

Ocean Prediction Center

2007 Accomplishments

1. Overview

During 2007, OPC products and services have continued to increase in popularity world wide. This is evidenced by the annual OPC web hit statistics. From 2006 to 2007, hits to the OPC web site increased from about 36.7 million to nearly 43 million. Over the past four years OPC has seen a dramatic increase of annual web hits from about 10 million in 2003, a more than three fold increase over this period.

In 2007, OPC provided on-demand weather support on a number of occasions. In one instance, weather support was requested by NOAA HAZMAT when a Japanese vessel in distress near Antarctica in February 2007 threatened a major oil spill. OPC also provided real-time support to the NESDIS field experiment on ocean winds in early spring 2007 that resulted in validation of the capability by the QuikSCAT satellite to measure hurricane force winds. In addition, OPC provided weather forecasts for a US Navy Research and Development field test off the west coast. OPC provided wind and wave height analysis and forecast information, on a regularly scheduled basis to the Navy. At conclusion of the field test, the program director for the project wrote a letter of appreciation to OPC noting the great value of the service provided.

Several enhancements were introduced to OPC operations during 2007. These include the routine production of gridded wave analyses and forecasts which have been made available on the AWIPS system. This will facilitate the use of gridded guidance for WFO forecast applications. And, for the first time, altimeter data has become available operationally to OPC's marine forecasters. This data, from the Jason satellite, has now become an integral part of evaluating the sea state of the waters in OPC's area of responsibility.

The past year saw a number of changes in OPC personnel. Mr. James Clark was promoted to Senior Marine Forecaster in January 2007; Mr. Frank Musonda joined OPC in December 2007 from WFO Guam; Ms. Joan Van Ahn joined Ocean Applications Branch in May from IMSG, she subsequently departed OPC for OCWWS in November. Dr. Yan Hao joined Ocean Applications Branch as a contracting scientist with IMSG in November. Dr. Hao came from SUNY Stony Brook upon completion of her Ph.D work there.

2. Major Accomplishments

The highest number of OPC web site hits for a twelve month period - For 2007, the OPC website has recorded 42,955,000 million hits. This was 117% of the 2006 total, and an all time record for the web site. The web site received 1,116,931 unique visits for the year. During the past year, the Atlantic Charts were always the files most requested followed by the Unified

Analysis files. The product loops, files from the grids directory and the Pacific Charts rounded out the top five. The chart most in demand from the Atlantic files was the RA1 or Sea State Analysis. The RA1 usage varied throughout the year accounting for as high as 20% of the total hits and as low as 7%. The RA1 is the chart displayed on all of the commercial vendor's sites who link to the OPC web site. The most popular Pacific chart was the East Pacific Surface Analysis.

Support to NOAA HAZMAT in Antarctica – On February 16 the OPC received a call from NOAA HAZMAT requesting weather support for a factory ship for the Japanese whaling fleet, the Nisshin Maru, off Antarctica near 73.38 S and S 175.56 E. The support was requested to help the United States Coast Guard (USCG) assess the risk from an oil spill should it happen. OPC prepared a seven day forecast for winds and seas at this location which was sent to NOAA HAZMAT. In addition, Joe Sienkiewicz, OPC Science and Operations Officer (SOO), provided QuikSCAT data and maps for the incident area to OPC forecasters. A total of two sets of forecasts were provided to HAZMAT who asked that OPC be prepared to continue to provide support, if needed. No further support to NOAA HAZMAT was required.

Operational enhancements - OPC completed a number of enhancements to operational marine forecast products and services in 2007. Early in the year, OPC began routinely producing gridded wave analyses and forecasts and made them available on the AWIPS system to facilitate the NWS field office to use the gridded guidance for their forecast applications. OPC implemented an operational capability for marine users to obtain graphical weather forecasts and analyses on personal digital assistants and cell phones. This permits mariners to have a low cost, portable version of OPC's products available on demand. In addition, OPC began operationally providing confidence levels of marine forecasts as part of its Marine Weather Discussion. This enables Weather Forecast Offices and marine users to interpret OPC marine weather forecast, and making better informed decisions.

