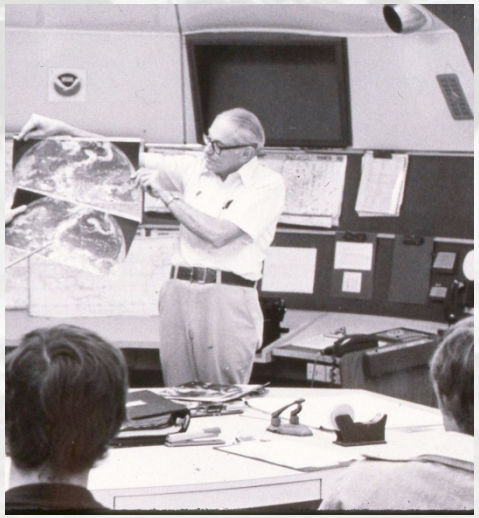
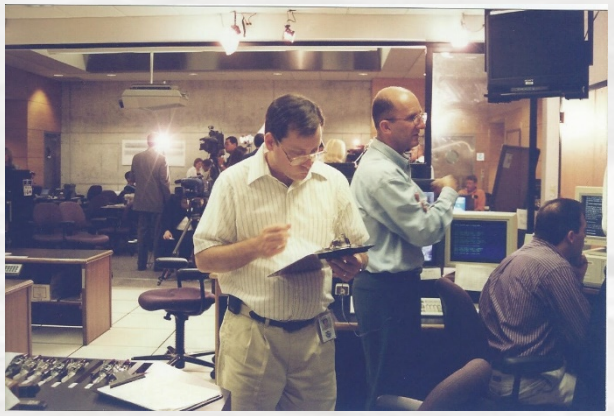
National Hurricane Center Snapshots
1949 to present day





National Hurricane Center Locations

Lindsey Hopkins Building
Miami, Fla. 1949-57

Aviation Building
Miami, Fla. 1958-64

Univ. of Miami Computer Bldg.
Coral Gables, Fla. 1964-1979

One Gables Tower
Coral Gables, Fla. 1979-95

Florida International University
West Miami-Dade, Fla. 1995 to present

Receiving and sending information

Circa 1950

Weather data was transmitted and received via telephone circuits using teletype machines.

Public Communication

Circa 1959

Special equipment was set up at the facility by local media outlets to obtain weather information from forecasters.

Receiving and sending information

W. Boyd, 1962

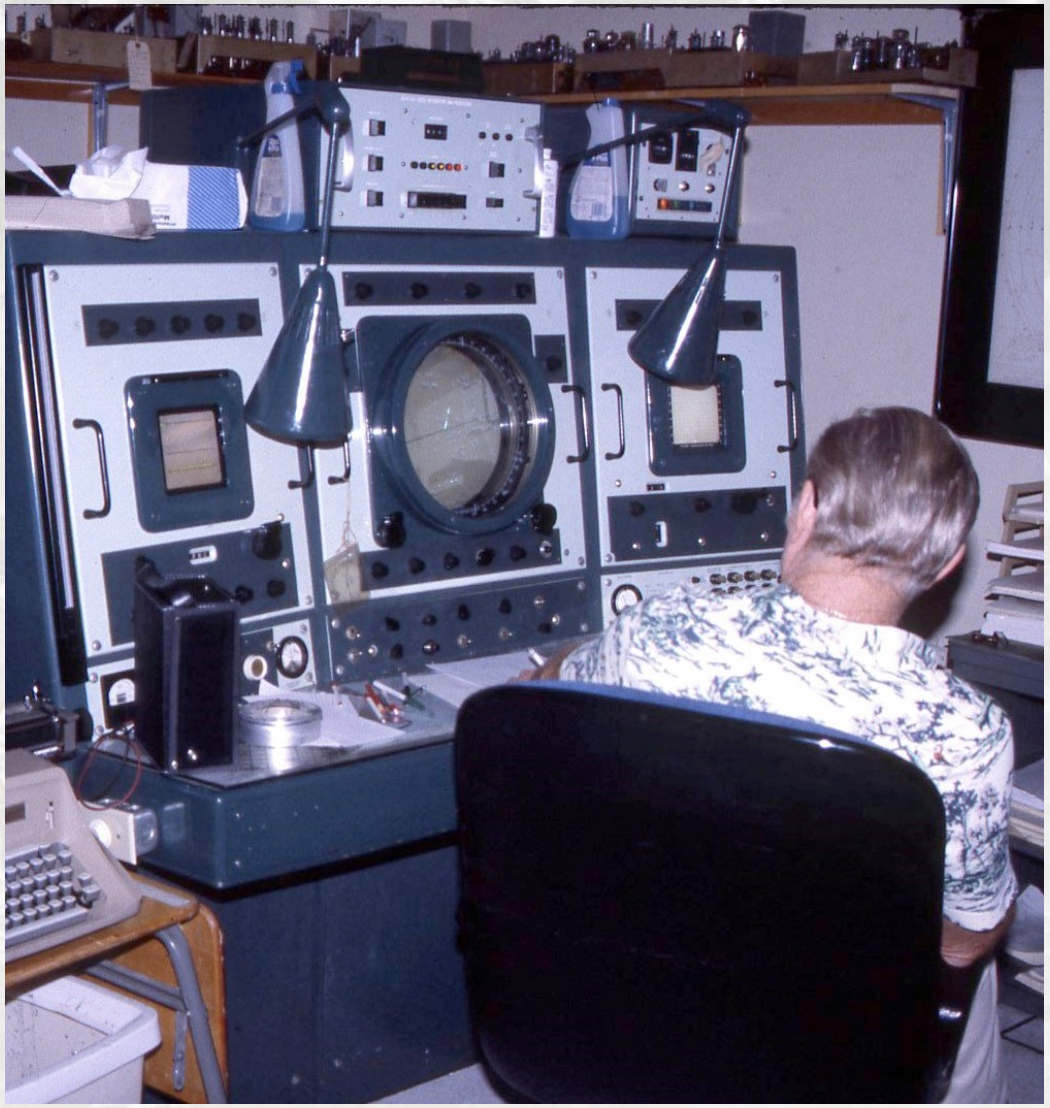
In the 1960s, the teletype remained the most common method to move data.

