WRITTEN TESTIMONY OF
VICE ADMIRAL CONRAD LAUTENBACHER, JR. (U.S. NAVY, RET.)
UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE
AND NOAA ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

JOINT HEARING ON
TRACKING THE STORM AT THE NATIONAL HURRICANE CENTER

BEFORE THE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT AND THE
SUBCOMMITTEE ON INVESTIGATION AND OVERSIGHT
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

JULY 19, 2007

I am here in response to your request for testimony on issues concerning the Tropical Prediction Center's National Hurricane Center. The Committee has asked me to provide an account of events relating to the hiring of and recent decision to place on leave the Director of the Tropical Prediction Center ("TPC"), Mr. William Proenza.

Before I begin, however, I want to make clear to the Committee and all the residents of coastal states in no uncertain terms that NOAA, the National Weather Service and the TPC are fully prepared for this hurricane season. Our forecasting ability continues to improve and the American people can expect nothing less than the full capabilities of the National Hurricane Center.

The scientists and forecasters at the TPC answer to one of the highest callings in public service – the protection of life and property. They have dedicated their careers to preparing their fellow citizens for the dangers brought on by tropical weather. When a storm is bearing down, they continue to calmly provide accurate and timely forecasts.

It is for these reasons that we want to provide them with all the support they need to do their jobs.

In summer 2006, the then-Director of the TPC, Max Mayfield, informed me of his decision to retire, and D.L. Johnson, the then- Director of the National Weather Service, initiated a search for a replacement. In November, General Johnson, with the concurrence of the Deputy Under Secretary, General (Ret.) Jack Kelly, recommended to me that William Proenza be appointed as Director of the TPC.

Mr. Proenza began employment at the TPC on January 6, 2007. During January to May 2007, Mr. Proenza made a series of statements to the media regarding the TPC's budget and the potential loss of NASA's QuikScat research satellite. The statements about the budget were not factually accurate and the statements about the satellite were misleading and potentially detrimental in terms of public confidence in the Center's forecasts. I felt that some of these statements could have been the result of Mr. Proenza's being new to the TPC and not yet up to speed in terms of his new role. To address these concerns, I instructed senior management to work with him throughout the spring and to provide him with the necessary information and training to succeed as TPC Director, including detailed budget information relating to TPC operations.

On June 11, 2007, Mary Glackin, a 30-year career NOAA employee with 22 years of experience in the National Weather Service, became the Acting Director of the National Weather Service. In assuming her duties, Ms. Glackin was made aware of the need to improve managerial rigor throughout National Weather Service operations. Accordingly, at the outset of her tenure, Ms. Glackin communicated to senior staff the need for adherence to organizational policies, procedures, and the chain of command.

With respect to Mr. Proenza, Ms. Glackin was advised that since January, "there [had] been times when [Mr. Proenza] may have disregarded the direct instructions of [his] supervisor, the Director, National Centers for Environmental Prediction (NCEP), or [had] made decisions on [his] own which [he] had no authority to make." For example, Ms. Glackin had learned that Mr. Proenza instructed forecasters to replace the TPC heading with the "National Hurricane Center" label on the March 4 High Seas forecast. Because this action embedded the word "hurricane" in the forecast, it set off a "pan pan" alarm – a non-life threatening distress call -- on every ship in the Pacific Ocean. To make sure there was no misunderstanding and to clarify management expectations, Ms. Glackin issued a memorandum on "Operating Procedures/Instructions," dated Thursday June 14, (attached) and met with Mr. Proenza in person in Florida the next day, to discuss its contents.

Ms. Glackin's memo was not a reprimand. After identifying the "pan pan" alarm and other instances over the past five months that had prompted her to prepare the memo, it acknowledged that "[s]ome of this . . . might have resulted from some confusion as to the various roles and responsibilities in the [National Weather Service.]" Ms. Glackin, however, wanted to reiterate to him her instructions about adhering to organizational policies, procedures and the chain of command, and that going forward she "expect[ed] that [Mr. Proenza] and [his] staff will follow the directions and the policies and procedures developed by NCEP."

In particular, Ms. Glackin asked Mr. Proenza to consult on a regular basis with his direct supervisor on issues concerning "budget, science, research, and operational or administrative issues" that had "NOAA- or [National Weather Service]-wide implications

or public safety consequences." Ms. Glackin expressly stated that she was "available to resolve any disagreements," once the two had discussed the matter fully, and expressed the intention to "work together to ensure accurate predictions and to support the work of [the NCEP], [the National Weather Service], and NOAA."

On the evening of June 18, Ms. Glackin received a request from an employee at the TPC for a conference call. The call took place on Tuesday, June 19, with eleven TPC employees participating. These included seven of the nine TPC Hurricane Specialists; the TPC Union Steward agreed this meeting was requested by the TPC group and did not constitute a formal meeting requiring official notification to the union.

During that call, Center employees raised several serious concerns about Mr. Proenza's actions, and whether they could do their job under Mr. Proenza's leadership. These concerns are reflected in a memorandum for the record (attached) including:

- They feared Mr. Proenza would take retaliatory action against them if he learned they were voicing their views, some stating they "were scared" of Mr. Proenza and others that they were "deep[ly] concern[ed] that their future was at stake if this meeting got out,"
- They felt "muzzled" by Mr. Proenza, citing as an example the development of priorities for improving hurricane forecasting agreed to by the hurricane specialists, "but not approved by [Mr. Proenza]," and therefore not permitted to go forward to NCEP/NWS,
- They lacked confidence in Mr. Proenza's knowledge of the hurricane program and were concerned that Mr. Proenza would make decisions about its future without the required knowledge or willingness to listen to staff,

- They believed the QuikScat issue had been "overblown" and its representation in the media "is not accurate,"
- They questioned his "integrity" and were "outraged" at his misrepresenting the actions and views of his staff in the office and media, and
- They felt Mr. Proenza's actions were generating "turmoil," "anxiety," "fear," and a loss of "cohesiveness" at the Center.

Ms. Glackin and Dr. Uccellini were gravely concerned by what they had heard, and communicated to me their conclusion that immediate action was necessary. Given the fact that seven of the nine TPC Hurricane Center forecasters were expressing these concerns, it was their assessment that if the current situation persisted, the Center would have difficulty fulfilling its life-saving mission. Because of the serious nature of the situation, I consulted with my chain of command and we determined we had no other choice but to take action. Had we failed to act, we would have been derelict in our duties as public servants charged with protecting people's lives.

However, in our judgment, the need for prompt action had to be balanced with making sure we had a clear understanding of the situation and were fair to all concerned. We therefore decided that the right approach was to convene an independent assessment of the Center's management and operations and its ability to meet its mission, and to set a fairly short deadline for completion of this assessment.

Accordingly, on June 26, I requested that Dr. James Turner, NIST's Deputy Director, lead a team to undertake this charge. A copy of my memo to Dr. Turner is attached. On July 2, a memo was distributed to all employees of the Tropical Prediction Center advising them that I had asked for this independent operational assessment

(attached). I further stressed that the "candid views and opinions of the entire TPC team are extremely important to this assessment" and encouraged "everyone's engagement, participation, and support of this endeavor without fear of retaliation or criticism." I also advised staff that the team would be touring the Center and would be available to conduct individual and group interviews.

On Friday, July 6, Dr. Turner and his team provided me with a preliminary assessment and recommendation regarding management of the Center (attached). Specifically, the team advised me that, based on their first-hand observations, "the continued presence of Director Proenza at the TPC will interfere with the ability of the Assessment Team to complete its work." Moreover, it was the "unanimous opinion of the Assessment Team that Mr. Proenza's actions during the assessment have not only failed to calm his staff but have actually resulted in a level of anxiety and disruption that threatens the TPC's ability to fulfill its mission to protect the American people." In a series of documented incidents, Mr. Proenza had questioned a senior forecaster at his work station about his interview, which made the forecaster uncomfortable and upset; he approached other staff and asked for their support before they spoke with the Team; and he held media interviews on the operations floor about the assessment while the hurricane specialists were performing their duties analyzing tropical activity. The Team thus recommended that Mr. Proenza be "temporarily removed from active direction of the Center until such time as the assessment is complete and has been reviewed by NOAA management."

