GRANITE ISLAND, MI - A small, rocky island in Lake Superior known for getting hit with some wicked waves is the latest place NASA is using to gather data on Earth's radiation. And the information being churned out on Granite Island will end up being used in classrooms by college students nearby.

The U.S. space agency this summer is teaming up with Northern Michigan University in Marquette to install equipment as part of the Clouds and the Earth Radiant Energy System experiment. The 2.5-acre island and its lighthouse sit 12 miles northwest of Marquette.

NASA has been using satellites to measure the Earth's radiation for more than 30 years, but collecting ground data helps validate the information, according to the Associated Press.

The data collected on Granite Island should help researchers better understand the role of clouds and the energy cycle as it relates to climate change, NMU said in a recent synopsis of the partnership.

"We want to know what's taking place in layers, from the top of the atmosphere to the Earth's surface, so clouds can be better modeled in computer programs used to predict climate forecasts," Fred Denn, research scientist with contractor Science Systems and Applications Inc. of Hampton, Va., told NMU.
The university said more work with NASA could happen in the future if the island experiment is successful. Granite Island's location - surrounded by deep water and perched far from land - makes it a good spot to collect the readings.

The instruments are measuring things like short-wave radiation reflected from the sun, longer-wave infrared radiation, and aerosol particles in the air.

"It's an interesting project that has cutting-edge research," NMU alumnus and trustee Scott Holman, who owns the island and agreed to host the NASA instruments there, told the university. "One of the criteria for any research project on Granite Island is that it has to involve NMU faculty and students.

"As we add monitoring equipment on the island, energy becomes an issue. We create our own with propane tanks and wind generators. NASA will generate its own power for its project with solar panels and batteries."

Granite Island is no stranger to housing equipment. For the last nine years, it has been a home base for meteorological research equipment donated by Holman to NMU. That setup measures evaporation rates on Lake Superior. It's one of only six sites compiling the data as part of the Great Lakes Evaporation Network.

"Granite Island was selected as a CERES site based on its over-water location, as well as the available infrastructure, power and internet at the island," John Lenters, NMU research associate and owner of Lentic Environmental Services, said in the university's report. "The potential added benefit of weather monitoring equipment that had been installed at the island previously as part of the Great Lakes Evaporation Network also appealed to NASA."

Native Americans called Granite Island "Na-Be-Quon" Island, according to Terry Pepper, who has detailed the history of many Great Lakes lighthouses.

It's home to what's been called one of the oldest surviving lighthouses in Lake Superior. Construction on the Granite Island light began in 1868. But it was no easy task. Crews first had to blast off the top of the island to make a flat foundation for the lighthouse.

**Jacksonville Architect Preserving Something We Love - Lighthouses**

We didn’t build the first lighthouse. The U.S. Lighthouse Society gives that distinction to Egypt, with a 450-foot tower that was finished about 280 B.C. and stood for more than a thousand years.

We don’t have the oldest standing lighthouse. That honor typically is given to a Spanish lighthouse constructed about 20 B.C. But if you can quantify love of lighthouses, America might have that wrapped up.

We have the most lighthouses in the world. We went from 12 lighthouses in 1776 to building about 1,500 more and, for a while, having more than 800 in operation.

But, according to the Lighthouse Society, we haven’t built a new shoreside lighthouse since 1962 with Sullivan's Island in Charleston, S.C. (also the only triangular-shaped lighthouse tower). Even the old Boston Light is automated now.

While maritimes have changed, we still love lighthouses. We fight to save them. We travel to see them. We pay good money to climb their stairs.

Why the infatuation? “That’s a good question,” said Ken Smith, a local architect. “I never thought too much about lighthouses until I started working on them.”

There’s a good reason to meet Smith, 73, in his Southside office and talk with him about lighthouses. He and his firm, Kenneth Smith Architects, have won dozens of awards in the last 40 years for their restoration of historic buildings — including more than a dozen lighthouses in Florida and Georgia. In his office, Smith points to a poster with drawings of lighthouses, two rows of varied shapes and sizes and designs: Amelia Island, St. Augustine, Gasparilla Island, Fowey Rocks, Crooked River, Cape St. George, Sapelo Island, Anclote Key, St. Simons, Tybee Island, Ponce Inlet, Pensacola, Jupiter Inlet. He worked on all of these, plus a symbolic inland lighthouse (the First Baptist Church parking garage) and one on a private island in Georgia.

