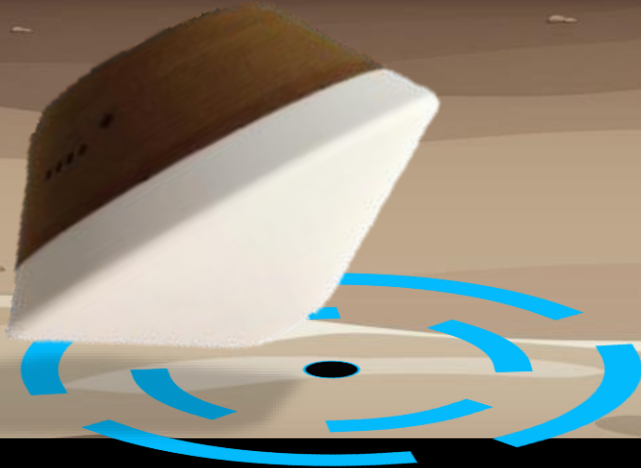


# Sample Return Contingency Coordination OSIRIS-REx Project

Leviticus A. “L.A.” Lewis

Deputy Lead Federal Agency Contingency Coordinator (D-LFACC)

Committee on Planetary Protection Spring Meeting



# OSIRIS-REx Contingency Coordination Group

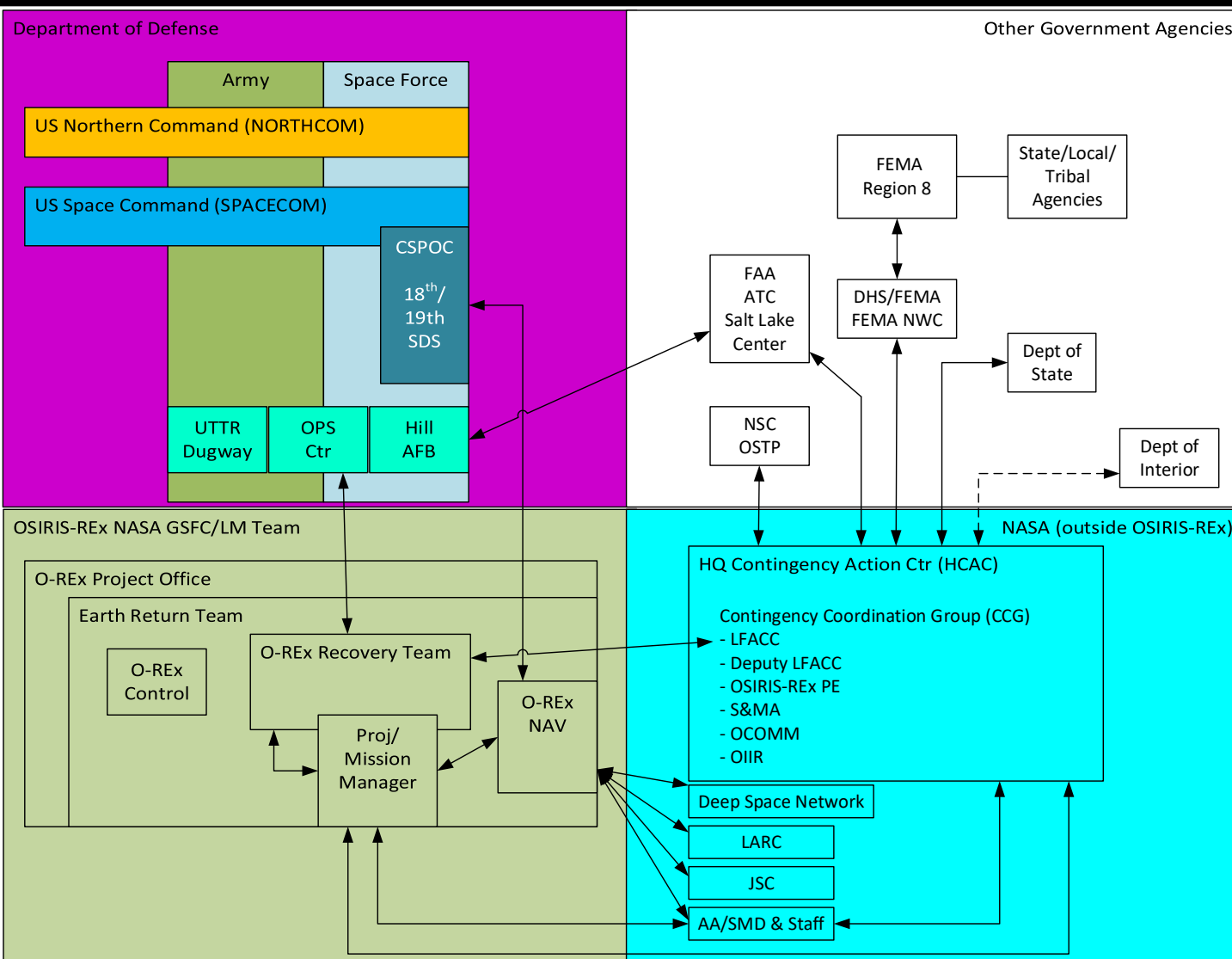


	Contingency Coordination Group Members	
	Lead Federal Agency Contingency Coordinator (LFACC)	
	Deputy LFACC (FEMA detailee)	
	Office of Safety and Mission Assurance (OSMA)	
	SMD Communications Lead	
	PSD Communications Lead	
	Office of International and Interagency Relations (OIIR) - International	
	Office of International and Interagency Relations (OIIR) - Interagency	
	OSIRIS-REx Program Executive/AA-SMD Liaison	

# Contingency Coordination Operations Plan (CCOP)

- Scope:
  - Defines participants (organizations, roles, and responsibilities)
  - Defines Incident Command System
    - OSIRIS-REx Recovery Command System document is a relevant reference (nominal recovery command operations)
  - Defines Earth return contingency scenarios and coordination procedures
  - Defines contingency policies and practices
  - Contains OSIRIS-REx Sample Return Contingency Communication Plan as an Appendix

# O-REx Contingency Response Team



- Four major groups of organizations are involved in the contingency operations.
  - NASA Agency Elements (light blue/lower right)
  - GSFC O-REx Project/contractors (green/lower left)
  - Dept. of Defense Supporting Elements (purple/upper left)
  - Other US Government Agencies (white/upper right) which may become involved in contingency operations
- Details on the organizations and their specific roles are defined in the Contingency Coordination Operations Plan (CCOP)

# Contingencies for Sample Return

- Contingency 1 of 4 No Re-Entry/No Return
- Contingency 2 of 4 Hard landing within Range (no parachute)
- Contingency 3 of 4 Impact outside of range (known location)
- Contingency 4 of 4 Impact outside of range (unknown location)

# SRC Off-Range Contingency Recovery Plan



- CCG will operate out of the Space Operations Center (SOC) at NASA Headquarters with PE at UTTR