Also in 2007, Jason altimeter data was introduced into OPC operations. This is the first time that satellite based significant wave height information has become operationally available to OPC forecasters. This information has become an integral part of evaluating the sea state of the waters in OPC's area of responsibility

3. Customer requirements collection and validation through interaction with customers and partners

3.1 Conference Participation

OPC took part in 11 domestic and international workshops and conferences in 2007 –

Ming Ji, Director, OPC, Joe Sienkiewicz, and Robert Daniels, IMSG/ OPC Oceanographer, attended the 11th HYCOM workshop at NRLSSC Mississippi, April 24-26. Mr. Daniels presented OPC results from evaluating the Environmental Modeling Center/Marine Modeling and Analysis Branch HYCOM based Real Time Ocean Forecast Systems (RTOFS) model.

The workshop topics included a broad range of applications covering global, basin, and regional spatial scales and ocean weather to climate time scales. Of particular interest to National Centers for Environmental Prediction (NCEP), the HYCOM model is used for coastal applications, both directly and configured as a regional model to force simpler but higher resolution local models

Joe Sienkiewicz was invited to participate in a three day National Academy of Sciences (NAS) Meeting concerning the Options to Ensure the Climate Data Record from the National Polar-orbiting Operational Environmental Satellite Systems (NPOESS) and Geostationary Environmental Operational Satellite Series-R (GOES-R) Spacecraft. The meeting was held at the NAS' Keck Center in downtown Washington, DC June 19-21. Mr. Sienkiewicz participated in two breakout sessions. The first session was concerned with atmospheric sensors used to retrieve ocean surface winds. The second session discussed microwave sensors and included scatterometers, altimeters, and passive radiometers. He also presented OPC results during the microwave session concerning the use of QuikSCAT quality winds. Mitigation strategies were proposed to maintain the current quality of the climate data record. The NAS panel will provide a final report summarizing findings in early 2008.

Dave Feit attended the 10th International Workshop on Wave Hindcasting and Forecasting and Coastal Hazards held November 11-16, 2007 on the Island of Oahu in Hawaii. Dave and Scott Prorise, OPC Senior Marine Forecaster, along with Chris Burr and Mark Tew, both on the staff of the National Hurricane Center, co-authored a poster presentation entitled "Overview of the Operational Marine Forecast and Warning Products Produced at the Ocean Prediction Center and the National Hurricane Center."

Ming Ji attended the International Global Ocean Data Assimilation Experiment (GODAE) Steering Team (IGST) meeting in St John's, Newfoundland, Canada, 7-9 August. The purpose of the meeting was to assess progress on regional and global demonstration of ocean forecasting capabilities, evaluate ocean observing system from a science and data assimilation requirement perspective, and to discuss future directions in operational oceanography after GODAE ends in December 2008. Ming Ji reported the status of Argo and NCEP's activities in assimilating Argo data for ocean and climate prediction at the meeting. An important subject of discussion at the meeting was the legacy and future direction of GODAE community. The IGST recognized an important reason for GODAE's success - GODAE was not conceived as a research program. It was aimed at demonstrating an operational oceanographic analysis and forecasting capability based on the ocean observing system of satellites and in situ platforms (e.g., altimeter, scatterometer, and Argo). A key to GODAE's success is the active participation of operational numerical weather prediction (NWP) centers internationally.

Ming Ji attended the 1st Joint World Meteorological Organization (WMO) – Intergovernmental Oceanography Commission (IOC) technical Commission for Oceanography and Marine Meteorology (JCOMM) Scientific and Technical Symposium on Storm Surge, Oct. 2-6, 2007 in Seoul, South Korea. Ming gave a presentation on "Toward Improved Operational Surge and

Inundation Forecasts and Coastal Warnings”. His co-authors include Frank Aikman of NOAA’s Coast Survey Development Laboratory and Carlos Lozano of NOAA’s Environmental Modeling Center. He also served as a member of a summary panel discussion session of the symposium. Weather hazards such as storm surge and inundation often severely impacts coastal communities and the economy internationally. OPC is poised to develop an operational coastal forecast capability to support the NWS service needs for coastal warnings and forecasts. The purpose of this symposium is to enhance JCOMM’s activity in provision of expert technical advice on the modeling, analysis and forecasting of storm surges, to assist national meteorological services in fulfilling their service obligations.

