57th Annual Honor Awards Program

2005

United States Department of Commerce

Fifty-seventh Honor Awards Program

Andrew W. Mellon Auditorium
1301 Constitution Avenue, NW

December 6, 2005

Introduction
Honorable David A. Sampson
Deputy Secretary

Presentation of Colors
Armed Forces Color Guard

National Anthem
Marine Brass Quintet

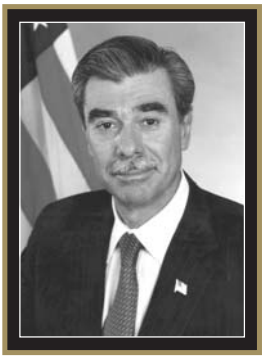
Address
Honorable Carlos M. Gutierrez
Secretary of Commerce

Announcement of Awards
Honorable Otto J. Wolff
Chief Financial Officer and
Assistant Secretary for Administration

Presentation of Gold and Silver Medals
Secretary Gutierrez assisted by Department Officials

Closing Remarks
Honorable David A. Sampson
Deputy Secretary

Soloist
Paul Bell



MESSAGE FROM THE SECRETARY

Public service is a great privilege and responsibility. At the U.S. Department of Commerce, our historic mission is to promote economic growth and opportunity. This is a broad mandate, which encompasses a wide range of critical services that directly affect the welfare and security of the American people.

The men and women of the Department have proudly accepted this mandate. They have demonstrated a commitment to a strong, competitive and safer America through programs and policies that foster business development, job creation, environmental stewardship and cutting-edge research and technology.

President Bush said those who serve in government should dedicate themselves to great goals: to make an impact, to achieve results and to leave a record of excellence. The 2005 Honor Awards celebrates the accomplishments of those whose caring, talent, work ethic and leadership have met these goals and set the highest standards for service to the Department and the nation.

It is with great pride that I salute the recipients of the U.S. Department of Commerce 2005 Honor Awards.

Carlos M. Gutierrez

Gold Medal

This award, the highest honorary award given by the Department, is granted by the Secretary for distinguished performance characterized by extraordinary, notable, or prestigious contributions that impact the mission of the Department and/or one operating unit and that reflect favorably on the Department.

Silver Medal

This award, the second highest honorary award given by the Department, is granted by the Secretary for exceptional performance characterized by noteworthy or superlative contributions that have a direct and lasting impact within the Department.

To warrant a Gold or Silver Medal, a contribution must focus on qualitative and quantitative performance measures reflected in the Department's Strategic Plan and be identified in one of the following areas:

leadership

personal and professional excellence

scientific/engineering achievement

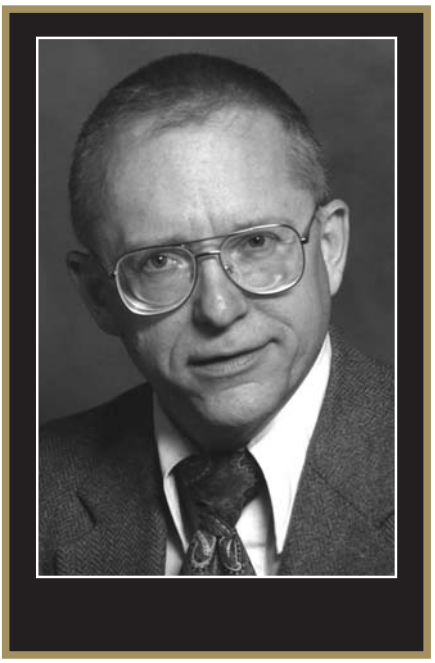
organizational development

customer service

administrative/technical support

heroism

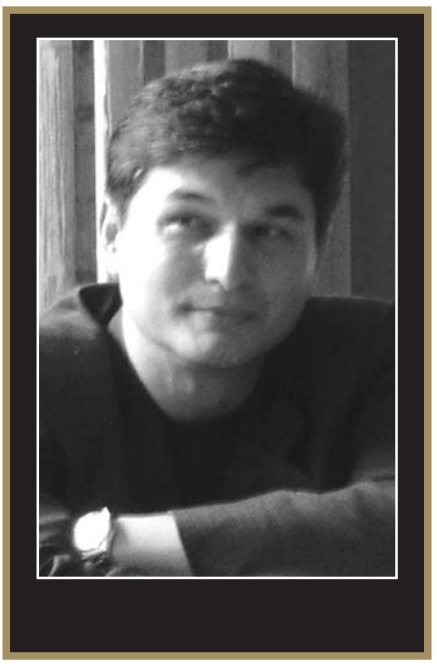
2005 NOBEL PRIZE IN PHYSICS



Dr. John L. Hall

National Institute of Standards and Technology
Technology Administration

John Hall shares the 2005 Nobel Prize in Physics for his contributions to the development of laser-based precision spectroscopy, including the optical frequency comb technique that allows laser frequency measurements accurate to 1 part in 10^{15}. A NIST fellow and a fellow of JILA, a joint research institute of NIST and the University of Colorado, Hall developed methods for improving laser stability and the precision and accuracy with which lasers can produce a specific, sharp frequency or color of light. These improvements enabled a broad range of laser applications, including precision spectroscopy for physical and chemical analysis, new tests of fundamental physical laws and constants, time and length metrology, and fiber-optic communications.



Presentation of Gold Medal
for
Personal and Professional Excellence
to:

Gregory Michael Wong
Senior Commercial Officer
International Trade Administration

for his selfless dedication to service in Iraq

Mr. Wong is honored for his critical role in supporting U.S. commercial objectives in Iraq. As the first Senior Commercial Officer in Baghdad, Mr. Wong showed extraordinary dedication and skill under extremely dangerous conditions in the advancement of the Administration's national objectives. During his one-year tour, he worked tirelessly to support U.S. companies in their efforts to enter the Iraqi market. Mr. Wong was instrumental in bridging the gap between the Coalition Provisional Authority and the Iraqi interim government providing expertise on trade policy and commercial rules of law. The compassion and integrity he displayed gave many Iraqis highly positive impressions of Americans that will pay dividends for American businesses for years to come. Mr. Wong has, through his service in Iraq, brought high credit to the Department of Commerce.

BUREAU OF INDUSTRY AND SECURITY

Gold Medal

PERSONAL AND PROFESSIONAL EXCELLENCE

James Brigham
David Poole
Special Agents

Office of the Assistant Secretary for Export Enforcement

Bureau of Industry and Security

Special Agents Brigham and Poole are recognized for their outstanding work in conducting the Karni/Khan investigation – one of the Commerce Department's most significant ever investigations and criminal prosecutions involving the proliferation of Weapons of Mass Destruction. The two agents uncovered a web of illegal exports to Pakistan of U.S. dual-use goods with nuclear weapons applications and conducted and coordinated extensive investigations that led to the smashing of this network.

Norma Curtis
David Severson
Special Agents

Richard Modesette
Julie Salcido
John Sonderman
John Wanat
Supervisory Special Agents

Office of the Assistant Secretary for Export Enforcement

Melissa Mannino
Supervisory Attorney

Office of the General Counsel

Office of the Assistant Secretary for Export Enforcement

Bureau of Industry and Security

The Ebara Enforcement Team is recognized for the successful completion of a criminal and administrative case involving a global conspiracy to illegally and covertly export submersible pumps to Iran, a state sponsor of terrorism, in violation of the U.S. embargo. The team's work resulted in Ebara and a senior official of that company pleading guilty to criminal charges; assessment of a $6.3 million criminal fine, the second-highest criminal fine ever obtained in a Commerce export case; and imposition of a total of $211,000 in administrative penalties.

