

ARCTIC VESSEL MONITORING AND GEOFENCING

Keeping an Eye on Important Coastal Areas



WHY MAKE A GEOFENCE?

Creating a Geofence

You can establish a geofence around any sensitive areas to monitor vessel activity using AIS data 24 hours a day. Your geofence can be programmed to send you an alert through email or text message when vessels enter the geofence area or exceed speed restrictions within it. Using grant funding this tool is free for Alaska Native tribes and all government agencies to pilot through 2021.

- Protect subsistence activities
- Minimize wildlife disturbance
- Encourage compliance

As maritime activity in Alaska increases so does the potential for adverse environmental and safety impacts. The relatively recent introduction and application of Automatic Identification System (AIS) technology for tracking large ships has enhanced the ability to assess, monitor, and take action to improve vessel traffic management and maritime safety.



The Basics

Large ships are required to carry AIS technology that monitors their location and activity in real time. The information available from AIS signals includes the vessel's name, type, speed, and course. When creating a geofence you can specify which types of vessels, a minimum speed, or other factors you want to trigger alerts as they pass in and/or out of your zone.

A zone is simply an area defined by geographic coordinates to create your geofence. If you use Geographic Information System (GIS) applications like ArcGIS or Google Earth then you are probably used to seeing lines, circles, and polygons that designate areas of

interest. The concept here is the same.

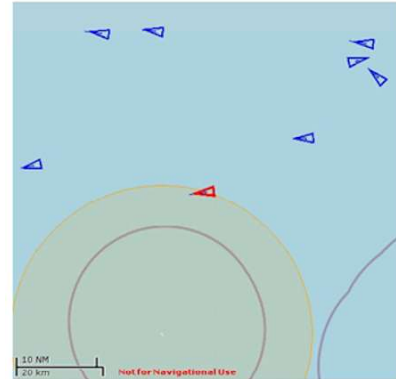
Our program creates polygon zones using an unlimited number of coordinates. Because many organizations share common interests, we have created several pre-designated options for geofence zones. You can also create your own zone by using GIS coordinates.



Tracking - SiiTech 2
12/5/2020



UTC: 20-12-05 19:57, Local: 20-12-05 10:57,
Alarm: ██████████ Bogoslof, Type: On Enter,
MMSI: 215240000, Name: CMA CGM GEORGIA,
Call Sign: 9HA5027, Type: Cargo ship, carrying
DG, HS, or MP (A), SOG: 21.1 knt, COG: 262.0°, Lat:
54°14.089'N, Lng: 167°53.070'W, Dest.: KRPLUS,
ETA: 2020-12-11 19:00, Msg: A vessel has crossed
the boundary.



Area: 1134.1NM², Zoom: 9

Example screenshot of an email alert.

How to Create Your Geofence

Head to our website, www.AlaskaGeofence.org to learn more and create your own geofence.

If you want to learn more or partner with us please contact Aaron Poe at
apoe@alaskaconservation.org

For technical details please contact the Marine Exchange of Alaska team at
geofencing@mxak.org