Public Communication

Ken Poteat and Nate Ellis in the public service unit, circa 1962.

The National Hurricane Center and the Miami Weather Bureau Office were co-located at the facility. There was a public number to call to get the local weather forecast or hurricane information.

Radar Observations with the WSR-57

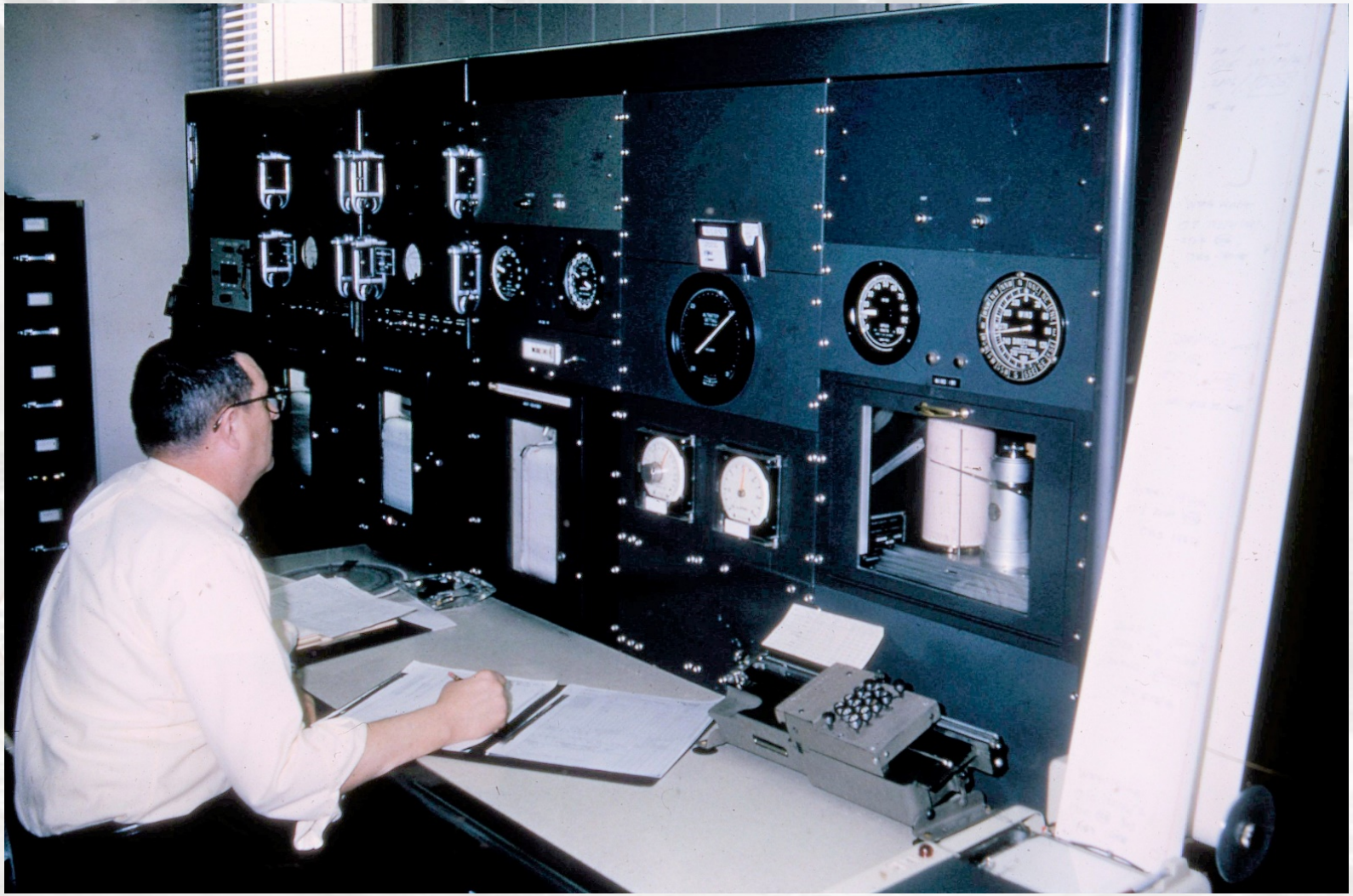


Radar specialist Eugene Wood at the WSR-57

The WSR-57 stands for Weather Surveillance Radar – 1957, the first generation of modern weather radar. The very first one was commissioned at the Miami Weather Bureau Office and National Hurricane Center and was later placed in other cities across the United States.

