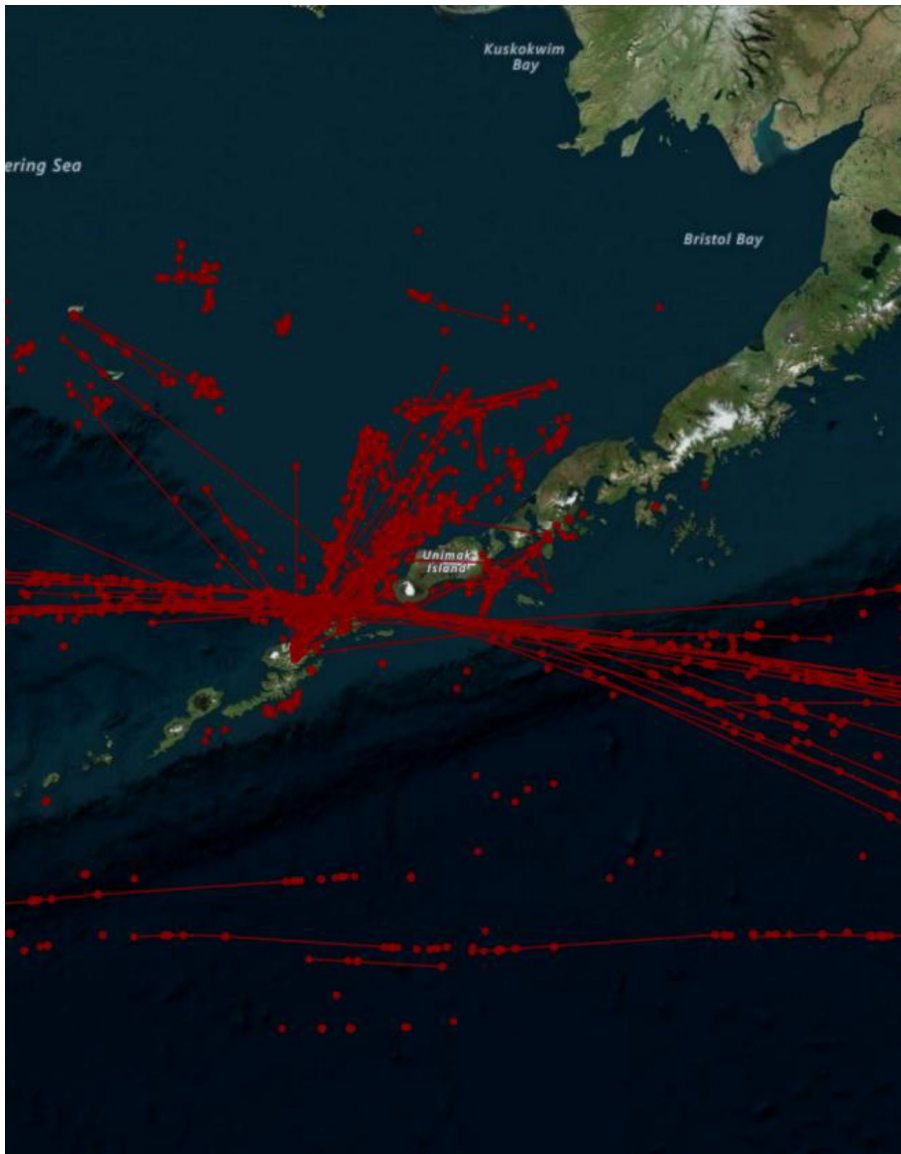


# ARCTIC MARITIME DOMAIN AWARENESS



GO BEYOND WITH BALL.™

Leveraging more than 30 years of data analytics expertise, Ball Aerospace, in partnership with Spire Global, Inc., is improving maritime domain awareness (MDA) in the Arctic by providing the National Geospatial-Intelligence Agency (NGA) with actionable intelligence on ship traffic and activity in the region. NGA maintains current information on global transportation networks to improve MDA in the region, greatly improving ship navigation and safety.

## OVERVIEW

Tracking and monitoring ship traffic in the Arctic, like many remote parts of the globe, is notoriously difficult – and activity in the region is only expected to grow - 250 percent by 2025 - as the polar ice melts.

Using its constellation of nanosatellites, Spire collects Automatic Identification System (AIS) ship tracking data from around the globe, even in the most remote regions. Ball then fuses Spire's AIS data with commercial Geospatial Intelligence (GEOINT) data, including electro-optical and Synthetic Aperture Radar imagery, using an advanced data processing system to turn the raw data into actionable intelligence. This provides the NGA the ability to persistently monitor and detect vessel activity in the region in never-before-available detail and accuracy, addressing a critical gap in monitoring maritime vessel patterns.

## OUR ROLE

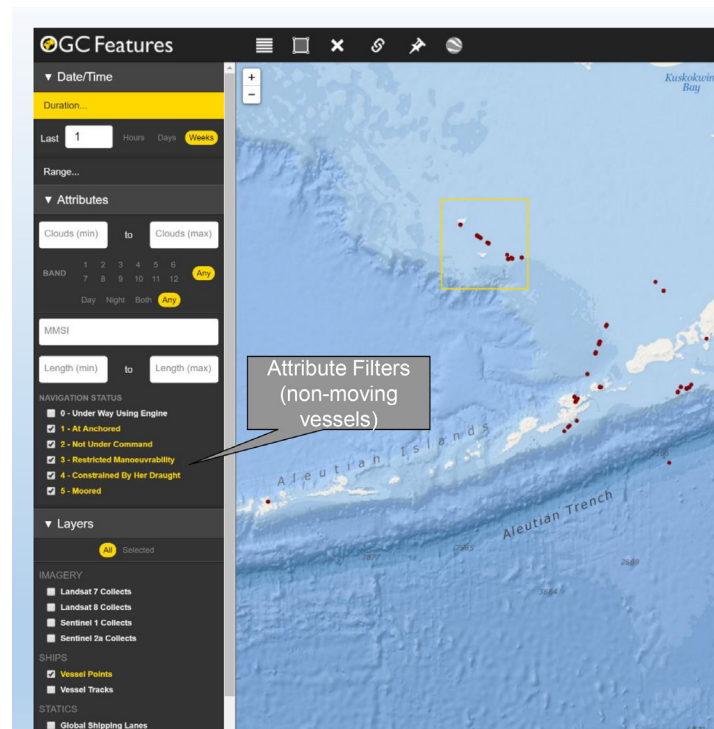
For more than 30 years, Ball has delivered data analysis software and systems expertise to the United States Government. We are now applying this heritage to develop innovative GEOINT solutions for commercial problems and customers.

For the Arctic MDA program, we developed a cloud-based data analytics architecture that incorporates maritime tracking algorithms and machine learning to automatically, in near real time, verify the presence and location of vessels entering areas of interest in the Arctic, enabling greater awareness and safety.

Our capability is easily transportable and scalable to any area of interest around the globe and can be customized to any mission need.

## KEY FEATURES

- Improving maritime domain awareness
- Tracks and monitors ship traffic in remote parts of the globe
- Improving ship navigation and safety
- Turns raw data into actionable intelligence
- Capability is transportable and scalable to areas of interest
- Customizable to any mission need



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