The most recent: the St. Marks Lighthouse in the Panhandle; the state’s second-oldest lighthouse behind only Amelia Island (1838).

On Aug. 7 — National Lighthouse Day — St. Marks Wildlife Refuge will hold what it’s calling a “homecoming celebration.” It is inviting the descendants of lighthouse keepers and families to come see what ranger Craig Kittendorf described as a “breathtaking” restoration.

In his office, Smith calls up a PowerPoint presentation on his computer and begins to point to before-and-after photos. He shows the rotting wood floor, the old roof, the “resident snake.” “They pulled him out of there multiple times,” he said. “One time when we climbed to the top, we found a snake skin there. … We think we finally got all the holes closed up so he’s not getting back in.”

They stick to strict standards, spelled out by the Department of the Interior, to maintain character-defining features — while at the same time adding some modern amenities and safety features. “I like the challenges of it,” he said. “They’re all unique, and you have to figure out exactly what you need to do and how to do it.”

In many ways, he is an unlikely person to be saving lighthouses.
Smith grew up in Kentucky, not exactly a haven for waterfront beacons. While studying architecture at the University of Kentucky, he was influenced by Frank Lloyd Wright. “I always thought I was going to design modern buildings,” he said.

For a while, he did. After college he moved to Jacksonville — where Lorraine, his wife of 50 years, grew up — and started working for KBJ Architects at a time when it was basically building the downtown skyline. When he ended up working for Herschel Shepard, his career changed. Shepard, who became the dean of Florida historic preservation, had been doing this kind of work since he accepted a commission to re-roof parts of Fort Clinch in 1963. When they were hired to do stabilization work on the Mayport Lighthouse, it was the first time Smith had even been in a lighthouse.

He started his own firm in 1984 — and followed in Shepard’s restoration footprints. “Herschel told me it would be a great adventure,” he said. “And it has been.”

He walked through his office, pointing out photos of some of the projects through the years. Many of them are in Jacksonville, including the Greenleaf and Crosby Building, the St. John’s Episcopal Cathedral and — the place where he and Lorraine had their wedding reception decades earlier — the San Jose Country Club. He’s the campus architect at Flagler College in St. Augustine and has done extensive work there. But his career also has taken him to places in Florida he probably wouldn’t have gone to otherwise — like the Emily Taber Library in Macclenny.

It originally was the Baker County Courthouse, built in 1908. It isn’t just the details about restoring the building that Smith remembers. It’s the funding. The state provided part of it. But to get the grant, the state required a match from the community. So the librarian led the way. “She’d have bake sales and raffles and fashion shows, all kinds of things to fund her part of it,” he said. It was an example of how old buildings are pieces of a community, passed from generation to generation. That’s particularly true with a lighthouse. When asked if he has a favorite, he thinks about it for a moment. The Sapelo Lighthouse, which had been abandoned almost 100 years, is memorable. The Ponce Inlet is the tallest in the Florida (175 feet) and has an exhibit with huge lenses. But he points to the St. Augustine Lighthouse. It was his first major lighthouse restoration project, back in the early 1990s. And beyond the years of work, one specific day comes to mind. “My son got married on the front lawn,” he said.

Which leads back to the question of why we love lighthouses. Sometimes it’s a personal connection like that. But often it’s something more universal. The sense of history, the things these structures have seen in the past, and the things we can still see from some of them in the present.

“I’ll tell you one thing, when you get to the top on a pretty day, it’s breathtaking,” Smith said.

International Lighthouse News

Whale watchers to set up home at remote lighthouse

Nature lovers have applied for a “once in a lifetime experience” to live at a remote lighthouse on mainland Britain’s most westerly point - to record whales.

The month-long placements at Ardnamurchan Lighthouse are part of a trial to develop the Hebridean Whale Trail, which launches next year and will be the first of its kind in the UK.

The trail will be a network of around 25 world-class whale-watching and whale heritage sites. Its development is being led by charity Hebridean Whale and Dolphin Trust.

