**National Hurricane Center Library**

Background History

By Gloria Aversano,

National Hurricane Center Librarian- 2004 to present

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To pin down the creation of the NOAA, National Hurricane Center (NHC) Library one ends up tracking the founding and evolution of several government agencies. It reflects the impact of hurricanes on the U.S. east coast, the relational development of hurricane research in support of hurricane forecasting, the scientists involved in that work and the government’s decision to support it.

This overview begins in 1935. At that time the National Hurricane Center did not exist and hurricane warnings were issued by four forecast offices located in Jacksonville Florida, New Orleans, San Juan and Washington D.C. However, the primary warnings came out of Washington D.C. In part, it was a show of force by Mother Nature that would change that.

Between 1920 and 1950, 27 hurricanes hit Florida of which 14 were category 3 or higher. An additional 39 hurricanes impacted seven other southern states. Comparatively, eight hurricanes impacted four northern states during that period. The issue of warning timeliness became a concern and as a result the Jacksonville, Florida Forecast Office was assigned coordination of hurricane warnings issued from other state offices.

In 1943 the hurricane forecast staff in Jacksonville moved and co-located with the Miami Weather Bureau Forecast Office in downtown Miami due to the installation of improved forecast equipment on the Miami building. This co-location was the precursor of today’s existing relationship. The Miami office operated in conjunction with staff from the Weather Bureau, Air Corps, and Navy under meteorologist in-charge Grady Norton.

Grady Norton, was known for his exceptional forecasting skills. Having been involved with the 1935 Labor Day hurricane that struck the Florida Keys and resulted in the death of hundreds of veterans he was dedicated to improving forecasting techniques to save lives. He ignored warnings from his doctors to control his high blood pressure and reduce stress and it is recorded that he “suffered a stroke after working a 12 hour shift forecasting hurricane Hazel.” (WFO website). Hazel was the third major hurricane to impact the east coast in 1954. However, this time the northern states also took a hit. (Hurricane Carol Sept. 1954 category 3 – NY, CT, RI, NC- category 2 ; Hurricane Edna Sept. 1954 – category 3 - MA ; Hurricane Hazel, Oct. 5 – 18, 1954, category 4 – NC, SC, VA, MD, PA, NY.)

Norton Grady is replaced by Gordon Dunn in 1955 and the Miami hurricane forecast office became known as the National Hurricane Center with Gordon Dunn as its first “officially appointed” director. It was Gordon Dunn who succeeded in attaining Congress to endorse the position of ‘hurricane specialist’.

The impact of the three 1954 major hurricanes got the government’s attention in a new way and in 1955 Congress appropriates funds to initiate hurricane research in support of improved forecasting techniques. Several divisions of the Weather Bureau were tasked with doing research in addition to the creation of the National Hurricane Research Project (NHRP).

It is with the inception of the National Hurricane Research Project (NHRP) that a “National Hurricane Center” collection may have developed. This is supported by the first report produced by the NHRP in 1956. Titled, *Objectives and Basic Design of the National Hurricane Research Project,* the report includes a task plan chart. The plan lists under “*Data Collection”- ‘bibliography and abstracts on hurricanes” and “publication – 1. preprint series, 2. monograph series and journals, 3 .final volume on the hurricane.”*

In 1959 the NHRP moved from West Palm Beach and for the first time is co-located with the National Hurricane Center in the Aviation building in Miami. In 1960 the NHRP develops into an ongoing research lab and both agencies together are referred to as the National Hurricane Center.

The first published evidence I found of a research library supporting hurricane forecasting is in a 1965 *Weatherwise* article. The article states that in December of 1964 the National Hurricane Center was moved to a computer center belonging to the University of Miami in Coral Gables. NHC was joined with staff from U.S. Fleet Weather Facility (Naval Air Station) located in Jacksonville along with staff from the Weather Bureau Airport Station at Miami International Airport. The article offers a picture of the ‘research library’ along with the communication center and forecast analysis area.

Hurricane specialists, Lixion Avila and Richard Pasch, recall that in 1979 the NHC and WFO were moved from University of Miami computer building to the IRE building (later called Gable 1 Tower) on US 1/Dixie Hwy. They have distinct recollections of a library at the National Hurricane Center, in that building. John Pavone from the NHC CARCAH unit, remembers that NHC was located on the 6th floor of the 13 story IRE building.

According to Hurricane Research Division researcher, Neal Dorst, in 1984 the National Hurricane Research Lab was changed from its stand-alone laboratory status and moved, as a department, into the Atlantic Oceanographic and Meteorological Lab (AOML) which also housed other research departments. In conjunction with this split, a portion of the NHC library holdings were moved into AOML’s existing library on Key Biscayne which contained oceanographic and meteorological materials. According to the Hurricane Research Division’s current website, “ending 25 years of co-location with the National Hurricane Center.”

In 1994, as part of the National Weather Services’ modernization efforts a new building was erected on the campus of Florida International University, 8th street campus. Included in the design of the building, along with the Hurricane Operations, Tropical Analysis and Forecast unit and the Miami Weather Forecast Office, was a library. While the primary function of these agencies is to reduce hurricane related deaths, the library was to support the many additional functions of the operation centers which included, (then and now) “collaborative research and instruction, research projects, seminars and conferences which will benefit both the National Weather Service and the students and faculty of the University.” (NHC Building Brochure).

Today the Library is approximately 860 SF with movable shelving and currently houses roughly 9,700 cataloged items and an additional estimated 10,000 professional atmospheric or multi-science journals. It also houses microfilm, weather maps and archived weather data records. In addition to an in-house librarian and library interns, National Hurricane Center staff, have been placed in the library working on hurricane reanalysis and storm wallet projects.

**References:**

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**I would like to thank the following for their statements**:

In-person conversation with Lixion Avila and Richard Pasch, National Hurricane Center, Hurricane Specialists – April 12, 2017

In-person conversation with John Pavone, Chief, Aerial Reconnaissance Coordination, All Hurricanes (CARCAH) unit a remote operating location of the 53rd Weather Reconnaissance Squadron, staff, April 12, 2017

In-person interview with Neal Dorst, Atlantic Meteorological and Oceanographic Laboratory, Hurricane Research Division staff, April 14, 2017

In-person conversation with Steve Wachholder, Miami resident and hurricane enthusiast, April 20, 2017.