On Saturday, July 7, 2007, Ms. Glackin sent me a memo, agreeing with the recommendation of the Assessment Team, and recommending that Mr. Proenza be placed on leave (attached).

The following Monday morning, July 9, Mr. Proenza was advised that he was being placed on leave, and that the reason for doing so was based on the preliminary determination of the independent assessment team that his presence was interfering with the Team's completing its work, and resulting in a "level of anxiety and disruption that threatens the [Center's] ability to fulfill its mission to protect the American people." A copy of the memo issued to Mr. Proenza is attached to my testimony. A memo was then distributed to Center employees advising them that Mr. Proenza would be on leave until further notice, and that Deputy Director Ed Rappaport would serve as acting Director of the Center during this period (attached).

On July 13, Dr. Turner and the Assessment Team completed the report. A copy of the report is attached to my testimony. The Team found that the TPC is technically equipped to continue to provide accurate and timely information regarding hurricane-related activities. Specifically, the TPC's readiness has been strengthened by the addition of four new hurricane specialists in late 2006 (a two-thirds increase over prior years), the addition of a new hurricane forecast model this year, additional buoys, and a new instrument on the hurricane reconnaissance planes that will provide surface wind data.

At the same time, the Team found that "the short-term ability of the TPC to provide accurate and timely information was put at risk due to the TPC director's disruptive conduct and the lack of trust between many staff and the director." Even more pointedly, "the team concluded that the TPC's ability to achieve its mission was seriously

threatened because of the environment which had been created by the director's statements and actions." The Team cited actions by Mr. Proenza that intimidated some staff, alienated others, damaged teamwork, and produced fears of retaliation. In short, the Team found that "[t]he negative work environment, exacerbated by the director, has had – and is likely to continue to have – a major deleterious impact on the center's ability to fulfill its mission, if he is allowed to return to his position."

Drawing on these findings, the Team recommended immediate action with respect to Mr. Proenza, due to his failure of leadership:

> The current TPC director should be reassigned and not be allowed to return to his position at the center. This should be done due to his failure to demonstrate leadership within the TPC rather than due to his public statements about [the] QuikSCAT satellite or NOAA leadership. A replacement should be recruited as soon as possible through a nation-wide, full and open competition.

I want to note that the report also includes a number of other recommendations for improvement of the TPC, NCEP, NWS and NOAA. These include better management approaches (e.g., establishing "clear, written statements of authority for decision making throughout the management chain at TPC"), enhanced employee training and leadership development programs (e.g., "[i]nstitut[ing] formal succession planning and leadership programs for developing staff from within"), additional support for identifying and addressing technical needs, tighter linkages with the research and user communities (e.g., establishing a "user group to provide regular input" to the Center), clearer visioning, improved organizational structure in certain areas, stronger integration of the TPC into its parent organization, and constantly improving public education and outreach.

I have directed the Deputy Under Secretary, Jack Kelly, to lead a review of the report and provide a response to the Team's recommendations within two weeks' time

(attached). Following the same procedures we have used in responding to GAO reports, General Kelly will comment on the report's findings and recommendations and detail the steps to be taken to address the identified concerns.

Let me say at this point that William Proenza has a long and distinguished career with the National Weather Service. Any decisions I may make with regard to these recommendations will be made on the merits of the team's assessment of operations at the National Hurricane Center and not on any other issues or public comments Mr. Proenza may have made.

And finally, I'd like to note that the official forecasts of the Tropical Prediction Center do not come out of a computer. They do not come from a single satellite. Hurricane forecasting, at its core, still comes down to a team of specialists coming together to analyze all available data and using their best expertise and wisdom to make a forecast. The American people need to know that when a storm is bearing down, those forecasters are focused on only one thing, that they feel free to offer their views and that they are supported at the very highest levels. Again, the scientists and forecasters at the TPC – indeed, employees throughout the National Weather Service and NOAA, including myself – answer to one of the highest callings in public service – the protection of life and property, and we are fully prepared for this hurricane season.

Attachment 1

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
1325 East-West Highway
Silver Spring, Maryland 20910-3283
THE DIRECTOR

June 14, 2007

MEMORANDUM FOR: X. William Proenza
Director, Tropical Prediction Center
National Centers for Environmental Prediction

FROM: Mary M. Glackin
Acting Assistant Administrator
for Weather Services, and
Director, National Weather Service

SUBJECT: Operating Procedures/Instructions

Upon my assignment to this position, I have been examining the current National Weather Service (NWS) management structure to determine the best way to ensure accurate delivery of services. The purpose of this memorandum is to inform you of the organizational standards and procedures you should follow. To the extent there were mistakes or confusion regarding roles during the past few months since you assumed responsibilities for your current position, I hope this memorandum clarifies the situation. I will also discuss these issues with Jack Hayes when he begins his tenure.

As the Director of the Tropical Prediction Center (TPC) and as the primary spokesperson for the NWS during hurricane and other tropical events, you are one of the most important expert voices on these matters. However, as a member of the Senior Executive Service, you are expected to understand the importance of following organizational policies and supervisory instructions, and exercise sound judgment in the performance of your duties.

I understand that in these past five months there have been times when you may have disregarded the direct instructions of your supervisor, the Director, National Centers for Environmental Prediction (NCEP), or have made decisions on your own which you had no authority to make. For example, I learned that you instructed your forecasters to replace the "Tropical Prediction Center" label with a "National Hurricane Center" label on the March 4 High Seas worded forecast. Since the word "hurricane" appeared in the forecast, it set off a "pan pan" alarm on every bridge on every ship in the Pacific Ocean region. I also learned that, more recently, you have been signing Standard Form 52s authorizing career promotions and forwarding them directly to Workforce Management for processing, despite a long-standing procedure (of which I understand you were instructed) at NCEP that the Director, NCEP, is the official who authorizes such personnel matters.

Some of this, again, might have resulted from some confusion as to the various roles and responsibilities in the NWS. However, in the future, I will not accept intentional

disregard or refusal to work with one's supervisor any more than you would accept a member of your own staff who would do so. Such conduct does not promote an efficient or effective NWS, and puts in jeopardy our ability to help the public prepare for Hurricane Season and to engender confidence in our tropical weather. Because TPC is part of NCEP, I expect that you and your staff will follow the directions and the policies and procedures developed by NCEP.

I also ask that you consult on a regular basis (weekly or more frequently, if necessary) with the Director, NCEP, to communicate and coordinate tropical prediction budget, science, research, and operational or administrative issues that you or he feel deserves discussion because of their NOAA- or NWS-wide implications or public safety consequences. I am available to resolve any disagreements, but only after you two have discussed the matter fully.

Secondly, I want to make certain that your interactions with the news media are in the best interest of conveying critical and accurate information to the public. There are Departmental and NOAA policies of which you need to be aware, the knowledge of which could have aided your judgment in discussing NOAA budget and policy issues in a public forum. Again, in the past it appears coordination within the NWS management chain would also have given you accurate factual data that would be helpful in public discussions.

I understand that you have just completed an intensive, professionally-led media training program on June 5. That training, and the ensuing contacts with NOAA Public Affairs, should assist you immensely as you focus your current energies on assisting the public's severe storm preparedness. I also remind you to read Department Administrative Order 219-1, "Public Communications," if you have not already done so. You must become familiar with its requirements and adhere to them. If you have any questions about the policy you should contact the NOAA Public Affairs Office. You should also re-read the April 23, 2007, memorandum from the NOAA CFO, Maureen Wylie, regarding communicating budgetary information and the requirements of OMB Circular A-11.

