Casting & Forging
Aviation Forging and Casting Assistance Team
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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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Dick Farrara Albany, NY
Keith Sturgill Richmond, VA
Gary Burrow Billings, MT
Julia Spieker Charleston, SC
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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/