

Warner Robins Air Logistics Center

AFMC



T3000/4000 Engine Trailers

**642d
Combat Sustainment
Group (CBSG)**

**Briefer: Janice Chwat
Program Manager/579 CBSS
478-222-3951**



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

- Program Description
- Photo
- State of the Program
- Program Challenges
- Solution
- Market Research
- BCA
- Requirement
- Remanufacture Challenges
- Payback
- Q&A



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Program Description

- 3000 and 4000 Engine Trailers are used to transport, store and remove and replace F100, F110 and F119 engines on multiple aircraft including F-15, F-16 and F22
- Aging fleet, parts obsolescence, reduction in maintenance personnel, high Ops Tempo has caused supportability shortfalls
- Need repair/refurbishment program to extend service life, as trailers are old and are in need of complete overhaul to meet safety, reliability and supportability requirements



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Service Life Extension Program (SLEP)





T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

State of the Program

- T3000 trailers
 - Approximately 2000 in use worldwide
 - Primarily transport dollies
 - Simple design
 - Unit price approximately \$10K
 - Considerable recoverable materials
 - No depot maintenance requirements
 - Field-level maintenance
 - Unit funded overhauls
 - Several configurations – same function
 - Increasing number of failures/structural defects
 - Spindle failures
 - Age/environment related defects



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

T3000 Spindle Failures





T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

State of the Program

- T4000 trailers
 - Approximately 388 in use worldwide
 - Used for engine removal/replacements
 - More complex than T3000
 - Hydraulics
 - Scissor type lift
 - Recoverable materials
 - No depot maintenance
 - Different configurations – same function
 - Prototype remanufacture completed



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

T4000 Prototype Remanufacture





T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Program Challenges

- Safety/functionality
 - Recent failures
 - Potential for human and material losses
- Limited budget
 - SE historically funded at 30%
 - Competing requirements
- DMS/obsolescence issues
 - Impact on field maintenance
 - Proprietary parts
- Asset accountability
 - Use as transport dollies
 - UID



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Solution

- Remanufacture condemned trailers
 - Like new condition
 - Meet or exceed OEM specs
 - 85/15 coating
 - Same service life as new
 - No proprietary parts
 - Must be long term sustainable
 - Invisible to user
 - UID



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Market Research

- Common commercial practice
 - Used by other DoD agencies and FMS
- Request for Information (RFI) issued Jul 08
 - Five responses received
 - Relevant capability exists
 - Pool of capable small businesses available



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Business Case Analysis (BCA)

- 40-60% cost savings anticipated
- Risk
 - Low cost risk
 - Establish minimum carcass standards
 - Low schedule risk
 - Moderate performance risk
 - Safety
 - Long term supportability
- T4000s are good candidates for remanufacture
- Researching T3000
 - Safety issues
 - Inexpensive to buy new
 - Risk/reward



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Requirement

- Long term contract
 - Anticipate 1 yr basic period plus 4 options
 - Competitive small business set aside
 - Firm fixed price
- Out year requirements
 - Available dollars vary from year to year
 - Many factors influence actual execution
 - Availability of contract
 - Competing requirements
 - Actual budget
 - CAMS



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Requirement

T4000 Quantities by FY - Based on TA Shortages

	FY09	FY10	FY11	FY12	FY13
Required (Quantity)	119	138	155	166	189
Funded	1	3	14	3	9



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Remanufacture Challenges

- Gaining acceptance
 - Must perform like new product
 - Safety
 - Must show significant ROI
- Limit impact
 - TO changes
 - Field maintenance
- Long term sustainment
 - No proprietary parts
 - Maximum use of common COTS items
- Uncertain requirements
 - Successful execution and ROI may change trend



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING

Pay Back

- Significant savings
- Increase MAJCOM spending power/flexibility
 - Buy more trailers
 - Buy deeper into SE requirements list
- Reduced ALT/PLT
- Improved durability/maintainability
 - 85/15 coating
 - COTS components
- Ability to accept and execute GWOT funding



T3000/4000 Engine Trailers



542d COMBAT SUSTAINMENT WING



Questions?