

# NIRPS Workshop

## Stewardship Industry Panel Discussion

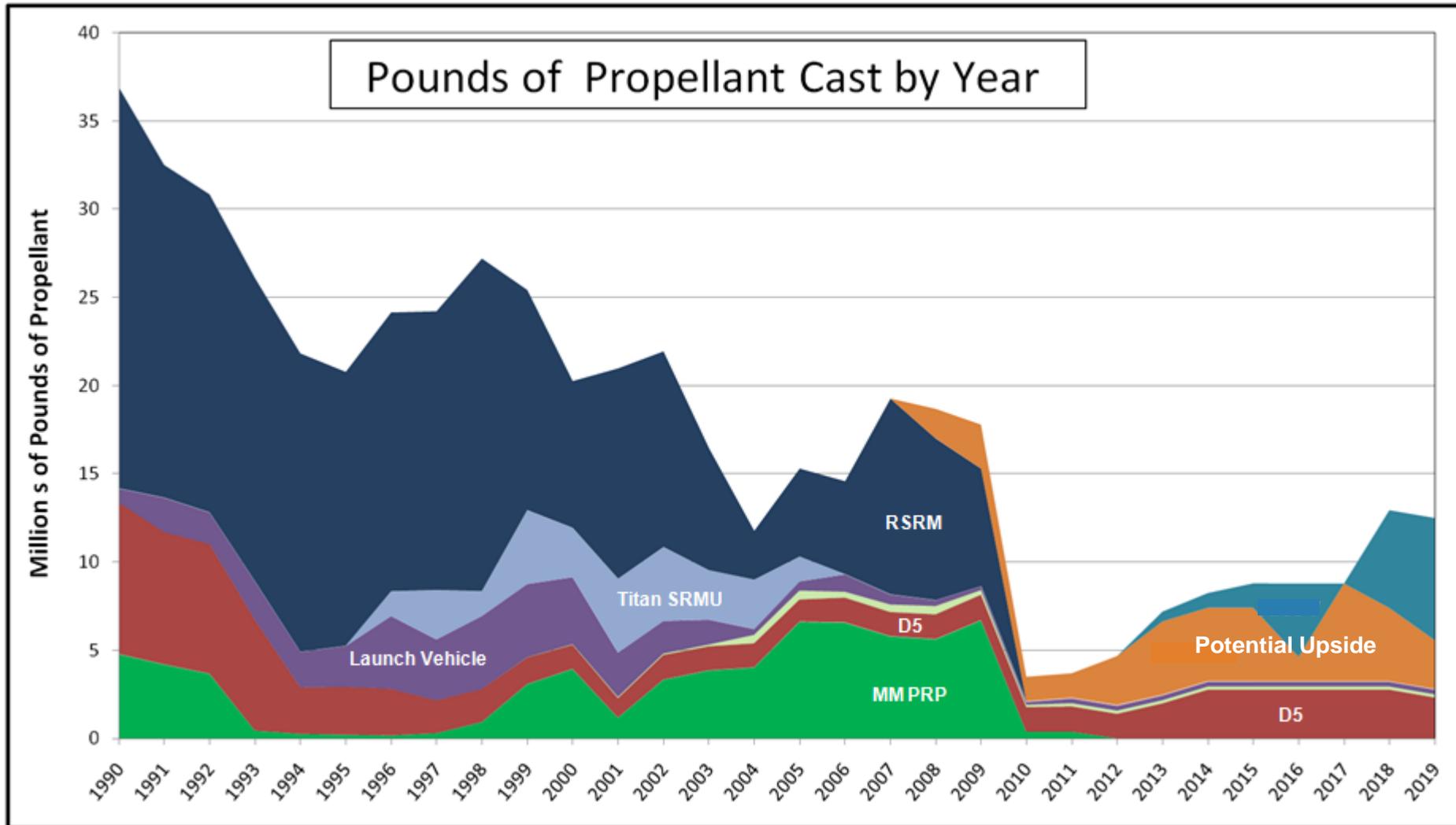
### ATK Perspective

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6 December 2012



# What is your view of the health of the propulsion industrial base?



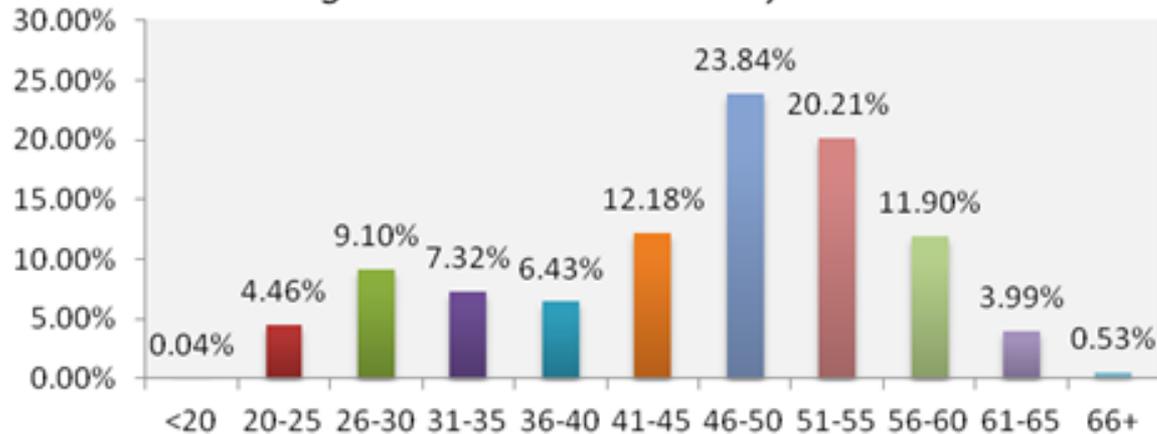
Reduced production creates challenges in sustaining core competencies and maintaining cost competitiveness