Silver Medal

PERSONAL AND PROFESSIONAL EXCELLENCE

Caroline Andrews
Computer Specialist

Tracey O'Donnell
Supervisory Export Policy Analyst

Office of the Assistant Secretary for Export Administration

Bureau of Industry and Security

The group is recognized for their outstanding work in developing the Chemical Weapons Convention (CWC) Implementation Assistance Program (IAP). The IAP is an automated electronic tool that governments can use to identify and implement fundamental responsibilities under the CWC, which prohibits the development, production, stockpiling, and use of chemical weapons. The tool is now being used by many of the 164 State Parties to the CWC and has become a critical component in efforts by the United States to halt the proliferation of chemical weapons.

ECONOMIC DEVELOPMENT ADMINISTRATION

Silver Medal

LEADERSHIP

Mary C. Pleffner
Deputy Assistant Secretary for Management Services and Chief Financial Officer

Benjamin Erulkar
Chief Counsel

Jedd B. Vertman
Attorney Advisor

Office of the Assistant Secretary for Economic Development

Jerry Foster
Attorney Advisor

Donald C. Huff
Supervisory Civil Engineer

Harry P. Paradice, Jr.
Supervisory Community Planner

Thomas A. Pellegrino
Economic Development Program Specialist

Lola B. Smith
Supervisory Public Works Program Specialist

Willie C. Taylor
Economic Development Program Specialist

Asa R. Williams
Civil Engineer

Atlanta Regional Office

Economic Development Administration

The group is honored for the rapid identification and timely deployment of financial assistance to the State of Florida for economic recovery in response to a series of hurricanes in

2004. Beginning early August 2004 with Tropical Storm Bonnie, through Hurricanes Charley, Jeanne, and finally, Ivan on September 16, 2004, Florida suffered catastrophically through an unprecedented series of natural disasters. Hurricanes measuring as great as Category 4 resulted in loss of life, property destruction, and severe economic dislocations. The Economic Development Administration team formulated an innovative and rapid response resulting in $4 million in federal financial assistance being made available to jump-start economic recovery in severely affected communities.

ECONOMICS AND STATISTICS ADMINISTRATION

Gold Medal

LEADERSHIP

Thomas Zabelsky
Supervisory Statisticial Economist

U.S. Census Bureau

Economics and Statistics Administration

Mr. Zabelsky is cited for implementing the Quarterly Service Survey (QSS), the first new principal economic indicator in 30 years, providing vital source data to the Bureau of Economic Analysis to measure the Gross Domestic Product (GDP). In 13 months, Mr. Zabelsky assembled resources, consulted with data suppliers and users, and began data collection for the QSS. His exceptional project management of multiple cross-organizational teams enabled him to adeptly face this myriad of customer, statistical, logistical, and personnel challenges. The QSS data reduces revisions in the Bureau of Economic Analysis' quarterly GDP data and give the Federal Reserve Board and Council of Economic Advisers more timely data to assess economic performance.

Silver Medal

LEADERSHIP

Charles Funk
Supervisory Survey Statistician

U.S. Census Bureau

Economics and Statistics Administration

Mr. Funk is cited for leadership and technical expertise in developing statistical measures of capital expenditures by domestic businesses. He is also noted for visionary contributions that will have a direct and lasting effect on official measures of information and communications technology infrastructure that in recent years supported economy-wide productivity gains and fueled the growth in electronic commerce. Without these new data it would not be possible to fully analyze the changing domestic economy or to measure their effect on our national growth and productivity.

PERSONAL AND PROFESSIONAL EXCELLENCE

John Ruser
Associate Director For
Regional Economics

Robert Brown
Kathy Albetski
Sharon Carnevale
James Zavrel
John Rusinko
Supervisory Economists

Matthew Vonkerczek
John Laffman
Mauricio Ortiz
Economists

Bureau of Economic Analysis

Economics and Statistics Administration

The team is cited for responding to the needs of users by providing more detailed and timely state and local area personal income data. Geographic detail was expanded from 314 communities to 934, almost tripling the number of cities now able to use personal income for budget and planning purposes. The accelerated release of state personal income to three months after the quarter helps state governors and legislatures to quickly respond to budget issues. New estimates of compensation provide economic development officials with better information to support growth of their communities.

INTERNATIONAL TRADE ADMINISTRATION

Gold Medal

LEADERSHIP

Commercial Service Athens, Greece

Trade Promotion and U.S. & Foreign Commercial Service

International Trade Administration

The Commercial Service (CS) in Athens, Greece is cited for leadership, professional performance, and success in winning business and U.S. exports for American companies for the 2004 Olympic Games. CS Greece had to devise and execute a strategy for success in an anti-American climate, and a chaotic business environment that is extremely difficult to navigate under the best of circumstances. Greece achieved full accession to the European Union in 2001, and the political as well as commercial pressure on the Greek market and Greek public officials to 'buy-EU' was overwhelming. CS Greece's efforts resulted in American business interests being the largest and most pronounced foreign commercial presence at the 2004 Olympic Games in Greece, with contracts worth about $1 billion.

Silver Medal

LEADERSHIP

Belinda Collins
Deputy Director, Technology Services

Elisabeth Gomez
Social Scientist

Mary Saunders
Supervisory Social Scientist

Carmina Londono
Supervisory Physical Scientist

National Institute of Standards and Technology

Gwen Lyle
Louis Santamaria II
Commercial Officers

Brian McNamara
International Trade Specialist

Trade Promotion and U.S. & Foreign Commercial Service

Heidi Hijikata
Jennifer Stradtman
International Trade Specialists

Manufacturing and Services

International Trade Administration

The group is recognized for their vision and leadership of a cross-bureau effort to implement the Department's Standards Initiative (SI). The SI aims at maximizing competitiveness and increasing U.S. exports by eliminating standards-related market barriers that undermine trade and threaten the international competitiveness. Standards affect 80 percent of global trade and significantly impact competitiveness worldwide. Industry views standards as the principal non-tariff barrier to expanding exports. In the two years since the launch of the SI, significant improvements have been made across the Department to improve internal coordination and to be more responsive to private sector needs in this area of trade-related standards issues.

James Fluker
Commercial Officer

Samuel Newman
Special Assistant

Trade Promotion and U.S. & Foreign Commercial Service

Erik Lenz
International Trade Specialist

Manufacturing and Services

International Trade Administration

The group is recognized for their tenacious work in opening new markets for U.S. exporters. Specifically, the group worked for more than three years to assist a U.S. exporter to open up the Railways Sector of the Former Soviet Union (FSU) through the first significant sale of locomotive modernization kits in the FSU. The group helped introduce the first non-sovereign export credit to a Kazakhstani non-bank company. This contributed to direct sales of over $200 million of annual U.S. merchandise exports to Kazakhstan. These and other efforts assisted U.S. exporters to get access to this major market, and provide new export financing tools, as well as creating and keeping jobs in the U.S. that otherwise would have gone overseas.

David Fulton
Senior Commercial Officer

Trade Promotion and U.S. & Foreign Commercial Service

David Bisbee
International Trade Specialist

Market Access and Compliance

International Trade Administration

The group is cited for leadership in strengthening a foreign government's commitment to improve protection for Intellectual Property (IP) rights and to begin a public campaign to eliminate pirate vendors from retail shopping malls. The Philippines has been the subject of criticism for lack of commitment to enforce IP rights laws and protect U.S. interests. The Office of Management and Budget issued an unprecedented public warning that mall owners would face criminal liability for sale of pirated goods on their premises, and the Under Secretary for International Trade urged mall owners to include anti-piracy clauses in leases. As a result of their efforts, the Philippine government increased its public commitment to IP rights enforcement.