Weather systems were traced by forecasters across the radar screen using grease pencils. A manual turn of a crank changed the radar's scan elevation to determine the height of the storm.

Observing the weather



The meteorological technician, circa 1964

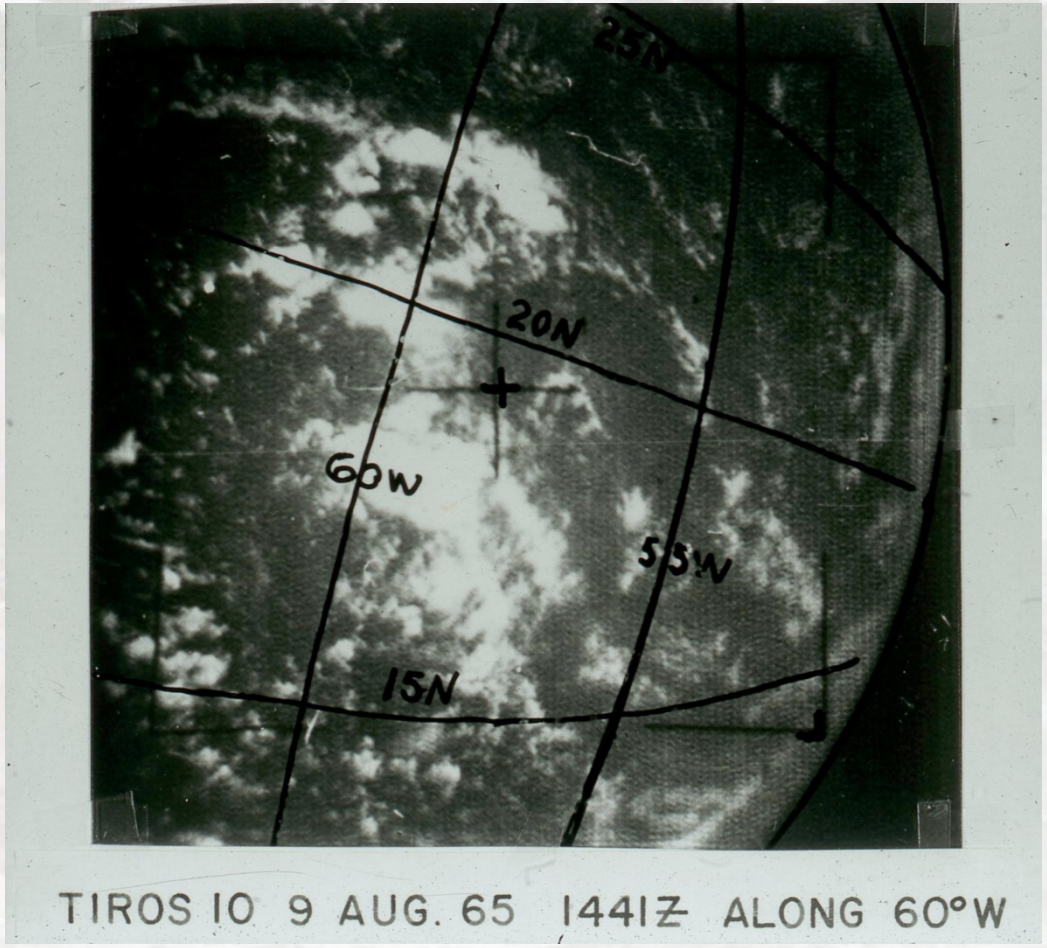
The temperature, dew point, humidity, wind speed & direction, cloud type and height, air pressure and rainfall are observed and recorded at least once an hour.

