

## Group A Priorities

1. Basic/applied research needs that should be addressed by AMTAS
2. Educational/training courses that should be developed by AMTAS
3. Long-term growth of AMTAS (new funding/members)

### 1. Research needs

- Manufacturing automation—repeatability, nature of defects, tolerance limits
  - part thickness
  - complex material/assemblies (fasteners/metals/composites)
  - drilling
  - tooling
- Baseline knowledge—company-specific manufacturing differences
  - communication/training
- Effects of defects (manufacturing) and damage
  - visual damage limits =  $f$  (impact event: energy, impactor geometry, other variables)
  - quantitative NDI
  - assigning a metric to damage/defect
  - strong links to maintenance
- Composite material cure—heat transfer, tooling, design detail
  - manufacturing
  - maintenance/repair

### 2. Training

- Simple but practical manufacturing concepts (materials, processes, metal/composite differences)
- Maintenance
- Damage tolerance (manufacturing defects, ADL, critical damage)
- 4-year degrees that include 20+ years experience

### 3. AMTAS growth

- What does it mean?
  - actual funding
  - technical oversight/advice
  - training support
- Industry partners related to existing AMTAS partner products
- Seek strategic partners globally based on need
- What strategy should we take for candidate partners outside aero?
- DoD, NASA, foreign government—when it helps our mission
- Other aero products in addition to transport (small airplanes, commuters, rotorcraft, space)