Michelle O'Neill
Acting Under Secretary of Commerce for Technology

Technology Administration

Patricia Sefcik
Supervisory Economic Policy Analyst

Arrow Augerot
Jeffrey Rohlmeier
International Trade Specialists

Manufacturing and Services

William Yue
Attorney Advisor

Office of the General Counsel

International Trade Administration

The group is cited for spearheading U.S. government, industry, and international efforts to create the Asia-Pacific Economic Cooperation's (APEC) Privacy Frame, the first agreement of its kind for the region. Over a two year period, the Commerce group worked creatively and tirelessly with all stakeholders. The team's efforts reached fruition with the endorsement of the Framework by APEC Ministers and Leaders. The APEC Privacy Framework will establish a consistent approach to privacy across APEC members economies, while also avoiding the creation of unnecessary barriers to information flows.

PERSONAL AND PROFESSIONAL EXCELLENCE

Import Administration
Office of the Chief Counsel

International Trade Administration

The organization's are recognized for their critical role in enforcing U.S. unfair trade laws as they relate to the domestic industry producing frozen warmwater shrimp. Over the past several years, the jobs of thousands of workers in the U.S. shrimp industry were jeopardized by an influx of low-priced imports from Asia and Latin America. Their efforts allowed the Department to put into place measures which afforded legal and legitimate protection, desperately needed by the U.S. shrimp industry, to a large number of small business owners who were facing severe economic hardship because of unfair competitive practices. The result of their efforts leveled the playing field in this area and helped to save many small businesses from bankruptcy.

CUSTOMER SERVICE

Trade Promotion and U.S. & Foreign Commercial Service
Office of the Chief Information Officer
Market Access and Compliance

International Trade Administration

The team is recognized for its formulation and implementation of the China Business Information Center initiative - an innovative and extraordinary contribution to client service and an integral part of the Department's long-term China Strategy. The team melded together technical skills, marketing skills, and specialized knowledge of China to launch the first comprehensive U.S. Federal Government resource for trade information on China. The China Business Information Center introduced creative approaches to client service; enhanced the competitiveness of small and medium-size U.S. exporters to China; and demonstrated the value of teamwork across ITA bureaus.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Gold Medal

LEADERSHIP

Holly Price
Resource Protection Coordinator

National Ocean Service

National Oceanic and Atmospheric Administration

Dr. Price is honored for the development and implementation of the Agriculture and Rural Lands Water Quality Action Plan (Ag Plan) for the Monterey Bay National Marine Sanctuary. Through implementation of the Ag Plan, thousands of farmers and ranchers have enrolled in courses, developed conservation plans, and attended workshops run by the agriculture industry to learn new land-use practices on farms. Their actions prevented over 250,000 tons (annually) of soil eroding from farms and carrying pollutants such as pesticides and nitrates into the ocean resulting in improved sanctuary health.

Kenneth Sherman
Research Fishery Biologist

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

Dr. Sherman is honored for his international leadership in establishing a global network of Large Marine Ecosystems (LMEs) using interdisciplinary scientific attributes rather than single species or geo-political boundaries. LME coastal areas and oceanic regions protrude from river basins and estuaries to seaward boundaries of continental shelves and produce 90 percent of the world's fish catch. Most of the ocean's degraded habitat and coastal pollution also are found in LMEs. Due to Dr. Sherman's foresight, international efforts are underway in LMEs to reduce degradation, pollution, habitat loss, and over-fishing.

PERSONAL AND PROFESSIONAL EXCELLENCE

Jeffrey Ray
James Cassin, Jr.
Robert Gregory
Criminal Investigators

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

Special Agents Ray, Cassin, and Gregory are cited for a long-term, multifaceted, international criminal investigation to substantiate allegations suggesting that illegal South African toothfish and lobsters were being imported and sold in the U.S. in violation of several U.S. and foreign statutes such as the Lacey Act. As a result of their investigative efforts, the U.S. federal court in New York levied historic fines and penalties against Hout Bay, a South African company. The company paid a $4 million fine and lost fishing rights in that country. Conviction of U.S. partners resulted in jail sentences for all principles, forfeiture of $1.5 million in proceeds, and sale of their Maine processing plant. This case of marine resource enforcement and international investigative collaboration set a landmark precedent for the Lacey Act.

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Eddie N. Bernard
Director, Pacific Marine Environmental Laboratory

Frank I. Gonzalez
Supervisory Oceanographer

Hugh Milburn
Leader, Engineering Development Division *(retired)*

Christian Meinig
Director of Engineering

Harold O. Mofjeld
Oceanographer

Marie Eblé
Research Scientist

Scott Stalin
Engineer

Office of Oceanic and Atmospheric Research

National Oceanic and Atmospheric Administration

The group is recognized for research and development of a NOAA tsunami forecasting capability. NOAA is responsible for providing tsunami warnings to the US. Past warnings were based on earthquake size and coastal tide data that provided poor information about an approaching tsunami. The group developed the tsunameter to measure tsunamis and transmit the data to NOAA's Tsunami Warning Centers in real time. The tsunami scientists developed forecast models to interpret the measurements and predict trans-oceanic tsunami propagation and the site-specific inundation of coastal communities. Together, these two new capabilities produce a fast, accurate, reliable forecast of the tsunami impact on coastal communities and reduce costly and dangerous false alarms. The forecasting methodology was tested using several past tsunamis with outstanding results that were published in a peer-reviewed scientific journal in April 2005.

John Cassidy
Information Technology Specialist

Mary Culver
Mark Vincent
Physical Scientists

Richard Stumpf
Michelle Tomlinson
Oceanographers

National Ocean Service

Kent Hughes
Oceanographer

National Environmental Satellite, Data, and Information Service

National Oceanic and Atmospheric Administration

The group is honored for developing and implementing the Harmful Algal Bloom (HAB) Forecasting System to forecast harmful algal blooms in the Gulf of Mexico. The group's vision and expertise transferred research into an operational product that supports local and state management efforts to more effectively protect human health and local economies by closing beaches and shellfish beds when necessary. Over 200 HAB bulletins have been published. Subscribers in federal, state, and local agencies use the bulletins to guide sampling and support predictions of likely impacts. The HAB Forecasting System allows coastal managers to more effectively manage beaches, shellfish beds, and endangered species, thereby protecting human health, ecological priorities, and local economies.

Mitchell Goldberg
Supervisory Physical Scientist

Fuzhong Weng
Supervisory General Physical Scientist

Larry McMillin
Meteorologist

National Environmental Satellite, Data, and Information Service

John Derber
Russell Treadon
Meteorologists

National Weather Service

National Oceanic and Atmospheric Administration

The group is recognized for developing and testing scientific techniques to assimilate the observations of advanced satellite instruments into NOAA operational numerical weather prediction models. The team developed innovative techniques for rapidly processing and extracting information from massive amounts of new, high-quality satellite observations of the atmosphere. Tests show that the new data will significantly improve the accuracy and extend the range of weather predictions. As a result of the group's accomplishments, NOAA is better prepared for uses of these data to improve operational weather forecasts at least one year earlier after the satellite's launch and realize a 20 percent productivity increase, assuming a satellite life span is typically 4 to 5 years.

Hua-Lu Pan
Shrinivas Moorthi
Yu Tai Hou
Wanqiu Wang
Jae Kyung Schemm
Wesley Ebisuzaki
Huug Vandendool
Meteorologists

Suranjana Saha
Physical Scientist

David Behringer
Diane Stokes
Oceanographers

National Weather Service

National Oceanic and Atmospheric Administration

The group is honored for implementing a new Climate Forecast System for Seasonal-to-Interannual (S/I) prediction one year ahead of schedule, with groundbreaking results. The goal was to develop an advanced technology system producing superior results to all incumbent models and to obtain sufficient computing resources for the system to become operationally useful. The group implemented an atmosphere-ocean coupled Climate Forecast System (CFS) for S/I climate prediction. The CFS is a fully-coupled, dynamical system representing critical weather and climate interactions between the earth's oceans and atmosphere. Historical forecasts demonstrated the CFS to be at least as accurate as the best statistical models for S/I forecasting, a breakthrough for dynamically-based models.

