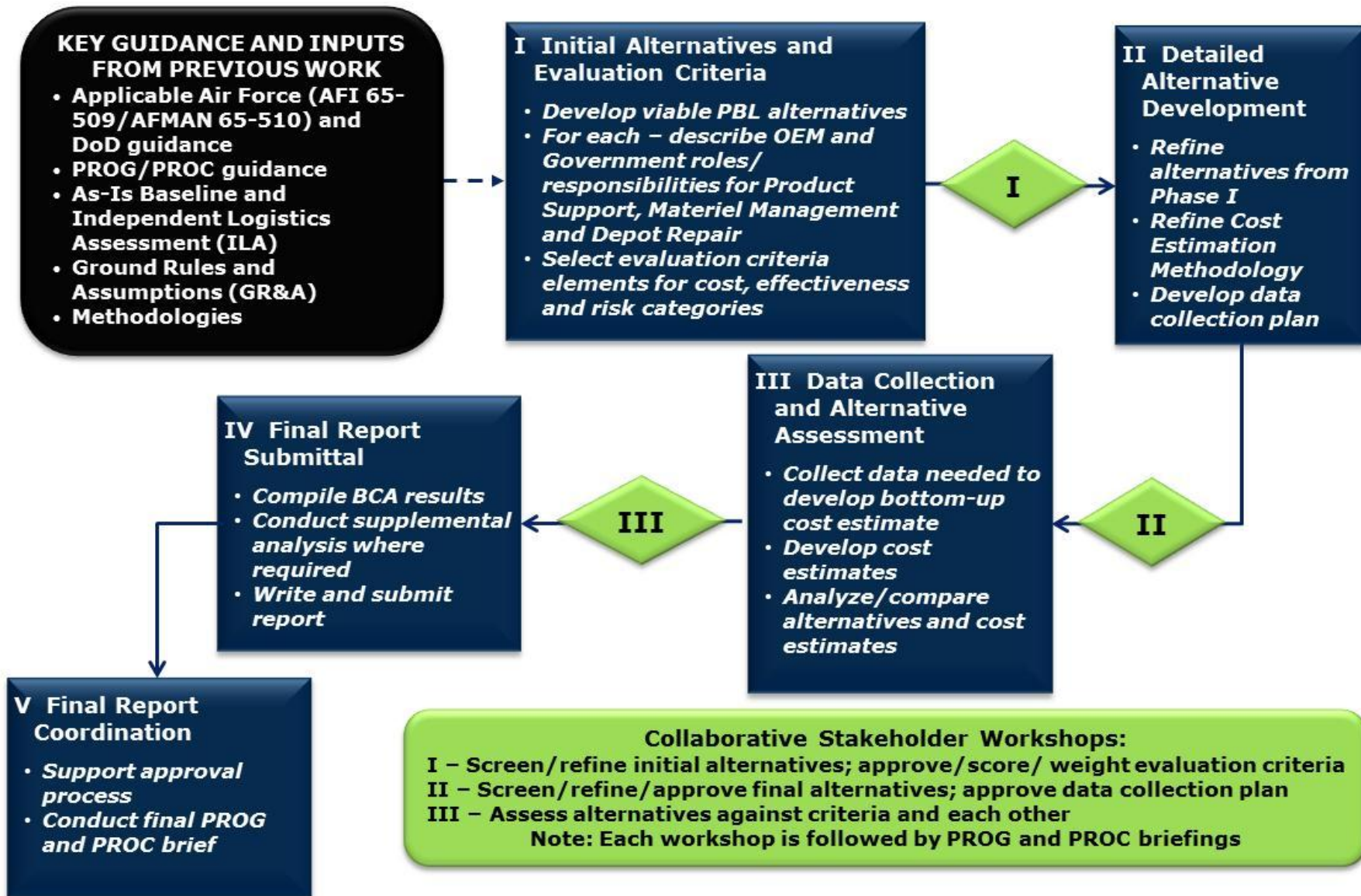


BCA Process



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost





BCA Governance Membership



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

Review Structure

Predator/Reaper Oversight Council (PROC)
GO/SES level forum that provides strategic oversight and approves direction and final recommendation

Predator/Reaper Oversight Group (PROG)
O-6/GS-15 level forum that reviews and validates direction and outcome of each phase of BCA development

Working level forum that works with the contractor to conduct the BCA

Review Cycle

BCA Work in Progress

Working level review and participation

Workshop

Working level feedback and scoring
PROG review/validation

Executive Review

PROC Approval

Review Phases:

