



**AINet ANT-X
AI Prize Challenge
30 July 2021**

Operational Context:

Understanding the battlespace is critical to Naval operations in a contested, all-domain battlespace. Naval and Joint Forces must have situational awareness including identification of all forces in surface and air domains in order to operate freely. Enhancing situational awareness requires rapidly processing data to understand the location, signature, and predicted course of action of all vessels and forces in the area.

Data: Air Tracks, Sea Tracks, OPTASK VI, RF

1. Challenge teams should use AI and ML to understand and predict patterns of life, courses of action, and characterize contacts for all forces based on the data given.
2. Teams are encouraged to explore and propose other capabilities that would be useful in the given operational context, including, but not limited to understanding, mapping, characterizing, and identifying parts of the environment.

A sample description of air tracks data is available in the Q&A. The data is described in the table below.

Data	Description	Recording Area
Air tracks	Aircraft status, location, speed, direction, heading, etc. over time.	Location 1
Sea tracks	Ship location, speed, direction, heading, etc. over time.	Location 1
OPTASK Visual Intelligence	Raw text parsed from Optask VI powerpoints. Includes latitude/longitude and description of contacts between surface craft/aircraft and Navy ships.	Location 1
RF data*	Contains Wideband RF recordings passed through an energy detector, yielding information-like transmission power.	Location 2

3. ***Note:** The recording area for RF data does not overlap the recording area of other datasets, but Bonus points are available for Teams who are able to utilize this data.