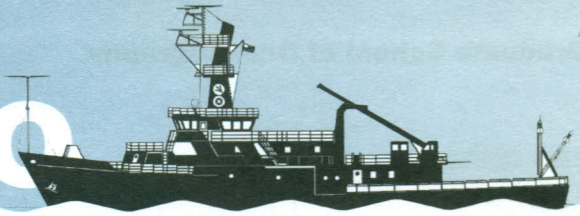


# ABOARD GSO



A Newsletter for Alumni and Friends of the University of Rhode Island's Graduate School of Oceanography

## The Ocean from Above

Jim Hain, Ph.D. 1975

It is a glorious day off the coast of Florida. Off to the right, the coastline, piers, and condos pass in a moving panorama. We, the Marineland Right Whale Project, are searching for right whales. This is the area and the season where this endangered species come to have their calves. Our eyeballs are scanning, but not much is moving. An uneventful day. The aircraft passes through its waypoint off the Canaveral Seashore and turns east on the outbound leg of our survey pattern. Abruptly, the voice of the pilot comes to life in my headset: "Sight, dead ahead, one mile." We spring into a familiar but always exciting routine. I reach for the camera, pull back on the zoom lens, and prepare for the photography, which will be to the left. "Mother-calf pair," the pilot calls. The plane begins a series of slow, quiet orbits with the closest segment of the curve positioned to give me, the photographer, the "whales down-sun" view that we need. Not always easy because this has to be coordinated with the diving and surfacing pattern of the whales. The pilot is skilled and we have done this many times. I have the pair in the frame, and push out on the zoom lens for the required full-frame shot of the mother's head and the pattern that will allow us to identify the individual. After about 15 minutes of photography, observations, and logging of GPS positions, I announce, "All set, thank you." The plane straightens, points north, and we rejoin the survey track. There will be one more sighting this day before we complete the pattern and land back at the grassy airfield and our hangar just west of Marineland, Florida.

I began flying surveys in Professor Howard Winn's Cetacean and Turtle Assessment Program (CETAP), 1978-82, based at GSO. In the decades since, I have flown in various aircraft, including blimps and helicopters. Projects and methods evolve. This particular aircraft is interesting. The AirCam type was originally designed for wildlife surveys and photography in Africa. In addition to all the characteristics that make for a good survey and photographic platform, there was one more thing: the highest level of safety and reliability—as the remote jungles of Africa were not a location where one would want any untoward events or surprises. The same is true for overwater surveys, often at some distance from land. It was the combination of capability and safety that led us to purchasing an AirCam in late 2006. We are now in the 5th year of using an AirCam for ocean studies. The plane is used for right whale and manta ray studies, and the flights and sightings data are typically coordinated with sea-surface-temperature data from satellite imagery and data-buoy stations.

In a time when "keyboard science," predictive modeling, and other characterizations of reality are in vogue, the real bread-and-butter of our chosen profession are the field studies. As we celebrate the 50th anniversary of the GSO, an inventory of the several hundred GSO graduates would include many innovative and effective advances in methods and platforms. Contrary to what the Gilbert and Sullivan lyrics (as adapted for oceanographers) describe: "Stick close to your desk and never go to sea, and you'll get ahead in oceanography"—the excitement, rewards, and yes, (sometimes) the fun, are when we go to sea. We may be in, under, on, or over the sea. Either way, it is what we do. And GSO is almost always at the core. ■



Jim Hain, GSO 75, Associated Scientists at Woods Hole, Massachusetts

Below far left: The pattern of callosities (skin eruptions inhabited by whale lice) on the head of this female allow us to identify this individual as Catalog #3430, age 7, with her first calf.



Left: The AirCam, a quiet, twin-engine, open-cockpit aircraft allows for unobtrusive observations and photography of endangered right whales and other ocean life. The plane is currently based in Florida.