Keeping the records

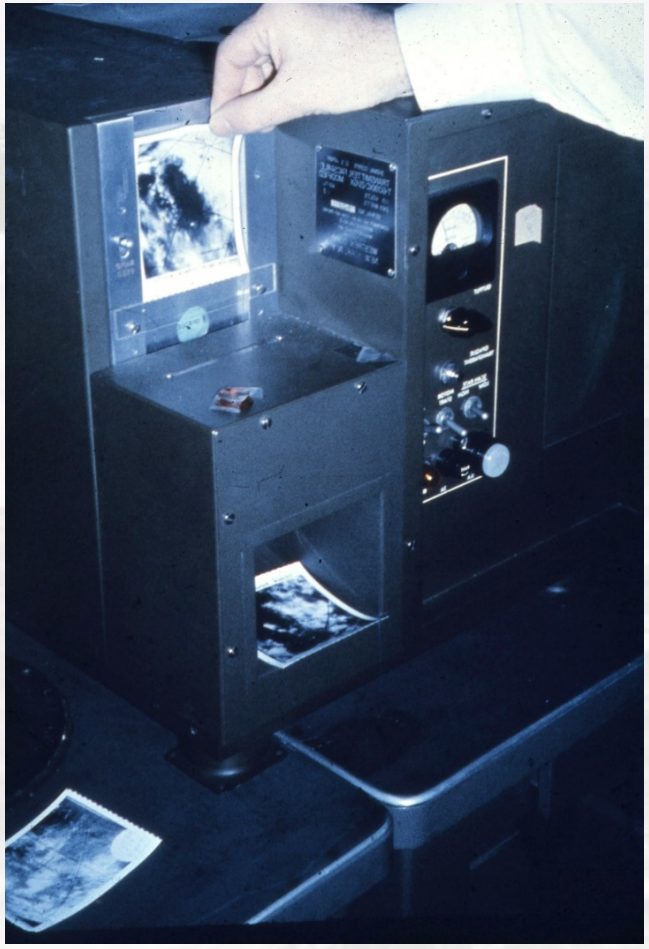
There are more than 200 containers in each drawer.

Meteorological observations and forecasts were placed onto microfilm and stored in large filing cabinets.

The Satellite Era arrives



With the 1960's arrival of Tiros, Nimbus and GOES, forecasters had an important analysis tool.



Images were transmitted to NHC via phone line and received on a special image processor.

Map Discussion

Hurricane Specialist Gil Clark, circa 1969

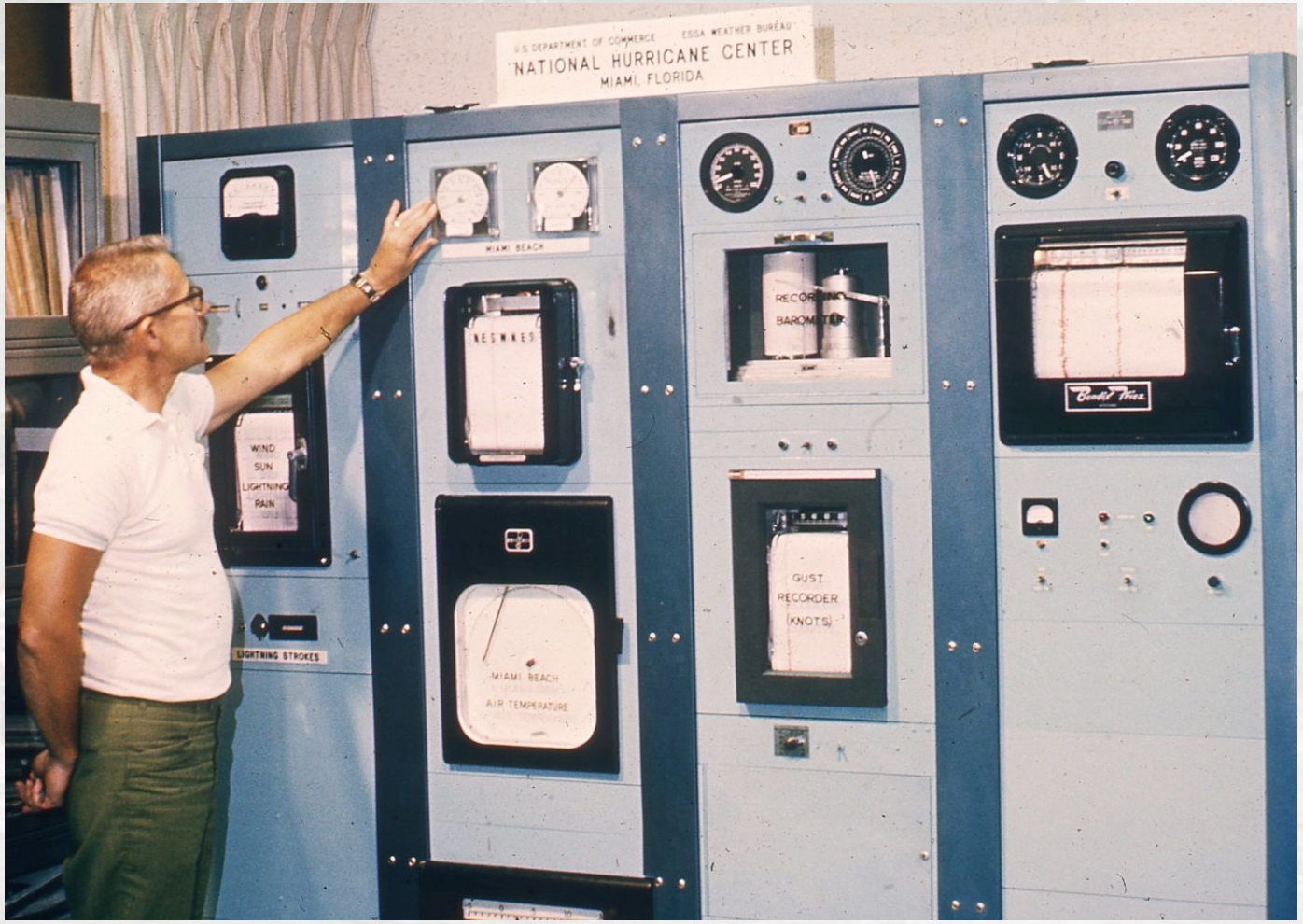
Discussions of the tropics took place daily using facsimile weather charts and satellite images.

