Thunderstorm Contested Logistics

Executed by:
Georgia Tech Research Institute, Penn State Applied Research Lab, Naval Postgraduate School JIFX, and Stiletto Maritime Demonstration Program

Sponsored by:
Rapid Reaction Technology Office

Updated: 15 Sep 2021
Thunderstorm Contested Logistics

- **Focus area**: Contested Logistics (CONLOG)
- **Demonstration site**: Crucible (Fredericksburg, VA); Norfolk, VA; Camp Roberts (CA)
- **Demonstration dates**: 1-4 Nov 2021 (NCR events); Oct 2021 (venue specific)
- **Technology areas for demonstration**:
  - **Multi-Capable Distribution platforms**: Agile delivery platforms for sustainment and replenishment operations; swarm systems enabling performance improvements through task sharing and attrition resiliency; AI/ML facilitating semi-autonomous/autonomous operation
  - **Resilient Logistics Command and Control (C2)**: Improved analytics, scheduling, and awareness supporting C2 operations; data management and information distribution; shared and interoperable logistics support elements from joint and allied forces
  - **Logistics Intelligence**: Improved processing for operations of enhanced time sensitive software applications such as AI/ML algorithms, data fusion, advanced analytics, and other “real-time” data collection; AI/ML for faster and improved decision support; information distribution with cross-domain, secure, resilient communications
  - **Demand reduction**: Self-contained power production, storage, and delivery technologies with an emphasis on improved efficiencies, renewable sources (e.g., solar, wind); self-sustaining maintenance and repair capabilities; synthetic training environments for adaptive, cross-trained workforce
**Crucible (Fredericksburg, VA)**

**60 Jack Ellington Road**

Fredericksburg, VA 22406

**Dates:** 1-4 November

**Lead:** Georgia Tech Research Institute and Penn State Applied Research Laboratory

**Intent:** Field demonstrations and Technology Innovation Discovery Event (TIDE) for CONLOG technologies in close proximity to NCR stakeholders

In order to facilitate the safe execution of the Thunderstorm Contested Logistics event, the demonstration and TIDE event will both be held outdoors. This will provide for maximum distancing and minimize risks presented to participants.

Thunderstorm will follow CDC and government health recommendations. Full health/safety protocols and guidelines will be determined ~30 days prior to the event. **Please reach out to our team if you have any questions.**
# Tentative Schedule

<table>
<thead>
<tr>
<th>Monday – 1 Nov</th>
<th>Tuesday – 2 Nov</th>
<th>Wednesday – 3 Nov</th>
<th>Thursday – 4 Nov</th>
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<tr>
<td>0800-1000</td>
<td>0730-0800</td>
<td>0730-0800</td>
<td>0630-0900</td>
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<tr>
<td>Vendor arrival, registration, &amp; range access</td>
<td>Vendor arrival</td>
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<td>Vendor arrival and setup</td>
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<td>1000-1630</td>
<td>0800-0900</td>
<td>0800-0900</td>
<td>0900-1400</td>
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<tr>
<td>Setup and dry-run demonstrations</td>
<td>Daily briefing, setup</td>
<td>Daily briefing, setup</td>
<td>TIDE event, limited ad-hoc demonstrations, and vendor/government discussions</td>
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<td>0900-1500</td>
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<td>0900-1500</td>
<td>1400-1700</td>
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<tr>
<td>Technology demonstrations</td>
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<td>Vendor load-out and depart</td>
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<td>Wrap-up and depart range</td>
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Tentative Schedule for Crucible – Fredericksburg, VA
**Demonstration Venues**

**Stiletto (Norfolk, VA)**

**Dates:** Oct 2021

**Lead:** Stiletto Maritime Technology Demonstration Program

**Intent:** Demonstrations relevant to CONLOG in the maritime domain. Demonstrations supported by Joint Vulnerabilities Assessment Branch (JVAB).

**JIFX (Camp Roberts, CA)**

**Dates:** 1-5 November 2021

**Lead:** Naval Postgraduate School – Joint Interagency Field Experimentation (JIFX)

**Intent:** Field demonstration of technologies relevant to CONLOG requiring expanded airspace and/or approvals unable to be gained in the NCR.
POCs

- For demonstrations at Crucible (Nov 2-3)
  - GTRI Thunderstorm Team
    thunderstorm-vendors@gtri.gatech.edu

- For TIDE (Nov 4)
  - ARL Thunderstorm Team
    thunderstorm@arl.psu.edu

- For Camp Roberts demonstrations
  - JIFX Team
    https://nps.edu/web/fx/contact-us

- For maritime demonstrations
  - Stiletto Team
    stiletto@navy.mil