I do not want you to lose sight of your responsibilities to the public. The Director of the Tropical Prediction Center plays an important role in communicating with the public about severe weather, and NOAA is committed to fully supporting you in doing so. I think you understand this role, but your recent statements instead may have caused some unnecessary confusion about NOAA's ability to accurately predict tropical storms. The training, policies, and organizational coordination that I mentioned above should assist you in developing strategies to deliver accurate information to the public and correct any misimpressions that may result from your media coverage.

Your commitment to coordinate your public communication efforts and internal administrative management within the NWS organizational chain will also avoid any unnecessary detrimental effects on our organization, for example: requiring me to spend a disproportionate amount of time to correct any confusion; causing undue concern and misunderstanding among your staff, and; taking valuable time away from your public

role as the NOAA official responsible for instilling confidence in our tropical storm predictions and preparing the public for hurricanes and other tropical events. I am particularly concerned about the latter two effects as you and your staff should be focused on TPC operations and especially hurricane forecasting, during this Hurricane Season.

With the Hurricane Season upon us, we need to work together to ensure accurate predictions and to support the work of NCEP, NWS, and NOAA. It has been my experience that adherence to organizational policies, procedures, and the chain of command will allow us to achieve this goal. I believe you have the requisite knowledge and experience to help NOAA and NWS succeed. I look forward to tapping that experience and working with you at this important time.

cc: Conrad Lautenbacher
John J. Kelly, Jr.
Louis W. Uccellini

Attachment 2

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

On Monday evening, June 18, 2007, a confidential conference call was requested of Mary Glackin, Acting AA, NWS by an employee of the Tropical Predication Center (TPC) which indicated they might be joined by colleagues. The call occurred at noon on Tuesday, June 19, 2007, and was attended by 11 Tropical Prediction Center (TPC) employees, including 7 out of 9 Hurricane Specialists (4 Senior or Lead Hurricane Specialists and 3 Junior Hurricane Specialists). Also in attendance were Mary Glackin, Acting Assistant Administrator for Weather Services and Director, National Weather Service (TPC second level supervisor), Dr. Louis Uccellini, Director, National Centers for Environmental Prediction, NWS (TPC first level supervisor),and Eddie Ribas, Director for Workforce Management, NOAA (servicing Human Resources Director). Included in this group was the TPC NWSEO Union Stewart who agreed that this was a meeting requested by this group, and did not constitute a formal meeting requiring formal notification to NWSEO.

This Memorandum for the Record (MFR) documents this meeting.

At their request, and to protect confidentiality of statements made by the TPC employees, their names will not be used in this MFR.

"A" led the discussion by emphasizing that all of the participants had a deep concern that their future was at stake if this meeting got out and their names got back to Bill Proenza, Director, TPC. The employee was very clear that there was a high fear level among the employees at the TPC concerning Bill's ability and willingness to retaliate.

Mary Glackin assured the group that she wants to make sure that 1) the employees at the TPC have a comfortable work environment that is free of fear and 2) the NWS provide the best service to the American public which requires the public to have confidence in TPC's ability to provide service.

Mary then said she wanted to hear from the employees, as they had requested:

"J" started the discussion by stating that Bill doesn't represent the views of the Hurricane Specialists with respect to interactions with NOAA, the NWS and other components of NCEP especially on the QUIKSCAT issue. The employee also said that all the hurricane specialists have much more collective experience in hurricane forecasting than Bill and that they were concerned that their views were not getting out.

"M" agreed and went on to say that she believed the QUIKSCAT issue is overblown, noting that they questioned Bill's personal integrity and that the staff is "outraged" by his representing the staff as being in support of his position and related actions. They also went on to say that if the satellite fell out of the sky tomorrow, they would still continue with their forecasts and meet their mission.

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

"J" then made it clear that Bill is trying to manipulate the staff in other areas. That Bill broke into a technical meeting last Friday, June 15, 2007, after Mary Glackin presented him with a letter and that Bill stated he had already "let it out." Later the staff heard that Bill claimed he shared the letter with the staff and they may have leaked it. The staff was "outraged" at this contention. Several of the staff then commented that he has no sense of integrity and that he is misrepresenting the issues.

Louis Uccellini asked if everyone agreed with "J's" statement, and the other 10 employees said yes.

"V" then provided a perspective from the administrative staff. The employee noted that Bill spent little time in the office, did not get into any topic in depth and pointed to his arbitrary way of going around policy, causing problems with all administrative processes and creating "lots of turmoil" which has never been seen before by the employee until Bill's arrival. They also noted that since their arrival in 1985, they never felt as much anxiety in the Center. This employee recently had to call the Southern Region Headquarters Office (Bill's former organization) and the first word out of the Southern Region employees mouth was, "I have been expecting your call," which this employee perceived as similar issues may have been happening during Bill's tenure as Director, Southern Region, NWS.

"S" noted from the technical support unit that there is no longer any cohesiveness to the unit. Everyone is doing their own thing.

"D" notes that NWSEO members in the Center agree about the integrity issue and that they have no confidence in Bill's integrity. They also felt that the MFR done by one of the TPC employees on the events after the letter was issued to Bill on Friday, June 15, 2007, was accurate.

"M" said that Bill seems to look "prettier" to the people who are the furthest away from him, but looks "horrible" to the Hurricane unit. They also stated that Bill "scares me" and that because of his unethical behavior, they have lost respect in him.

Louis Uccellini asked if everyone on the phone agreed with "J" and "M's" comments.

They all agreed (emphatically).

"A" emphasized the threat and said they felt Bill would put "daggers in their back" if he knew about the meeting (this conference call). They were being "muzzled" by Bill. The example cited was the development of priorities for improving hurricane forecasting which were agreed to by the hurricane specialists but not approved by Bill. Thus they

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

were not permitted to go forward to NCEP/NWS. They repeated that they "were scared of Bill'," and were scared about the impact of their career since they had such little time in with the Federal Government. This employee believes the QUIKSCAT issue is overblown and Bill's actions show a lack of integrity. The employee is outraged by this and how it reflects on all of them. Again expresses their fear and anxiety about Bill and the way he will act against all of them.

Eddie Ribas asked if anyone had notified their union steward or any other NWSEO representative of these issues/matters. "D" stated that Bill had total support from NWSEO, especially the President, but they were not sure about the Vice President.

"M" stated they did not want to work in a place where they had to worry. That they loved their job, but wanted to work in a Center where they did not have to check the local newspapers or turn on "CNN" to see "what they were in for that day." When pressed to explain, they clarified the comments to mean what kind of mood Bill would be in and what type of calls they should expect. "M" recently worked a shift where the Center was flooded with media inquiries.

"L" noted that they had been there a long time - longer than any of them and can state that they have had the privilege of working with a number of TPC Directors that all knew the hurricane program. They then stated that Bill does not know the hurricane program and that they were concerned that as the Director, Bill would make decisions about the future of the program without the required knowledge.

"V stated that they had been interacting with administrative personnel in Southern Region, Training Center, and the Finance Office in Kansas City and was surprised that they all seemed to know about Bill's method of operation and how he always tries to position himself by what ever means as the little David against the Goliath. The employee went on to say that they had been warned not to talk with him alone.

"R" stated he had no "personal issues" with Bill. However, he had a "lack of confidence" in Bill's knowledge of any of the ongoing model issues. "R" went on to say that Bill's priorities "seem to be misguided" and that Bill makes decisions that are not thought through.

"J" emphasized that with previous directors one could always count on them to be a resource to the hurricane specialists. "J" then stated that Bill "is not a resource to the hurricane specialists."