Joe Sienkiewicz participated in the Waves and Operational Oceanography 2007 workshop at the French institute IFREMER in Brest, France September 19 and a Wave Data User Workshop, Defining a GLOBWAVE project, September 20-21, 2007. On the same trip, Joe presented a paper entitled, "Hurricane Force Extratropical Cyclones as Detected by QuikSCAT" at the joint 2007 EUMETSAT Meteorological Satellite Conference, and 15th American Meteorological Society Satellite Meteorology and Oceanography Conference in Amsterdam, Netherlands September 24-28, 2007. Joe also gave an invited presentation entitled, "the Operational Use of Ocean Surface Vector Winds at NOAA" at the 4th EUMETSAT Ocean Sea Ice Satellite Applications Facility Workshop on September 27, 2007. The workshop was held concurrently with the joint EUMETSAT-American Meteorological Society conference on Satellite Meteorology and Oceanography in Amsterdam, the Netherlands. While in Amsterdam, Mr. Sienkiewicz also participated in the NASA Ocean Surface Winds Science Team Meeting September 28-29.

Dave Feit, Chief, Ocean Forecast Branch, represented the U.S. in the first session of the Joint World Meteorological Organization/International Ocean Commission Expert Team on Marine Accident Emergency Support. The meeting was held in Angra dos Reis, Brazil January 29-31. The main issues addressed at the meeting related to the provision of emergency support to HAZMAT, search and rescue operations, and support during harmful algal blooms. As a result of the meeting, Dave was named a member of two tasks teams, the team on MetOcean Product Development and the task team on training.

3.2 Outreach to Mariners

Marine safety lectures and briefings –

On March 3, in Annapolis, MD, Paul Vukits, OPC Senior Marine Forecaster, participated in the annual Singles on Sailboats, Inc. “Spring Training”. This is a day long training program designed for sailors of novice, intermediate, and advanced skill levels. Approximately 300 nationwide attendees participated in four 90 minutes sessions. The sessions consisted of nine classes being taught simultaneously. Mr. Vukits’ session was titled “Offshore Weather by National Oceanic Atmospheric Administration (NOAA)” and was attended by 21 sailing students. His talk addressed how sailors can use OPC text and graphical products to ensure

safe transits. He explained the meteorology behind each product, how and why sailors should use them, and how and where the products can be obtained.

Ming Ji and Paul Vukits attended the Velux 5 Oceans race event in Norfolk, VA on April 13-14, 2007. On April 13, Paul Vukits presented to the VELUX 5 OCEANS Race skippers and race team members a Power Point Weather Safety Briefing detailing the latest available Ocean Prediction Center products. WFO Wakefield also provided a briefing on local weather conditions for the weekend. The last leg of the race, from Norfolk VA to BilBao, Spain was to depart Norfolk on Sunday, April 15. However, a strong coastal storm was predicted to cause significant wind and sea conditions off the mid-Atlantic coasts from Sunday through early the following week. Based on this briefing the start of the third leg of the race was delayed by several days.

Joe Sienkiewicz participated in a weekend training session in April, in Ronkonkoma, NY hosted by Maritime Communications and Navigation, Inc. Attendees were sailors and mariners intending to either take part in the upcoming Marion, MA to Bermuda Race this June or have plans for long distance sailing such as trans-Atlantic. Twelve sailors participated in the seminar. Joe spoke for an hour and a half on the use of National Weather Service (NWS) text and graphical marine products and also talked about the use of model data in the form of GRIB files. He spoke about the strengths and weaknesses of both numerical weather and ocean prediction and gave examples of both. Joe used a mix of a prepared presentation and live internet access to give examples of various National Oceanic Atmospheric Administration (NOAA) marine weather and oceanographic products. The talk was well received with many questions being asked.

On June 22, Dave Kosier, OPC marine forecaster, participated in a briefing to the Blue Water Sailors Group at Quiet Waters Park in Annapolis, MD. The briefing was attended by about 18 people. Dave made a slide presentation of the products and services OPC provides and answered questions regarding OPC capabilities. The group was very enthusiastic in their support of OPC and had a particular interest in the issue of continuation of radiofax charts.

