





# Value Engineering Tools for Contractor Support

Dwayne Porter Castings and Forgings 614-692-8857/DSN 850-8857

Steve Gomez Value Engineering Proposals 614-692-7308/DSN 850-7308



#### **Agenda**



- Castings & Forgings Assistance Tools
- Value Engineering Change Proposals (VECP's)
- Replenishment Parts Purchase or Borrow (RPPOB)
- Sustaining Engineering (SE)
- Additional VM Programs Managed at DSCC
- New Initiatives
- Summary
- Value Engineering Program Points of Contact





# DSCC Casting and Forging Assistance Tools





Maritime & Land Forging And Casting Team



#### DSCC's MetaLFACT Team



- Provides casting & forging assistance
- MetaLFACT is comprised of Government and Industry representation
- MetaLFACT is a resource available to the following
  - DSCC Personnel: Product Specialists, Buyers, Planners
  - Engineering Support Activities (ESAs)
  - Contractors/Suppliers
    - With active DSCC contracts (w/Contracting Officers' approval)
    - Bidding on open DSCC solicitations
- Tools to provide assistance







#### Cast Tooling Database



#### www.defensetooling.com

- Population
  - 120 companies
  - 18,600 tooling records
- Utilized by Supply Centers
- Assist defense contractors in finding tooling
  - 50% success rate of matching inquiries to patterns/suppliers
- Company notified each time gov't buying parts for which they have tooling
- \$1.5 million in orders directed to participants each month







#### **Success Stories**



#### Linking DLA Needs to Capable Metalcasters

- Latch Bar Assembly: Sole Sourced
- Prior contract: 15,000 @ \$47.49/ea.
- Foundry bids direct: 12,000 @ \$37.50/ea.
- Contract award for 16,000: \$159,840 in cost savings

#### Linking Defense Contractors to Foundries with Tooling

- Detent Lever Bracket: Aluminum Sand Casting
- Previous Buy June 1985: Contractor no longer exists
- DLA Solicitation on May 2008: Qty. 161
- Contractor inquiry through Tooling Database Website
- Tooling located at foundry
- Contractor bid and awarded



#### Casting Suppliers Database

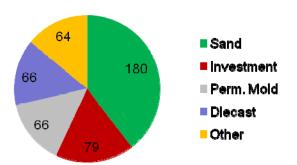


Culture

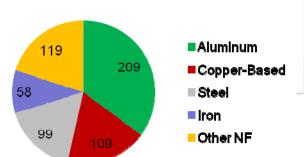
#### www.defensecastingsuppliers.com

- Online directory of metalcasters serving the defense industry
- Utilized by government and defense contractors
- 256 Registered Metalcasters
  - All Processes & Materials
- Casting bid solicitations matched to plant capabilities

#### **Casting Processes**



#### **Casting Materials**





Search Supplier Capabilities Databas

Supplier Profile Information		
Company Name:		
Cage Code:	State: Delect (Date(x) AL AR A2	1
RapidTooling: ONs OYes	Low Volume: O No: O Yes	
Search Type: @ "And" Return	ns suppliers who meet ALL criteria suppliers who meet AT LEAST CNE criteria	
Supplier Classifications and Capabilities		
Susiness Classification:	Federal Classification:	
BA Program Participant  Minority Owned  BRA Cettfied Hubbone Firm  Small Bulletenes  Small Disadvartaged Business  Valeurs Owned  Woman Owned	Guns through 20 mm (1005) Guns over 20 mm up to 75 mm (1012) Guns 25 mm through 125 mm (1015) Guns 35 mm through 125 mm (1015) Guns over 125 mm through 200 mm (1020) Guns over 200 mm through 200 mm (1020) Guns over 200 mm through 200 mm (1020) Guns over 200 mm (1025) Chemical weagons 8 equipment (1040) Launchers, brised 6 depth charge (1045) Launchers, greade 8 depth charge (1045)	
Casting Processes:  Certiflipal  Olecating  Investment  Fermanent Mold  Flanne  Sand  SourcalSeni-Sold  V-Process	Secondary Operations:   Assembly     Engineering & Design     Uppid Periodrat   Painting     Radography     Surface Treatments	Denensional Inspection Heat Tout Wagnetic Particle Pattern Shop Rough Finish Nachining
Supplier Materials & Alloys		34
Materials:		
O stemos		



