

Ordnance Systems Inc. Holston AAP **RDX Expansion Overview**

October 2017



BAE SYSTEMS

INSPIRED WORK

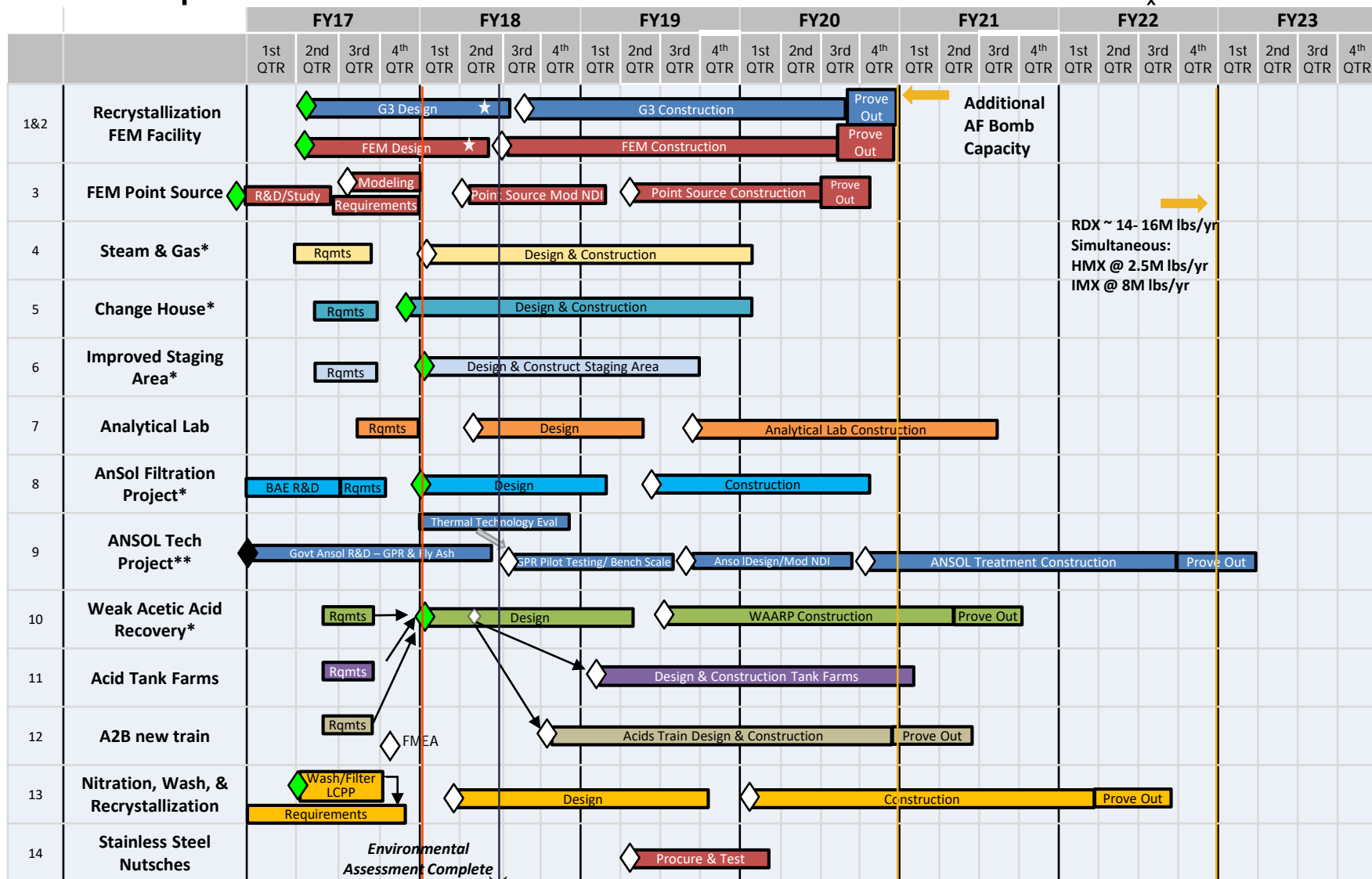
RDX Production Capacity Program

- RDX capacity at Holston is running at maximum rates, primarily driven by high demands for CXM-AF-5/CXM-AF-7 for Air Force bombs
- Demand, in total, is projected to remain high for the next several years
- PEO Ammo/PD Joint Services is leading a Joint IPT and modernization program that will increase Holston's overall explosives production capacity.
- Continuous improvement initiatives are being executed with an effort to realize incremental throughput increases
 - Significant capacity increase will not be seen until the completion of the modernization programs
- Challenges remain in requirements definition to ensure successful design, construction and facility hand-over
- Government/Industry IPT working to define all constraints and solutions

RDX Capacity Expansion underway to meet War Fighter demand

RDX Expansion Schedule

◆ - Awarded Projects
◇ - Planned Projects



Additional AF Bomb Capacity

→ RDX ~ 14- 16M lbs/yr
Simultaneous:
HMX @ 2.5M lbs/yr
IMX @ 8M lbs/yr

★ Environmental Assessment Complete

Current Status

- Joint IPT Formed between BAE Systems, PD Joint Services, ARDEC and JMC
- Conducted 8 RDX Workshops to review status, projects, and program risks
- Seven projects awarded for analysis, design and construction of initial capacity constrained facilities
 - Fluid Energy Mill (FEM) facility design
 - Recrystallization facility design
 - Pilot technology test and demonstration for wash/filter capability
 - Change House Design and Construction
 - Improved Staging Area Design and Construction
 - ANSol Filtration Design
 - Weak Acetic Acid Recovery Process Design
- Environmental Assessment and Air Permitting critical to beginning construction
- Internal BAE Systems Operational Improvement Activities underway to optimize

RDX Capacity Expansion Summary

- Joint IPT working very well to develop strategies for implementing solutions to meet future demands
- RDX workshops allow continued dialogue with all stakeholders to promote collaborative decision making
- Seven projects awarded and progressing on schedule; substantial progress on requirements and SOWs for future projects
- Continue to address challenges with finalization of requirements, proposal timelines through award
 - Nitration/Wash/Recrystallization biggest challenge to date
- Additional FY17 funding allowed for the acceleration of four programs to be awarded by September 30
- Internal BAE Systems Operational Improvement Activities underway to optimize existing processes and slightly improve through-put in near-term