



ARGUS CommandCenter

▶▶ TOMORROWING TODAY



**HYPER
GIANT**
INDUSTRIES

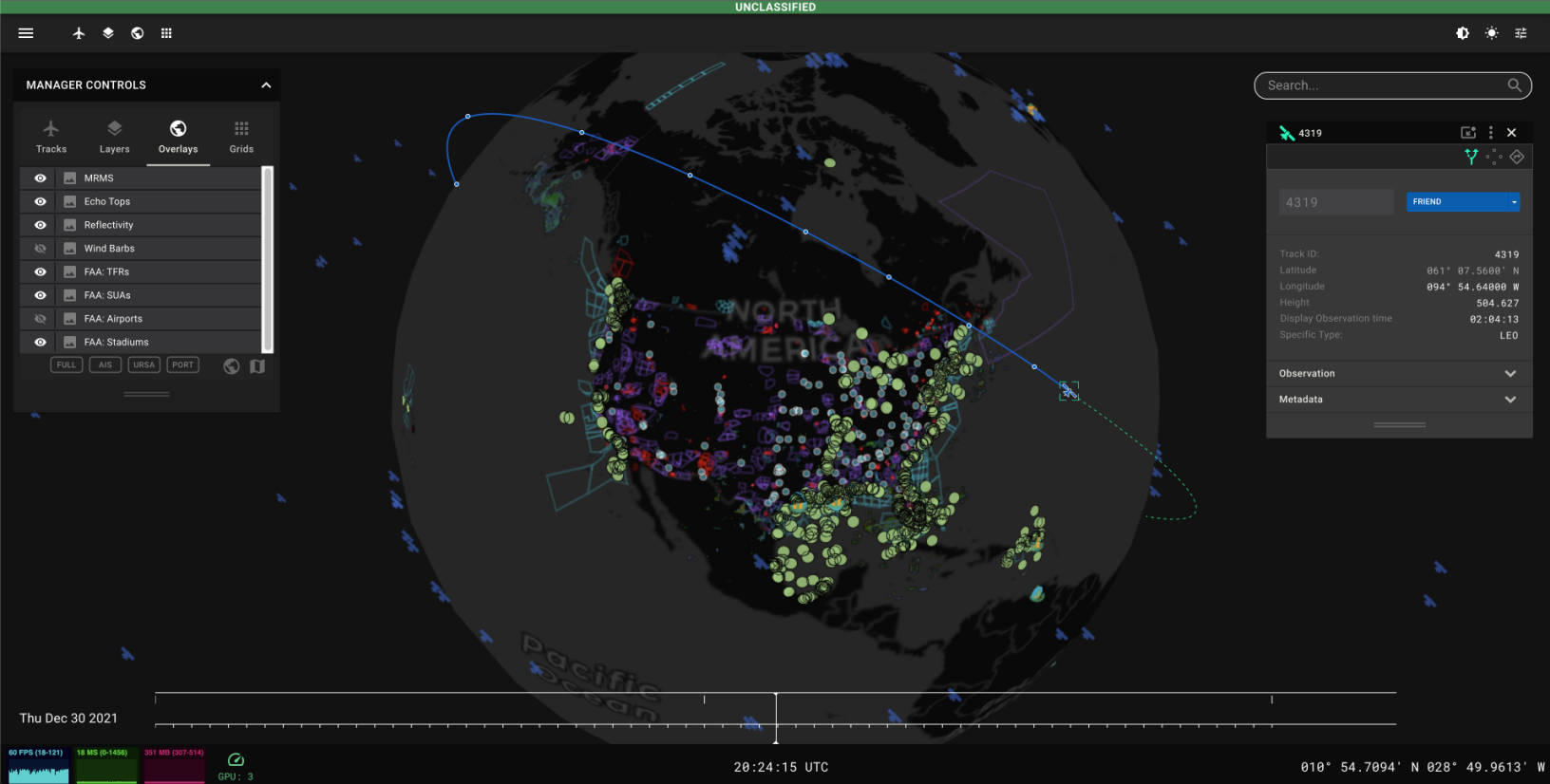


Figure 1—**ARGUS CommandCenter** by Hypergiant Industries providing live 3D views with orbital path and prediction lines for global situational awareness. The system pulls dynamically from multiple live or snapshot data sources, presenting in various web browsers from ruggedized military tablets to large desktop or even operation room monitors at upwards of 60 frames per second with no lag. Operators have ability to choose available tracks, layers, overlays, and grids via the Manager Controls menu on the left, while details about a selected item are displayed in an informative “baseball card” on the right. Operators can zoom in and inspect any data point or area in space, air, surface and subsurface or underwater provided available applicable datasources.

ARGUS CommandCenter

ARGUS CommandCenter by Hypergiant Industries is a real-time, highly performant (60fps+) Intelligent Common Operating Picture thin-layer front end application supporting courses of action for various contexts and customizable to specific use cases. **ARGUS CommandCenter** visualizes disparate data sources in order to gain enhanced situational awareness, displaying actionable contextualized data, and presenting operators with both automated and recommended course of action decision-making across all echelons in multiple operational domains, including space, nautical, terrestrial, and air.

*“When Hypergiant was first approached by our partners at AWS to help the White House with triaging an international problem in space with an excellent team of partners, we jumped on the opportunity,” said Mike Betzer, Hypergiant CEO. “Our main focus is on Space, Defense, and Critical Infrastructure, and adapting our CommandCenter platform towards this use case was a clear fit for the ARGUS program. **ARGUS CommandCenter** enables operators to quickly take action on multiple data points feeding live from partner data products with intelligent courses of action and the ability to drill into detailed views from orbit to terrestrial assets and effects.”*

ARGUS CommandCenter brings the right contextualized data to operators anywhere and everywhere (Cloud, Edge, & Far-Edge) empowering them to make timely and critical decisions and take informed courses of action at the speed of relevancy.