CUSTOMER SERVICE

Russell Page
Meteorologist

National Weather Service

National Oceanic and Atmospheric Administration

Mr. Page is honored for expert meteorological advice in directing search and rescue teams to recover four lost seal hunters on Alaska's arctic coast. On July 27, 2004, four seal hunters were reported missing in the Beaufort Sea. Initial search and rescue efforts were unsuccessful and hopes that the hunters would be found alive in the harsh environment were waning. With time running out, the Disaster Coordinator for the North Slope Borough (NSB) contacted Mr. Page at the NWS Forecast Office in Anchorage. His analysis of satellite imagery and wind fields showed the NSB was searching in the wrong area. Heeding his advice, the NSB shifted their search efforts and found the lost hunters exactly where Mr. Page had suggested.

Tropical Prediction Center/National Hurricane Center
Southeast River Forecast Center
Weather Forecast Offices:
Atlanta, Georgia
Jacksonville, Florida
Key West, Florida
Melbourne, Florida
Miami, Florida
Tallahassee, Florida
Tampa Bay, Florida

National Oceanic and Atmospheric Administration

The organizations are recognized for providing life-saving weather warnings during hurricanes which impacted Florida and Georgia in August and September 2004. The unprecedented number of hurricanes produced hurricane force winds, storm surges, flooding rains and tornadoes. The organization's efforts demonstrated that providing effective weather information to a growing, mobile population requires innovation and flexibility in order to ensure the widest dissemination of the warnings. During the 6-week period, the NWS website received more than 3 billion hits. The outstanding efforts of these operational groups, particularly their interactions with the media and emergency management officials, saved lives and helped first responders plan and act quickly to mitigate the storms' impacts.

Weather Forecast Offices:
Los Angeles/Oxnard, California
San Diego, California

National Oceanic and Atmospheric Administration

The NWS Forecast Offices, Los Angeles/Oxnard and San Diego, are honored for providing life-saving warning and weather services during one of the most massive rain and flood events to hit Southern California since the late 1800s. Their innovative planning tools, including task force development plans, detailed outlooks, forecasts, warnings, and multi-agency briefings allowed public officials, emergency service responders, flood protection districts, and private citizens to make critical life-saving decisions days in advance. Their efforts were instrumental in enhancing the safety and security of the area's 20 million residents.

Silver Medal

LEADERSHIP

Jeffrey Fujioka
Mathematical Statistician

Anne Hollowed
Supervisory Research Fishery Biologist

Daniel Ito
Craig Rose
Research Fishery Biologists

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

The group is honored for developing and applying the first-ever quantitative mathematical model to predict the long-term effects of fishing on sea floor habitats. The group designed and led an evaluation of how habitat changes predicted by the model affect managed fish stocks in Alaska. The analysis highlighted considerable scientific uncertainty and the need to be precautionary. With support from fishermen and environmental groups, managers responded by creating protected areas for cold water corals and other sensitive habitats, including the largest marine protected area in the U.S.

Gary Davis
Director, Office of Systems Development

Kathleen A. Kelly
Director, Office of Satellite Operations

Katy M. Vincent
International Relations Specialist

National Environmental Satellite, Data, and Information Service

Glenn Tallia
Attorney Advisor

Office of the Under Secretary

National Oceanic and Atmospheric Administration

The group is cited for concluding a satellite agreement ensuring access to critical data for severe weather forecasting in case of NOAA satellite failure. NOAA concluded a historic long-term geostationary environmental satellite back-up arrangement with Japan in February 2005. This agreement stipulates that in the case of a NOAA satellite failure, Japan would move a satellite towards the United States to provide critical satellite data coverage for severe weather and tropical storm monitoring and prediction, at minimal cost to NOAA. This very unique agreement is one of only two agreements in the world for nations to provide mutual back-up satellite support, the other between NOAA and Europe.

Gary Stauffer
Supervisory Research Fishery Biologist

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

Dr. Stauffer is honored for partnering with the Alaska fishing industry on cooperative research and assessment of the Bering Sea ecosystem crab stocks. Stocks of King, Tanner, and snow crab fisheries are at low levels, limiting commercial fisheries. Surveys and research were needed to understand factors affecting stock recovery. Dr. Stauffer's work with industry was instrumental in creating the Bering Sea Fisheries Research Foundation, a nonprofit organization to support and fund cooperative long-term research and surveys. In 2004, this effort resulted in a successful joint survey of Bering Sea snow crab.

PERSONAL AND PROFESSIONAL EXCELLENCE

Donna Darm
Fishery Management Officer

Steven Stone
Research Fishery Biologist

Mark Plummer
Economist

R. Craig Wingert
Supervisory Fishery Management Specialist

National Marine Fisheries Service

Daniel Cohen
Chief Counsel

Office of the General Counsel

Kirsten Erickson
Attorney Advisor

Office of the Under Secretary

National Oceanic and Atmospheric Administration

The group is honored for developing and implementing a cost-effective framework for designating a critical habitat for imperiled species. For the first time, critical habitat areas were designated under the Endangered Species Act (ESA) using both economic and conservation data to maximize conservation while reducing economic impacts. The group evaluated the relative conservation value of 800 separate habitat units covering nearly 254,000 square miles. The group demonstrated a practical method to implement a contentious and difficult provision of the ESA by balancing economic impacts and species conservation, consistent with the ESA and administrative law.

Steven Davis
Supervisory Biologist

Anne Hollowed
Patricia Livingston
Supervisory Research Fishery Biologists

Daniel Ito
Jonathan Heifetz
Research Fishery Biologists

James Hale
Technical Writer/Editor

National Marine Fisheries Service

Lauren Smoker
Attorney Advisor

Joseph McCabe
Paralegal Specialist

Office of the Under Secretary

National Oceanic and Atmospheric Administration

The group is honored for its leadership in preparing the Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement (PSEIS). This analysis examined the largest commercial fisheries in the U.S., evaluating environmental impacts of fisheries activities on the Bering Sea and Gulf of Alaska marine ecosystems. Addressing policy alternatives and environmental issues through such a programmatic review had not been previously attempted. With adoption of the new ecosystem-based policy, the Alaska groundfish fisheries, valued at $1.5 billion, were reauthorized for fishing.

Charles Karnella
Fishery Management Officer

Dean Swanson
Foreign Affairs Officer

Michael Gonzales
Supervisory Criminal Investigator

Gary Sakagawa
Raymond Clarke
Research Fishery Biologists

National Marine Fisheries Service

Judson Feder
Paul Ortiz
Attorney Advisors

Office of the Under Secretary

National Oceanic and Atmospheric Administration

The group is honored for exercising international leadership while working together through a series of international negotiations, both formal and informal, in multilateral and bilateral settings, over the last eight years to influence the final terms of the Western and Central Pacific Fisheries Convention (WCPFC). The Team significantly shaped the fisheries conservation and management framework for highly migratory species (e.g. tuna) in the Western and Central Pacific Ocean. The WCPFC will involve the last significant ocean area of the world without such a framework for high seas fisheries. This WCPFC will cover the world's most productive tuna fisheries, yielding an annual ex-vessel value of approximately 2 billion dollars.

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Changyong Cao
Research Physical Scientist

Jerry Sullivan
Andrew Heidinger
Physical Scientists

National Environmental Satellite, Data, and Information Service

National Oceanic and Atmospheric Administration

The group is recognized for developing and implementing a novel method, the Simultaneous Nadir Overpass (SNO) technique, for inter-calibrating satellite instruments while they are in orbit. The method compares the observations of two instruments on different satellites at times when they are both simultaneously viewing the same scenes. As a result of the team's work, the measurements of different satellite instruments are now more consistent with one another, facilitating more reliable measurements of climate change and providing higher quality data for weather prediction models.