Paul Vukits and Joe Sienkiewicz participated in the annual Safety At Sea Seminar hosted by the US Naval Academy Sailing Squadron, West Marine, and the Marine Trades Association of Maryland the weekend of March 24 and 25. The event was held in Alumni Hall of the Naval Academy and on the waters of the Severn River. Approximately 250 civilian boaters and 400 midshipmen attended the Saturday sessions and 150 civilian boaters the Sunday sessions. Joe and Paul gave several presentations and also staffed a booth. Joe's Saturday presentation was entitled "Weather Awareness" and basically described National Weather Service (NWS) marine products and responsibility and gave tips on to what to watch for when at sea or on the Chesapeake Bay. On Sunday, Paul, Joe and former OPC forecaster Lee Chesneau teamed up to go live on line and demonstrate the capabilities of the OPC and NWS web pages. This was the thirteenth year the OPC has been invited to take part. Many of the participants will be sailing this summer in the Annapolis to Newport Race or heading across the North Atlantic and

will be relying on OPC Offshore, High Seas and graphical products. The USNA Safety At Sea Seminar remains one of the best opportunities for OPC forecasters and customers to interact.

Boat shows –

Atlantic City Boat Show

Ming Ji and Ross Van Til, OPC Marine Forecaster, worked with staff from Weather Forecast Offices (WFO) Mt Holly, NJ and Upton, NY to maintain booth coverage during the Jan 31-Feb 4 Atlantic City Boat Show. Large displays from OPC and WFO Mt. Holly were set-up side by side, yielding an impressive combined presentation. A laptop/monitor with live internet, allowing booth operators to display various NWS web sites, added to the effectiveness of the presentation. Also, several NWS/OPC handouts were available. The show was very well attended, and several dozen users of NWS/OPC products stopped by to chat, pick up information, and to share ideas on various marine related issues.

Washington D.C. Boat Show

Four members of the OPC staff, marine forecasters Robert Banks, Hugh McRandal, George Bancroft and OPC Director Ming Ji, participated in the Washington Boat Show from February 14 - 19. They helped staff a booth arranged by and shared with Weather Forecast Office (WFO) Sterling, VA. The OPC display setup was used as a backdrop in the booth and attracted a significant number of boat show attendees. Many of them expressed interest in OPC and noted that they keep the OPC web site permanently bookmarked on their web browser.

Seattle Marine Expo

Ming Ji attended the Pacific Marine Expo in Seattle, WA from Nov. 15-17. He joined NOAA personnel from NOS, NMFS and NWS personnel from WFO Seattle, Anchorage and Juneau to staff the NOAA booth at the Expo. The Pacific Marine Expo attracts deep water mariners from Alaska to Australia, many of them are OPC customers. Ocean surface currents and SST are the frequently requested information by the Expo visitors.

Miami Boat Show

In June, Paul Vukits participated in the Miami Boat Show with staff members of TAFB and Miami WFO to staff the NWS booth at the show during his three week synergy training at TAFB.

3.3 Outreach to partners

MITAGS

Ming Ji, Dave Feit, and Joe Sienkiewicz attended the grand opening event of the Marine Simulation Technology Center at the Maritime Institute of Technology and Graduate Studies (MITAGS), Linthicum, Maryland, on March 26. Among the new or improved technologies

displayed were full-mission bridges and towing simulators. Both of these systems realistically display the shipboard environment in a number of different ports, harbors, and offshore situations. Of particular interest was the capability of simulating and displaying real-time weather information in the training environment.

PMOs and Ship Visits

On April 12, Ming Ji visited the Norfolk PMO, Mr. Pete Gibino, and accompanied him to visit merchant ships in Norfolk ports. On June 21, Ming Ji visited the New York City PMO located in South Amboy, NJ. Ming met with PMO Jim Luciani and accompanied him to visit merchant ships in several NJ and NY ports. On Oct. 14, Ming Ji accompanied Seattle PMO, Mr. Pat Brandow, to visit merchant ships in port of Seattle and port of Tokoma.

Ship visits by PMOs include recruiting ships into the voluntary observing ships (VOS) program, calibrating barometers on board ships if necessary, disseminating OPC analysis and forecasts to ships, and alerting ship masters that the USCG is seeking public comments on a USCG proposal to terminate HF radio fax broadcasting. The USCG's announcement is available only on internet, but most of the merchant ships do not have internet access while at the sea or in ports. PMO's ship visitations alerted many ships to the USCG proposal and encouraged the ship masters to respond to the USCG proposal via their shipping companies or agents. The NWS PMO program is a vital link between OPC and high seas marine warnings and forecasts and one of OPC's important customer - the commercial shipping sector. PMOs ensure OPC products get to shipping customers on time, useful to the customers, and obtaining feedbacks from merchant ship customers on needs to improve OPC services.

