

ABOUT

The research vessel **Sikuliaq**—pronounced See-KOO-lee-auk and translated from Inupiaq as "young sea ice"— is a 261-foot Global Class ice-capable research vessel designed to operate in harsh oceanographic conditions to advance polar and subpolar scientific research. Owned by the National Science Foundation and operated by the University of Alaska Fairbanks College of Fisheries and Ocean Sciences (CFOS), *Sikuliaq* is the only ice-capable vessel in the US Academic Research fleet.

SHIP SPECIFICATIONS

Sikuliaq allows researchers to collect oceanographic samples directly from the water column and seafloor, host remotely operated vehicles, use a flexible suite of winches to raise and lower scientific equipment, and conduct surveys throughout the water column and sea bottom using a variety of sampling systems.

Characteristics	
Overall length	261 feet
Draft	18.9 feet
Beam	52 feet
Performance	
Cruising speed	10 knots
Endurance	45 days
Ice-breaking	2.5 feet at 2 knots
Capacities	
Scientist berths	24
Crew berths	20 plus 2 marine technicians
Science labs	2100 square feet
Lab or storage vans	4 vans
Deck working area	4360 square feet
Freshwater storage	13,190 gallons
Water-making capacity	6000 gallons/day
Fuel capacity	170,000 gallons
Disability accommodations	Yes: labs, galley, staterooms



Contact Us

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ARCTIC RESEARCH ICEBREAKER CONSORTIUM

Sikuliaq and CFOS have joined 13 other partners from Europe and Canada in the international Arctic Research Icebreaker Consortium (ARICE). The collaboration supports transnational planning and implementation of Arctic research cruises. As the US representative in ARICE, Sikuliaq is well positioned to serve an increasingly international audience and to foster greater collaboration between US Arctic ship users and international scientific partners.

COMMUNITY OUTREACH

Sikuliaq strives to work closely with Alaska coastal communities to ensure our activities do not interfere with Native hunting or cultural events. Sikuliaq is the first university-operated vessel to adopt standard operating procedures outlining when and how our Arctic researchers are expected to work with coastal communities.

2020 CRUISE TRACK

In her fourth full year of operation, *Sikuliaq* supported nine science cruises. Working from the icy Beaufort Sea to the Oregon coast, her ventures included supporting the 100th occupation of the Seward Line in the NGA LTER study area, investigating the epicenter of an earthquake in the Aleutian Islands, and measuring waves along the Arctic coast.

In 2020, UAF faculty, staff and students were involved in 47 percent of *Sikuliaq* science days at sea, again highlighting the active seagoing research and education programs at the university.



Photo by Ana Aguilar



2020 Cruise Track. Photo below by Ethan Roth



20,900 nm traveled • 192 paid ship days • 153 days of science (not including mob/demob days) • 72 UAF/CFOS PI days
31 days in the Arctic (as defined by the Arctic Research and Policy Act of 1984) • 8 days in the ice • 6 ice station days
359 CTD casts • 2 XBT casts • 35 moorings deployed • 58 moorings recovered • 14 ROV dives • 7 gliders deployed
5 gliders recovered • 7 corings collected • 107 buoys/floats deployed • 61 buoys/floats recovered
121 laser sediment measurements • 279 net tows