Thomas L. Delworth
Paul Ginoux
Larry Horowitz
Ronald Stouffer
Physical Scientists

Keith Dixon
Stuart M. Freidenreich
Michael Spelman
Research Meteorologists

Richard Hemler
Dan Schwarzkopf
Meteorologists

Venkatachala Ramaswamy
Senior Scientist

Office of Oceanic and Atmospheric Research

National Oceanic and Atmospheric Administration

The group is honored for delivering state-of-the-art model simulations of past, present, and future climate and for enabling open access to the data sets. Results from a recent international workshop support the conclusion that the Geophysical Fluid Dynamics Laboratory climate model is among the best in the world. This work lays the basis for addressing critical environmental questions the Nation faces on: droughts in the west, changes in the fisheries in the Pacific Northwest, whether temperatures over the U.S. continue to warm and by how much, changes in the strength of El Niño, and the benefits and unintended consequences of new energy techniques.

Mark DeMaria
Supervisory Meteorologist

National Environmental Satellite, Data, and Information Service

Michelle Mainelli
Meteorologist

National Weather Service

National Oceanic and Atmospheric Administration

The group is honored for collaborating to improve the most accurate operational intensity forecast tool, the Statistical Hurricane Intensity Prediction Scheme (SHIPS), and for implementing the new model into operations. The NOAA Joint Hurricane Testbed provided the framework in which this work was carried out. Over the last few years, the most accurate intensity forecast model used by the National Hurricane Center was based on fairly simple statistical relationships. This statistical model was significantly improved by the incorporation of input from geostationary and polar orbiting satellites. After two years of testing, the satellite version of the intensity model became operational and provided valuable forecast information during the very busy 2004 Atlantic hurricane season.

Jeffrey Key
Supervisory Physical Scientist

Jaime Daniels
Physical Scientist

National Environmental Satellite, Data, and Information Service

National Oceanic and Atmospheric Administration

The group is honored for significantly advancing the usefulness of satellite data in weather forecasts, developing a polar wind product, and fostering its use in numerical weather prediction. A limitation of weather prediction models was the lack of wind measurements in polar regions. The group realized that satellite images viewed in time sequence over the poles enable inference of motions that can positively influence forecasts over the entire globe. The improvement in prediction has been cited by the European Centre for Medium-range Weather Forecasts as the most significant achievement in 2004, extending forecasts by 3-6 hours. In response, the next generation of operational polar orbiting satellites will be modified to provide the capability of generating polar wind information.

Kenneth L. Schere
Chief, Atmospheric Model Development Branch

Jonathan Pleim
George Pouliot
Physical Scientists

Tanya Otte
Meteorologist

Jeffrey Young
Mathematician

Office of Oceanic and Atmospheric Research

Paula Davidson
Physical Scientist

Wilson Shaffer
Geoffrey DiMego
Supervisory Meteorologists

Jeffery McQueen
Meteorologist

Allan Darling
Supervisory Information Technology Specialist

National Weather Service

National Oceanic and Atmospheric Administration

The group is honored for the development, testing, and deployment of the National Air Quality Forecast Capability. The group implemented an initial operational capability for predicting ground-level ozone for the northeastern United States through the next day, at hourly time intervals. The forecast guidance improves the basis for state and local health-based alerts and provides information for those at risk from poor air quality. NOAA's air quality forecast capability was developed and implemented in partnership with the U.S. Environmental Protection Agency, combining the two agencies' strengths in air quality measurements and atmospheric modeling.

CUSTOMER SERVICE

Brent Gordon
Meteorologist

Paula Freeman
Stephen Gilbert
Kenneth Clarke
Walter Mussante
Thomas Makle
Information Technology Specialists

National Weather Service

National Oceanic and Atmospheric Administration

The group is honored for designing and implementing a new method of transferring numerical forecast guidance produced on the National Centers for Environmental Prediction Central Computer System to the Telecommunications Operations Center. This resulted in a dramatic improvement in the timeliness of numerical guidance to the Weather Forecast Offices (WFO). Numerical guidance is an essential component for the NWS in support of its critical mission to protect life and property. This improvement ensures that the WFOs will have current guidance in time to meet their forecast deadlines.

Hydrometeorological Prediction Center
Ohio River Forecast Center
Weather Forecast Offices:
Cleveland, Ohio
Indianapolis, Indiana
Louisville, Kentucky
Northern Indiana
Paducah, Kentucky
Wilmington, Ohio

National Oceanic and Atmospheric Administration

The organizations are cited for providing accurate and timely information before, during, and after the record snow and ice storm of December 2004, and the widespread historical flooding of January 2005, across Kentucky, Indiana, and Ohio. A winter storm produced record snowfall of up to 30 inches with five foot drifts and ice accumulations of one inch. The snow and ice were followed by rainfall of up to 10 inches. Melting snow and the heavy rain produced record flooding. Decision makers were proactive in initiating an emergency response and the public was well aware of the potential dangers. As a result of their outstanding efforts, lives were saved and economic losses were reduced.

James Lushine
Randy Lascody
Meteorologists

National Weather Service

National Oceanic and Atmospheric Administration

The group is recognized for developing and promoting a rip current awareness and forecast program for the Atlantic and Gulf coasts of the United States. The United States Lifesaving Association estimates that rip currents kill more than 100 people at the Nation's beaches each year. Rip currents account for more than 80 percent of the rescues performed by surf beach lifeguards. The group conducted research using South Florida county records and other data to correlate rip current deaths with the weather and developed a forecast method to predict the daily rip current risk. Their efforts have already saved lives and will result in many more lives saved in the future.

Weather Forecast Office Austin/ San Antonio, Texas

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Austin/San Antonio, Texas is honored for providing life-saving warnings during devastating flooding and tornados in South Central Texas in November 2004. A slow moving low pressure system produced the wettest November on record with rainfall averaging 430 percent greater than normal. The highly populated corridor from Austin to San Antonio had 10 to 15 inches of rain and severe storms that produced 21 confirmed tornadoes. Numerous high water rescues were made. The WFO staff utilized an innovative way of notifying emergency managers and the media by direct e-mail messaging. They provided crucial briefings and coordination with emergency managers and responders during the entire event. A large measure of the life-saving credit and minimal property loss is the direct result of the extraordinary services provided by NWS Austin/San Antonio.

Weather Forecast Office Des Moines, Iowa

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Des Moines, Iowa is honored for providing life-saving warning services during an extensive severe weather outbreak on May 21-24, 2004. Over the 4-day period, 28 tornadoes, 16 flash floods and 128 severe hail and wind events occurred in central Iowa. The most devastating tornado destroyed much of Bradgate, Iowa. Warnings via NOAA All Hazards Weather Radio saved Humboldt Scout Troop #108, who heard the weather radio warnings while hiking on the outskirts of Bradgate and ran one-half mile to the nearest home and sheltered in the basement. Despite the dimension of the severe four day event, there were no fatalities and only minor injuries.

Weather Forecast Office Fairbanks, Alaska

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Fairbanks, Alaska is honored for providing life-saving weather forecasts throughout the extended 2004 fire weather season. During the fire season, a total of 706 wildfires occurred in Alaska during the summer, which burned a record 6.7 million acres (the size of Maryland and Washington, DC combined). WFO Fairbanks prepared a record-breaking 451 spot forecasts during the season, in addition to providing aerial fire weather forecasts and warnings. While 6.7 million acres burned in Alaska, there was no loss of life or significant property damage due in large part to

the accurate and timely forecast and warning services provided by WFO Fairbanks.

Weather Forecast Office
Omaha/Valley, Nebraska

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Omaha/Valley, Nebraska is honored for providing extraordinary life-saving warning services during the massive, Hallam, Nebraska, tornado of May 22, 2004. The width of the tornado averaged half a mile, but widened to 2.5 miles around Hallam. Available records indicate this to be the largest (in width) tornado on record. The WFO staff helped prepare the four counties hit by the enormous storm with effective spotter training and enhanced county preparedness through the StormReady certification program. The combination of effective warning services, trained and well-organized spotter networks, and a well-prepared public willing to take protective action, resulted in just a single fatality and a surprisingly small number of minor injuries.

