



DoD Joint Fuze Technology Program (JFTP) Overview

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Joint Fuze Technology Program (JFTP)



- Develop enabling and common fuze technologies into DoD and Combatant Command high priority weapon capability needs
- Focal point to set technical direction for fuze solutions and technologies that enable munitions to meet current and future requirements
- Organized in four Fuze Area Technology Groups (FATG) addressing fuze technology aspect:
 - Extreme environment survivable fuzing
 - Tailorable effects and initiation
 - High-reliability safety and arming devices
 - Target detection and burst point control
- Driving DoD Fuzing Technology Capabilities:
 - High-speed weapon fuzing
 - Air defense / C-SUAS
 - Embedded, survivable fuzing technology
 - Miniature, affordable safe and arm devices





JFTP Management and Partnerships



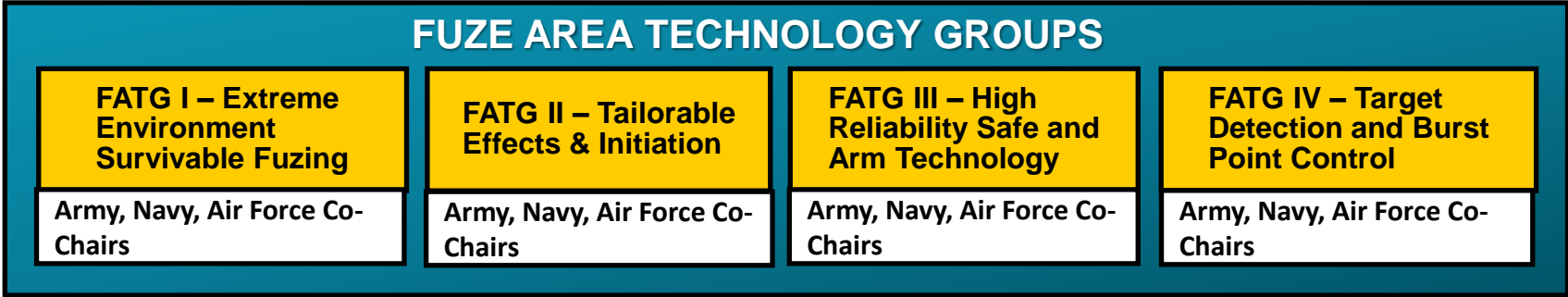
USD Research & Engineering, Research & Technology

Director, Weapons and Platforms

Director of Munitions

JOINT FUZE TECHNOLOGY PANEL

Program Manager



Leveraging and Collaboration

Joint Munitions Portfolio and DOE

Services Munitions S&T and Laboratories

Commercial Fuze and Component R&D

Academia and Gov't Laboratories

Transitions

Service Weapon PM/PEO

Fuze Industrial Base



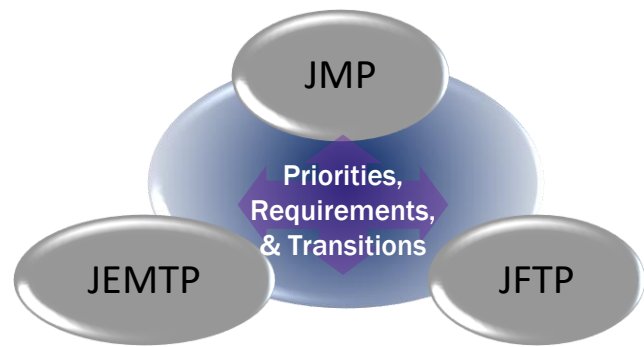
JFTP and R&E Organization Overview



- **OUSD Research & Engineering (R&E) Leadership**
 - Dr. Douglas Blake, (Acting) Deputy Director, Research, Technology & Laboratories OUSD(R&E)
 - Mr. Michael Holthe, Director, Platform and Weapons OUSD(R&E)
 - Dr. Jason Jouet, Director of Munitions OUSD(R&E)
 - Manager Joint Munitions Portfolio (JMPo)
 - Mr. Lawrence Fan, Program Manager, Joint Fuze Technology Program
- **DoD Tech Panel and FATG Support**
 - Army: CCDC AC, CCDC AvMC
 - Air Force: AFRL
 - Navy: NSWC Indian Head EOD Technology Division / NAWCWD