The Wall Map

Hurricane Specialist Dr. Neil Frank, 1971.

A large map located in the hurricane operations area displayed the progress of the tropical activity during the season.

Monitoring and recording the weather



Francis Drybola - radar specialist, circa 1971

As technology improved, so did the instruments to measure the temperature, dew point, humidity, wind speed & direction, cloud type and height, air pressure and rainfall.

Communications Room

Specialized teletype machines included the NOAA Weather Wire, Service A, Service C and RAWARC circuits, circa 1971

Facsimile weather maps and satellite composites were received via phone line, circa 1971

Operations Area

Paul Hebert and Robert Carson, circa 1972

The primary function of the National Hurricane Center is to provide hurricane and marine forecasts for the tropical and subtropical Atlantic and eastern Pacific Oceans.

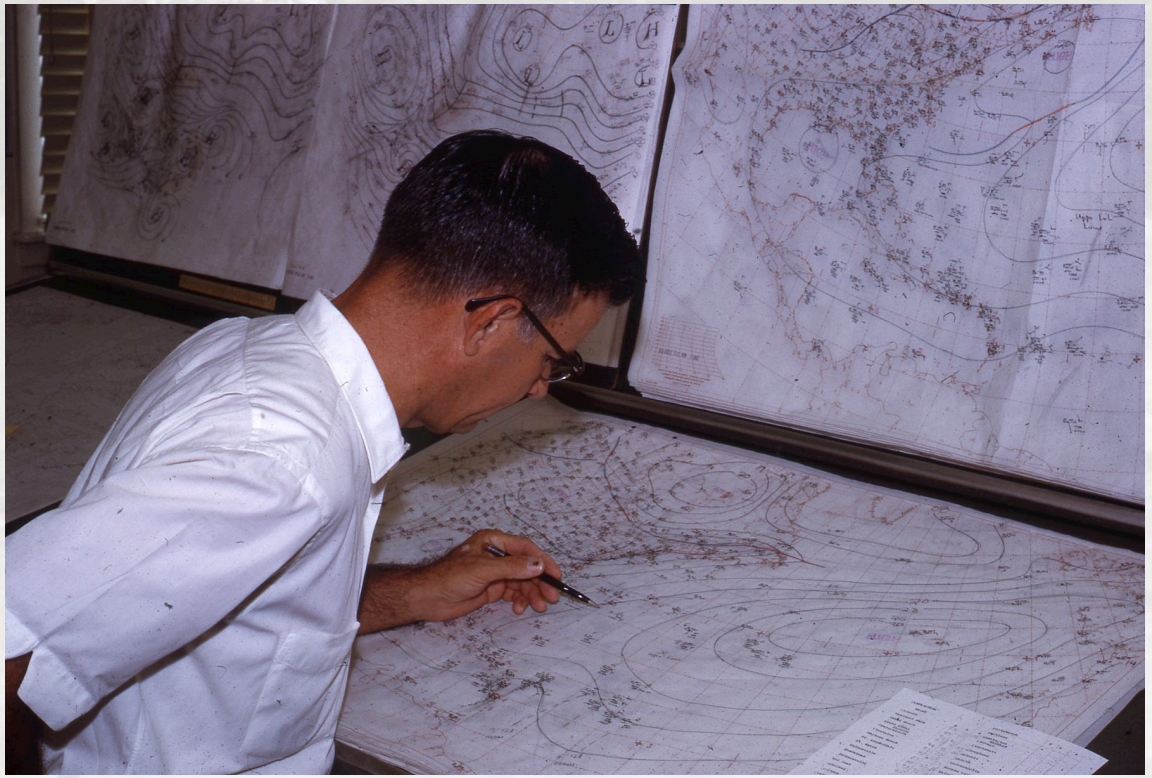
During hurricane season, NHC is staffed around the clock by at least two hurricane specialists and two to three marine forecasters.

The Charting Unit

Mary Watson, Chief, Charting Unit, circa 1973

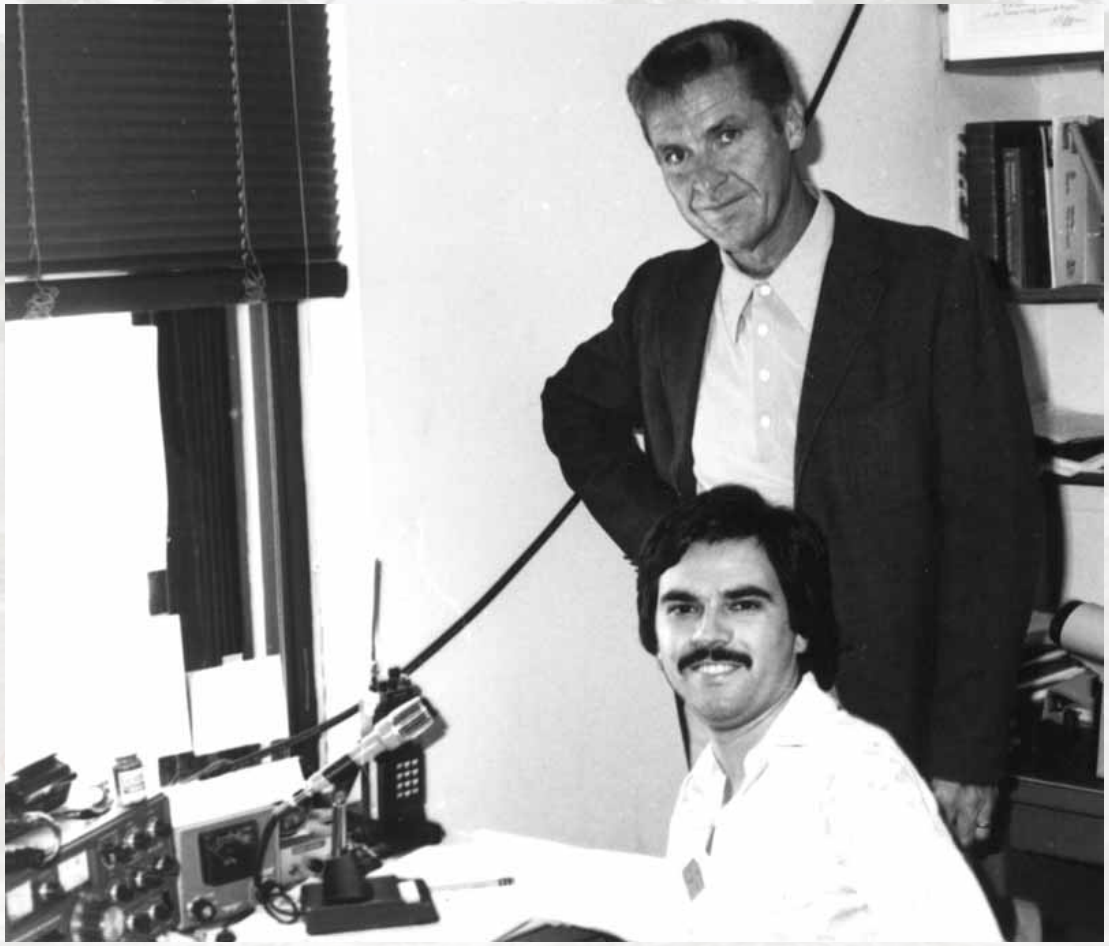
Many of the charts used by NHC forecasters were plotted by hand, with an entire unit dedicated to the task. At one point, it was the largest unit at NHC.

Plotting and analyzing the data



Student interns plot surface and upper air data onto charts for analysis, circa 1973.

HAM Radio Station at NHC



WX4NHC Ham Radio Operator Julio Ripoll with NHC Director Neil Frank, 1980

In 1980, Amateur Radio Station WX4NHC was set up at NHC. It's activated whenever a hurricane is within 300 miles of landfall in the areas of the western Atlantic, Gulf of Mexico, the Caribbean Sea or the eastern Pacific.

These reports provide the forecasters with supplemental weather and damage data that are not normally available to them, providing a human perspective and eyewitness accounts of what people are experiencing during the hurricane.

New equipment and a new look

The NHC Operations Area, circa 1988

The advancing computer age brings new technology and a fresh look to the hurricane operations area in the 1980s.

WMO classes begin

Students are given instructions on how to use the many NHC products, 1988

Since 1988, the National Hurricane Center has hosted a two-week training course with meteorologists and decision-makers from member nations of the World Meteorological Organization (WMO) Region IV.

Training for Emergency Managers

The first training class of the Hurricane Preparedness Course for Decision Makers, 1992. NHC staff seen here are Joe Pelissier, Max Mayfield, Brian Jarvinen, Bob Sheets and Hal Gerrish.

In 1992, NHC began hosting the "Hurricane Preparedness Course for Decision Makers". The 5-day training, coordinated with FEMA's Emergency Management Institute (EMI), is designed for emergency managers and decision makers of each coastal U.S. state from Texas to Maine. The course includes a hands-on tabletop exercise as a hurricane approaches the coastline.

The Media

Local and national media surround NHC Director Dr. Bob Sheets as Hurricane Andrew nears Miami, August 24,1992.

Since the 1960s, many media outlets have sent cameras, microphones and reporters to NHC to obtain the latest information and live interviews about the approaching hurricane.

