



DEFENSE LOGISTICS AGENCY

THE NATION'S COMBAT LOGISTICS SUPPORT AGENCY



Casting & Forging

Aviation Forging and
Casting Assistance Team
May 29-30, 2019



WARFIGHTER FIRST



Casting & Forging



Aviation Forging and Casting Assistance Team (AFCAT)

John Wilson

AFCAT Program Manager

Walker George

Forgings Application Engineer

Keith Sturgill

Castings Application Engineer



Mission Relevance



- Proactive Reviews
- Decreased lead-time and reduction of unfilled orders
- Reduction in cancelled contracts
- Provide sourcing solutions for challenges presented by military aviation requirements
- Assistance to contractors requesting information on tooling for Cast or Forged items



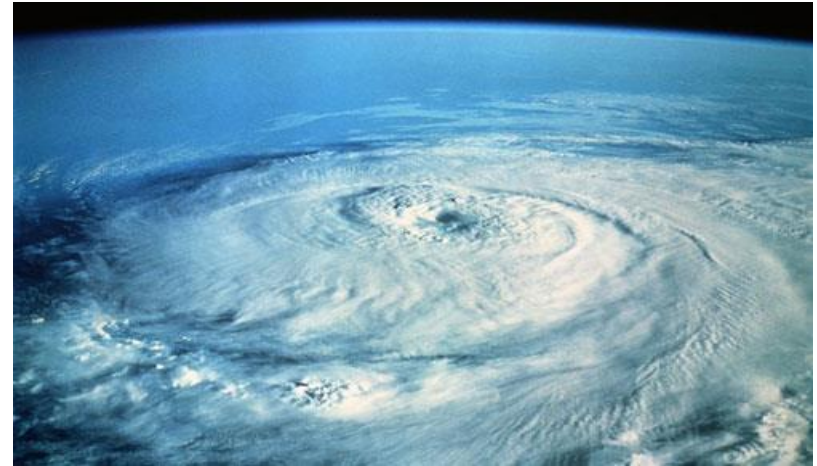
Sustainment Horizon

“The Perfect Storm”



- **Challenges for procurement:**
 - Small quantity orders
 - Long lead times
 - Infrequent buys
 - Labor intensive RFQ System
 - Non-existent/missing tooling

- **Objective:**
 - A more innovative approach
 - Responsive to industry concerns
 - Utilization of industry expertise
 - Sharing of knowledge





Weapons Systems Sustainment



- Castings and forgings represent about 4% of DLA solicitations but 15-20% of backorders over 180 days
- Forgings/castings is hindered by
 - Lost or hard to locate tooling
 - Fragmented supply chains
 - Inadequate procurement data
 - Diminishing supply base
 - Hog it out?





Source Approval Requests (SAR)



- AFCAT assistance with Casting and Forging SAR submissions
- Reverse Engineering opportunities
 - RPPOB
 - Proprietary items
- Recent example
 - B-52 Drag Link





Casting/Forging Clauses



- “A metal casting process was identified as a means to manufacture this item. Tooling is required to produce a casting. For sourcing, tooling, materials or other information, please contact the appropriate assistance team: (Aviation, C&E Supply Chains) DSCR.afcat@dla.mil ; (Land & Maritime Supply Chains) DSCC.cast.forge@dla.mil”
- “A forging process was identified as a means to manufacture this item. Tooling is required to produce a forging. For sourcing, tooling, materials or other information, please contact the appropriate assistance team: (Aviation, C&E Supply Chains) DSCR.afcat@dla.mil ;(Land & Maritime Supply Chains) DSCC.cast.forge@dla.mil”



Future Initiatives



- AFCAT review of PR lists
- Consolidated Web Portal R&D
- Magnesium Casting Source Development
- Expanding the use of Rapid Prototyping
- Boeing Rights Guard
- Item transfers to DLA
- Long-term contracting for grouping of castings and forgings

CAST-IT Engineering Team

- Primary experience with steel, titanium, aluminum, magnesium, zinc, brass
- Metalcasting consultants totaling 155+ years of casting experience
- Casting related machining, post-processing, rapid prototyping, and tooling expertise
- Leveraging real world experiences and new technology tools
- Linking government and industry to support successful procurements



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Albany, NY



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The Forging Defense Manufacturing Consortium Team



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<http://fdmc.ati.org/>



The Aviation Forging and Casting Assistance Team



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<http://fdmc.ati.org/>



Where to get help

AFCAT Assistance Requests:

DSCR.AFCAT@dla.mil or John.M.Wilson@dla.mil

804-279-3775

Assistance in location of Forging Dies

National Forging Tooling Database (NFTD) available through IHS Haystack Gold

<http://aero-defense.ihs.com/products/procurement/haystack-logistics/>

Assistance in location Casting Patterns

Available through the Non Ferrous Foundry Society (NFFS)

<http://www.defensetooling.com/>

American Metalcasting Consortium (AMC)

<http://amc.ati.org/>

Forging Defense Manufacturing Consortium (FDMC)

<http://fdmc.ati.org/>

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WARFIGHTER SUPPORT

STEWARDSHIP EXCELLENCE

WORKFORCE DEVELOPMENT