"R" spoke of three major concerns. The first was the representation of QUIKSCAT. It's representation in the media "is not accurate". They stated improvements in the hurricane

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

program require a vision that includes a next-generation version of QuikSCAT with an advanced modeling program. Second, "R" was very concerned that internal conflicts are being played out in the media. "R" then related that they heard on the radio coming to work the other day a commentator worrying that with all of this turmoil, how could the TPC be ready for this season. Other participants on the call agreed with this sentiment. "R" stated that QUIKSCAT is important but that a "long-term, rather than a short-term solution is needed" and that it was "disheartening" to be working with the research community, primarily NESDIS and NASA and that they ("R") did not feel supported by Bill to come up with a "long-term" solution. "R" also stated that Bill forwards to all TPC staff positive emails received by him (Bill) and consequently felt that the TPC staff was being manipulated. "R" mention that they felt what Bill was doing was not serving as a "Whistleblower" on the QUIKSCAT issue. The third issue raised by "R" dealt with Bill's interaction with staff. They stated that Bill does not proactively consult with his staff – that all interaction is initiated by staff. "R" stated that "we (the TPC staff) have information to share, and he (Bill) does not want it – he is marginalizing it."

"A" stated "given what you (Mary, Louis, and Eddie) understand, where do they go from here."

"D" stated that they felt uncomfortable if their coming forward was the sole basis for taking action against Bill.

"M" expressed concern about a hurricane preparedness event schedule for Wednesday, June 20, 2007, that the media would be speaking about the "wrong things," not preparing for the hurricane season.

"A" stated that there are employees outside of the TPC that they believed also felt manipulated by Bill. They referenced an employee in another line office, "P".

Several people then spoke up about Bill's lack of focus on important issues and his focus on "logo issues" which are a distraction, and that his zeal in personally removing other logos from the hurricane center was "scary and bizarre." He even removed the FIU logo, which someone said would have required him to step on a ladder to do so, even though the TPC is located on their campus and FIU covers all rent for the facility. It was noted that this was a 'waste of time and money".

The meeting then spun down with several random comments about their fear of Bill, about not wanting to put on the radio when coming to work in the morning and several expressing fear about even coming to work in the morning, with additional comments about his lack of integrity in the way he deals with all issues. There were also references

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

to several people in the group from TPC getting calls from SR personnel who stated that this was the way Bill operated in Southern Region Headquarters, that he operated the office the same way against other components of the NWS and NOAA; and that they were fearful too.

Mary Glackin and Eddie Ribas then intercceded to assure the people that they would be protected and that we all valued their input into this call and that we would not divulge any of this information in a way that would make them vulnerable to Bill's retaliation, a concern expressed by staff at the beginning of the call. Louis Uccellini then noted that he had the utmost admiration for the way the TPC handled team approaches in the past (citing the synergy plan with OPC, HPC, and AR), the way the hurricane unit handled the 2004, 2005, 2006 seasons with incredible professionalism and that the way they handled themselves in this call only added to his admiration.

Call was ended at approximately 12:55 pm.

Respectively submitted,

Mary Glackin 6/21/07
Mary Glackin
Acting Assistant Administrator
for Weather Services and Director,
National Weather Service

Louis W. Uccellini 6/21/07
Dr. Louis Uccellini
Director for National Centers for
Environmental Prediction, NWS

6/21/2007
Eduardo(Eddie) J. Ribas
Director for Workforce Management,
NOAA

This material is administratively confidential and pre-decisional, and contains information employees have requested be kept confidential and protected out of fear of retaliation by their Supervisor.

to several people in the group from TPC getting calls from SR personnel who stated that this was the way Bill operated in Southern Region Headquarters, that he operated the office the same way against other components of the NWS and NOAA; and that they were fearful too.

Mary Glackin and Eddie Ribas then interceded to assure the people that they would be protected and that we all valued their input into this call and that we would not divulge any of this information in a way that would make them vulnerable to Bill's retaliation, a concern expressed by staff at the beginning of the call. Louis Uccellini then noted that he had the utmost admiration for the way the TPC handled team approaches in the past (citing the synergy plan with OPC, HPC, and AR), the way the hurricane unit handled the 2004, 2005, 2006 seasons with incredible professionalism and that the way they handled themselves in this call only added to his admiration.

Call was ended at approximately 12:55 pm.

Respectively submitted,

Mary Glackin 6/21/07

Mary Glackin
Acting Assistant Administrator
for Weather Services and Director,
National Weather Service

Dr. Louis Uccellini
Director for National Centers for
Environmental Prediction, NWS

6/21/2007

Eduardo(Eddie) J. Ribas
Director for Workforce Management,
NOAA

Attachment 3

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

JUN 26 2007

MEMORANDUM FOR: Dr. James M. Turner
Deputy Director
National Institute of Standards and Technology

FROM: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy, (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere

SUBJECT: Operational Assessment of Tropical Prediction Center

Thank you for agreeing to lead a team to assess the operations of the Tropical Prediction Center and the Center's ability to assure the delivery of accurate and timely hurricane forecasts to the American public. The Tropical Prediction Center is charged with providing these forecasts for the Atlantic as well as the East Pacific Ocean basins with the goal of saving lives and property.

I request that your team address these questions and report your findings and recommendations to me as soon as possible. Attached is a more detailed explanation of the scope and logistics of this assignment to which we have agreed.

Attachment

THE ADMINISTRATOR

Scope of Operational Assessment

Scope:

The Scope of this operational assessment is to examine the management and operations of the Tropical Prediction Center (TPC) to ensure that the TPC is positioned to provide accurate and timely information to the public and relevant local, state, and federal authorities about hurricane-related activities and events. Specifically, this study will assess: (1) the ability of the TPC to continue to provide accurate and timely information, (2) whether the management and organizational structure facilitates TPC achieving its mission and (3) the extent to which lessons learned from recent hurricanes, including whether the 2005 Gulf Coast events were incorporated.

Composition:

The Study Group will be composed of a Chair and another member from the National Institute of Standards and Technology, a senior manager from the National Oceanic and Atmospheric Administration (NOAA) with knowledge of operational issues, an administrative assistant from NOAA, and a representative from the Department of Commerce's Office of the General Counsel, as well as any other members deemed necessary and appropriate by the Chair.

Operating Procedures:

The Study Group will report its findings in writing to the Under Secretary for Oceans and Atmosphere. The target date for a final report is July 20, 2007. Interim updates will be provided weekly or more often as requested. To complete the assessment within the timeframe noted, members may need to be relieved temporarily of their official duties.

The Group will operate on the basis of consensus. Logistical and clerical support will be provided through NOAA at a site away from, but convenient to, the TPC premises. The Group will make appropriate arrangements to schedule and conduct the discussions. Costs for travel expenses will be borne by each member's parent organization. Public and congressional inquiries will be directed to the appropriate NOAA Office of Public Affairs or Legislative Affairs for response.

The Group will have access to all TPC staff for discussions, who will be allowed to speak to the Group during non-duty hours if they so choose. An opening discussion with the Director, TPC, is essential, as well as a preliminary meeting with all employees at the TPC. The discussions will be in accordance with any relevant collective bargaining agreement and within the stated scope of the study. No guarantees of confidentiality may be made to any TPC employee or manager, but all employees will be assured that NOAA and the Department will do everything necessary to protect employees from retaliation or retribution stemming from their participation in the assessment. Key National Weather Service (NWS) managers and staff will also be available. The Group will be given access to NWS and TPC documents that are relevant to the assessment. The Group may

also obtain relevant information from people outside of NOAA (*e.g.*, state and local emergency coordinators, etc.) if necessary and directly related to issues arising during this operational assessment.

The work of the Group will be considered as completed when the Report of Findings is accepted by the Under Secretary for Oceans and Atmosphere.

Attachment 4

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

JUN 29 2007

MEMORANDUM FOR: Employees of the Tropical Prediction Center

FROM: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy, (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere

SUBJECT: Operational Assessment of Tropical Prediction Center

The Tropical Prediction Center's (TPC) success in providing accurate and timely hurricane forecasts to the American public is the result of your dedication and hard work. TPC has a long history of providing these forecasts and I appreciate the role all of you have played in building the Center's capabilities.

I have become aware of concerns about TPC's ability to meet its mission. I want to ensure the Center's continued readiness for not only this season but future seasons.