NOAA/NOS ORR and WFO Seattle

On Oct. 13, during the trip to Seattle for the Pacific Marine Expo, Ming Ji visited NOAA HAZMAT and NWS WFO Seattle, both are located in the Sand Point NOAA facility in Seattle, WA. At NOS/Office of Response and Restoration (HAZMAT), staff members briefed Ming Ji on NOAA HAZMAT operations and requested for future OPC products on Gulf Stream analysis and forecasts. The visit to WFO (Seattle) resulted in the realization that OPC needs to continue work with OS-21 to "push" for the awareness of OPC gridded significant wave height product that is available on AWIPS but lack of awareness by WFOs.

USCG Operations Center

On August 1, Ming Ji and Dave Feit visited the USCG in Martinsburg, West Virginia. The purpose of the visit was to learn the scope and functions of the Automated Mutual-assistance Vessel Rescue (Amver) system. The visit was hosted by the Amver program leader, Mr. John Bowman. Amver is a voluntary reporting system for ship positions in real time from one to four times daily to facilitate search and rescue (SAR) efforts on the high seas. USCG built and operates the Amver system that serves all ships and coordinates SAR world wide.

OPC visitors learned how Amver is connected to the global surface marine observations. Most of the surface marine observations are collected by ships participating in the voluntary observing ship (VOS) program. Participating ships take regular marine observations while at

the sea and report observations through the Amver system in conjunction with their position reporting. Before ship position reports arrive at Martinsburg, the reports pass through a number of meteorological/oceanographic operational centers around world that would peel off marine/meteorological observations information from the Amver messages and send the marine/met information onto the Global Telecommunications System (GTS) for operational forecasting centers to use. Examples of these centers include NOAA's Amver seas, and U.S. Navy's Fleet Numerical Meteorology and Oceanography Center.

During the visit, Amver technical staff gave the OPC visitors a presentation on Amver basics. In addition, the Amver staff also gave a presentation on USCG's Self Locating Datum Marker Buoys which are deployed by USCG during any search and rescue event. These buoys report in real time local currents information which could be a very useful data source for OPC to validate HYCOM. Ming Ji gave a presentation on OPC mission, products and services and important OPC partnerships with USCG in disseminating OPC products. OPC visitors learned that National Weather Service (NWS) model products are being routinely downloaded by USCG for SAR applications. It was apparent that there are a number of potential NWS products that could enhance USCG's needs for search and rescue operations. OPC will follow up with USCG SAR operations to establish collaborative efforts by providing USCG the OPC gridded winds and wave height forecasts.

Naval Oceanographic Office

Ming Ji, Joe Sienkiewicz, and Robert Daniels visited Naval Oceanographic Office (NAVO) at Stennis Space Center on April 26 while attending the HYCOM workshop at NRLSSC. The visit was hosted by the Warfighting Support Center (WSC) of the NAVOCEANO. Mr. James Rigney, Director of WSC and his staff members provided presentations on WSC's operational ocean forecasting operations. OPC visitors also toured the Major Shared Resource Center (MSRC) for supercomputing that is housed and managed by NAVO, and met with NAVO's executive officer, Capt. Brian Brown, U.S. Navy, and Technical Director, Mr. Charles Martinek. The Commanding Officer, Capt. John Cousins was out of town. OPC visitors were shown NAVO's ocean forecasting operations and were informed that the Navy's operational global ocean forecast model output will become available for broad community to access in May 2007.

NOAA NDBC

Ming Ji, Joe Sienkiewicz, and Robert Daniels visited National Data Buoy Center (NDBC) at Stennis Space Center on April 26 while attending the HYCOM workshop at NRLSSC. Paul Moersdorf, Director, NDBC, spent about 1.5 hours with OPC visitors. He described to visitors NDBC operations, and discussed issues ranging from data quality control, ship time for service buoys, monitoring the observing network, and the Marine Weather Program. Of particular interest to OPC is quality control effort at both NDBC and OPC. We will follow up on this subject and looking for potential collaboration and coordination for possible enhancement to OPC operations.

