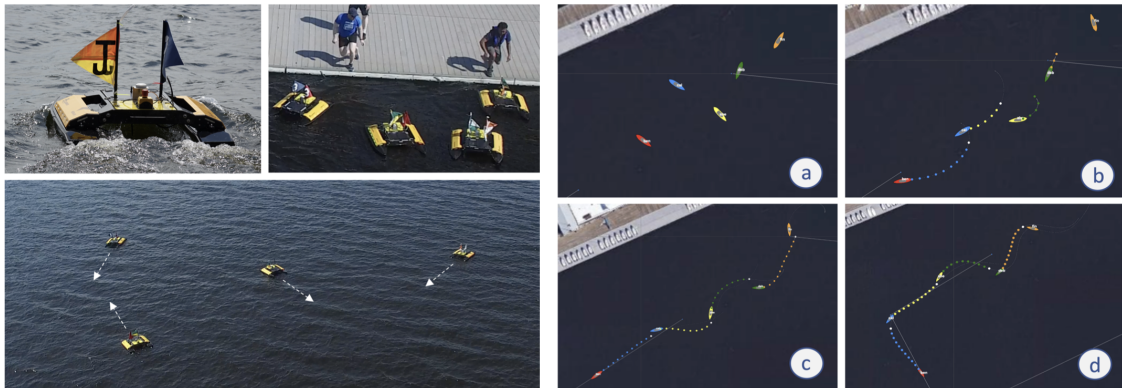


Sea Train

The Sea Train project at MIT involves field test evaluation of dynamic linear convoy algorithms for enabling multiple surface craft to form a train of vehicles, each following one another. Experiments include launching of vehicles with arbitrary starting positions, decentralized inter-vehicle auctions to form convoy ordering. The MOOS-IvP autonomy codebase in conjunction with modules in the Swarm Autonomy Toolbox, allow the vehicles form and hold their convoy patterns. The convoy parameters such as separation distance and convoy speed can be set at either the mission planning stage or during field exercises via command and control messages.



Status:	Ongoing since Sept 2020
Sponsor(s):	DARPA TTO / General Dynamics Applied Physical Sciences
People:	Mike Benjamin (PI), Supun Randeni, Tyler Paine
Robots:	https://oceanai.mit.edu/herons
Software:	MOOS-IvP public codebase, Swarm Autonomy Toolbox
Event Photos:	https://oceanai.mit.edu/media/PavLabSep21/album
Event Photos:	https://oceanai.mit.edu/media/Oct1821-SeaTrainTests/album

Recent Publications

2021 (1 item)

1. Michael Benjamin, Tyler Paine, and Supun Randeni. Autonomy algorithms for stable dynamic linear convoying of autonomous marine vehicles. In *OCEANS 2021 MTS/IEEE*, October 2021.

References

- [1] Michael Benjamin, Tyler Paine, and Supun Randeni. Autonomy algorithms for stable dynamic linear convoying of autonomous marine vehicles. In *OCEANS 2021 MTS/IEEE*, October 2021.