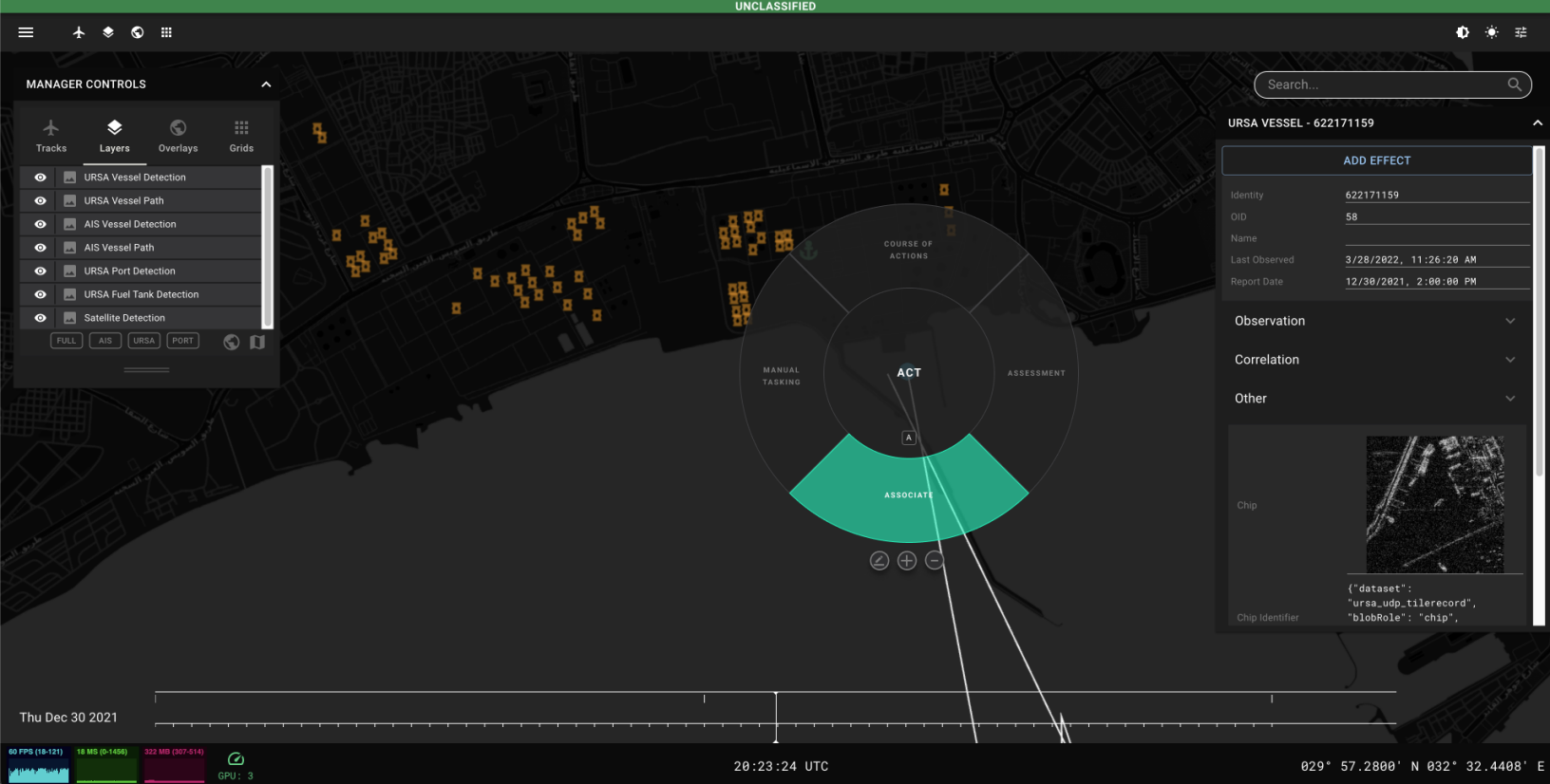


Figure 2—**ARGUS CommandCenter** by Hypergiant Industries zoomed in 2D view of a selected asset. The operator can choose to ACT on the asset. Associate (highlighted), add Manual Tasking, access Courses of Action, or perform an Assessment. The informational “baseball card” on the right displays details of the selected asset pulled live from ARGUS partner URSA showing the vessel’s identification and latest observation details, combined with the ability to ADD EFFECT, like tasking a nearby satellite to grab updated SAR imagery.

Performance & Scalability

CommandCenter is built upon a highly decoupled, flexible, and scalable architecture that has been pressure-tested in client production environments supporting hundreds of thousands of real-time moving entities while maintaining 60-120fps live rendering. Each architectural layer of the application is a separation-of-concern composed of various elements to solve its objectives while maximizing compliance, efficiency, modularity, and security for the layer, each of its parts, and the overarching application and architecture.

The complex visualization capabilities of the platform are robust “video game level” renderings capable of helping explain complex AI/ML answers (this isn’t just an app that draws lines & dots). CommandCenter has been deployed in AWS Cloud as well as in Edge and Far Edge environments via Amazon’s Snowball and Snowcone solutions. The system is optimized to quickly onboard new data sources and supports integrations with multiple data-systems and formats.