Initial Alternatives/
Evaluation Criteria

Detailed
Alternatives

Alternative
Assessment

Final
Recommendation



BCA Areas of Consideration



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

Product Support
Program Management
Technical Data
Sustaining Engineering
Support/Test Equipment
GFE/GFM
Manpower and Personnel
Protection of Critical Program Information and Anti-Tamper Provisions
Training and Training Systems
Post Production Support Planning
Design Interface
Facilities

Depot Maintenance
Maintenance
Computer Resources
Facilities

Materiel Management
Item Management
Supply Support
Supplier Management & Procurement
Packaging, Handling, Storage and Transportation
Facilities

MQ-1
OO-ALC - Airframe
FRCSE - Multi-spectral Targeting System (MTS)-A
KTR - Engine

MQ-9
OO-ALC - Airframe
OC-ALC - Engine
FRCSE - MTS-B

Common
OO-ALC - Ground Control Station (GCS)
OO-ALC - Ground Data Terminal (GDT)
KTR - Predator Primary Satellite Link



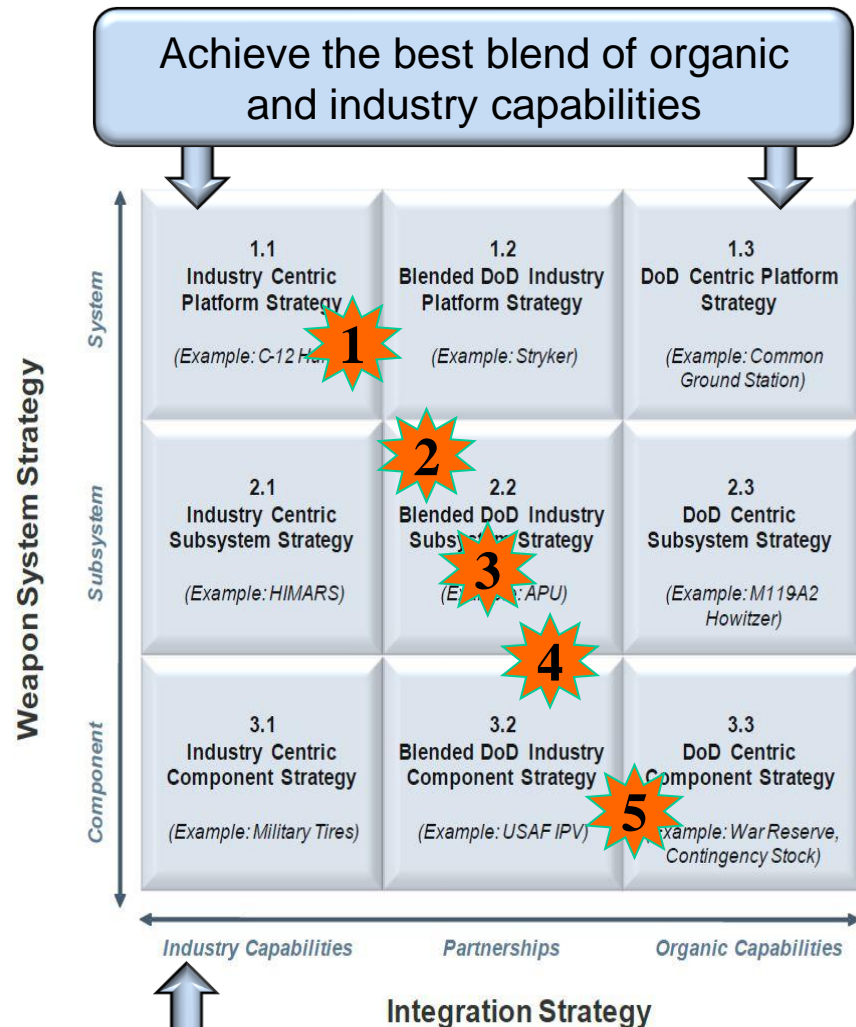
Methodology/Rationale



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- Consider MQ-1 and MQ-9 together in each alternative—look for commonality
- Move depot workload into organic depots in order to comply with statutory requirements
 - 10 USC 2464 (core) and 2466 (50-50)
- Designate Product Support Integrator (PSI) per AFI 63-101 (3 Aug 2011)



“Core” designation makes 100% contractor unlikely

Decision Matrix for Product Support (DMPS)*

* DoD Product Support BCA Guidebook – April 2011



BCA Lessons Learned



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

- **Get SAF/FMC (along with AFCAA), SAF/IEL, and other Headquarters AF-level organizations' buy-in up front**
 - most significant lesson learned
- **Have a governance structure in place at the start of the BCA**



U.S. AIR FORCE

Enabling kill chain dominance through decisive UAS solutions...on time, on cost

Questions?