Weather Forecast Office
Pleasant Hill, Missouri

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Pleasant Hill, Missouri is honored for providing life-saving warnings during a record rainfall in Kansas City on August 27, 2004. The effort of WFO Pleasant Hill to enhance partnerships with the media, emergency managers, and flood management officials and to improve flash flood observation, warning, and dissemination and response systems resulted in no deaths or injuries during the 6-8 inch rainfall event. This effort was in reaction to the flash floods in the same area of Kansas City in October 1998 that caused 13 deaths. WFO staff worked with community officials following the October 1998 Kansas City flash flood to develop an enhanced hydrologic observation and data management system which improved the office's ability to provide world-class warning service.

Weather Forecast Office
Reno, Nevada

National Oceanic and Atmospheric Administration

The NWS Forecast Office, Reno, Nevada is honored for providing life-saving warnings with almost unprecedented lead-time to the citizens of northeast California and northwest Nevada. The challenge was to provide a solid weather forecast and adequate lead-time on a major winter storm predicted to affect the Sierra Nevada mountains during peak holiday travel. Nearly 1 million travelers cross the Sierra Nevada during the holidays. WFO Reno relied on pre-winter training, experience, pattern recognition, and making calculated, specific forecasts for the record-breaking event 5 days in advance. Due to early warnings, travel was minimized during the storms. There was no loss of life due to weather, which was a direct result of extraordinary actions taken by WFO Reno.

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

Silver Medal

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Thomas M. Sullivan
Supervisory Electronics Engineer

James C. Richards
Ernesto A. Cerezo
Alakananda Paul
Cou W. Wang
Jonathan V. Williams
Electronics Engineers

Office of Spectrum Management

Milton E. Brown
Deputy Chief Counsel

Office of the Chief Counsel

Brent L. Bedford
Nicholas DeMinco
Jay R. Hoffman
Yeh Lo
Electronics Engineers

Institute for Telecommunication Sciences

National Telecommunications and Information Administration

The group is recognized for the formidable task of analyzing technical risks and developing regulations needed to advance Broadband over Power Line (BPL). BPL is a technology that provides for the transmission of internet and other data at radio frequencies over neighborhood power lines and uses electrical outlets in users' premises as data ports for computers and other devices. In October 2004, the Federal Communications Commission (FCC) adopted BPL rules in a landmark session attended by Assistant Secretary Gallagher and Federal Energy Regulatory Commissioners. NTIA is continuing its work with the FCC and other parties to facilitate development of responsible industry standards.

CUSTOMER SERVICE

Edward F. Drocella, Jr.
Supervisory Electronics Engineer

William M. Doolan
Electronics Engineer

Steven E. Litts
Supervisory Information Technology Specialist

Anshu Bhandari
Frederick A. Najmy, Jr.
Sky M. Owens
Stephen Pierce
Information Technology Specialists

Thomas F. Woods, Jr.
Supervisory Telecommunications Specialist

Office of Spectrum Management

Jeffrey E. Joyner
Attorney Advisor

Office of the Chief Counsel

National Telecommunications and Information Administration

The group is recognized for innovation in improving the United States spectrum management process. In response to President Bush's initiative to streamline the United States spectrum management process, broadband communication systems can now be coordinated with federal systems and approved in real-time. This capability takes a concrete step to institutionalize innovation in spectrum management. This capability will improve the effectiveness of the domestic spectrum management process as called for by President Bush and will virtually eliminate delays associated with the current manual process. Their

efforts resulted in eliminating delays associated with the current frequency coordination process, reducing costs to federal and commercial users, and allowing new services to be deployed rapidly.

OFFICE OF INSPECTOR GENERAL

Silver Medal

PERSONAL AND PROFESSIONAL EXCELLENCE

Adam Giampietro
Criminal Investigator

Suzanne M. Courtney
Computer Forensics Investigator

Office of Investigations

Office of Inspector General

The group is honored for establishing a modern, state-of-the-art computer forensic laboratory unit in the Office of Inspector General (OIG). The laboratory has enhanced the Office of Investigations' ability to analyze computer-based evidence for use in the prevention and detection of waste, fraud, and abuse in Department programs and operations. The group was able to leverage limited budgetary and personnel resources to build a clearly focused computer forensic investigative unit and deploy the capabilities of that unit to develop cases of strong prosecutive merit, which have been uniformly accepted by the Department of Justice. Their efforts have enabled the OIG to pursue an aggressive investigative program aimed at misuse of Departmental resources for the conduct of criminal activity.

E. Jerry McMahan
Kathleen M. McKevitt
Supervisory Auditors

H. Belinda Riley
Auditor

Office of Audits

Keith W. Teamer
Supervisory Criminal Investigator

Teresa M. Schlee
Attorney Advisor

Office of Investigations

Office of Counsel to Inspector General

Office of Inspector General

The group is recognized for conducting a complex and unique joint audit and investigation of costs claimed against a scientific research cooperative agreement awarded by the National Institute of Standards and Technology (NIST). The award to Allegheny-Singer was the largest biotechnology project funded by the Advanced Technology Program at the time. The group uncovered substantial evidence that discovered that Allegheny-Singer had submitted multiple false claims to NIST between June 1999 and September 2000. In September 2004, Allegheny-Singer agreed to pay the government $1.75 million to resolve outstanding audit issues and violations of the False Claims Act.

PATENT AND TRADEMARK OFFICE

LEADERSHIP

Board of Patent Appeals and Interferences

Patent and Trademark Office

The Board of Patent Appeals and Interferences is cited for reducing the pendency of patent appeals and interferences and for substantially improving customer service. During the past seven years, the Board reduced the inventory of pending patent appeals by 89 percent, and reduced its appeal pendency from 39 months to approximately 6 months. Similarly, the Board reduced the inventory of pending interferences by 83 percent, and reduced its interference pendency from 36 months to approximately 11 months. The achievements by the Board have significantly impacted the missions of the USPTO and the Department.

Silver Medal

ADMINISTRATIVE/ TECHNICAL SUPPORT

Mary F. Bruce
Attorney Advisor

Bonita R. Royall
Management Analyst

Office of the General Counsel

Julia T. Lee
Computer Scientist

Office of the Chief Information Officer

Patent and Trademark Office

The group is recognized for the development and implementation of electronic filing, workflow, and information dissemination at the Trademark Trial and Appeal Board. Electronic end-to-end processing has substantially improved processing times, reduced error rates, and enhanced customer service. As a result of the group's efforts, all processing times at the Board were drastically reduced, in some cases from more than 30 days cycle time to 3 days or less. Their efforts have transformed an outdated paper-processing operation into a model e-government organization.

TECHNOLOGY ADMINISTRATION

Gold Medal

LEADERSHIP

Sivaraj Shyam-Sunder
Deputy Director, Building and Fire Research Laboratory

National Institute of Standards and Technology

Technology Administration

Dr. Sunder is honored for leading the four-year, $16 million federal building and fire investigation of the World Trade Center disaster, recognized to be the most complex and sophisticated building failure investigation in United States history. He led 150 individuals, including a 14-member core team, more than 60 additional agency staff, and 75 external experts and contractors to conduct an investigation of huge scope, scale, and complexity. Not only were the technical challenges enormous, but significant challenges also existed in the administrative, legal, public affairs, and policy arenas. More than 20 significant recommendations were made for changes in building practices, standards, and model building codes. These addressed increased structural integrity, enhanced fire protection, improved building evacuation, and improved emergency response.