- CCG will alert US Government Agencies (FAA, FEMA, DoS, OSTP), in the event of a Contingency per the Contingency Coordination Operations Plan
  - FEMA will coordinate alerting federal, state, and local authorities
- The SRC is not expected to survive re-entry far off-range
  - Landing site/debris areas will be secured by local authorities
  - Pieces of SRC heat shield or spacecraft propellant tank may reach ground
  - No biological or radiation hazards. Possible live pyrotechnics and battery leaks
- If search required, Sensor/tracking info from DoD will define area of search
  - If wide search - NORTHCOM/Air Force Rescue Coordination Center facilitates
- Under direction of the LFACC, OSIRIS-REx team will perform recovery (includes LM, GSFC, UA, JSC)

**Goal: Get back to normal OSIRIS-REx team recovery activities as soon as feasible**

# FEMA/NASA Contingency Coordination



- Deputy LFACC/FEMA will be collocated with the LFACC/NASA at NASA HQ Space Operations Center for the Sample Return event
- Deputy LFACC will be in direct contact with FEMA National Watch Center (NWC) and FEMA HQ
- FEMA NWC has direct communication with all necessary response elements, including:
  - NORTHCOM
  - White House Situation Room (if necessary)
  - FEMA Region 8 (State, Local, Tribal)
  - Emergency Support Functions, as necessary (If FEMA National Response Coordination Center (NRCC) is activated)

# Contingency Communications

Contingency Communications Team (CCT) includes representatives from:

- Science Mission Directorate Communications
  - Planetary Science Division Communications
  - Goddard Communications
  - Office of International and Intergovernmental Relations
  - Lockheed Martin Communications
  - DoD/UTTR Public Affairs
  - FEMA Communications
- 
- Information is provided by the LFACC to the CCT lead, who coordinates with Federal, State, County and other agencies concerned, to maintain a flow of accurate and timely information to news media and public



# Sample Return Contingency Coordination

OSIRIS-REx Project