### Foundry Toolkit for Gov't Business



#### www.defensecastingtoolkit.com

- Online source assists suppliers to
  - Learn DLA e-commerce processes
  - Establish required supplier accounts
    - View solicitations
    - Access tech data packages
    - Submit quotes
  - Understand procurement process
  - Locate pre- and post-award assistance
- Find Business Opportunities



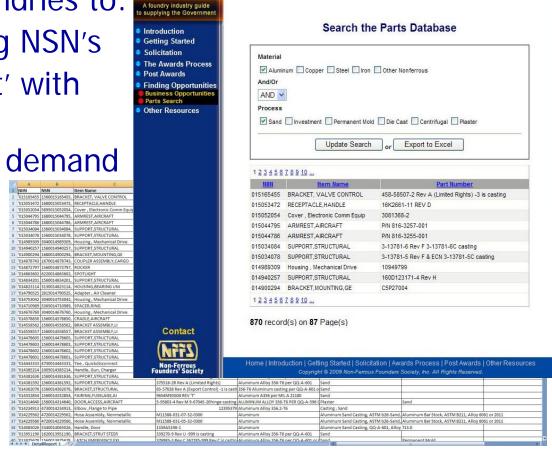


#### Identifying Opportunities \_



#### Defensecastingtoolkit.com/partsearch.htm

- Part search database
- Online source assists foundries to:
  - Quickly identify casting NSN's
  - Associate 'prospect list' with DIBBS user account
  - Determine anticipated demand
- Leverages CAST-IT, DSCR & DSCC databases
- 7,000+ casting NSN's
- Routinely updated





### National Forging Tooling Database (NFTD)

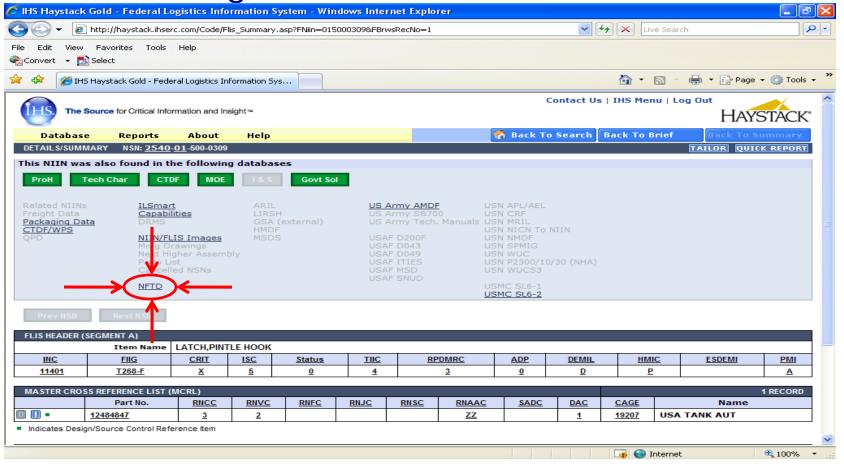


- Purpose
  - Rapidly locate forging dies for legacy weapon systems
- Benefits
  - Web base database
    - Locates forging dies and suppliers
    - Widely accessible through Haystack Gold
  - Reduces ALT and PLT
  - Avoids costs of designing/building new dies
    - Huge benefit for small order sizes
  - Sustainable beyond the life of the FAST Program



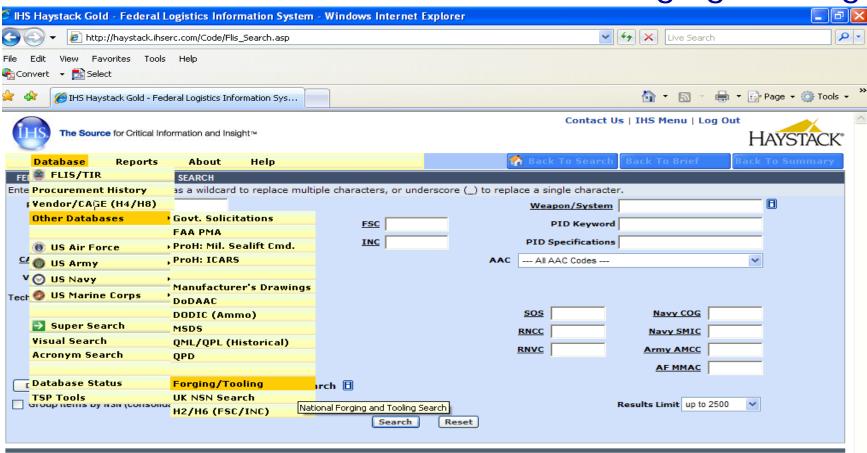


- Log into Haystack Gold
- Search for part on main screen by NIIN
- If tooling exists, select the NFTD link





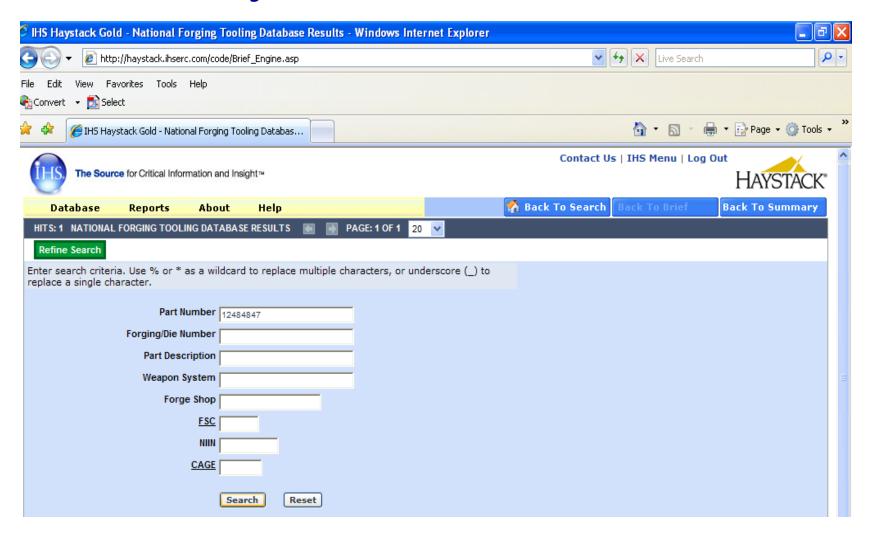
- Alternate Method: Log into Haystack Gold
- Select the Database drop-down menu
- Select "Other Databases", then "Forging/Tooling"