Joseph Falco
Keith Stouffer
Mechanical Engineers

Frederick Proctor
Albert Wavering
Supervisory Electronics Engineers

National Institute of Standards and Technology

Technology Administration

The group is honored for leading a cross-sector industry/government working group to address a key challenge in protecting the Nation's critical infrastructure - securing Supervisory Control And Data Acquisition (SCADA) and other industrial control systems against cyber attack. By developing the first-ever set of high level requirements for specifying security capabilities sought in new industrial control systems and products, the Process Control Security Requirements Forum has played a leading role in enhancing the cyber security of U.S. critical infrastructure industries.

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Jason Averill
Richard Bukowski
Erica Kuligowski
Robert L. Vettori
Fire Protection Engineers

James Lawson
Physical Scientist

Hai Lew
Senior Research Structural Engineer

Richard Peacock
Chemical Engineer

Matthew Heyman
Chief of Staff, NIST

William Dols
Mechanical Engineer

Stephen Cauffman
Supervisory Research Engineer

Valentine Junker
Medial, Visual and Database Expert

James Filliben
Supervisory Mathematical Statistician

William Grosshandler
Supervisory Mechanical Engineer

Michael Newman
Supervisory Public Affairs Specialist

Verna Hines
Supervisory Program Analyst

National Institute of Standards and Technology

Melissa Lieberman
General Attorney

Michael Rubin
Deputy Chief Counsel

Office of the General Counsel

National Institute of Standards and Technology

Technology Administration

The group is honored for conducting the four-year $16 million federal building and fire safety investigation of the World Trade Center disaster, recognized to be the most complex and sophisticated building failure investigation in United States history. Not only were the technical challenges enormous, but significant challenges also existed in the administrative, legal, public affairs, and policy arenas. With implementation of the recommendations, significant advances will be made in the safety and protection of America's buildings, their occupants, and first responders for future disasters.

Miral M. Dizdar
Supervisory Research Chemist

National Institute of Standards and Technology

Technology Administration

Dr. Dizdar is recognized for his pioneering efforts in the development and critical evaluation of measurement methods for the detection of DNA damage and cellular repair. Oxidative DNA damage is believed to be responsible for both human aging and a causative factor for many forms of cancer, as well as neurodegenerative diseases such as Alzheimer's. Measurements of DNA damage and repair might allow us to modulate DNA damage and repair living cells. This information could lead to improved diagnostics, drug developments, and clinical applications including the advancement of cancer therapies.

Fahim Sadek
John Gross
Therese McAllister
Research Structural Engineers

Richard Gann
Senior Research Scientist

William Pitts
Research Chemist

Stephen Banovic
William Luecke
Timothy Foecke
Materials Research Engineers

Anthony Hamins
Jiann Yang
Supervisory Mechanical Engineers

Kevin McGrattan
Mathematician

Frank Gayle
Supervisory Metallurgist

J. David McColskey
Physical Scientist

Kuldeep Prasad
Mechanical Engineer

Frank Davis
Engineering Technician

Thomas Ohlemiller
Chemical Engineer

Kathryn Butler
Physicist

Emil Simiu
Howard Baum
NIST Fellows

National Institute of Standards and Technology

Craig Burkhardt
Chief Counsel for Technology Administration

Office of the General Counsel

National Institute of Standards and Technology

Technology Administration

The group is honored for conducting the four-year $16 million federal building and fire safety investigation of the World Trade Center disaster, recognized to be the most complex and sophisticated building failure investigation in United States history. Not only were the technical challenges enormous, but significant challenges also existed in the administrative, legal, public affairs, and policy arenas. With implementation of the recommendations, significant advances will be made in the safety and protection of America's buildings, their occupants, and first responders for future disasters.

Joseph Stroscio
Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Stroscio is honored for conceiving, designing, and building the NIST Nanoscale Physics Facility, an unparalleled facility for fabricating and measuring the electronic properties of nanostructures to study such diverse problems as atom motion on surfaces, metal film and alloy growth, superconductivity, and semiconductor nanodevices. Realizing early the importance of atomic scale measurements on the development of nanotechnology, Dr. Stroscio built both a novel Room Low Temperature Scanning Tunneling Microscope (RT-STM) and a groundbreaking Low Temperature Scanning Tunneling Microscope (LT-STM) as the heart of the NIST Nanoscale Physics Facility.

Silver Medal

LEADERSHIP

Raju Datla
Supervisory Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Datla is recognized for advancing the field of infrared optical measurements in support of U.S. missile defense by developing a unique state-of-the-art Low-Background Infrared Facility to deliver low-level infrared radiation standards to the Department of Defense (DoD) to help ensure that potential missile targets are reliably detected and accurately identified. The traceability to international standards provided by the facility helps DoD laboratories and contractors meet the stringent performance standards necessary for a successful missile defense system.

Kenneth Ferguson
Technology Policy Analyst

Office of Technology Policy

Technology Administration

Mr. Ferguson is honored for conceiving, designing, then managing production of a Science and Technology (S&T) reference manual for Iraqi government agencies. The manual contains detailed information on hundreds of international S&T policy organizations, research institutes, counterpart government ministries, and standards and metrics organizations. The objective of the manual is to provide planners in Iraq or anywhere else in the world with information that will assist in creating a new S&T policy environment that stimulates innovation and entrepreneurism.

Simon Frechette
Supervisory Mechanical Engineer

Joshua Lubell
Computer Scientist

Allison Barnard-Feeney
Information Technology Specialist

National Institute of Standards and Technology

Technology Administration

The team is recognized for contributions in developing and deploying a new standard to facilitate the exchange of computer-aided design information. They led the progression of International Organization for Standardization (ISO)10303-203 Second Edition to international standard status which culminated in the first modular STEP (Standard for the Exchange of Product model data) standard - a landmark in the technical and strategic method for preparing international standards. This new method of developing specifications for product data has significantly reduced time and cost of deploying these standards to industry.

PERSONAL AND PROFESSIONAL EXCELLENCE

Health Physics Group

National Institute of Standards and Technology

Technology Administration

The group is recognized for the development and administration of the best radiation safety program in the Nation. More than 1900 researchers and scores of operations and technical personnel utilizing the NIST Center for Neutron Research (NCNR) depend on this group for vital program support. The NCNR is one of the leading research reactors in the world and the largest licensed by the Nuclear Regulatory Commission with extensive research and experimental facilities second to none. The group has achieved a perfect safety record which is the most important factor in the operation of the reactor, in the protection of the public, and in the success of the research programs.

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Christopher Cromer
Darryl Keenan
Physicists

Marla Dowell
Supervisory Physicist

Shao Yang
Electronics Engineer

National Institute of Standards and Technology

Technology Administration

The group is recognized for their vision and innovation in the development of the world's only measurement program to fully characterize ultraviolet (UV) laser instruments. With this unique program, the group established itself as

industry's gatekeeper for UV laser measurements. This capability directly benefits the semiconductor manufacturing industry, which relies on UV lasers and detectors in their manufacturing processes. Recognizing the significance of the achievement, industry released NIST-traceable commercial products based on their technology within one year of proof of concept.

Piotr Domanski
Supervisory Mechanical Engineer

National Institute of Standards and Technology

Technology Administration

Dr. Domanski is cited for the development of simulation models for designing and evaluating the performance of vapor-compression refrigeration and air-conditioning systems. These models provide equipment manufacturers in a $30 billion per year industry with the most technically-sophisticated and user-friendly tools for optimizing air-conditioning systems working with a variety of ozone-friendly refrigerants and refrigerant mixtures. Their use is enabling the manufacturers to successfully combat international competition and to meet increasing environmental demands from customers.

John Gillen
Supervisory Research Chemist

National Institute of Standards and Technology

Technology Administration

Dr. Gillen is recognized for his breakthrough research and development of polyatomic ion sources for secondary ion mass spectrometry (SIMS). Dr. Gillen recognized that polyatomic ion sources, consisting of bound clusters of atoms, could provide major improvements in the chemical analysis capabilities of SIMS. Dr. Gillen's contribution was to recognize and exploit a specific property of polyatomic clusters that would dissociate upon impact with a surface to be analyzed, and the kinetic energy of the cluster would be partitioned among its component atoms. His work has radically advanced the state-of-the-art and opened up new possibilities for practical chemical analysis of diverse materials such as semiconductors and polymers.