# What is your view of the health of the propulsion industrial base?



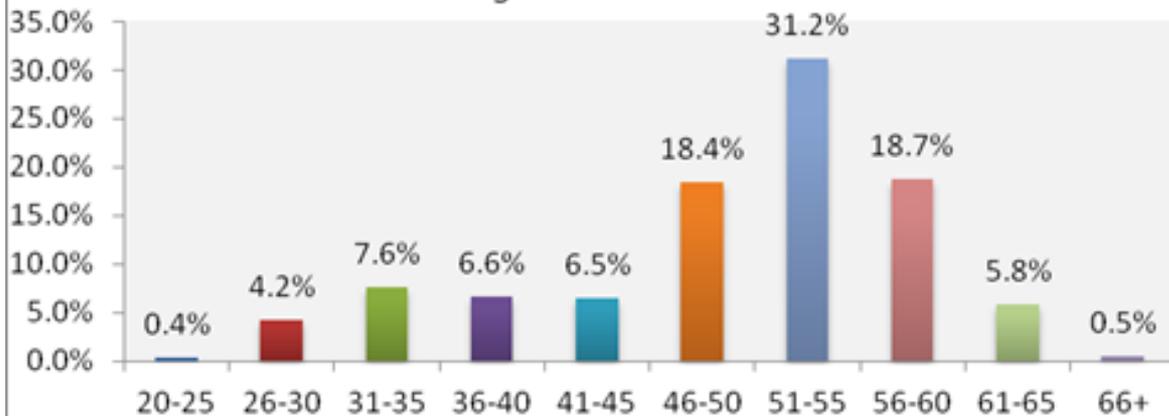
## Propulsion Systems

Age Distribution - February 2008



## Propulsion Systems

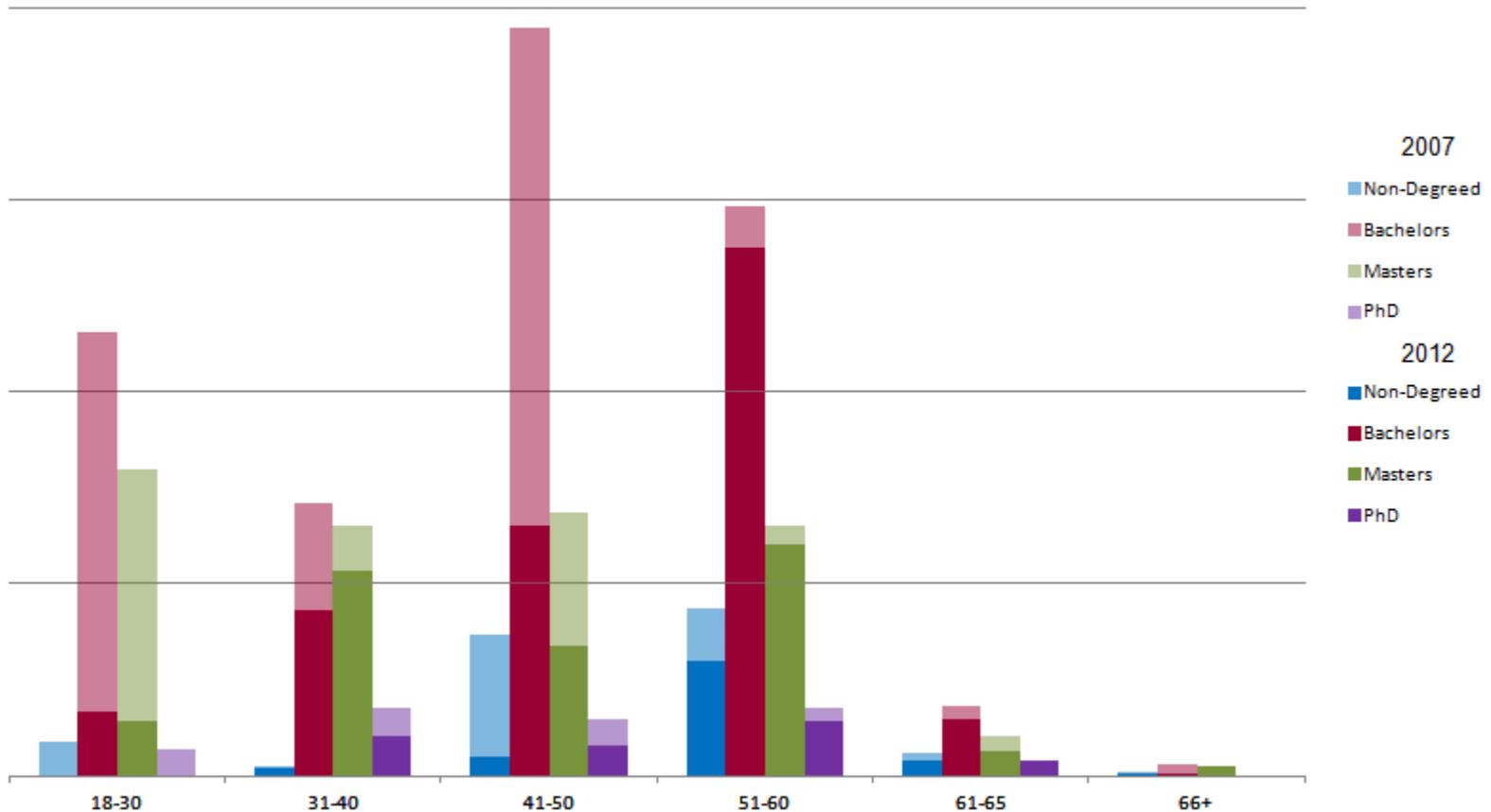
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Aging workforce creates challenges for future

- Exacerbated by force reductions

# What is your view of the health of the propulsion industrial base?



**Workforce reductions are adversely affecting STEM core competencies**

# What is your organization doing to sustain your supplier base as well as internal capabilities?



ATK works with level 1, 2, and 3 suppliers to ensure changes and /or obsolescence issues at tier 2 and 3 are identified early to allow for effective mitigation.

- ATK terms & conditions to our suppliers require the early reporting of issues.

The majority of our supplier base has diversified their product lines into commercial and other ventures. The only known supplier where ATK sales are >50% of their total revenue is American Pacific Corporation (AMPAC).

Minimal stockpiled material to compensate for obsolescence issues (Rust-Oleum Paint Resin, TCA (1-1-1Trichloroethane), Rayon Supplied from NARC, MBTS Replacement in Insulators, HD2 Grease)

- Current production requirements will be met utilizing these stockpiled materials.

ATK has diverse supplier base



DoD Unique Suppliers:	332
DoD/NASA Common:	215
NASA Unique:	471

# What areas of emphasis would enable NIRPS to provide the best value to address industrial base issues?



## **Need government sponsored technology programs that focus on propulsion capabilities needed for future military and civil programs**

- Best way to sustain necessary competencies until they are needed for next generation programs
- Lost capabilities will be very expensive to reconstitute (plus inherent learning curves will reduce early program reliability)
- This is consistent with recommendations from recent DoD Space Policy  
DOD Space Policy Directive 18 Oct 12:  
“DoD will promote a robust U.S. defense space industrial base, to the extent consistent with defense objectives as well as DoD funding and authorities.”  
“Science and technology efforts, and research and development investments, will focus on leading-edge technologies that address mission-area deficiencies.”

## **Improved government/industry interaction model would reduce oversight costs**

- Need to compliment each other’s capabilities, not duplicate

## **Industry needs to become more efficient in development and production**

## **Do a better job of managing risk/reward (not everything needs a 99% confidence solution)**

- Can learn from JPL missions where they cannot test before flight, but have a remarkable success rate