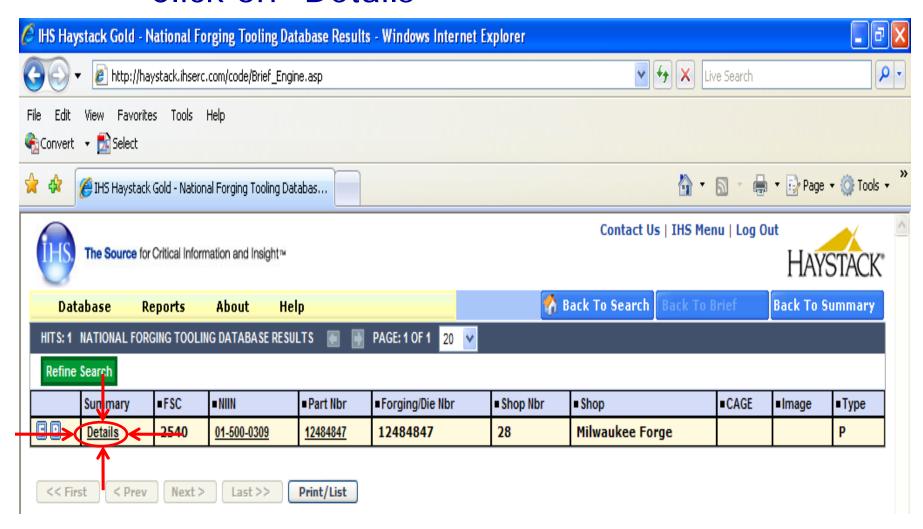
Search by Part Number or NSN







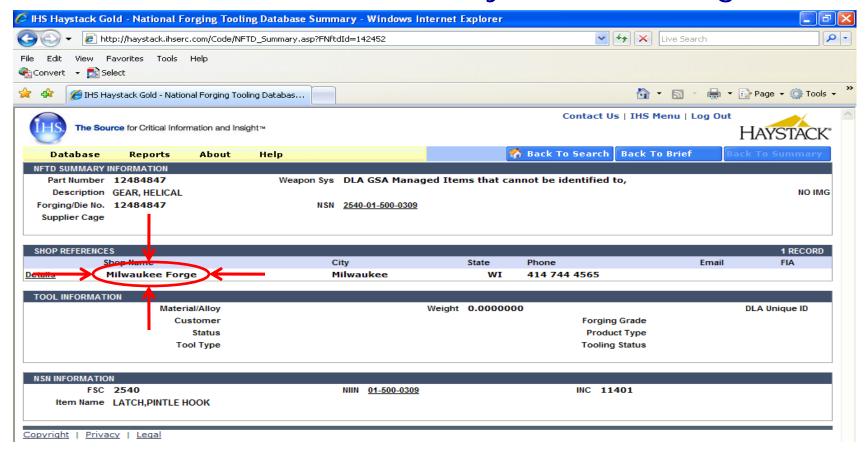
Click on "Details"







- Screen shows last known location of tooling
- Contact company to verify the existence, condition, and availability of the tooling.



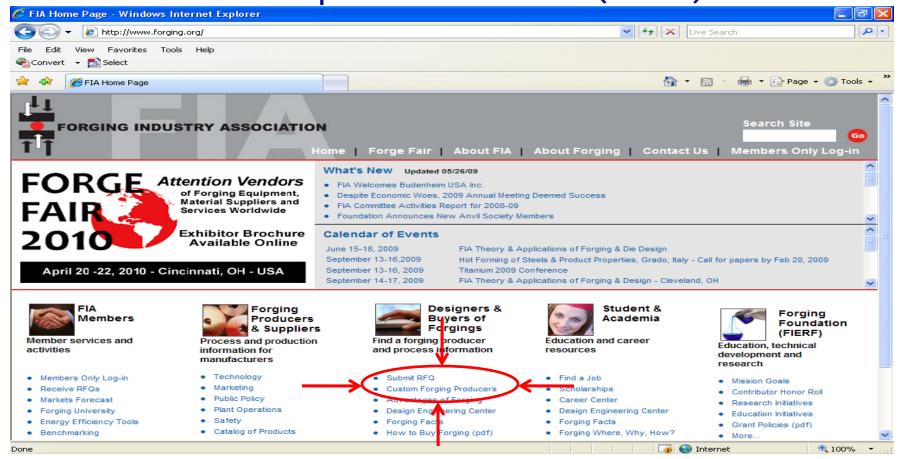


### Forging Industry Association Website

#### http://www.forging.org

Culture

- Locate Forge Shops
- Submit Request for Quotes (RFQs)

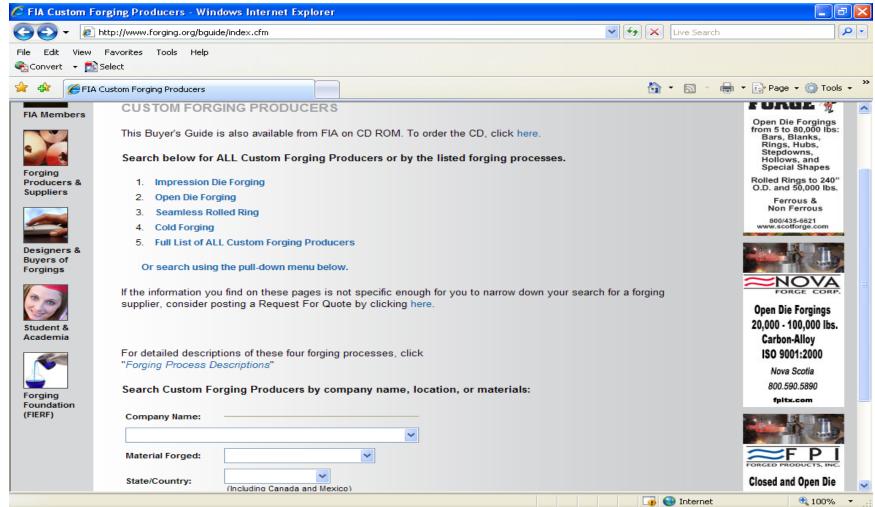




## Find a Forging Source Using FIA Website



Search for a forge based on process, location, or type of metal being procured



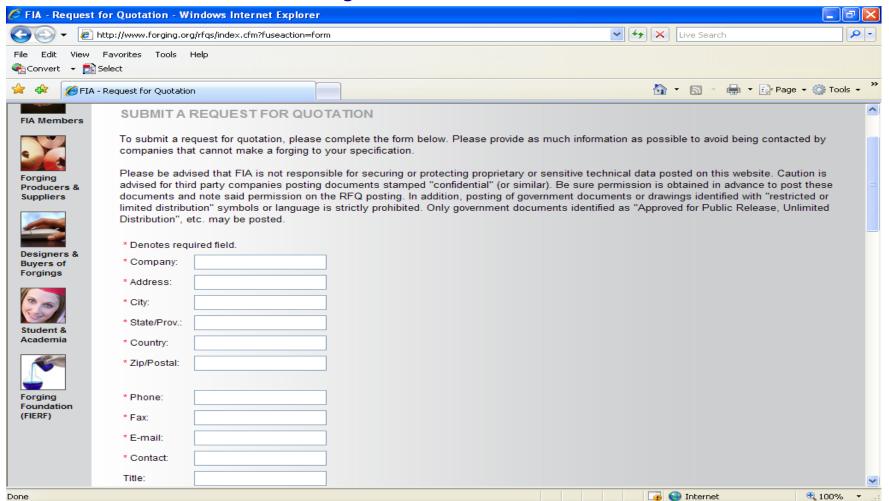


## Submit RFQ Through FIA Website



Fill out all required fields and submit.

RFQ will notify 118 FIA members.







# Value Engineering Change Proposals

**VECPs** 



#### Value Engineering Change Proposals



Culture

- Contractual method to share savings
  - Improve DoD supplies and/or equipment
  - Savings shared between Contractor and DoD
  - Described in FAR Clause 52.248.1
- Improvements include any price savings
  - Processes
  - Materials
  - Manufacturing techniques
  - Other





#### **Rules and Tools**



- VECP clause in all DSCC contracts>\$25K
- Clause can be added by modification
- VECP can only be received on an instant contract
- Typical share ratio: 50/50
- Collateral lifecycle savings may be negotiated





# Replenishment Parts Purchase or Borrow Program

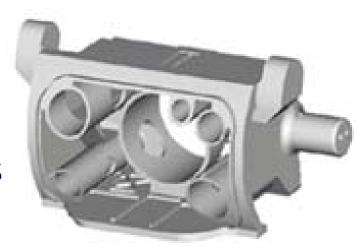
**RPPOB** 



#### Why RPPOB



- Statutory Requirement
  - Defense Procurement Reform Act of 1984
    - Public Law 98-525, Section 1216(a)
    - Codified at Title 10 U.S.C. 2320(B)
- Promote full and open competition
- Develop new sources
  - Sole Source
  - Limited Competition Items





#### **RPPOB Methods**



- Direct Purchase
  - Contractor buys at Standard Unit Price (SUP)
  - Item is not returned
- Bailment
  - Item loaned at SUP
  - SUP held in Trust by DFAS
  - SUP monies returned
    - If item is returned in "A" condition
- View of Part
  - Contractors may inspect part in a designated area





#### RPPOB – What it is Not



- Not intended to proof their manufacturing
- Not available on solicitations/contracts when:
  - In accordance with a specification
  - In accordance with a drawing
- Not to test a competitor's part



#### Purpose: Develop New Sources



#### **RPPOB Process**



- Contractor request received
- Item reviewed as an RPPOB candidate
- Contact with ESA for approval to bail out
- Contractor provides monies and signs the agreement
- Item directly sent to Contractor
- Contractor provides alternate offer data package
- Data package sent to ESA for final approval
- System updated with approval



#### Benefits of RPPOB



- Break Sole Source
  - Average 30-40% in procurement savings
- Provide additional sources on limited source items
- Provide source for obsolete items
- Reduce cost through enhanced competition
- Potential for Unlimited Rights Technical Data Packages (TDPs)





# Sustaining Engineering Program

SE



#### Sustaining Engineering



- Improve/upgrade DLA-managed items
  - New technology
  - Quality/reliability improvements
  - Ease of maintenance improvements
  - Improve logistics footprint
- Save money!!
- Relatively new program at DSCC
  - Initiated in Jan 04
  - Focus on Land and Maritime items





#### Sustaining Engineering



- Proposals solicited from all services
- Proposals evaluated by DSCC team
  - Value Management Team lead
  - Weapon System Support Manager (WSSM)
  - Cognizant Maritime/Land Application Team
    - Engineer/technical
    - Product Assurance
    - Buyer
- Selections funded/implemented in order of
  - Date of receipt
  - Weapon system support impact
  - Overall best value to customer
- Accepted proposals funded by DSCC
  - Coordinated with ESA
  - Funds available FY09: \$5M





#### **Project Selection Criteria**



- DLA/DSCC managed item
- Minimum ROI of 10:1
  - Lifecycle savings
- Make positive impact
  - Operational readiness
  - ALT/PLT
  - Item demand
  - Unit price
- Reduce field maintenance actions
- Improve competitive position
  - Availability of tech data
  - Increase sources of supply





#### Aviation Ground Power Unit (AGPU) Exhaust



NSN 2990-01-325-1868

- AGPU used by Army Aviation
- Redesign AGPU exhaust to eliminate heat traps and improve fuel consumption.
- Benefits include:
  - Increased turbine life cycle
  - Reduced maintenance actions
  - Lower fuel costs
  - Gov't owned Technical Data Package
  - Reduced field demands
- Project proposed and managed by Aerospace Ground Support Equipment Directorate at Redstone Arsenal



Investment: \$736K

ROI: 23:1

Project Savings: \$16.8M



#### M224 Mortar



#### NSN 1005-00-903-0933

- Revise drawings/TDP's for 28 DSCC managed NSN's used in M224
  - All approved ECP's
  - Current tolerancing/dimensioning conventions (ANSI Y14.5)
  - Current process specifications for materials, platings, and coatings
- Benefits include:
  - Complete gov't owned TDP's
  - Improved competition
  - Reduced deviation/waiver requests
  - Reduced procurement support costs/lead times
- Project proposed and managed by Benet Laboratory, the design control activity for M224