OUSD(R&E) Joint Munitions Portfolio



- **Joint Munitions Portfolio Synergy**

- JFTP and JEMTP help define hard S&T problems for JMP
- JFTP and JEMTP transition technologies developed by JMP

- **The Joint Fuze Technology Program (JFTP)**

- Developing and transition next generation capability with enabling fuze technologies
- Leverage other technology development programs for rapid innovation and industrial base diversification

- **The Joint Enhanced Munitions Technology Program (JEMTP)**

- Focus and objectives aimed advancing capability with respect to performance, range, and lethality

- **The Joint DoD/DoE Munitions Program (JMP)**

- Leverages the expansive capabilities of the DOE weapons laboratories to advance the Department's conventional weapons capabilities

The JMP has multiservice participation, long history of transition and impact, and is aligned with NDS and supporting R&E priority areas



JFTP Overview



- JFTP realignment focus is on investing and driving enabling and common fuze technologies for DoD weapon capabilities (e.g. Hypersonic and high speed weapons)
- JFTP looking for “tech pull” feeder technologies (basic research pipeline) for high payoff tech insertions
 - Applying and leveraging R&E Priority Modernization Technologies
- JFTP Budget:

Budget by Year (\$M)

	FY19	FY20	FY21	FY22
6.2	6.198	6.237	6.288	6.408
6.3	6.546	6.574	6.621	6.782

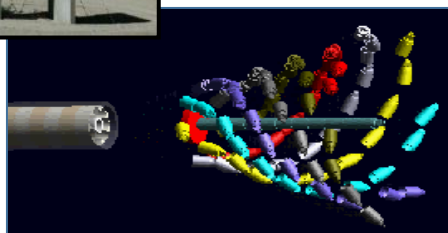
Strategic Thrusts > Technology Planning > Technology Application



Fuzing S&T Enables Weapon Capabilities

Survivable Fuzing:

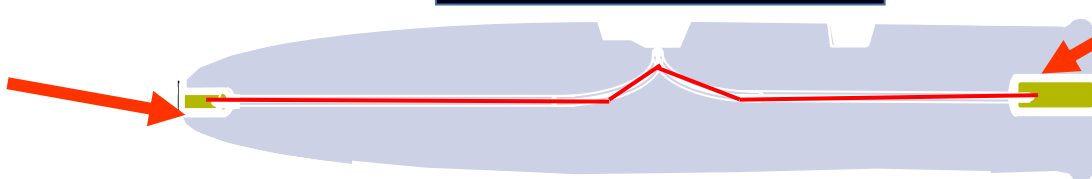
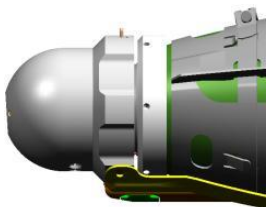
- Extreme environment survivability: potting, thermal protection
- High G, precision fuzing



Safe and Arm:

- Common/modular safe and arm devices and sensors
- Distributed fuzing architecture

Target Detection Device



Target Detection

Selectable height-of-burst (HOB), Proximity sensing:

- Precision target detection fuzing technology to optimize lethality

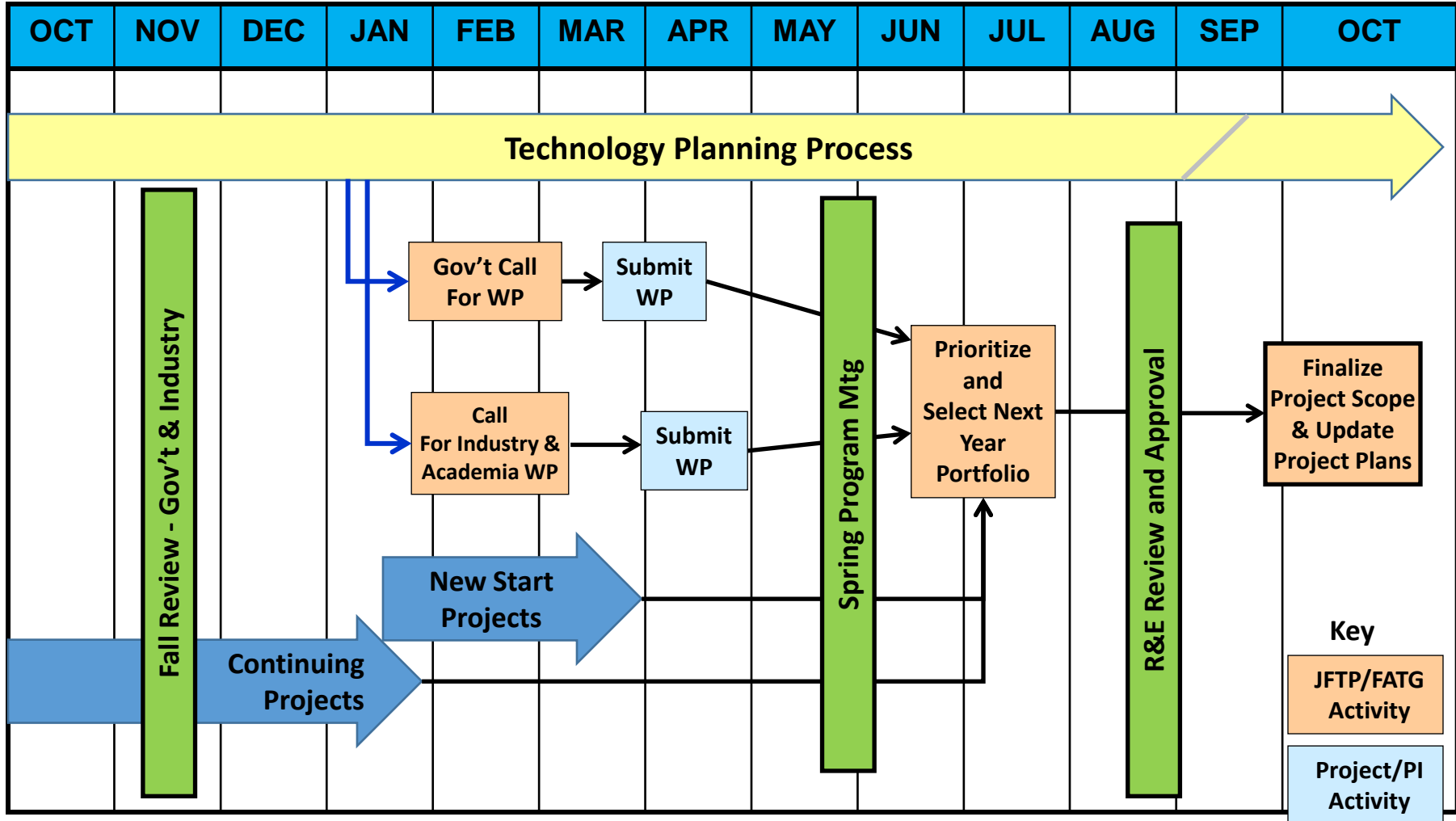


Initiation

- Burst point control of warhead initiation
- Survivable and reliable detonators and explosive initiation trains



JFTP Annual Cycle





JFTP / DoD Fuze IPT Schedule



- **4-5 August 2020 – NDIA Annual Fuze Conference (virtual)**
- **6 August 2020 – 54th DoD Fuze IPT**
- **11-12 August 2020 – DoD Fuze IPT and industry one-on-one sessions (virtual)**
- **Mid-November 2020 – 55th DoD Fuze IPT / JFTP Fall Review @ Booz Allen McLean, Virginia**
- **December 2020 - Posting of JFTP 2020 project reports (Distro D) on DTIC**
- **January 2021 – JFTP call for FY22 white paper ideas**



JFTP Summary



- **JFTP Aligned OUSD R&E Strategic Thrusts**
- **Looking for High Risk = High payoff
(Constant Innovation)**
- **Continued Technical Planning and Collaboration
(Strategic Investment)**
- **Providing Future Warfighter Capability**



Questions?