4. Special Activities

OPC Support for NESDIS Field Experiment

Joe Sienkiewicz, using available satellite, observational, and numerical model forecast data from his desk in Camp Springs, MD helped guide a NOAA P-3 aircraft into strong winds in an intensifying winter ocean storm south of Nova Scotia on Friday, January 26. Through satellite communication links aboard the aircraft, Joe was able to "converse" with NESDIS scientist and Principal Investigator Dr. Paul Chang via email and help guide the P-3.. The researchers were testing an airborne dual frequency scatterometer developed by the University of Massachusetts. Results are preliminary, but both the scatterometer and a GPS dropsonde observed 70 knots of wind approximately 240 nautical miles southeast of Halifax, Nova Scotia. The P-3 was coordinating an overpass of the EUMETSAT METOP satellite with the ASCAT scatterometer on the aircraft.

In support of the ongoing NESDIS experiment using National Oceanic Atmospheric Administration (NOAA) P-3 N42RF, Joe Sienkiewicz, Joan Von Ahn (NESDIS StAR and OPC), and Zorana Jelenak (NESDIS StAR/UCAR Visiting Scientist) provided forecast information and made pre- and in-flight recommendations to sample the areas of highest winds in several winter ocean storms. Joe, Joan and Zorana worked with NESDIS Principal Investigator, Paul Chang for flights on February 2, 6, 8 and 9 and communicated through email via satellite communications on the P-3. On the 2nd, based on their recommendations, the P-3 investigated an area of winds over a warm eddy north of the Gulf Stream and about 45 nautical miles southeast of Sable Island. The flight was quite successful with the P-3 instrumentation observing 50 to 55 knots over the warm eddy. The February 8 and 9 flights were extremely successful as the P-3 was able (for the first time) to detect extreme winds of hurricane force intensity coincident with satellite overpasses. The P-3 uses GPS dropsondes, a Step Frequency Microwave Radiometer, and IWRAP dual frequency scatterometer to measure the surface winds.

Special Weather Support for U.S. Navy

From November 1 - 17, OPC provided twice daily marine weather forecast support for a US Navy Research and Development project field testing off San Diego coast. The testing site was within the OPC offshore zone forecast area of responsibility. OPC provided twice daily wind and wave height analysis and forecast information for the testing area. These specialized forecasts were based on OPC's operational forecasts. The specialized forecasts were provided in text format and required an acceptable level of additional OPC resources to produce. They were transmitted to the Navy via email.

At the conclusion of the testing period, the Navy program director, Mr. John Curtis, wrote OPC: "... The information you have provided us has been of tremendous value and we sincerely appreciate your help. The twice daily forecasts were exactly what we needed ..."

5. Media Interactions

Joe Sienkiewicz answered questions regarding winds and currents over the North Atlantic for Science World Magazine. Joe's interview will appear in an article concerning the single handed passage by a 14 year old boy, Michael Perham, from Gibraltar to Antigua November 2006 to early January 2007. The route was designed to take advantage of the favorable Canary and North Equatorial Currents and the predominant northeasterly trade winds. In the interview Joe explained that Michael's route was one favored by mariners in the era of sail and was south of the main storm track. He also explained that Michael would have experienced swell generated by North Atlantic winter cyclones and squalls of tropical convection. The article will appear in the May issue of Science World.

On May 31, at 11:30am, Dave Feit was interviewed live on the G. Gordon Liddy radio show. He provided information about the weather characteristics in the North Atlantic associated with the beginning of the hurricane season. Dave emphasized that mariners intending to do a transatlantic crossing at this time should be highly aware of the marine weather situation and should monitor OPC marine products on a routine basis.

On July 12, Joe Sienkiewicz was interviewed Molly Bentley of the BBC Radio News concerning the use of QuikSCAT ocean surface winds at the OPC. The interview addressed issues of the use and quality of QuikSCAT winds to more specific questions about the potential loss of QuikSCAT and impact on OPC operations. Ms. Bentley planned to interview other experts within National Oceanic Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) and publish her story on the BBC Radio News web site.