Therefore I have asked for an independent assessment of the Center's overall capabilities. Attached to this memo is a copy of their charge which includes an expectation that they will give me a report no later than Friday, July 20, 2007. The candid views and opinions of the entire TPC team are extremely important to this assessment and I encourage everyone's engagement, participation, and support of this endeavor without fear of retaliation or criticism.

The assessment team will be led by Dr. Jim Turner, Deputy Director of the National Institute of Standards and Technology (NIST), one of our sister bureaus in the Department of Commerce. Dr. Turner will be joined by Mat Heyman the NIST Chief of Staff, Kathy Kelly from the National Environmental Satellite and Data Information Service (NESDIS), who runs a 24 X 7 satellite operations center, and John Guenther, an attorney with the Department of Commerce. The team will also have a staff assistant supporting them. The team is to tour TPC and you may have already interacted with them this morning.

At the team's request, they were briefed on NOAA and NWS organizational matters and they have asked the NWS headquarters staff questions that will assist them in conducting the onsite assessment. The team will be available to conduct individual and group interviews. This is your opportunity to express your views, concerns, comments and suggestions to the team.

Finally, I want to reiterate how critical your forecasts are to the protection of life and property. I remain committed to providing a properly resourced, effective working environment to support the successful accomplishment of your mission.

THE ADMINISTRATOR

Printed on Recycled Paper

Attachment 5

UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-
OFFICE OF THE DIRECTOR

July 6, 2007

MEMORANDUM FOR: Vice Admiral Conrad C. Lautenbacher, (USN ret.)
Undersecretary of Commerce for Oceans and
Atmosphere & NOAA Administrator

FROM: James Turner for JT
Deputy Director, National Institute of Standards and Technology

SUBJECT: Recommendation regarding management of the Tropical Hurricane Center

The purpose of this memorandum is to confirm, in writing, the recommendation communicated to you earlier today by the Tropical Prediction Center (TPC or Center) Assessment Team. It is the preliminary assessment of the team that the continued presence of Director Proenza at the TPC will interfere with the ability of the Assessment Team to complete its work Further, it is the unanimous opinion of the Assessment Team that Mr. Proenza's actions during the assessment have not only failed to calm his staff but have actually resulted in a level of anxiety and disruption that threatens the TPC's ability to fulfill its mission to protect the American people. For this reason, we recommend that Director Proenza be temporarily removed from active direction of the Center until such time as the assessment is complete and has been reviewed by NOAA management.

NIST

Attachment 6

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for Oceans and Atmosphere
Washington, D.C. 20230
National Weather Service

JUL 7 2007

MEMORANDUM FOR: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce
for Oceans and Atmosphere

FROM: Mary M. Glackin
Acting Director, National Weather Service

SUBJECT: Tropical Prediction Center Administrative Changes

Per the recommendation of the Tropical Prediction Center Assessment Team received today, I have identified the following three options:

1. Temporarily detail Mr. Proenza to an unspecified set of duties.
2. Require Mr. Proenza to work from home.
3. Place Mr. Proenza on Administrative Leave in pay status for the duration of the Organizational Assessment.

After consultation with my management team, I recommend option 3, place Mr. Proenza on Administrative Leave. The duration of the leave should be effective immediately through the completion of the Organizational Assessment. Dr. Edward Rappaport, deputy director of the Tropical Prediction Center would be acting director for this time period.

7/7
Concur

Let's Discuss

Attachment 7

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

JUL 7 2007

MEMORANDUM FOR: X. William Proenza
Director, Tropical Prediction Center
National Centers for Environmental Prediction

FROM: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce
for Oceans and Atmosphere

SUBJECT: Administrative Leave

This purpose of this memorandum is to advise you that effective immediately you are being placed in an administrative leave status for a period not to exceed August 9, 2007. During this timeframe, you will remain in pay status and are not to report to the Tropical Prediction Center (TPC) unless authorized to do so beforehand by Dr. Louis W. Uccellini, Director for National Centers for Environmental Prediction.

This action is in response to the Assessment Team's preliminary determination that your continued presence will interfere with the ability of the Team to complete its work, and that your actions during the assessment have not only failed to calm your staff, but have actually resulted in a level of anxiety and disruption that threatens the TPC's ability to fulfill its mission to protect the American people.

While you are in this administrative leave status, you are not to contact TPC staff. Additionally, you must make yourself available to the Assessment Team should they need to discuss any matters with you relating to their undertaking.

I appreciate your cooperation in this matter.

THE ADMINISTRATOR

Printed on Recycled Paper

Attachment 8

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

JUL 7 2007

MEMORANDUM FOR: Employees, Tropical Prediction Center
National Centers for Environmental Prediction

FROM: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce
for Oceans and Atmosphere

SUBJECT: Tropical Prediction Center Administrative Changes

As you know, an Assessment Team headed by a prominent NIST scientist has undertaken, at my request, a review of the operations of the TPC. In response to the Assessment Team's preliminary determination that current conditions at the TPC pose an obstacle to the team's completion of its work, as well as the Team's concern that, as expressed by many of you, there currently exists a level of anxiety and disruption that threatens the TPC's ability to fulfill its mission to protect the American people, I have taken the following actions:

- The Director will be on leave until further notice, which means that he will not be undertaking any official duties or performing any function in your chain of command.
- Dr. Edward Rappaport, current Deputy Director of the TPC, will serve as acting Director of the TPC during this period.
- Mr. David Caldwell, Chief Operations Officer, National Centers for Environmental Prediction, will report to the TPC on July 9 to provide additional operational support.

Thank you for your continued support and patience during this time. Your dedication to the provision of high quality hurricane forecasts and tropical analysis and forecasts is much appreciated by NOAA and the Nation.

Cc:
W – M. Glackin
W/NCEP – L. Uccellini

THE ADMINISTRATOR

Printed on Recycled Paper

Attachment 9

UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-0001

JUL 13 2007

MEMORANDUM FOR: CONRAD C. LAUTENBACHER, JR.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere

FROM: Dr. James M. Turner
Deputy Director
National Institute of Standards and Technology

SUBJECT: Report from the Tropical Prediction Center Assessment Team

Attached is the Report on the assessment of the Tropical Prediction Center, in Miami, Florida.

NIST

Introduction

On June 26, 2007, Vice Admiral Conrad C. Lautenbacher (U.S. Navy ret.), Under Secretary for Oceans and Atmosphere, requested Dr. James M. Turner, Deputy Director, National Institute of Standards and Technology, to lead an independent team to assess the operations of the Tropical Prediction Center (TPC), commonly referred to as the National Hurricane Center, and the center's ability to deliver accurate and timely hurricane forecasts to the American public. In order to assess the operations of the TPC, the team was asked to look at the following three areas:

(1) The ability of the TPC to continue to provide accurate and timely information,
(2) Whether the management and organizational structure facilitates TPC achieving its mission and,
(3) The extent to which lessons learned from recent hurricanes, including the 2005 Gulf Coast events have been incorporated.

In addition to the team leader, the team included Kathleen A. Kelly, senior manager from the National Oceanic and Atmospheric Administration (NOAA), Matthew Heyman, the chief of staff of the National Institute of Standards and Technology (NIST), John K. Guenther, a senior counsel from the Department of Commerce's Office of General Counsel, as well as Alexis T. Gutiérrez, NOAA Fisheries.

The team began its work by meeting with several members of NOAA's National Weather Service's senior leadership to gain an understanding of the National Weather Service, the National Centers for Environmental Prediction, and the TPC. After several days of conducting background interviews, the team traveled to Miami, Florida, on July 2 and 3, 2007 to meet with the staff of the center. The team developed a standardized set of questions used in each interview at the center. Each interviewee was presented with a copy of the questions at the beginning of the interview. To ensure accuracy, at the end of each interview, interviewees were subsequently provided an opportunity to confirm the team's understanding of their responses.