A new home

The NHC building under construction in early 1995

Having sustained damage to its facility from 1992's Hurricane Andrew and with the objective of being co-located with a university having compatible curricula and vision, NHC and NWS leaders moved forward with their plan to relocate. NHC moved into its own new building on the campus of Florida International University in May 1995.

Making the decision

NHC Director Max Mayfield studies the track of Hurricane Charley, flanked by hurricane specialist Richard Pasch and Monroe County Emergency Manager Billy Wagner, along with specialists Lixion Avila and Eric Blake. Aug 11, 2004

NHC Hurricane Specialists, collaborating with their NWS Forecast Office partners, use their track and intensity forecast and other considerations to determine when and where the watches and warnings will be issued.

The Coordination Call

Hurricane specialist Jack Beven leads one of the many coordination calls during the record 2005 hurricane season. Listening in are Stacy Stewart, Billy Wagner, Max Mayfield, Ed Rappaport and Rick Knabb.

One hour before the release of the latest public advisory of a tropical cyclone, the lead hurricane specialist on duty conducts a call with all of the National Weather Service offices in the watch and warning area, as well as other NWS agencies. It would become a video call beginning in 2018.

Presidential visit

President George W. Bush and NHC Director Max Mayfield, 2005.

NHC has been visited by two U.S. Presidents.

Refreshing the map wall

Workers roll out the new track map, Sept 16, 2008

After more than 35 years and two buildings, the tracking map in the NHC Operations Area was updated.

Emergency Management briefings

NHC Director Bill Read provides a briefing to FEMA regarding Hurricane Earl, Aug. 31, 2010.

Emergency Managers make the difficult decisions regarding evacuations ahead of an approaching tropical cyclone. NHC provides live virtual briefings of the potential hazards of the approaching storm.

Presidential Briefing

President Barack Obama is flanked by NOAA Administrator Kathy Sullivan, U.S. Commerce Secretary Penny Pritzker and FEMA Administrator Craig Fugate, May 18, 2015

Every year, the President receives a briefing from NOAA regarding the upcoming Atlantic hurricane season. In 2015, it took place at NHC.

Opening the front door

Senior hurricane specialist Stacy Stewart discusses hurricane operations with visitors, April 16, 2016.

A National Hurricane Center open house allows the public to see how it's all done and meet the forecasters.

Media Day

Photographers obtain video of forecasters, June 1, 2017

On June 1st, the official start of the Atlantic hurricane season, NHC provides an opportunity for media to obtain interviews.

