1st LANL UAV, Sensors, and Networks Workshop (Internal and Unclassified)

1. Agenda

Monday July 14th at the Engineering Institute (TA-3-4200 Rooms 203A,B – behind Hot Rocks Café)

08:00–08:30 Introduction and Scope of Workshop – Will Fox, IAT-2
08:30–08:45 Opportunities for UAVs, Sensors, and Networks – Kerry Habiger, DI-PO
08:45–09:00 DoD Program Office Overview of UAVs, Sensors and Networks – Rich Oldenborg, DI-PO
09:00–09:15 DoD Perspective of Unmanned Systems – Doug Anson, DI-PO
09:15–09:30 UAVs in Homeland Security – Randy Michelsen, HS
09:30–09:45 UAV Deployable RF Sensors – Mark Dunham, ISR-DO
09:45–10:00 Optical Sensors Deployed on UAVs – Bob Shirey, ISR-2
10:00–10:30 --------- Break ---------
10:30–11:00 Communications Networking for UAV Swarms – Sam Ayyorgun, CCS-3
11:00–11:30 Remote Sensor Powering and Interrogation – David Mascarenas, UCSD
11:30–12:30 10 minute Capability Overviews

- Flow Diagnostics for UAVs – Balakumar Balasubramaniam, P-23
- UAV Autopilot Capabilities – Steve Whittemore, ISR-3
- UAV Operations – Jeff Hill, ES-SE
- Angel Fire – Matt Fair, ISR-2
- UAV Composite Fabrication – Jeff Scott, IAT-2
- LANL-UCSD Plume Project – Chuck Farrar, INST-OFF

12:30–01:30 --------- Lunch ---------
01:30–01:45 Global Climate Modeling Sensors (Opportunities), TBD
01:45–02:15 UAV Current-State-of-the-Technology Overview – John Kosmatka, UCSD
02:15–03:15 Define LANL's Niche in UAVs, Sensors, and Network Technology – Group
03:15–03:30 --------- Break ---------
03:30–05:00 Three Concurrent Working Groups Discussions
05:00–05:45 Working Group Summaries and Final Discussions, Path Forward

2. Possible Working Groups and Discussion Topics

Working Group 1: Networked UAVs and sensors for detection and surveillance
Discussion Group Leader (TBD)

Working Group 2: Networked UAVs for communications, command, and control functions
Discussion Group Leader (TBD)

Working Group 3: Networked UAVs to resupply ground based sensors
Discussion Group Leader (TBD)

3. Directions and Parking

Location: The conference will be held at the Engineering Institute (UCSD building) in Rooms 203 A & B. You could get to the room by entering the building using the entrance closest to the Hot Rocks Cafe. Upon entering, turn right (on your left would be the Cafe), walk through the door near the steps and turn left. The rooms will be to your left.

Parking: There are two prominent parking spaces nearest to the Engineering Institute(EI): 1. Park in the parking garage near the Ottowi building/library and walk across the road to the EI. 2. Park in the EI parking lot located to the east of the EI. Please note that the entrance to this parking lot is from Diamond Drive. For directions, please see attached map in page 3.

4. Instructions for Speakers

The conference room is equipped with a PC and a projector system with Powerpoint and Adobe Acrobat readers (along with media players for playing video). **The speakers are urged to bring copies of their presentations in USB drives or in the form of CDs.** If you have any questions regarding the presentation formats, please email bbalasub@lanl.gov, wefox@lanl.gov, farrar@lanl.gov or call 505-665-9612 (Bala).