

HOW WE THINK ABOUT TECHNOLOGY VALIDATION AND CERTIFICATION



Certification is a degree, not a demo...



T-REX · Technology Readiness Experimentation

TIER 1

PURPOSE: Validation of emerging technology

➤ INDUSTRY gets

- Low-risk venue to demo prototypes to operators
- Technology-readiness-level validation
- Direct operator feedback on CONOPs & gaps
- On-ramp to assessment & contracting

➤ GOVERNMENT gets

- Independent readiness call for MEIA
- First step to validate system & subsystem
- Grows validated "magazine depth"
- Expands thematic efforts across JOPs

J-REX · Technology Readiness Experimentation

TIER 2

PURPOSE: Certification of emerging technology

➤ INDUSTRY gets

- Realistic certification that counts Dept-wide
- Unlocks low-rate production & fielding
- "Qualified once, certified across CCMDs"
- Direct path to programs of record / fielding

➤ GOVERNMENT gets

- Joint certs: cyber/ATO, airworthiness, safety
- Environmental & Electromagnetic Environmental Effects (E3) certification
- Data jumpstarts program-of-record OT&E
- Joint interoperability at operational level

TRACK	100-Level · FOUNDATIONS	200-Level · CORE	300-Level · ADVANCED	400-Level · CAPSTONE
Tier 1 · T-REX	Discovery: enabling tech; JOP scene-setter	Prize challenges: pay-to-play to follow-on	Path to further develop & transition	Validation: WoR & assessment reports
Tier 2 · J-REX	Certification entry: mission-thread analysis	Operational assessment: lab/sim. validation	Path to cert.: safety, J-WSRB, airworthiness, ATO, Training	Certification: RCO safety, cyber, spectrum, HSI
Degree Gate	Enroll: admitted to the pipeline	Coursework: earns credits via experimentation	Thesis: defended in contested environment	Degree conferred: a CERTIFIED technology

TEEP = Training, Exercise & Employment Plan · OTAP = new-start selection process · RFI = Request for Information · LNO = Liaison Officer · RPP = Rapid Prototyping Program · DIA = P&E prototyping tier (PE 0603838D8Z, not Defense Intelligence Agency)

FCT = Foreign Comparative Test · PEWC = Procurement of Emerging Warfighter Capabilities · JT&E = Joint Test & Evaluation · MEIA/JOP = Mission Eng., Integration & Assessment / Joint Operational Problem · APEX = P&E execution/portfolio governance body
E3 = Electromagnetic Environmental Effects