William Grosshandler
Supervisory Mechanical Engineer

Nelson Bryner
Supervisory Chemical Engineer

Daniel Madrzykowski
Fire Prevention Engineer

National Institute of Standards and Technology

Technology Administration

The group is honored for completing a comprehensive and sound technical investigation of a deadly nighclub fire in West Warwick, Rhode Island, on February 20, 2003. This was the worst fire disaster in almost three decades in the United States, killing 100 individuals. They reconstructed the event through tests of mock-up sections of the nightclub in the NIST Large Fire Laboratory and subsequent simulation of the entire event using the NIST Fire Dynamics Simulator. The comprehensive set of recommendations included requiring sprinkler systems in all nightclubs, forbidding the use of certain finishing materials known to easily ignite, and changing the way safety is analyzed and designed for an egress from such nightclubs.

John Kitching
John Moreland
Hugh Robinson
Peter Schwindt
Physicists

Li Anne Liew
Mechanical Engineer

Leo Hollberg
Supervisory Physicist

National Institute of Standards and Technology

Technology Administration

The group is cited for leading the team that designed, constructed, and tested the world's first ultra-miniature operational atomic clocks and magnetometers, about the size of a grain of rice. The team demonstrated the world's first chip-scale atomic clocks and magnetometers, outperforming the existing similar devices by about a factor of 1,000. This accomplishment required substantial work, both on the fundamental science of making new types of atomic clocks and magnetometers, and also on the technology of making the devices very small and using very low power. These revolutionary devices promise to dramatically improve a wide range of applications through the use of atomically-precise measurements in portable, battery-powered electronic devices.

James Lyle
Douglas White
Computer Scientists

National Institute of Standards and Technology

Technology Administration

The group is recognized for developing computer forensic standards and test methods needed for the successful investigation and prosecution of crimes involving computers. Computer forensics is an emerging discipline and its growth depends on standards and test methods needed to establish scientific credibility. The group provided the first set of objective and repeatable standards and test methods. This work has had momentous impact on the ability of law enforcement to apprehend and prosecute criminals and terrorists and to strengthen our homeland defense.

Mark Stiles
Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Stiles is recognized for exceptional contributions to the theory of magnetic phenomena in nanostructures. His research was quickly recognized worldwide as being both correct and comprehensive. His work on magnetic multilayers, most notably the phenomenon of giant magneto-resistance (GMR), was crucial to the development of new nanotechnology-based devices that have revolutionized the magnetic sensing and information storage industries. As a direct result, the rate of growth in storage density now exceeds one hundred percent per year, which even eclipses the "Moore's Law" growth of semiconductor processing power. His efforts will result in furthering U.S. competitiveness in the development of a wide array of magnetic sensors and information storage devices.

Joel Ullom
Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Ullom is recognized for the development of the world's first practical solid-state quantum nanorefrigerators. These devices improve the sensitivity and reduce the cost of low-temperature photon detectors and other quantum devices. With a series of breakthroughs in physics and materials science, Dr. Ullom improved the cooling power of quantum nanorefrigerators by two orders of magnitude. These devices will lead to improved x-ray microanalysis for the semiconductor industry, improved photon detection for astronomy, and improved cooling of devices used in quantum physics experiments.

John Villarrubia
Physicist

Andras Vladar
Electronics Engineer

Michael Postek
Supervisory Physical Scientist

National Institute of Standards and Technology

Technology Administration

The group is honored for development of an innovative technique for improved measurement of nanometer-scale dimensions of microelectronic devices with scanning electron microscopes, the most common metrology instrument on semiconductor processing lines. Being adopted within an industry in which the value of a nanometer increase in precision is measured in dollars per device produced, the Model-Based Library method has been shown to increase precision of measurement by up to a factor of three and to reduce sensitivity to image noise and focus.

CUSTOMER SERVICE

Michael Fasolka
Supervisory Materials
Research Engineer

Kathryn Beers
Christopher Stafford
Research Chemists

Alamgir Karim
Supervisory Physicist

Eric Amis
Supervisory Physical Scientist

National Institute of Standards and Technology

Technology Administration

The group is cited for creating the NIST Combinatorial Methods Center (NCMC), a unique source for high throughput tools used in materials development by over 25 industrial partners. The NCMC was designed around a new collaborative legal agreement precluding exchange of proprietary information and assuring research results would be made public immediately, while allowing companies to join with minimum paperwork and delay. Through its established mechanisms, the NCMC will continue to develop and provide unique, elegant, and inexpensive solutions to industrial problems.

EXTERNAL AWARDS

ARTHUR S. FLEMMING AWARD

Keith R. Lykke
Supervisory Chemist

National Institute of Standards and Technology

Technology Administration

Dr. Lykke was recognized for the development of novel laser technology for the accurate calibration and characterization of optical instruments used in ground and satellite-based remote sensing, missile defense and targeting, and standards research, development, and dissemination. This technology has led directly to improved values for ocean carbon levels important in climate change research, to innovative high-temperature pyrometers critical to the development of a new International Temperature Scale, and to approaches to reliably correct for stray light affecting the accuracy of multimillion dollar satellite environmental optical sensors.

Steven R. Jefferts
Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Jefferts was recognized for outstanding technical and managerial leadership of NIST-F1, the world's most accurate atomic clock. Dr. Jefferts led the design, construction, operation, and continual improvement of NIST-F1, the first U.S. laser-cooled frequency standard, from its earliest conception in 1996. NIST-F1, the U.S. national standard for the second, is one of the most visible and widely-used assets of NIST. NIST time, calibrated by the NIST-F1 atomic clock, is used literally billions of times each day for everything from setting consumer timepieces to ensuring the accurate timestamping of hundreds of billions of dollars of electronic financial transactions to coordinating the most precise international time.

Jun Ye
NIST Fellow

National Institute of Standards and Technology

Technology Administration

Dr. Ye was recognized for his contributions to the fields of precision measurement, quantum optics, ultrasensitive detection, and cold molecules. Dr. Ye's accomplishments help maintain NIST leadership in the international metrology community and have a strong impact on research, such as in quantum information. Dr. Ye has developed techniques to coherently combine the output of independent lasers and the successive pulses emitted by a single laser. These enable new advances in chemically-specific microscopy and replace optical amplifiers with a simple cavity, respectively. Dr. Ye has demonstrated a unified time and frequency spectroscopy of atoms using phase-stabilized femtosecond lasers, a very important advance.

Daniel A. Fischer
Supervisory Physicist

National Institute of Standards and Technology

Technology Administration

Dr. Fischer was recognized for pioneering development of an unparalleled soft x-ray absorption spectroscopy facility enabling key advances in cutting-edge technologies. The facility combines unique detection capabilities with innovative sample manipulation and environmental control to permit measurements of atomic and molecular order and orientation at surfaces and interfaces of materials under real-world operating conditions. Results include breakthroughs in catalytic materials for chemical production, photoresists for integrated circuit fabrication, and lubricants for magnetic hard disks, as well as ground-breaking work on self-assembled nanoparticles, nanotubes, biomaterials, and high temperature superconductors.

Many thanks to those individuals who contributed so much to today's program.

Special thanks to:

Office of Human Resources Management Incentive Awards Staff

Michael R. Osver
Retha Maddox

Incentive Awards Program Officers of the Department

Lashonda Simmons - Census
Charlene Gantt - ITA
Sheila Jones - NIST
Jennifer Heyob - NOAA
Azalea Nunnally - OIG
Dawn Washington - PTO

and their valuable assistants

Armed Forces Color Guard
Printing and Graphics Division
Marine Brass Quintet
Paul Bell, Soloist


DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA