Q & A for NHC

Martin Nelson

Meteorologist

Tropical Analysis and Forecast Branch

National Hurricane Center

By Dennis Feltgen
Public Affairs Officer
NOAA Communications & External Affairs
National Hurricane Center

You're one of the long-time veterans here.
I have been (at NHC) for almost 30 years. Before that, nearly two years at Miami International Airport working contract weather, and before that I was an Army meteorologist.

A native Floridian?
Yes, I was born in North Florida and grew up in South Florida. When I finished high school, I was a wholesale nurseryman and lived in Central Florida for a few months, where I helped build a large nursery while attending agriculture college.

Weren't there official agricultural stations then?
Yes, and I thought I would like to work in agriculture, but the economy in the mid-'70s was really bad. It was getting tough to finish college and work at the same time. So I explored the military options. I took the recruiter test and did really well**.**

What did you decide?
These were the early days of computers, and the recruiter gave me a printout. It was the first computer printout I had ever seen, and this one had every job that would be

available in the U.S. Army during the next 18 months. I was interested in flying but, unfortunately, I was already wearing corrective lenses. I was told that I probably wouldn't be able to fly. I had taken science courses in several disciplines, and was considering meteorology courses the next semester. So, the military meteorology positions on the recruitment list got my attention.

Why was that?
My father was an air traffic controller who certified controllers in meteorology. One of his jobs in the Navy was in meteorology. So, I was taught about clouds while growing up. Weather was not a passion for me, but it was always in the back of my mind, especially with the Hurricane Center on TV every summer. I often wondered why it rained in same place every summer afternoon, or why the waves were coming in at six feet every time I went to the beach, forcing me to put my diving gear back in the car and return home.

The meteorology seed was planted?
It was. So I enlisted in the Army and entered into meteorology. I liked it, and ended up teaching National Guard Units upper air meteorology every summer. When my tour was up, I got out with the intention of someday working at the Hurricane Center. I started applying to the Weather Service, but Meteorology Technician jobs were becoming scarce as the Weather Service was reorganizing.

What had happened?
Technology, especially computer technology, was advancing fast. I was told that I really needed a meteorology degree. Although I had a lot of college, the courses were from several universities, so I didn't have a formal degree. But some folks at the Hurricane Center told me that Miami International Airport was going to be one of the first experimental contract sites for taking weather observations and providing flight documentation to the airlines. The certifications for surface and synoptic observations would be National Weather Service certifications, and this might eventually lead to a Weather Service position. I jumped on that opportunity, later becoming the Station Chief at Miami International. Eventually, the Hurricane Center had an opening for me.

Could you still go to school?
I was also able to take more classes locally that would be applied toward a degree in meteorology, including advanced math, computer science and language courses. When I was not going to college, I completed every Weather Service course that existed at the time. I also did correspondence courses from Penn State. But, I still lacked the dynamics courses to be a meteorologist.

Was that a common plight?
It was very common among the Meteorological Technicians throughout the Weather Service. It was especially difficult for this office to release me during hurricane season so that I could attend a college such as Florida State for a couple of semesters to finish the last few courses. I would have had to terminate my job in order to get a formal degree. The Weather Service wanted to retain their meteorological technician talent, so they created the San Jose State Program.

What was that?
It was specially designed program for Met Techs such as myself to go to school for one summer, allowing us to complete a full year of synoptic and dynamic courses in three months. It was an intense program, but it did provide me with the final dynamic credits that the Office of Personnel Management required for a forecaster position. I was reclassified as a forecaster, and continued to work different positions in both the Miami Forecast office and the Hurricane Center. I enjoyed working in aviation and public forecasting, but tropical meteorology seemed the most interesting. I decided to settle in what is now the modern Tropical Analysis and Forecast Branch (TAFB). I have seen this office progress from teletype tape dissemination to computer servers, and have worked under seven different NHC directors so far.

You have a great interest in the TAFB marine program.
I began diving when I was 14 and have done all types of diving. For a few years, I used my vacation time to help salvage artifacts and treasure from 1715 Spanish galleons under Mel Fischer contracts. I also enjoy all types of fishing, and even got into competition fishing which led to Merchant Marine and Amateur Radio licenses. I have a tremendous respect for the marine community and the importance of marine forecasts and warnings at every level.

What is your greatest challenge in TAFB?
I believe basin wide gridded marine forecasts are the future in marine meteorology. I noticed several years ago that the global sailboat racing community, backed by multi-million dollars corporations, was beginning to use gridded model forecasts. Gridded marine forecasts and warnings will become very common as marine electronics advance and become affordable for all vessels. Through grids, a forecaster can provide high resolution forecasts for many weather parameters. Although this has already been done in the U.S. coastal water regime, basin-wide grids are a real challenge due to the vast amount of data. Additionally, communicating all this information is a challenge as we must honor international maritime agreements.

How long do you see yourself doing this?
I am eligible to retire soon, but I would like to stay around long enough to see a complete suite of marine gridded forecast for the Atlantic and Pacific basins.

How do you get away from the job every day?
My wife and I have a home business, so that takes most of my off duty time. One of my passions is genealogy which has been a hobby for many years.

Any surprises?
My mother is from Trinidad. My research on her ancestry has allowed me to create one of the largest databases of European surnames that settled in the Southeast Caribbean, primarily Trinidad. I researched some of these family surnames back to many lines of European royalty. My father's line is Scandinavian, and I have researched back to the

mid-1600s on his side. Some of my wife's line dates back to the American Revolution. My retirement project will be to organize my research it into four or five books.

Send comments to: nhc.public.affairs@noaa.gov