Joe was also interviewed by Maya Bell of the Orlando Sun Sentinel on July 13 regarding the operational use of QuikSCAT at the OPC. Ms. Bell's questioning was centered on the impact of QuikSCAT quality winds on the OPC warning and forecast process. Specifically she wanted to understand what QuikSCAT has meant to operational marine forecasting. Joe gave examples of the impact on OPC operations including a discussion on the Gulf Stream effects on wind and the ability to identify warning category winds.

6. Special Visitors

A contingent from the U.S. Coast Guard Office of Information Resources visited the Ocean Prediction Center (OPC) on May 25. The group comprised LCDR Alan Yelvington, LT Joe Lally, Lt Wade Gough, and LT James Corbett. Dave Feit and Joe Sienkiewicz provided a briefing about OPC operations and a tour of the operational facility. Among the important issues addressed concerned developing closer contacts and relations between the Coast Guard and OPC and to seek ways OPC can increase support to Coast Guard operations. As a result of this meeting, LCDR Yelvington will seek input from various Coast Guard operational functions about how most effective use can be made of OPC capabilities.

On July 16, OPC was visited by Mr. John Englander, Ms. Rosa Maulini, and Mr. Geoff Morrison, all of the International Seakeepers Society. They were given a tour of the Center along with a briefing and detailed demonstration of the OPC observation quality control system. The demonstration focused on how the observations provided by Seakeeper platforms are integrated into the quality control program. An accompanying film crew recorded an interview with the National Centers for Environmental Prediction (NCEP) Director, Louis Uccellini, who explained the value of in situ marine observations to the forecast process. This was followed by the crew taking video footage of OPC operations. The video recordings will be used in an informational Seakeepers DVD.

Mr. David Wartman of Environment Canada visited the OPC on Monday October 22, 2007. Mr. Wartman is the Director, Meteorological Services of Canada Atlantic Operations and Chief of Marine Services for all of Environment Canada. Joe Sienkiewicz and Wayne Weeks of NWS Headquarters had an extended discussion on the challenges of operational forecasting, future products and possible collaboration. Mr. Wartman was given a tour of National Centers for Environmental Prediction (NCEP) operations in the National Oceanic Atmospheric Administration (NOAA) Science Center.

7. Awards

Jim Kells, Marine Forecaster, received the NWS 2007 Regional Level Cline award named after Isaac Cline who warned the residents of Galveston, Texas about an impending hurricane in 1900. Jim developed a variety of new methods of using meteorological data and processes. This has led to significantly improved effectiveness and efficiency for OPC operations. His efforts have also greatly improved the reliability and strength of the OPC product suite.

Joe Sienkiewicz received the 2007 Department of Commerce Gold Medal for leadership. Joe was recognized for leading NOAA's operational use of NASA's QuikSCAT satellite to produce more accurate forecasts and warnings of marine and coastal weather. The Gold Medal was a group award. The team consisted of eight members from both NOAA NESDIS and the NWS.

8. OPC Staff as of December 31, 2007

Administration

Ming Ji, Director
Kevin McCarthy, Deputy Director
Crystal Rickett, Administrative Officer
Terri Borza, Secretary

Ocean Forecast Branch

David Feit, Branch Chief
Senior Marine Forecasters: Robert Oszajca, Scott Prosis, Jim Clark, Douglas Scovil,

Paul Vukits

Marine Forecasters: Kevin Achorn, George Bancroft, Robert Banks, Katherine Bell, Victor DeJesus, Joseph Czarniecki, James Kells, David Kosier, Hugh McRandal, Frank Musonda, David Mills, James Nolt, Michael Rowland, Todd Shaw, Ross Van Til,

Ocean Applications Branch

Joseph Sienkiewicz, Acting Branch Chief/Science and Operations Officer
Curt Janota, Meteorologist Developer

Contractors: Robert Daniels/IMSG, Yan Hao/IMSG

Personnel Changes

Edward Schoenberg, Senior Marine Forecaster, retired January
Jim Clark, Marine Forecaster, was promoted to Senior Marine Forecaster in April
Frank Musonda, Marine Forecaster, became an OPC staff member in November
Joan Von Ahn, Meteorologist Developer, transferred to the Office of Climate Water and Weather Services in November



Senior Marine Forecaster Scott Prosis working on the Atlantic Regional Forecast



Joe Sienkiewicz, fourth from right, being honored for receiving the 2007 Department of Commerce Gold Medal.