On Monday, July 9, 2007, the team returned for two days to Miami to meet with additional TPC staff members. In total, the team met with 31 out of the 46-member TPC staff, including its senior managers.

After returning to Washington, D.C., the team met to reach consensus on their findings and recommendations. These findings and recommendations were then forwarded to Vice Admiral Conrad C. Lautenbacher for his review and deliberation.

Findings

Our assessment considered both the TPC's technical capabilities and its working environment. The team's findings addressed its three charges:

1. The ability of the TPC to continue to provide accurate and timely information regarding hurricane-related activities

Across the board, staff members of the TPC are highly dedicated to achieving the mission of saving lives and protecting property.

Even in the midst of recent controversy at the center, staff expressed vigorous commitment to, and belief in, the organization and its mission. At the same time, staff strongly expressed the need for a more settled work environment and for strong, informed, interactive, and supportive management.

From a strictly technical standpoint, the TPC is equipped to continue to provide accurate and timely information.

This finding is bolstered by the most recent statements of TPC Director Bill Proenza (referred to as the director throughout this document) and by senior hurricane forecast staff.

> "I know that we agree that the National Hurricane Center, with our capabilities, this season's new tools and graphics, coupled with the tremendous preparedness effort we have put forth this year, ***has never been more ready to serve the American people in a hurricane season.***" Bill Proenza, memo to TPC staff, July 7, 2007

The addition of four new hurricane specialists in late 2006 – a two-thirds increase over prior years – strengthens the center's readiness.

So does the addition of a new hurricane forecast model introduced this year, additional buoys, and a new instrument (SFMR) on the Air Force hurricane reconnaissance planes that will provide data on surface winds.

The short-term ability of the TPC to provide accurate and timely information was put at risk due to the TPC director's disruptive conduct and the lack of trust between many staff and the director.

After our first visit on July 2-3, the team concluded that the TPC's ability to achieve its mission was seriously threatened because of the environment which had been created by the director's statements and actions. The director's actions intimidated some staff and alienated others. Teamwork, essential to the center's hurricane forecasting capabilities, was damaged severely. Some staff were concerned about retaliation for voicing their views.

The team witnessed first-hand the impact of the director's conduct during the first visit, leading to our recommendation that he be removed temporarily from active direction of the center until the assessment was complete and reviewed by NOAA management.

Mistrust was caused by:

Statements by the director about the limited lifetime of the QuikSCAT satellite and the resulting impact on forecasts – made without context or caveat – raised public doubt about the center's ability to perform its mission and distracted center staff from doing their jobs.

> These statements confused and diluted the preparedness message to the public and created an atmosphere which introduced doubt about the accuracy of upcoming forecasts. They also raised concerns among the hurricane specialists that the director was jeopardizing support for other, more valuable, observation sources—notably hurricane reconnaissance aircraft.

Many staff reported that the director lacked integrity in his conduct with TPC employees; they said he intentionally misrepresented their technical views.

> Several members of the staff noted that the director rebuffed their attempts to correct or to contextualize his assertions with respect to items ranging from QuikSCAT to the budget -- and that he repeated certain claims even after he was corrected by staff. For example, one senior hurricane specialist noted that the director repeatedly quoted him out of context about the potential impact of QuikSCAT's loss even after the director was told that he was in error.

Statements and actions by the director led many staff to question his technical and managerial capabilities, motives, and leadership. This caused divisions among the staff and between the director and some staff.

> For example, one specialist reported that the director disrupted his ability to track tropical storms. "We had Barbara and Barry. He kept bringing the media over [onto the operations floor] to show QuikSCAT, while I am trying to put out a forecast. It was hard to get the job done."

> Separately, the assessment team witnessed similar behavior. In the team's initial meeting with the director, he asserted that he wanted the assessment "to be least disruptive as possible to our operations" and "to be low-key." He told the team that he did not "want anyone going to the media otherwise that will engage a lot of explanation on our part to them." Nevertheless, the next day, he held media interviews on the forecast operations floor about the assessment while hurricane specialists were performing their duties analyzing tropical activity.

The negative work environment, exacerbated by the director, has had—and is likely to continue to have—a major deleterious impact on the center's ability to fulfill its mission, if he is allowed to return to his position.

Even while the team was gathering information, the director's actions not only failed to calm his staff but resulted in a level of anxiety and disruption that threatened the TPC's ability to fulfill its mission. In one instance reported to the team, the director visited a senior hurricane forecaster at his work station to question him about his interview. This visibly upset the forecaster, who later raised it with the team. He indicated that he was

made uncomfortable by the director's questions and by the visit itself because it was out of the ordinary.

The director also approached other staff, including a senior manager, and asked for support before they spoke with the assessment team. This continued until the team advised the director to cease having those discussions.

By the same token, simply replacing the director will not resolve the center's workplace issues. If staff morale and long-standing organizational issues are not addressed, they will hinder the center's longer-term ability to accomplish its mission.

In the longer term, the TPC faces some potential degradation of its capabilities if current data about wind speed and direction (wind vectors) over the oceans are no longer available due to the loss of QuikSCAT before similar or better data are available through a yet-to-be designed alternative instrument.

- The QuikSCAT satellite is on its redundant transmitter as of July 2006; its lifetime is unknown, although the identical, primary transmitter lasted 7 years.
- After another ocean surface wind vector instrument was dropped from plans for the NPOESS satellite due to concerns about its likely effectiveness and satellite program cost overruns, in 2006 NOAA began assessing requirements for a replacement instrument.
- Although very limited efforts have been made to quantify the implications of the eventual loss of information from QuikSCAT, quantitative data about the likely impact of the loss (and the relative contributions of data from other sources) will be generated in a large-scale analysis recently launched by NOAA.
- ASCAT, a European satellite, just began providing wind vector data to the TPC in early July 2007. An assessment of the usefulness of these data will be made well after the 2007 hurricane season when the data can be analyzed.
- Senior hurricane specialists emphasized the need to have a thorough assessment of the impact of QuikSCAT and to ensure that future instrumentation provides more advanced -- rather than simply equal -- capabilities.
- The NOAA administrator and the TPC director in a press conference on May 22 described replacement efforts and expressed satisfaction with the approach.
    - *"I am encouraged in those conversations that we have had, and discussions we have had, that the nation will be moving ahead very constructively in coming up with design next-generation QuikSCAT to replace the current, which is still operational QuikSCAT that we have at this time."[sic] Bill Proenza, May 22, 2007, NOAA news conference*

In the long term, the TPC's ability to improve hurricane intensity forecasts can be advanced primarily through more research within the federal and academic communities.

It is widely agreed that hurricane track forecasts have improved steadily over the past two decades but that intensity forecasts have improved only minimally and are a top research priority.

A NOAA scientific advisory board working group reported in October 2006 on research directions and needs in order to improve hurricane intensity forecasts. (Others, including

the National Science Board in a January 2007 study and the Office of the Federal Coordinator for Meteorology in February 2007, cited the need for additional research on hurricane intensity.)

NOAA provided an initial status report on implementing this group's recommendations in March 2007 and then again in May 2007.

NOAA decided in May 2007 to form a new group encompassing all of its hurricane research activities to generate and track plans for improving intensity forecasts and the understanding of hurricane forces generally. That Hurricane Project Team is now organizing, and will have high-level NOAA representation.

The Joint Hurricane Testbed (JHT) managed by the TPC is and should be part of NOAA's hurricane research efforts, especially with its emphasis on applying research to generation of the hurricane forecasts.

Funds for the JHT were reduced in FY 2007 by $0.26 million, down from the FY 2006 allocation of $1.39 million and applied to improving hurricane models. That decision was made by a U.S. Weather Research Program group made up of NOAA senior research managers that annually allocates funding for weather research.

After the TPC director raised this issue with NOAA senior management, this group was asked to review their initial recommendations for funding of projects—and they reaffirmed their decision that funding for other research projects was of higher priority.