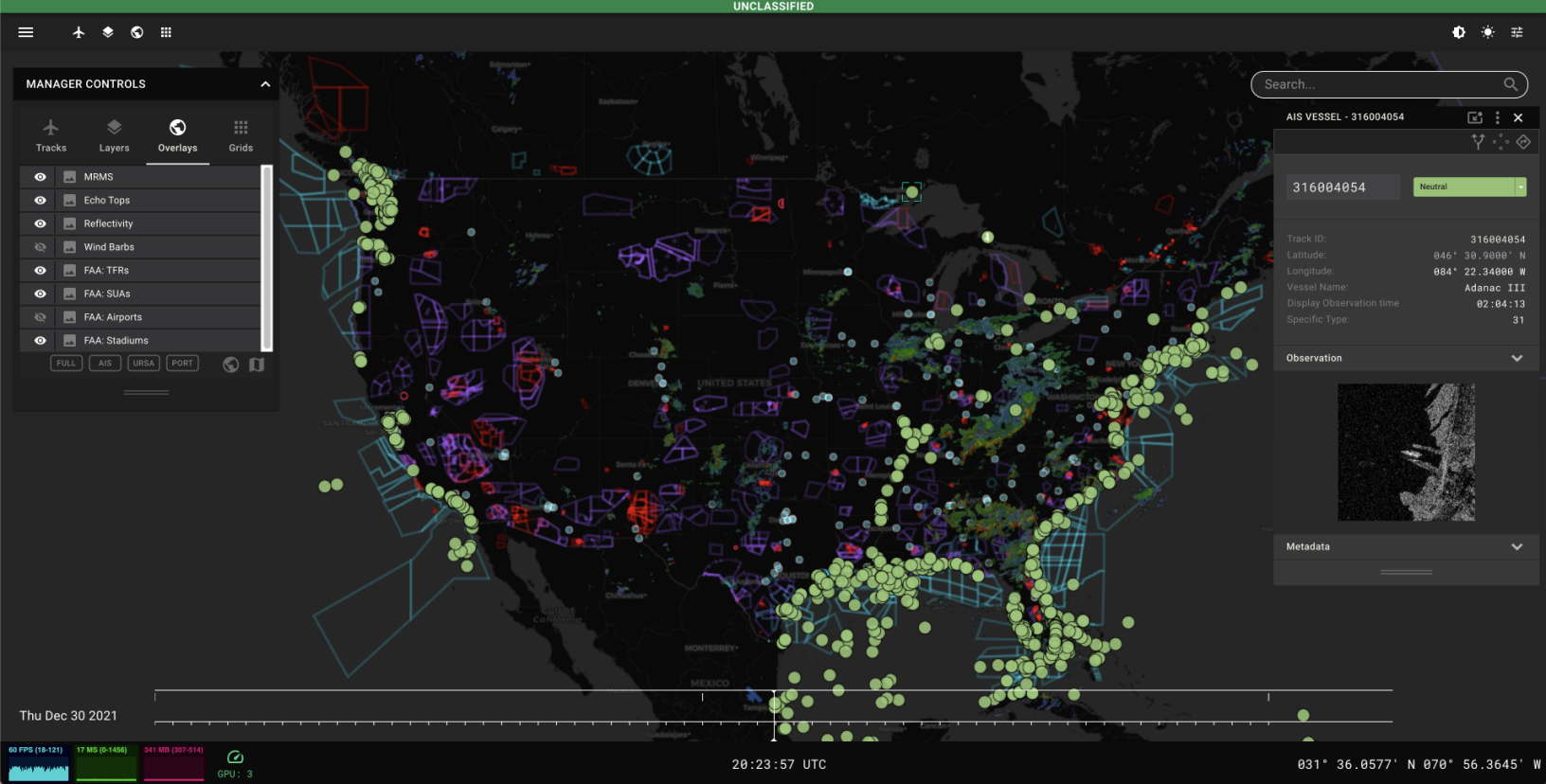


Figure 3—**ARGUS CommandCenter** by Hypergiant Industries 2D view fused with satellite imagery for terrestrial based situational awareness. Manager Controls on the left display the ability for operators to toggle on and off the visibility of various Overlays. Informational “baseball card” on right shows status of selected vessel identified as “Neutral” pulled directly from another ARGUS data partner.