The project will promote Scotland as one of Europe’s best destinations for spotting whales, dolphins and porpoises and champion conservation of the Hebrides’ unique, globally-important marine wildlife and environment.

Applications to live at Ardnamurchan closed yesterday and the successful applicants will start their placements from next month.

The job advert stated: “As a volunteer with the Hebridean Whale Trail you will have the opportunity to be a part of a project which will connect communities and visitors with the amazing Hebridean marine
environment. “You will benefit from one-to-one training, and will develop your skills in public engagement and science communication.

“At the most westerly point on the British mainland, Ardnamurchan Lighthouse has been guiding ships safely through the waters off Scotland’s west coast since 1849. The Ardnamurchan Lighthouse Trust operate a busy visitor centre and cafe, offering the chance to learn more about Scottish lighthouses, and the flora and fauna of the Ardnamurchan peninsula.”

It added; “Minke whales, harbour porpoise and bottlenose dolphins are just some of the amazing marine species regularly sighted in the surrounding water. “You will inspire and inform visitors and the local community, champion participation in citizen science, and set up a programme to monitor marine life. “Living and working at a lighthouse in a remote but beautiful part of Scotland makes this is a fantastic opportunity for a once in a lifetime experience, while playing an active in marine conservation and tourism.”

The accommodation will be a keeper’s cottage at the lighthouse.

The Hebridean Whale Trail project has been possible by a grant of £175,000 from the UK Government-funded Coastal Communities Fund, which is delivered by The Big Lottery Fund.

Trail manager Karl Stevens said: “People currently visit Scotland for the landscapes, wildlife and culture - but not necessarily to see cetaceans.

“With the Hebrides being one of the best places in Europe to see these spectacular animals, we want to add them to the mix - and our research shows that the potential is huge,” said Karl Stevens, the trail’s manager.

DRONE DROP

The mission was dubbed “Rothar to Rotor” in reference to a Saw Doctor’s song “Clare Island”.

An Post twitter said: “An Post has just carried out Ireland’s first ever autonomous parcel delivery from mainland to island using a drone.”

A spokesman said that they “don’t currently use drones, just testing the possible future”. They hope that the new technology will be able to facilitate people in more rural and secluded areas.

6th July 2018 - An Post delivers Ireland’s very first parcel by drone to a lighthouse on Clare Island, Co Mayo.

The drone nicknamed ‘Postman Padraig’ delivered a small trinket from Roonagh pier in Mayo to a customer staying on the island The autonomous delivery took 11 minutes and 30 seconds to complete on Thursday afternoon.

An Post twitter said: “An Post has just carried out Ireland’s first ever autonomous parcel delivery from mainland to island using a drone.”

A spokesman said that they “don’t currently use drones, just testing the possible future”.

Just for fun….can you guess which lighthouse I am in?

If you think you know you can e-mail me
Happy Birthday to:

Dot Black 9/02
Tom Kenworthy
Ann Solaequi 9/13
Marcia DeClerk
Lee Benford 9/18

Tim Harrison 9/03
Anita Norris 9/14
Bob Scroope 9/22

Anniversary Wishes to:

Bob Lynne Kerber 9/02
Herb & Tracie Carpenter 10/07

Anniversary Wishes to:

Christine Cardaci 10/06
10/09 Anthony Savino
Jessica Schulman 10/17
Frank Carbone 10/30

Arlene Pregman 10/12
Tom Pregman 10/22

Please Note:
We are looking for volunteers who are interested in serving on committees, those who have good ideas for lighthouse preservation, fund raising, suggestions on improving the operations of the club, or just getting more involved.
Please contact: Ron Foster (860) 303-2986 or via e-mail: ron@foster-photo.com

The Lighthouse Digest - For each subscription, please use the subscription envelope that you can get from the form on the NELL website. Mail with check to Lighthouse Digest, ATTN: Kathleen Finnegan, P.O. Box 250, East Machias, ME 04630. Be sure to write NELL in the memo section of your check and NELL will receive $10.00 per subscription to go toward restoration and preservation of lighthouses.

If you know of a member that needs some cheer, get well wishes, condolences or congratulations, please let Cynthia Bosse - Sunshine Chair know at: bossnjc@comcast.net or call 1(860) 688-7347.