2. Whether the management and organizational structure facilitates TPC achieving its mission

The TPC's structure generally permits it to achieve its mission, although some improvements are needed.

The center director has four distinct, major responsibilities – helping to oversee storm forecasts, communicating those forecasts to the public through the news media, communicating the importance of preparedness to local, state, and federal emergency management officials and to the public, and establishing the priorities and managing the operations of the TPC. These multiple responsibilities place enormous pressures on the director and can cause burnout and inattention to one or more of these responsibilities.

The hurricane specialists report directly to the TPC deputy director. This results in an imbalance in management; the Tropical Analysis Forecast Branch (TAF B) and the Technical Support Branch each have a direct supervisor who leads those groups and reports to the deputy director.

The TPC staff – especially within TAF B -- does not universally believe that its expertise is respected and called upon as often as it should be by the National Centers for Environmental Prediction (NCEP) or the National Weather Service (NWS). These employees do not believe that NCEP is supportive enough of the center's needs.

The lack of effective supervisory oversight from NOAA, NWS, NCEP, and TPC management has contributed significantly to long-standing problems at the center, as well as the disruption over the past 6 months.

This extends to personnel selection (including the rushed appointment of the current TPC director), performance and conduct management, budgeting, communications, and organizational development, planning, and change.

Communication among TPC units and staff, and between TPC and other NCEP units, and NWS, is inadequate and is a major contributor to the morale and organizational issues mentioned earlier.

The branches at the TPC operate in some respects as separate units which only come together as a cohesive unit during a storm. Units—and to some extent, individuals—within the TPC are, in a variety of respects, compartmentalized. In itself, this contributes substantially to morale issues. These existed at the TPC prior to the current director's coming onboard and have been exacerbated since his arrival. Teamwork and morale issues are especially notable between the hurricane forecasters and TAF B; a number of TAF B staff reported that they do not feel as if they are on equal standing and they are not receiving equitable resources and attention. After a preliminary review, the assessment team was unable to determine if reality matched this perception. But, as is often the case, perception becomes reality.

Information flow among staff and supervisors about what and how decisions are made – whether at TPC, NCEP, NWS, or NOAA – is lacking on some fundamental matters. These include how priorities and budgets are set, and how training decisions are made. (See below). This has resulted in some staff feeling that they do not have an opportunity for input on matters ranging from whether to adopt new approaches for presenting forecasts to ergonomic considerations at the forecasters' desks. They also include issues of basic decision making by supervisors; a number of staff expressed concerns about indecisiveness by managers and confusion about approval processes and managers' authority within the decision making chain of command.

The TPC and its staff are not taking full advantage of opportunities for improvement, not only in developing forecasts, but also in communicating those forecasts and being fully responsive to partners and customers.

The current director has emphasized some of those opportunities, including the introduction of improved graphical tropical weather outlook after a trial period. Among the staff, there are differences of opinion about whether that trial period is long enough to be used with a high degree of confidence. The broader issue – what trial steps and periods are appropriate before a new forecast-related product or service is "rolled out" – also applies to other new ideas.

Tighter linkages with the research community, within and outside NOAA, can provide benefits both to the TPC forecasters and to researchers.

There has been interaction with other NCEP centers and the NOAA Hurricane Research Division (HRD), both via peer-to-peer contacts and participation in joint planning efforts and conferences. But by and large, awareness about these interactions among TPC staff is limited to the actual participants. Tighter, coordinated linkages would improve the work of each organization.

The vast majority of TPC staff interviewed understands their responsibilities.

But since the current TPC director assumed his position, there has been more frustration among managers and administrative staff throughout the organization about lack of delegation of responsibilities—both during normal operations and when the director is not in the office. Empowerment of officials to act in the absence of the director is unclear.

Many employees are not aware of basic administrative policies and procedures -- including approval for budget-related needs, such as training, travel and research. In some instances, routine administrative procedures are not followed.

For the most part, staff interviewed by the team lack any understanding of how priorities for projects and budgets are determined and how decisions are made, even when those decisions impact their work directly. This is especially true of the TAF B staff. This is true in spite of the fact that the assessment team found much of this information readily available.

This has resulted in some confusion and a sense of uncertainty–and in some cases, resentment-- about career development possibilities. This appears to be the case despite information provided to the team about communications to all staff about training opportunities. In fact, over the past several years, more training funds have been available than have been requested by staff.

3) The extent to which lessons learned from recent hurricanes, including the 2005 Gulf Coast events, have been incorporated (source document: http://www.nws.noaa.gov/om/assessments/pdfs/Katrina.pdf)

To strengthen ties with Weather Forecast Offices, in July 2006, TPC began to notify local Weather Forecast Offices immediately when storm surge forecasts were ready.

To better communicate storm surge predictions, a disclaimer was applied to storm surge graphics in April 2007 which clearly indicated a measure of uncertainty. TPC also provided links to a web site where the viewer could get additional information.

In addition, the following were noted as best practices:

TPC has increased its emphasis on outreach in order to develop stronger ties with state and local emergency management officials.

The TPC directors have expanded outreach and liaison. The center now offers direct contact with governors in affected states to ensure that the forecast is properly conveyed at the highest state levels.

In 2006, TPC began offering three, one-week hurricane program training courses for partners in emergency management. Those courses were held at the TPC in 2006 and 2007.

The following remains as an outstanding research challenge:

Limited progress has been made in improving forecasters' ability to predict rapid intensification due to the technical magnitude of the challenge.

Recommendations

Immediate actions

The current TPC director should be reassigned and not be allowed to return to his position at the center. This should be done due to his failure to demonstrate leadership within the TPC rather than due to his public statements about QuikSCAT satellite or NOAA leadership. A replacement should be recruited as soon as possible through a nation-wide, full and open competition.

A replacement director who demonstrates the following characteristics should be sought:

- Strong hurricane forecasting knowledge and experience
- Strong communications skills
- Strong *management* and *leadership* skills

The TPC deputy director's capabilities and activities should complement those of the director, recognizing that it is difficult to recruit a director with superior capabilities in all three areas.

Morale problems and divisions among the staff must be addressed as a high priority for the good of the center and to ensure that the organization can perform its mission.

With strong support from all levels of NOAA, the TPC director needs to improve management of and morale within the center, specifically to ensure:

- Management responsiveness
  - The director needs to demand management excellence from supervisors, and to hold those supervisors accountable, requiring a heavy emphasis on performance management for supervisors and employees alike.
- Teamwork
  - Clear divisions among the staff must be addressed. In the short-term, there are ample opportunities to address "low-hanging fruit" that could immediately improve the workplace environment. This can be achieved through greater collaboration, empowering the staff, and an emphasis on teamwork.
  - Morale problems and divisions among the staff must be addressed as a high priority for the good of the center and to ensure that the organization can perform its mission. These include differences among: long-time versus newer employees; hurricane specialists versus tropical forecasters; technical support staff versus forecasters.
- Continuous improvement
  - It is critical that the TPC foster an environment where new ideas, continuous improvement, and change is entertained, encouraged, supported and funded.
  - The center must constantly look for ways to use today's and tomorrow's tools to communicate with and to educate emergency management officials, private sector providers of storm-related information,

stakeholders, and the public. This can and must be done in a collaborative environment with management's strong encouragement.

- Employee continuous education and development
  - NWS/NCEP must find a way to enable leadership training for TPC employees who are interested in gaining those skills.
  - NOAA, NCEP, and TPC policies, procedures, and available funding for training staff and attendance at professional conferences should be made clear to all staff and made part of individual development plans for each employee; these plans should be tracked and discussed during performance reviews.

The director should make maximum use of organizational development expertise available in the Department and the private sector to accomplish these tasks.

NCEP, NWS, and NOAA should increase their focus on the critical technical needs in hurricane forecasting, including improved ocean surface vector wind data, intensity understanding and forecasting, and modeling.

NOAA is forming a new group to focus on and improve coordination of hurricane-related research and operations. This group should be made operational expeditiously.

