



DART
DRONE AUTOMATION & ROBOTICS TECHNOLOGY

&

STARTUP
MONTEREY BAY
CONNECT



ENTREPRENEURSHIP OPPORTUNITIES WITH THE DEPARTMENT OF DEFENSE

MARCH 12TH, 5:30–7:30 PM



UCMBEST CENTER

3180 IMJIN RD | MARINA, CA

Featured Speakers:



OFFICE OF RESEARCH
& INNOVATION



MONTEREY
BAY
APEX
ACCELERATOR

NAVAL XX

HAWKTOWER

VENTURE CAPITAL FOR CENTRAL CALIFORNIA





Art Siordia

Test Range Director,
Airspace Integration

&





- Monterey Bay Academy's Property and AirSpace Integration
 - Indoor and Outdoor Locations for aerial and ground robotics' testing
 - Innovation Incubator
 - Flight test range with access over the Monterey Bay, agriculture fields, etc.



AirSpace Integration on the Monterey Bay

- Located on a 400 acres that is situated directly on the Monterey Bay in La Selva Beach (between Santa Cruz and Moss Landing).
- 2'200 feet grass airfield (CA66) and plans to add a vertiport to support Urban Air Mobility operations
- Incubator and test facility on the MBA's property
 - Parallel Flight- Heavy Lift Drone with Hybrid Drivetrain System
 - Naval Research Laboratory-Coastal Observation Monitoring Station
 - Various small & large UAS testing
- Collaborations with UC Santa Cruz, Naval Postgraduate School and others
 - **Aviation**-Manned/Unmanned platforms, aerial data gathering, airspace management
 - **Marine Science**-Opportunities directly off of the property with BVLOS missions
 - **Agriculture**-On property/adjacent ag operations to support future developments
 - **Meteorological Research**-Fire Weather, Aviation, Agriculture, etc.
 - **Island Conservation**- Invasive species mitigation on remote islands to protect endangered species

Monterey Bay Academy and NRL Coastal Environmental Observation Station



Drivable Beach
Access from
MBA

Monterey Bay
Academy

Power

1 km

Grass Runway (CA66)

Power

Main NRL
Field Site

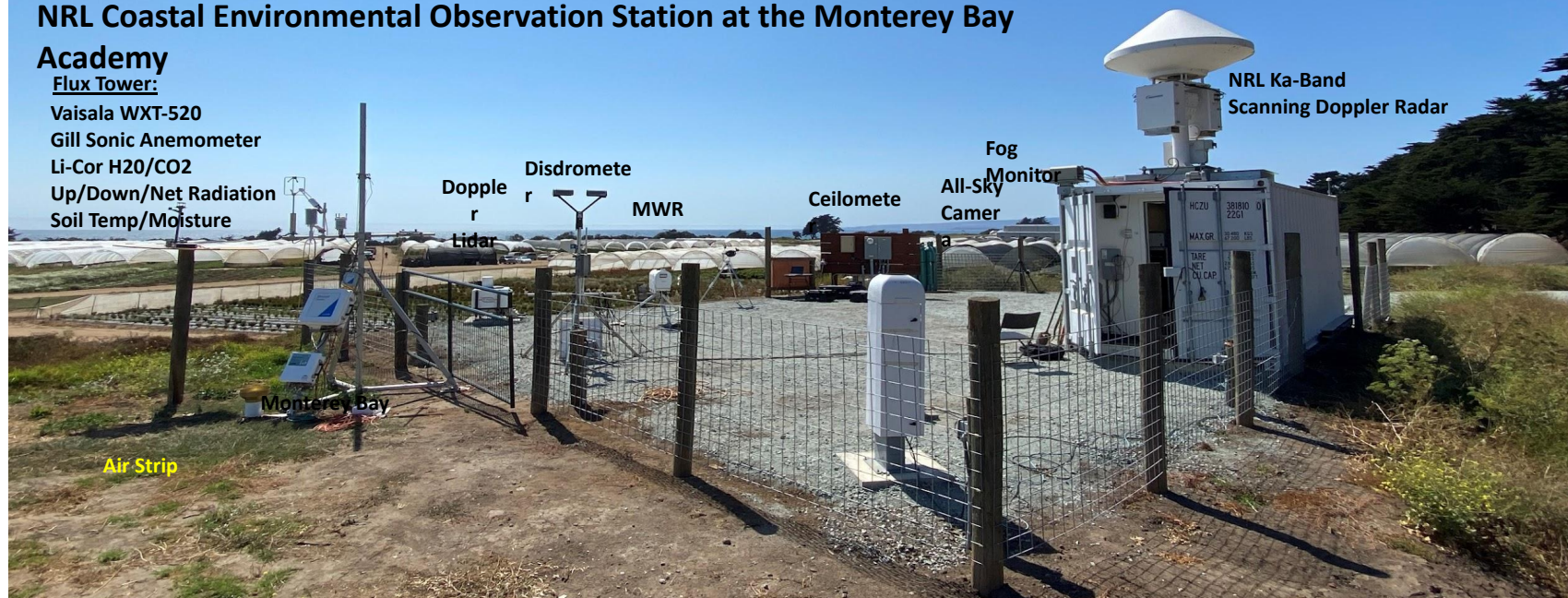
NRL Aerosol Site

NRL Coastal Environmental Observation Station at the Monterey Bay

Academy

Flux Tower:

- Vaisala WXT-520
- Gill Sonic Anemometer
- Li-Cor H2O/CO2
- Up/Down/Net Radiation
- Soil Temp/Moisture



Features:

- Coastal Access & Advanced Instrumentation
- Scanning Doppler Lidar & Ka-Band Radar
- Flux Tower
- Fog drop and Raindrop Size Distributions
- All-sky imager
- Microwave Radiometer
- Ceilometer
- Rawinsondes
- Micro Rain Radar
- Handix POPS-1100 Aerosol Instrumented sUAS

Aerovironment Jump 20



Shield AI V-BAT



UAF SeaHunter



SeaHunter and Xwing 208 Grand Caravan



SpaceX Starship



Operations in the NAS are changing!

Small and Large UAS Operations in the NAS must adapt to these changes. SAFETY is Critical!

- There will be increasing numbers of small and large UAS sorties taking place
- Need to bridge gap between prosumer vs. professional operations
- Increased ground safety for everyone...ground crews and the general public
- Large UAS operations must adopt practices analogous with municipal airport and manned aviation
- Technological advances: UAS are becoming more valuable across many different industries
- Strategy to designate and communicate areas of operations
- Increased radar and weather sensors to provide operational awareness
- Software system that aggregated the above sensors and operational areas to provide situational awareness. For example, Central Coast FIX (Flight Information Exchange)
- Education is fundamental to ensure safety for everyone



Art Siordia

AirSpaceIntegration.com