



NOAA Ocean Mapping and Reef Surveys American Samoa 2023

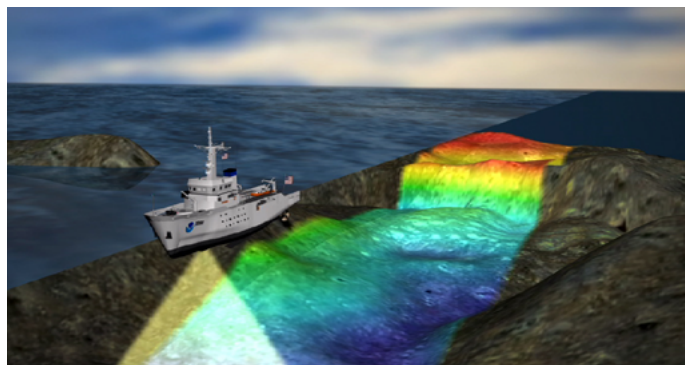
Scientists from the National Oceanic and Atmospheric Administration (NOAA) conduct ocean surveys to measure water depths and scuba dive to collect information on corals, fish, and changing ocean conditions as part of the [National Coral Reef Monitoring Program](#). NOAA staff and scientists collect data to:

- ensure that coastal regions are safe for navigation,
- map the ocean floor and update nautical charts, and
- examine fisheries habitat, coral reef health, and marine geologic processes.

The data are used to investigate coral reef fisheries and habitats. It also complements monitoring efforts of local agencies. Over time, we can see how coral reefs and ocean conditions have changed, which is an important part of managing and conserving coral reef ecosystems.

[NOAA Ship *Rainier*](#) has four small 28-foot boats called “launches,” which are lowered into the water to survey in shallow areas and support divers working under water. [Multibeam echo sounders](#) measure the depth and provide a detailed image of the seafloor using sound waves. Underwater, scientists record fish and habitat data, collect images of the ocean floor, and swap out instruments. These surveys are non-invasive, and do not involve taking any marine life.

In 2023, *Rainier* will conduct research and a hydrographic survey over the reefs and slopes surrounding the islands of American Samoa. The *Rainier* (S-221) is a 231-foot survey and research ship that will operate 24 hours a day, often using research equipment, deploying divers, or following specific survey lines with limited maneuverability. The ship is identifiable on the Automatic Identification System and will monitor marine VHF-FM channels 13 and 16, along with the four smaller launches.



A graphic showing a NOAA survey vessel scanning the ocean floor using multibeam sonar.



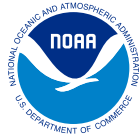
Vibrant array of tropical coral reefs and fish at the National Marine Sanctuary of American Samoa.



NOAA Ship Rainier docked in Pearl Harbor, Hawaii.

This mission is dedicated to the memory of Rear Admiral Richard T. Brennan. Rear Adm. Brennan was a champion of this one-NOAA mission to integrate mapping and coral reef surveys, and the survey would not have been possible without his leadership.

Questions or concerns:
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Fa'afanuaina ma le Su'esu'eina o 'A'au 'Amu a Amerika Samoa e le NOAA 2023

O se vaega o le [National Coral Reef Monitoring Program](#) a le National Oceanic and Atmospheric Administration (NOAA) o lo'o iai ni saienitisi e gafa ma su'esu'ega e fua ai le loloto o le sami, fa'amaumau ma tu'ufa'atasia fa'amatalaga e uiga i 'amu, i'a, fa'apea ai ma le fia malamalama i le suiga o tulaga o le sami. O le afaigaluega ma saienitisi a le NOAA e aoina ma tu'ufa'atasia fa'amatalaga aua le:

- silafia ai o le saogalemu o le gataifale mo femalagaiga,
- fa'afanuaina o le loloto o le sami fa'apea ai ma tala tu'ulata o fa'afanua o le alititai, ma
- su'esu'eina o nofoaga o i'a, tulaga o le ola maloloina o 'amu, fa'apea ai ma le fa'agasologa fa'a-le-natura o mea uma o lo'o i totonu o le gataifale

E fa'aoga fa'amaumauga ua mafai ona maua e iloilo ma su'esu'e ai i'a ma o latou nofoaga. O nei fa'amaumauga e fesoasoani lea i su'esu'ega ma galuega o lo'o fa'atautaia e pa'aga fa'alotoifale. O le aoga o nei galuega ma le galulue fa'atasi e fa'ailoa mai ai ni suiga ua ai o tatou a'au 'amu ma le sami aua ni fuafuaga mo le puipuiina ma le atina'eina o tatou tamaoaiga.

E iai ni va'a laiti se fa e ta'i 28-futu le u'umi i luga o le va'a tele ale [NOAA Rainier](#) ua ta'ua o "launches". O nei va'a laiti o le a mafai ona fa'atino ai su'esu'ega i totonu o gataifale. E fua e [multibeam echo sounders](#) le loloto o le sami ma e mafai ona tu'uina mai ni fa'amatalaga manino o le alititai e fa'aoga ai masini e pu'e ai si'uleo mai le loloto. A o iai saienitisi i lalo i le sami, e mafai ona latou pu'eina ma fa'amaumau fa'amatalaga e uiga i i'a ma o latou apitaga, ma fesuia'i masini o lo'o fa'aogaina. O nei su'esu'ega e le afaina ai pe fa'atama'ia ai meaola o le gataifale.

I le tausaga 2023, o le a fa'atino ai se su'esu'ega a le *Rainier* i le tulaga o a'au fa'apea ai ma le tele o 'amu i le talafatai o Amerika Samoa. O le *Rainier* (S-221) o se va'a su'esu'e e 231-futu le umi ma e fa'atinoina galuega i le 24-itula i le aso, e fa'aoga ai ni masini su'esu'e, fa'aoga tagata totofu, po'o le mulumulita'i i laina su'esu'e ma le leai o se fa'afitauli. O lenei va'a su'esu'e e faigofie lava ona maua i le Automatic Identification System ma e mafai ona ia siaki ina uaealesi fesoota'i VHF-FM o le gataifale i ala leo 13 ma le 16, fa'apea ai ma va'a laiti e fa'ua ta'ua o "launches".



Fa'aolaola o amu ma i'a i le Gataifale Faasao a Amerika Samoa.



O loo taula le vaa o le NOAA Rainier i Pearl Harbor, Hawaii.

O lenei auaunaga ua mafai ona tu'ufa'atasia e manatua ai le susuga ia Rear Admiral Richard T. Brennan. O Rear Adm. Brennan o se tasi sa tu malosi e lagolago a e fa'auluulu iai matagaluega ese'ese.

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