NOAA – UNH Joint Hydrographic Center

UPDATE ON THE AUTONOMOUS SURFACE VESSEL Research and Development Program at the NOAA – UNH Joint Hydrographic Center/Center for Coastal and Ocean Mapping



NOAA – UNH Joint Hydrographic Center

IMPACT OF COVID-19 PANDEMIC

- Classes continue all teaching online
 - Modify summer field course no data collection
- Possibly no 2020-2021 GEBCO Scholars visa delays
- Research activities continue faculty and students working from home
- No access to labs for "hands on" research impact on ASV upgrades and experiments, machining



- Early summer field programs (TBNMS) deferred
- Annual Review (14-16 July) TBD most likely virtual

PRESENTED IN NEW ORLEANS:



Shore-based ops in

Thunderbay NW

G-Worker working in high-risk environment off Channel Islands







Nikumaroro Island, Kiribati Aerial Drone, ASV, E/V Nautilus



DriX Trials on Thomas Jefferson Norfolk, October 2019



DriX Trials on *Thomas Jefferson* Sea Trials







Sea Trials

DriX Trials on Thomas Jefferson







From DDS \rightarrow Universal Delivery System DriX Module





From DDS \rightarrow Universal Delivery System – AUV Module









From DDS \rightarrow Universal Delivery System – Transportable Crane



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From DDS \rightarrow Universal Delivery System – Transportable Crane

ASV – AUV COLLABORATION

Saildrone SURVEYOR– 72ft (22m) UNMANNED VEHICLE



Saildrone SURVEYOR

Environmental Measurements





Mapping Sonars



MBARI ESP - eDNA Sampler



Saildrone SURVEYOR





Saildrone SURVEYOR



Unmanned → Autonomous









Enhanced Operations through AR and VR visualization

NOAA

