

# USTRANSCOM



## Module 2 – Lesson 201 Project Coordinator (PC) Duties



# Overview/Objectives



The intent of lesson 201 is to provide instruction on:

- Project Coordinator Duties
- Monthly Obligation and Expense Reporting
- The Quad Chart
- References and Expertise



# What USTRANSCOM RDT&E PCs Do



- Know your program
  - Rationale, uniqueness, goals, deliverables, and integration needs
- Facilitate technical work by scientists and engineers
  - Provide access to Distribution Process Owner (DPO)/Defense Transportation System (DTS) environment/expertise
  - Plan for team events/assist with problems
  - Lead the drive toward deliverables
- Report on progress (cost/schedule/performance)
  - Notify RDT&E Project Monitor of issues early
  - Monthly updates to designated RDT&E Team member/TCJ8
  - Annual reviews by TCJ5/J4-D and Program Director
- Aid technology transition and final reporting reviews
- Protect classified and proprietary information

**The RDT&E PC makes DPO Innovation Practical**

Together, we deliver.



# Treat the Developer as a Team Member



- The developer needs an open, information and communication-rich environment to succeed
- Respect proprietary information and make every effort to provide information to advance the development work
- Ensure you understand the developer's needs
- Establish an environment of open exchange between all team members

**Be a team leader and facilitator to reach goals**



# Tracking Performance



- The project proposal and deliverables should describe outcomes/goals
- Frequent, close collaboration between the USTRANSCOM PC and the technology developer keeps awareness of performance goals uppermost
- Minor schedule slippages and cost overruns, while not desirable, can be tolerated if performance goals are being met
- Obtain a copy of the contract that work will be accomplished against for projects accomplished by organizations other than Service labs or via a USTRANSCOM contract
- RDT&E is inherently risky; performance goals may not be achievable (especially for immature technologies)
  - If useful knowledge is gained, the RDT&E effort can still be viewed as successful



# The Final Tactical (Technology) Mile



- *Technology transition* is the transfer of knowledge gained in RDT&E to the next stage of development (and ultimately to a final product)
- Takes the form of formal scientific reports, plans and specifications, prototypes, and final “operational” items
- It is too late to begin transition planning at the end of development
- Many technology development efforts (JCTDs) are meant primarily to assist with acceptance and integration of new capabilities—but it’s still difficult
- Requires planning from project inception
  - The system/program of record must plan and resource integration of the new capability, which includes training and sustainment
- Any new capability requires changes to incorporate it
  - Planning, funding, physical configuration, training, and cultural changes

**Implication for PCs: Build a home for your technology as you develop it!**



# PC's Survival Checklist



- Structure your program for success
  - Well-understood, achievable goals
  - Technical, cost and schedule should support one another
- Look ahead to anticipate problems
  - Do you have sufficient funds, or too much to spend?
  - Can the schedule be met, or should work be rearranged?
  - Work on integration and transition from the outset
- Utilize experts from across disciplines and organizations
  - Use the USTRANSCOM RDT&E Team to assist
  - Nurture a synchronized development team
- Provide your monthly and annual reports promptly
  - Funds execution is a priority
  - Spend your money smartly--and early
- Protect classified and proprietary information

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# The PC's Deliverables



- Acquisition Packages (once a year)
  - Due prior to each FY funds receipt
  - “Local” paperwork necessary to execute funds IAW USTRANSCOM Instruction 63-7
- Quad chart/diagram or photo (at project start—update if changes)
  - Due at project start; review/update monthly
  - Project health “stoplight” charts, description of activities and deliverables
  - Summarizes cost/schedule/performance progress
- Briefing to RDT&E Program Director - February each year
- Briefing to TCJ5/J4-D - June each year (information to be used by RDT&E Program Director during annual July update to TRANSCOM Oversight Council)
- Obligation/Expenditure status (monthly)
  - Due monthly to designated TCJ5-GC RDT&E Team member
  - TCJ8 provides monthly report to DLA ~ 10th of each month
- Ensure the principles and operational parameters of the DoD Scientific and Technical Information Program (STIP) are adhered to by verifying that external projects document all results, regardless of outcome, per DODI 3200.12 & DODM 3200.14. Internal projects shall submit final results to the RDT&E Program Director for documentation.

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# Tracking Schedule



- Schedules are very often optimistic
  - Yet they become “contracts” with the resource provider
  - Credibility is lost with “schedule surprises”
- Schedule shows functional breakout of activities needed to accomplish project goals
  - PC needs to understand how the activities interrelate and contribute to the whole
  - Each activity should be analyzed for resource and time needs and “exit strategy”
    - How do you know you’re done?
- Schedule must show
  - Major phases of the technical effort
  - Deliverables from each phase
  - Logical relationship of activities
  - Achievable completion dates (at month level)
  - TRL entry level and exit goal
  - Project review activities
  - Technology transition activities
  - Final report or other output goal
- RDT&E Team (TCJ5/4-GC) should be notified of projected schedule problems beyond the control of the PC *as early as possible*
  - All projects have problems – non-notification only makes them worse/impacts our ability to help address issues impacting performance
  - Early on, remediation/re-scoping is more efficient

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# Technology Readiness Level (TRL) Targets



TRL 1: Basic principles observed and reported

TRL 2: Technology concept/application formulated

TRL 3: Analytical or experimental proof of concept

TRL 4: Component(s) validated in normal lab environment

TRL 5: Component(s) validated in realistic lab environment

TRL 6: System or subsystem prototype in relevant environment

TRL 7: System prototype demonstration in operational environment

TRL 8: Actual system qualified through developmental T&E

TRL 9: Actual system proven through operational T&E

USTC

RDT&E

Program

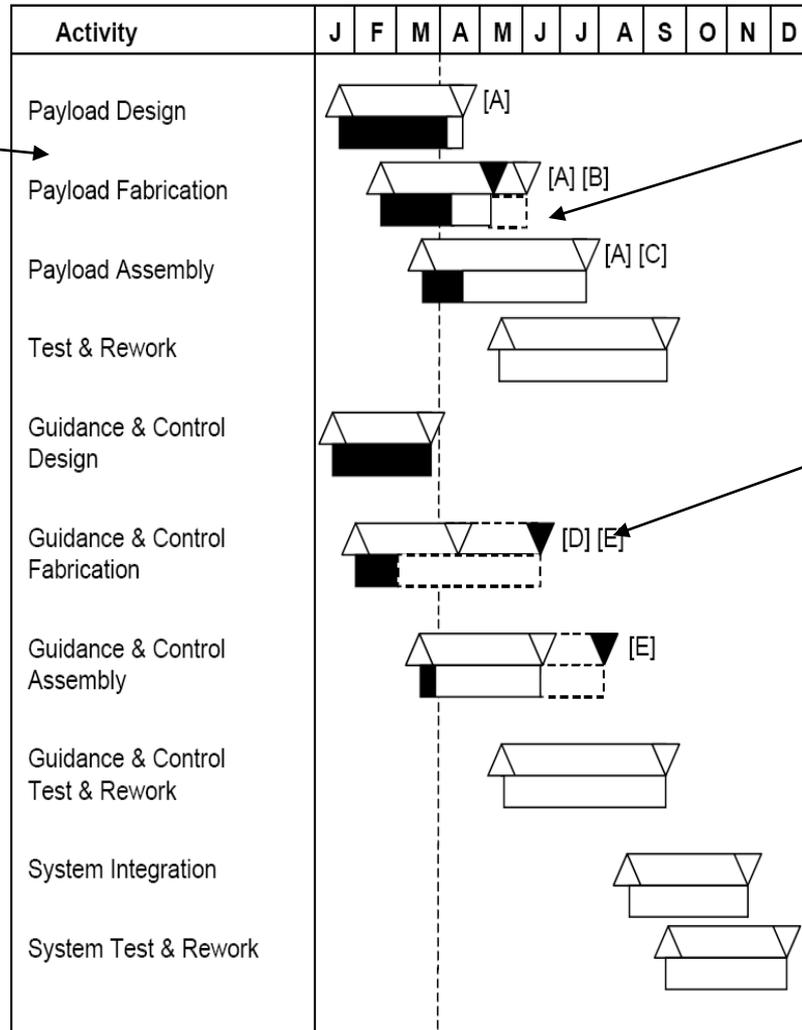
Focus



# Schedule (Example)



**Major tasks  
or deliverable items**



**Ongoing Activity  
(Started, ahead of  
schedule)**

**Ongoing Activity  
(Started, behind  
schedule)**

**Planned Activity  
(not started)**

Now

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# Reporting on Obligations and Expenditures



- Obligation and expenditure goals are the PC's fiscal flight path
  - Better to *exceed* goals - avoid pull-backs, especially at year end
  - At least *meet* goals by mid-fiscal year
    - First year: 90% Obligated/55% Expensed
    - Second year: 100% Obligated/90% Expensed
- Though legally “2-year money”, best strategy is to *treat as 1-year money and obligate 100%* in first year
  - DOD has imposed more stringent monthly reporting requirements; imperative to track funds very closely



# Enhanced Vision Navigation for JPADS



Submitted by: Natick Soldier RD&E Center

## PROBLEM/ISSUE:

- All currently planned and fielded JPADS platforms rely entirely on GPS data for all Guidance, Navigation & Control functionality to enable autonomous cargo resupply. This reliance is a single point failure that may be exposed in AoRs characterized by degraded or denied GPS resources.
- Current requirements articulate the need for continually increasing delivery accuracy and reliability across multiple weight classes, systems capable of delivering 200 lb - 120,000 lb, while developing capabilities for a wider weight range.
- These systems need to also meet logistics and operational constraints including low cost and minimized retrograde.

## RATIONALE:

- This work will deliver an enhanced avionics package and guidance software algorithms that enable precision guidance of airdrop bundles in areas of reduced or denied GPS information. Products can be adapted to multiple DoD agency systems conducting cargo resupply & unmanned aerial vehicle missions.

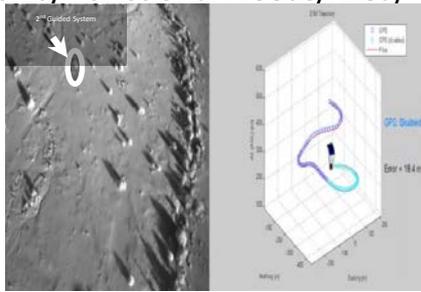
**PROGRAM OF RECORD:** Multiple Service PoRs (.5K Modular AGU, PM SPECOPS Forces Survival, Support & Equipment, 4K JPADS, PM Force Sustainment Systems 2K/10K JPADS)

## VALUE ADDED/ROI:

- Provide alternate navigation if GPS signals are being jammed, also addresses the requirement to deliver when the signal is lost due to terrain features and masking.

## APPLICABLE GUIDANCE/AUTHORITY:

- USTRANSCOM technology challenges Rapid Distribution Technologies, Point of Need Delivery, Convoy Security
- Combined Arms Support Command
  - Initial Capabilities Document
  - Analysis of Alternatives, JPADS High Altitude Aerial Delivery Capability
  - Capability Development Document for JPADS
  - Improved Cargo Airdrop Capability Functional Needs/Area/ Solutions Analysis Reports
- PM Force Sustainment Systems
  - 2009 JUONS CC-0376



(\$M)	FY15	FY16	FY17	FY18	Total
Other/Prior Funding Source	25.270	1.500	1.500	2.000	30.270
<b>USTRANSCOM R&amp;D</b>		<b>1.000</b>	<b>1.000</b>	<b>0.900</b>	<b>2.900</b>
Estimated Additional R&D		0.500	0.500	0.500	1.500
Estimated Development/Testing		0.300	0.300	0.300	0.900
Estimated Production/Fielding		0.400	0.400	0.400	1.200
Estimated Transition					
Estimated Sustainment		0.200	0.200	0.200	0.600

**COLLABORATION PARTNERS:** Army, USMC, USAF, SOCOM



# Project Name



Events and Deliverables	Start Date	End/Completion Date	Funds (\$K)
<i>FYXX</i>			
Event/Deliverable	Mmm YY	Mmm YY	xx
Event/Deliverable	Mmm YY	Mmm YY	xxx
Event/Deliverable	Mmm YY	Mmm YY	xxx
<b>Total Project \$\$:</b>			xxx

Events and Deliverables	Start Date	End/Completion Date	Funds (\$K)
<i>FYXX</i>			
Event/Deliverable	Mmm YY	Mmm YY	xxx
Event/Deliverable	Mmm YY	Mmm YY	xxx
Event/Deliverable	Mmm YY	Mmm YY	xxx
<b>Total Project \$\$:</b>			xxx

Together, we deliver.



# Available Tools



- **References and Expertise:**
  - **Website: <http://www.transcom.mil/rdte/>**
  - **RDT&E Plan USTC 60-2**
  - **USTCI 61-1**
  - **USTRANSCOM R&D Team (618-220-4337)**
  - **TCJ8 Budget Resource Advisor (618-229-5062)**
  - **Acquisition (TCAQ) (618-220-7021)**
  - **Judge Advocate (TCJA) (618-220-3982)**



# Summary



- You should now have a fundamental understanding of:
  - Project Coordinator Duties
  - The Quad Chart
  - References and Expertise

**Questions or Additional Information, Call the RDT&E Team at (618) 220-4337**