Satellite-based instrumentation is expensive and subject to long planning horizons; the value of active observation instruments, like the instrument aboard QuikSCAT, should be quantified in the near future. Planning for a more capable replacement for the QuikSCAT satellite instrumentation should proceed apace.

NCEP's recently launched assessment to quantify the relative contributions of QuikSCAT-generated data on hurricane-related analysis and forecasts should be given high priority as NOAA plans for an improved, replacement satellite-based instrument.

Organizational and communication improvements:

NOAA leadership at all levels must require the highest level of conduct and performance from its employees and its managers. Supervisors must know that they will be supported in the management of their operations and held accountable for failure to manage effectively.

Make the following organizational changes:

- Create a Hurricane Forecast Branch chief (separate and distinct from the center deputy director).
- Make the three branches (hurricane, tropical analysis forecast, and technical support) direct reports to the same TPC supervisor.
- Consider moving the Science Operations Officer (SOO) and storm surge activities into a separate unit reporting to the office of the director.

Establish clear, written statements of authority for decision making throughout the management chain at TPC—and communicate them to all employees.

Develop the methods and means to ensure that the products and services provided by the TPC are meeting the needs of users. Establish a user group to provide regular input on the TPC's priorities and proposed new or revised products.

This group would serve as a useful, ready-made sounding board that would aid the TPC in focusing on improved forecasting as well as improved communication of forecasts and the need for emergency preparedness.

TPC should develop a vision for the future, clearly identifying its priorities and how it plans to get there.

This vision and these plans should cascade from NOAA/NWS/NCEP strategic plans. All TPC staff should be given the opportunity to participate in this planning.

Institute formal succession planning and leadership programs for developing staff from within.

It is critical that the TPC and other centers of excellence within NCEP--where skills are so specialized--grow leaders via development programs. Such training opportunities are available within NOAA and the Department.

NWS/NCEP needs to foster an environment in which its centers, including the TPC, feel that they are part of the process and part of one organization.

NOAA must communicate aggressively, in plain language, key facts and rebut erroneous information about its hurricane program to stakeholders and to the public, including:

- Descriptions of the full array of techniques and tools that go into hurricane forecasting—including the strengths and limitations of satellite observations, aircraft, buoys, and other instruments as well as models and the forecasters themselves. For example, some in the public believe incorrectly that reconnaissance planes provide data akin to but less valuable than that provided by QuikSCAT.
- Descriptions of NOAA's key challenges in improving hurricane forecasts and its plan for meeting those challenges -- including realities about uncertainties in forecasts -- especially in terms of intensity.
- Descriptions of recent and planned improvements.

This Report was prepared by the following members of the Tropical Prediction Center Assessment Team.

7/13/07

Dr. James M. Turner — Date
Deputy Director
National Institute of Standards and Technology

7/13/07

Kathleen A. Kelly — Date
Director
Office of Satellite Operations
National Oceanic and Atmospheric Administration

7/13/07

Matthew Heyman — Date
Chief of Staff
National Institute of Standards and Technology

7/13/07

John K. Guenther — Date
Senior Counsel
Office of the General Counsel for Admin.
Employment & Labor Law Division

7/13/07

Alexis Gutierrez — Date
Foreign Affairs Specialist
National Oceanic and Atmospheric Administration

Attachment 10

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

July 18, 2007

MEMORANDUM FOR: John J. Kelly, Jr.
BGEN, U.S. Air Force (Ret.)
Deputy Under Secretary for
Oceans and Atmosphere

FROM: Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere

SUBJECT: *Report from the Tropical Prediction Center Assessment Team* and Development of Responses and Action Plan

Please find attached the *Report from the Tropical Prediction Center Assessment Team.*

I task you to lead a review of the report and provide me with responses to the team's recommendations as well as an Action Plan within 14 calendar days (by July 31, 2007).

Attachment

THE ADMINISTRATOR

Printed on Recycled Paper

Vice Admiral Conrad C. Lautenbacher, Jr., Navy (Ret.)
NOAA Administrator

A native of Philadelphia, Pa., retired **Navy Vice Admiral Conrad C. Lautenbacher**, Ph.D., is serving as the undersecretary of commerce for oceans and atmosphere. He was appointed Dec. 19, 2001. Along with this title comes the added distinction of serving as the eighth administrator of the National Oceanic and Atmospheric Administration. He holds an M.S. and Ph.D. from Harvard University in applied mathematics.

Lautenbacher oversees the day-to-day functions of NOAA, as well as laying out its strategic and operational future. The agency manages an annual budget of $4 billion. The agency includes, and is comprised of, the National Environmental Satellite, Data and Information Services; National Marine Fisheries Service; National Ocean Service; National Weather Service; Oceanic and Atmospheric Research; Marine and Aviation Operations; and the NOAA Corps, the nation's seventh uniformed service. He directed an extensive review and reorganization of the NOAA corporate structure to meet the environmental challenges of the 21st century.

As the NOAA administrator, Lautenbacher spearheaded the first-ever Earth Observation Summit, which hosted ministerial-level representation from several dozen of the world's nations in Washington July 2003. Through subsequent international summits and working groups, he worked to encourage world scientific and policy leaders to work toward a common goal of building a sustained Global Earth Observation System of Systems (GEOSS) that would collect and disseminate data, information and models to stakeholders and decision makers for the benefit of all nations individually and the world community collectively. The effort culminated in an agreement for a 10-year implementation plan for GEOSS reached by the 55 member countries of the Group on Earth Observations at the Third Observation Summit held in Brussels February 2005.

He also has headed numerous delegations at international governmental summits and conferences around the world, including the U.S. delegation to 2002 Asia-Pacific Economic Cooperation Ocean Ministerial Meeting in Korea, and 2002 and 2003 meetings of the World Meteorological Organization and Intergovernmental Oceanographic Commission in Switzerland and France, as well as leading the Commerce delegation to the 2002 World Summit on Sustainable Development in South Africa.

Before joining NOAA, Lautenbacher formed his own management consultant business, and worked principally for Technology, Strategies & Alliances Inc. He was president and CEO of the Consortium for Oceanographic Research and Education (CORE). This not-for-profit organization has a membership of 76 institutions of higher learning and a mission to increase basic knowledge and public support across the spectrum of ocean sciences.

Lautenbacher is a graduate of the U.S. Naval Academy (Class of 1964), and has won accolades for his performance in a broad range of operational, command and staff positions both ashore and afloat. He retired after 40 years of service in the Navy. His military career was marked by skilled fiscal management and significant improvements in operations through performance-based evaluations of processes.

During his time in the Navy, he was selected as a Federal Executive Fellow and served at the Brookings Institution. He served as a guest lecturer on numerous occasions at the Naval War College, the Army War College, the Air War College, The Fletcher School of Diplomacy, and the components of the National Defense University.

His Navy experience includes tours as Commanding Officer of USS HEWITT (DD-966), Commander Naval Station Norfolk; Commander of Cruiser-Destroyer Group Five with additional duties as Commander U.S. Naval Forces Central Command Riyadh during Operations Desert Shield and Desert Storm, where he was in charge of Navy planning and participation in the air campaign. As Commander U.S. Third Fleet, he introduced joint training to the Pacific with the initiation of the first West Coast Joint Task Force Training Exercises (JTFEXs).

A leader in the introduction of cutting-edge information technology, he pioneered the use of information technology to mount large-scale operations using sea-based command and control. As Assistant for Strategy with the Chief of Naval Operations Executive Panel, and Program Planning Branch Head in the Navy Program Planning Directorate, he continued to hone his analytic skills resulting in designation as a specialist both in Operations Analysis and Financial Management. During his final tour of duty, he served as Deputy Chief of Naval Operations (Resources, Warfare Requirements and Assessments) in charge of Navy programs and budget.

Lautenbacher lives in Northern Virginia with his wife Susan who is a life-long high school and middle school science teacher.