Investment: \$92K

ROI: 31:1

Project Savings: \$1.2M





# Additional Value Management Programs Managed at DSCC



#### Additional VM Programs



#### Price Challenge Program

- Responsive to customer suspicion of overpricing
- Determine value using tech data, buy history, and similar items
- Provide recommendation when overpricing is discovered
- Corrective action taken to improve pricing or recover funds

#### **Should Cost Program**

- Engineering Intrinsic Value Cost Estimate
  - Materials and labor
  - Testing
  - Packaging
  - Manufacturing Charges
  - Overhead and Profit
- Assists Contracting Officers during procurement negotiations





#### Additional VM Programs



#### **Reverse Engineering**

- Performed using Gov't resources
- Items ordered from Gov't stock
- Identifies physical, material, mechanical, and environmental properties
- Test requirements identified/determined
- Technical Data Package developed for use in full and open competitive acquisition



#### Organic Manufacturing

- Utilize manufacturing capacity of government labs/arsenals when private industry cannot meet our needs
- Public (organic) and Private sources cannot compete against each other for awards!
  - Exceptions:
    - **Price**: quoted price is <u>formally</u> determined to be unacceptable
    - Delivery: quoted delivery time frame does not meet our requirements.





#### **New Initiatives**

#### **NIST Pilot Program**



- National Institute of Standards (NIST)
  - Nationwide network of not-for-profit companies
    - Provide technical consultants to small business
      - Solve manufacturing/material problems
      - Lean Six Sigma
- Wants to expand to include business opportunities
  - Match opportunities to companies in network
- Goal: Use NIST to develop new sources
  - Hard to buy items
  - Sole source items
- DSCC will provide
  - Training on doing business with DLA
  - Samples, tech data, and/or photos
  - Funding for reverse engineering efforts





# Component Optimization for Ground Systems (COGS)



Cultur

- Pilot Program funded by TARDEC at TACOM
  - Congressional add money
- What is COGS?
  - Identifies all component and material requirements
  - Develops design and manufacturing alternatives
    - Utilize most cost effective processes
- TARDEC requested DSCC participation
  - DSCC provides NSNs for evaluation
    - DSCC managed NSNs with TACOM as ESA
    - Focus on high dollar and hard to buy NSNs
  - DSCC participates in technical evaluation
- Benefits
  - Gov't owned TDP
  - Approval process short since ESA is team member



#### MRAP Support



- Focused support to Land Supply Chain
  - Eliminating duplicate NSNs



- Reviewing/correcting technical data
- Current focus on "Sources Sought" synopsis
  - Seeking actual MRAP parts manufacturers
  - Synopsis for each MRAP OEM
    - Copies available at Sourcing Booth (#841)









#### Summary



- DSCC's Value Management Office provides support
  - Government
  - Customers
  - Suppliers
- Our focus
  - Provide solutions on problem parts
  - Reduce acquisition and support costs
- For further information
  - Contact attached P.O.C.'s
  - Visit our booths: #841, #842, and #941





#### **Points of Contact**



VM Program Manager: Dave Szczublewski

614-692-8854 / DSN 850-8854 / david.szczublewski@dla.mil

**VEB Team Chief:** Dan Krist

614-692-3320 / DSN 850-3320 / daniel.krist@dla.mil

**VEE Team Chief & VECP:** Don Howell

614-692-8837 / DSN 850-8837 / donald.howell@dla.mil

Castings & Forgings: Dwayne Porter

614-692-8857 / DSN 850-8857 / dwayne.porter@dla.mil

**RPPOB:** Daniel Bonner

614-692-4203 / DSN 850-4203 / daniel.bonner@dla.mil

Sustainment Engineering & VECP: Mark Cutler

614-692-4939 / DSN 850-4939 / mark.cutler@dla.mil

Organic Manufacturing: Jeff Culbertson

614-692-8833 / DSN 850-8833 / jeffery.culbertson@dla.mil

Price Challenge & Should Cost Teams: Andy Utz

614-692-8758 / DSN 850-8758 / andrew.utz@dla.mil