Key Features

- Cloud-based application
- Deployable to Edge and Far-Edge Devices (AWS Snowball, AWS Snowcone, Field tablets, etc.)
- Responsive design adapts to all screen resolutions: tablet to desktop and beyond
- Displays multiple live data points moving in geospatial visualizations at 60-120fps

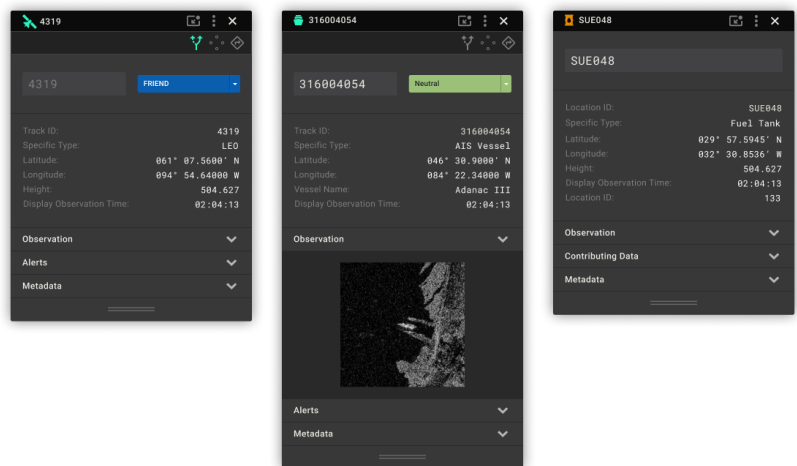


Figure 4—Baseball Cards displaying, from left to right, Satellite, Vessel (Maritime View), and Location

- Supports multiple data formats. Non-exhaustive list of currently supported data formats: JSON, GeoJSON, Raster Tiles, Vector Tiles, Protobuf, other Binary based formats, Base64 Encoded, Raw String, Tabular data (CSV, KML, KMZ, Shapefile, etc.)

- “Baseball cards” fully customized to data source and operator needs

- Robust search functionality

- Manager Controls allow operator to quickly select exactly the information to be evaluated, decluttering their scope to see the right information at the right time. Operators can also create recipes of information groups to quickly dial-in specific customized views to optimize speed of relevancy decision making

- Capable of 3D, 2D views as well as customizations to non-geospatial maps possible for specific use-cases (internal mechanics of a satellite or other hardware to indicate potential areas of underperformance from sensor data, for example)

- Ability to quickly command and control effects on tracks for decision dominance

- Courses of Action tied via integration with various external systems can enable operator to perform approved activities like request additional pictures from a satellite or drone, scramble jets to action, or fire maintenance bursts on a satellite’s ion thrusters

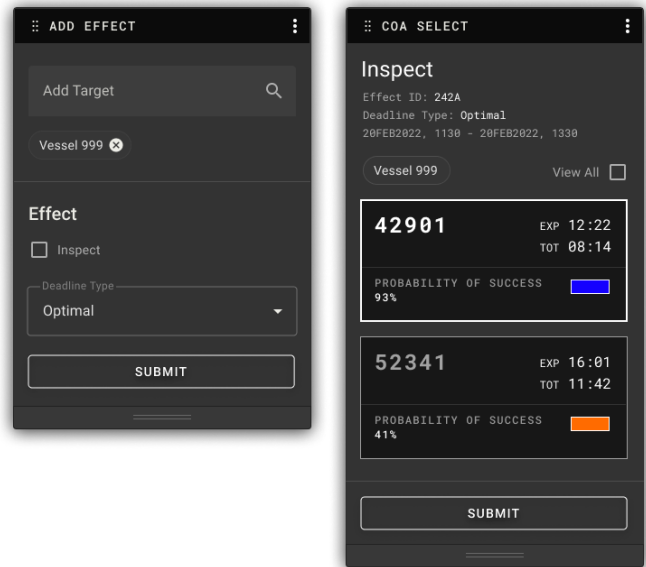


Figure 5—Courses of Action Parameters and Selection

Customizable

Hypergiant Industries has the ability to deploy a customized version of **ARGUS CommandCenter** integrated with other ARGUS data products and platforms to suite your business or mission's specific needs with courses of action and baseball cards customized to your specific problem set. The entire platform can be adapted to various data and visualization use cases, and integrated with systems outside of the ARGUS suite of tools.

Please contact Hypergiant today for a consultation on how **ARGUS CommandCenter** can be tailored to your mission context to solve your needs and pain points.

Contact

arguscommandcenter@hypergiant.com

