

Jinny Nathans: This is Jinny Nathans. I'm the AMS archivist. It's April 17th, 2018. I'm at the Hurricanes and Tropical Meteorology conference, and I have Chris Landsea from NOAA here for a short interview. Take it away.

Chris Landsea: Thank you very much. It's a pleasure to be invited to help out in this archiving of AMS history. I just wanted to relate a story to me about a couple of events that happened. As a grad student at Colorado State University I got to work with one of the preeminent scientists, Dr. Bill Gray. And I grew up in Miami and had a healthy interest in hurricanes and had the chance to become a meteorologist and work with Dr. Gray as a grad student starting in 1988. Turned out I had worked as an intern at the Aircraft Operations Center the summer before I started graduate school. It was the summer of 1988.

At that point it was a pretty quiet hurricane season to get going. I didn't get to do any hurricane flights. But a couple of weeks after graduate school started, there was this hurricane called Gilbert that was moving across the Caribbean, and it got to be very strong. It went right over Jamaica, east to west, caused a lot of devastation. At that point my advisor, Dr. Gray, he approached me and a couple of other grad students. He said, Chris, there's a hurricane out in the Caribbean, would you like to go fly? And I was like, well, sure, I'd love to. He was like, do you know any of those guys down there that can get you aboard? I said, I think so. Basically, we flew down – myself, Steve Hodanish, and Jim Kossin. We showed up at Miami where the Aircraft Operations Center was located and basically unannounced said, we'd like to see if we can get aboard a flight. Fortunately we knew a couple of the folks there and they bumped a news crew to allow myself and these two other grad students to get aboard.

Turned out that Gilbert continued to intensify, and by the time we were there, it not only was a Category 5 hurricane, but it was the strongest hurricane ever observed, 888 millibars. There was a NOVA crew onboard doing a documentary at the time. If you listen to it and see it, you'll hear in the background some whoops and yells from myself and my two co-students in the back of the plane, just can't believe the good fortune we have in getting a chance to experience this. Of course, our good fortune turned out to be horrible for Mexico because Cozumel and Cancun really got whacked pretty hard when the hurricane made landfall the next day.

In the intervening time myself and Steve and Jim have had great careers. We've kind of diverged in where we've gone a bit. Currently Jim Kossin is a researcher for NESDIS, and he works out of Wisconsin, and he does great climate work and great dynamical hurricane work. Steve Hodanish is a forecaster in Pueblo. He's a nutty guy that chases tornadoes in his spare time. We're still in the field together as meteorologists.

I had one final flight after flying for about 20 years as part of the Hurricane Research Division and joining the hurricane hunters aboard the NOAA aircraft. My last flight was into Hurricane Katrina. I was involved with the field program in 2005, and I helped out for three missions aboard the Gulfstream Four jet as it approached Florida, and then after it crossed the peninsula and got into the gulf rapidly strengthened and became a Category 5 hurricane in the middle of the Gulf of Mexico. It turned out that the missions that I was doing were done because the G4 isn't flown up into landfall. It helps out making better forecasts within a couple of days of the coast.

So I was actually at the airport in Tampa, ready to go home back to Miami because in 2005 the Aircraft Operations Center had long been moved to Tampa.

At the last minute I got a call from Frank Marks, the director of the Hurricane Research Division saying, well, the Aircraft Operations Center wants to do a landfall mission aboard a P3, and we could use you to help with the dropsondes. So of course I said, yeah, got to do that. So that flight was the landfall mission when Katrina hit Mississippi and New Orleans.

The night before, it was a Category 5, and during the flight, we were monitoring it the whole time and it was apparent that there was some good news, or so we thought, that it was weakening. It was no longer a Category 5 and may not have even been a Category 4 – it weakened quite a bit for the strongest winds. Most of us onboard, myself included, thought that this was great news, that a disaster was going to be averted in Mississippi and Louisiana because of the weakening.

But what we didn't appreciate, and I didn't appreciate, was because it had gotten a lot larger in size, the hurricane force winds extended 100 miles in radius, that that increased overall kinetic energy of the hurricane was going to cause a disaster because of the storm surge, with 300 people drowning in Mississippi, another 1200 dying in and around New Orleans. So we learned a lesson there, I certainly did, that a little bit weaker does not necessarily mean a better thing.

Turned out to be my last flight ever into a hurricane because a month later I switched over to the National Hurricane Center and have been helping with forecasts ever since. But I feel so fortunate that my advisor had the foresight to send myself and a couple of other green graduate students down to Miami in 1988 and then into a Category 5, and then bookended by Katrina, my last flight as a hurricane researcher in 2005. To me that was a great opportunity, and it's helped me throughout my whole career.

JN: Thank you very much. Those are valuable lessons to learn firsthand. And by flying into the hurricane, you certainly learned them firsthand.

CL: I appreciate it. Yes, I've been very fortunate throughout my career. Dr. Gray died two years ago yesterday, and we're actually having a symposium for him here at the AMS Hurricanes and Tropical Meteorology Conference tomorrow night. So I'm looking forward to remembering his contributions and toasting a beer or two in remembrance.

JN: That's absolutely great to hear, and a wonderful story to add to our collection.

CL: Glad to help. Thank you so much.

JN: Thank you.