



Warheads & Rockets Sector

ICAP Meeting

February 2nd, 2011

Tampa, Florida



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Warheads & Rockets Sector

■ Sector Members

- Aerojet
- American Ordnance LLC
- Arrow Tech Associates, Inc.
- Day & Zimmermann, Inc.
- European Aeronautic Defense & Space Company
- General Dynamics Armament & Technical Products (GD-ATP)
- General Dynamics Ordnance & Tactical Systems (GD-OTS)
- Kaman Dayron, Inc.
- KDI Precision Products, Inc.
- Nammo Talley
- Textron Systems Corporation



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- Soft Landing Outlook
 - New Developments: No reports of suppliers in serious trouble caused by munitions reductions.
 - Evidence of Positive Change: No knowledge of significant changes since last report.
 - Overall assessment from the Warheads & Rocket sector: Warheads/rockets business is doing well right now given the emphasis on precision munitions.
 - Still concerned about near term munitions spending cuts.



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▪ Quality of Work Environment (QWE)

– Employee Stress

- Employee Assistance Programs (EAP) -- Carebridge[®]
- Air Conditioned break areas
- Procedural requirements for extra breaks and hydration in extreme conditions.
- National Institute for Occupational Safety & Health (NIOSH) guidelines for ergonomics, employee stress, etc.

– Climate Control

- Climate control required for most warhead processes due to increased precision requirements.
- Heat stress measurements taken using wet / dry bulb instrumentation.
 - Cooling head bands, cooling collars, cool rooms utilized.

– Air Quality

- Industrial Hygiene air sampling conducted to assess exposure levels.
 - Ventilation systems, PPE utilized to eliminate or reduce hazards.

– Health

- Personal Protective Equipment (PPE)
 - Outer Wear, Eye Protection, Foot Wear, Hand Protection
- Hazard communication (MSDS sheets)
- Respiratory protection
- Emergency preparedness exercises
- Bulletin Boards / periodic newsletters to communicate policies, benefits information, company news with employees.
- Industrial Noise maintained below 85 dBA.
- X-Ray – Thermoluminescent Dosimetry (TDL) badges worn by radiographers to ensure exposure below limits of 5 rem/year or 1.25 rem/quarter.



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▪ **Quality of Work Environment (QWE)**

– **Safety**

- On-site fire departments
- On-site Health Care Medical Staff
- Lock-Out / Tag-Out procedures
- “Panic” hardware on production equipment
- Lighting Protection / Exits
- Tornado Shelters / Early Warning Weather Systems
- *Regulations and guidelines to provide safe & healthy work environments:*
 - *DoD Contractors Safety Manual for Ammunition and Explosives; 4145.26M, 13 March 2008*
 - *OSHA CFR, Title 29 General Industry Standards*
 - *OSHA CFR, Title 29 Construction Standards*
 - *National Electric Code*
 - *National Fire Protection Association (NFPA) Codes*
 - *ANSI Standards*
 - *DA PAM 385-64, Chapter 12; Lightning Protection*

– **Preventive Care Measures**

- 5S Programs (Housekeeping)
- Wellness Programs



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Challenges / Concerns

- IDIQ Contracts (Indefinite Delivery / Indefinite Quantity)
 - Since there are multiple contracts awarded with no guarantees that any quantities will result, industry cannot forecast accurately.
 - Causes companies to amortize capital costs on the base award and each option, not knowing if any quantities will actually result.
 - Raises proposed prices for other products due to the uncertainty of overhead absorption on IDIQ contracts.
 - » Individual delivery order competition does not allow enough time to effect rates applied to other product proposals.



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Challenges / Concerns

- Obsolete Mil-Specs
 - Industry has developed internal procedures and test equipment to insure compliance. Over time, procedures have changed, but Mil-Specs have not been updated.
 - Tightened compliance & oversight is resulting in strict interpretation that has caused shutdowns and deviation/waivers, which are resulting in increased costs, schedule misses, and consideration demands.
 - Perception by at least one sector member is:
 - The product is no better
 - The Mil Specs remain obsolete
 - The Government & taxpayer pay a higher price for no discernable gain



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