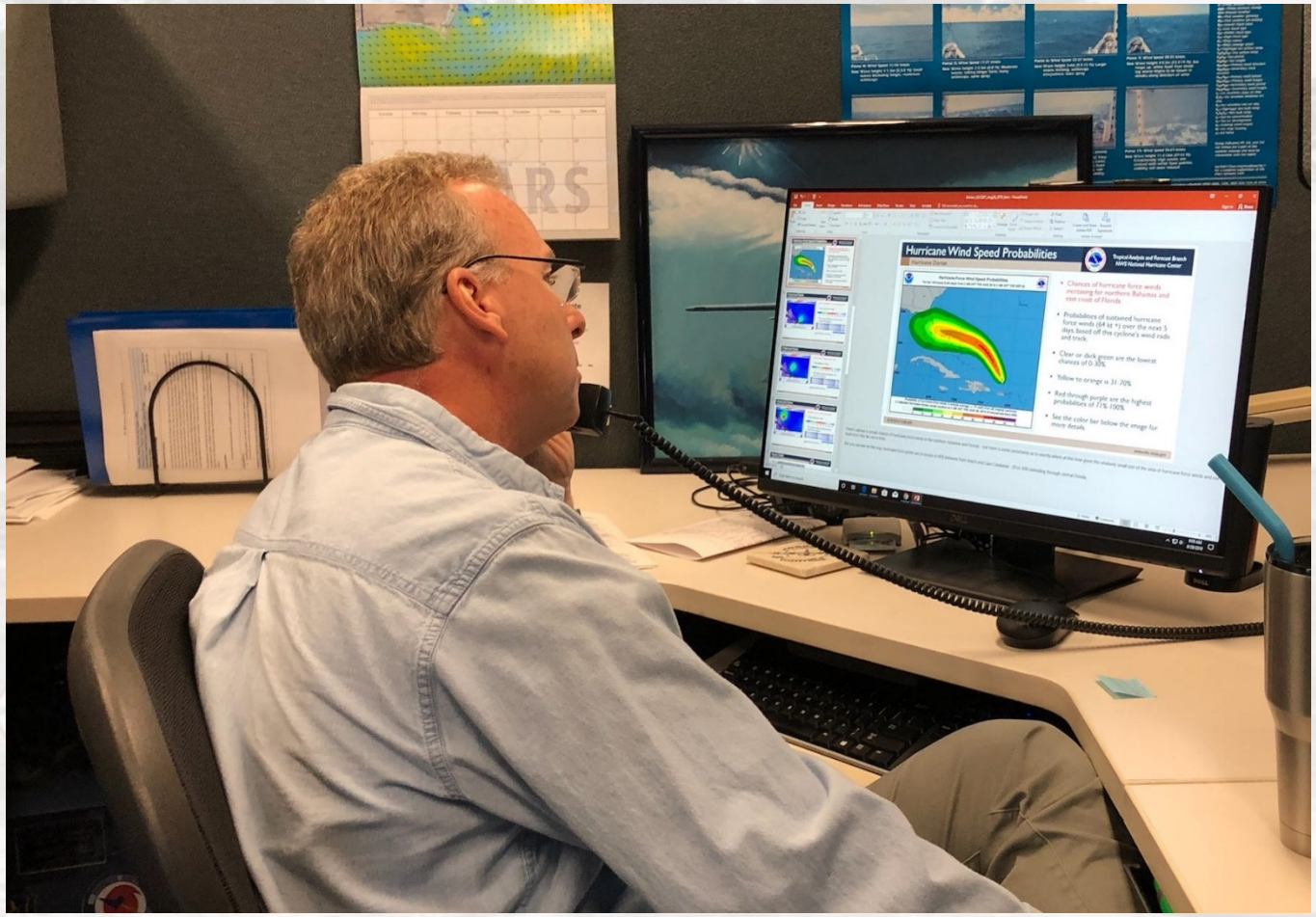
The NHC Media Pool

The NHC Media Pool as Hurricane Irma aims at South Florida, Sept., 2017

Live media interviews are provided to national broadcast & cable outlets and to local TV stations located in the hurricane watch/warning area.

Interviews are provided in both Spanish and English by hurricane experts from NHC and NWS WFO Miami.

TAFB – Forecasting for Mariners



TAFB Meteorologist Eric Christensen leads a briefing to the USCG District 7 regarding potential marine impacts from Hurricane Dorian, Aug. 29, 2019

NHC's Tropical Analysis and Forecast Branch (TAFB) is staffed 24 hours a day, providing more than 100 marine products covering more than 10 million square nautical miles.

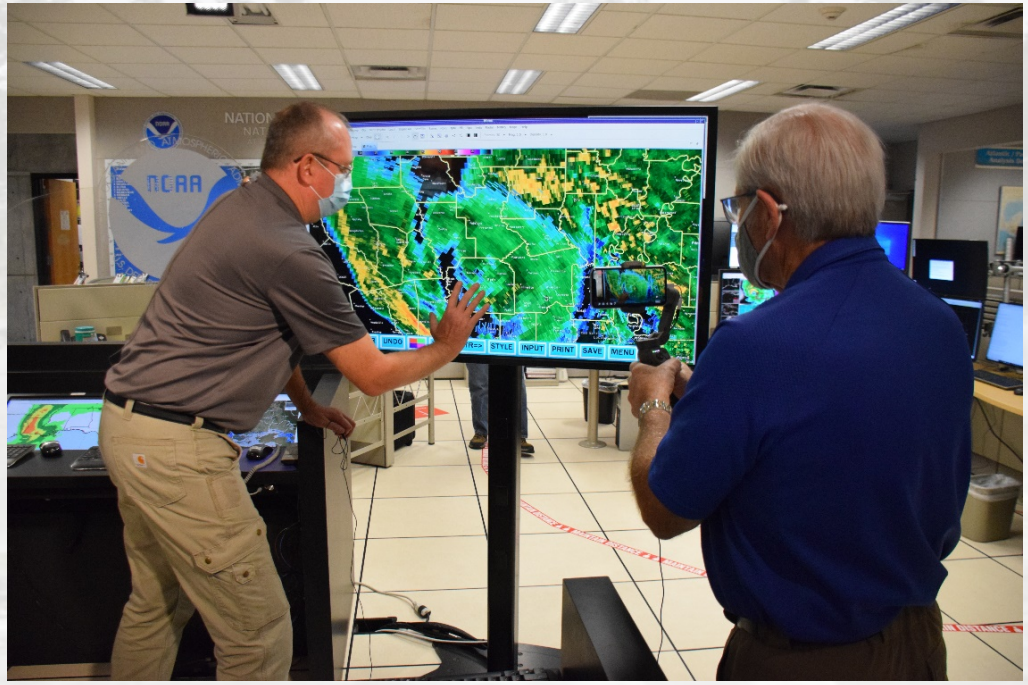
TAFB also supports the United States Coast Guard, providing briefings for high impact events such as tropical cyclones.

Storm Surge

Storm Surge Specialists Cody Fritz and Heather Nepaul study the data needed to create the graphic for expected storm surge from Tropical Storm Fred, Aug. 14, 2021.

NHC adds Storm Surge Watches and Warnings to its public products beginning in 2017.

Social media is added



NHC Director Ken Graham and NOAA/NHC Public Affairs Officer Dennis Feltgen with a Facebook Live broadcast, 2020

NHC Deputy Director Dr. Ed Rappaport prepares for a media interview via Skype, 2020

NHC adds Facebook Live in 2017, and Skype in 2020, to reach the growing social media audience.

This is a living document and will be updated as necessary. NHC welcomes any new or corrected information. Please contact us at nhc.public.affairs@noaa.gov