

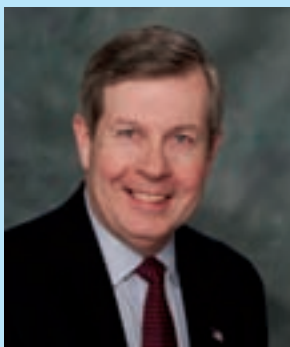
Jonathan T. Malay and John R. Toohey-Morales are the 2009 candidates for AMS president-elect; the candidates for AMS councilor are Eric J. Barron, Kenneth F. Carey, William B. Gail, F. Martin Ralph, Walter A. Robinson, John C. Schaake, Richard W. Spinrad, and Ahsha N. Tribble. To help the membership select its leaders, the Society asked the candidates to answer the following question, "What do you see as the challenges facing the Society, and how would you address them if elected?" Following are their responses, along with a brief biographical sketch of each.

AMS PRESIDENTIAL CANDIDATES

JONATHAN T. MALAY

This is an exciting and extremely important time for the AMS and our members. The U.S.-led creation of the Group on Earth Observations and the Global Earth Observing System of Systems (GEOSS) were very important initiatives, and the framework they can provide for international cooperation is truly exciting. However, U.S. participation in GEOSS has also been badly limited by sparse new investments in both Earth observations and an integrated information technology infrastructure that would enable us to achieve the noble societal benefit goals that were set. While our National Weather Service and private sector meteorological capabilities are the envy of the world, we have simply not been making the investments that are needed to become what had been conceived as an Integrated Earth Observing System (IEOS) for climate and severe weather.

JONATHAN T. MALAY



JONATHAN T. (JON) MALAY graduated from the U.S. Naval Academy in 1973 with a B.S. degree in oceanography and then earned a M.S. degree in meteorology from the Naval Postgraduate School a year later. In a 20-year U.S. Navy career, he served first as a surface warfare officer, specializing in Antisubmarine Warfare, and in 1977 became a full-time specialist in oceanography and meteorology. At the Fleet Numerical Oceanography Center and the Naval Underwater Systems Center, he gained experience in operations and applied research in numerical weather prediction and physical oceanography.

In 1984, he was a finalist for NASA astronaut mission specialist, but instead went on to serve as a meteorological officer on the USS *NIMITZ* (CVN-68).

One of the U.S. Navy's lead experts in satellite remote sensing, Malay was the first meteorologist/oceanographer to serve at the Naval Space Command, and then was the space specialist on the Oceanographer of the Navy's staff from 1989 to 1992, from which he was sent on special detail to the National Reconnaissance Office until his retirement in 1993. Except for one year on the NOAA NESDIS staff as a senior research scientist with the Environmental Research Institute of Michigan, his civilian career has been focused on Earth and space science business development for Orbital Sciences Corp, Ball Aerospace, and at Lockheed Martin's Washington Operations, where he has been director of Civil Space and Environment Programs since 2003.

Malay joined the AMS as a midshipman in 1970 and has served on the Committee for Satellite Meteorology and Oceanography. A member of the Marine Technology Society, he is also a Fellow and Past-President of the American Astronautical Society, an Associate Fellow and board member of the American Institute for Aeronautics & Astronautics, and chair of the NASA Science Associates Group. He was coauthor of the 2004 *National Geographic Encyclopedia of Space*.

Today, we're definitely at a turning point, with a new U.S. president, senior executives in his administration, and Congress, all of whom appear to be science-friendly and very concerned about energy, the environment, and climate change. We in the AMS have a collective responsibility to do whatever we can to ensure that policy decisions are based on sound science and reasoned judgment. The economic consequences of the actions taken by the U.S. government (and, for that matter, governments around the world) will have enormous consequences—either for good or for very, very bad. What stands between these two extremes is the effectiveness of the educated and technically correct voice of the AMS community.

The UCAR-led white paper, "Advice to the Administration and Congress: Take Actions To Make Our Nation Resilient To Severe Weather and Climate Change" (www.ucar.edu/td/) was delivered to President Obama's Transition Team with the full support of the AMS, the American Geophysical Union, the Alliance for Earth Observations, the Consortium for

Ocean Leadership, the Weather Coalition, and many other groups. This, together with the existing policy statements of the AMS and other reputable professional organizations, needs to be skillfully articulated to decision makers and to effectively support the National Academies' new study, "America's Climate Choices."

What do I personally bring to this challenge? Those who know me know I have passion for doing what's right and the leadership skills and energy to get things done. But in the course of my 36-year professional career, I've also been an operational user of environmental support services, a practicing meteorologist, a research oceanographer, a government program manager, an industry representative to NOAA and NASA, and a leading voice in the Washington community, fighting for responsible government (and, of course, for both noble and profitable work for my employer).

My goals are to bring these experiences, talents, and the best professional network in my industry to work closely with the distinguished members of the Council and my friends on the AMS professional staff to: a) serve our ever more diverse, highly educated, and richly experienced membership in advancing their careers; b) attract the best and the brightest young people to our Society, across all of the multiple disciplines of our "big tent" professional society; c) maintain the highest possible technical and ethical standards; and d) ensure that a growing and fiscally healthy AMS is heard as a leading voice in responsible and effective public policy. I'm incredibly honored to have been nominated for President-elect. I'm proud to accept this challenge, and *I ask for your vote.*

JOHN R. TOOHEY-MORALES

We should all be proud of the Society's long history of fostering the development of the atmospheric, oceanic, hydrologic, and related sciences, while promoting education and the dissemination of sound scientific information. Indeed, the AMS has always been important to our profession and relevant to our society at large. But as the AMS approaches its first century of service, our mission may be more relevant than ever. With weather and climate now at the forefront of many people's minds—including our elected officials—the Society's role in education and communicating the state of the science has become its most important challenge.

AMS Certified Broadcast Meteorologists and Seal holders are at the front lines of this essential mission. As President, I would leverage my ability as a bilingual science communicator to represent the AMS during this very important period in the Society's history. I would promote AMS's efforts to connect


JOHN TOOHEY-MORALES



JOHN TOOHEY-MORALES is chief meteorologist at WTJV-TV NBC-6 in Miami FL. He is also founder and president of ClimaData Corporation, a commercial weather firm providing specialized forecasts for government, industry and media. John—a Fellow of the AMS—has served as Commissioner on Professional Affairs since 2004, overseeing the Society's certification programs as well as its continuing education efforts and the private and public sector meteorologist boards.

During his 25-year professional career, Toohey-Morales has worked in the public sector (as a forecaster for the National Weather Service) and in the private sector (as a Certified Consulting Meteorologist and a broadcast meteorologist). He has also been exposed to the academic sector as an adjunct professor of meteorology. John attained his B.S. in atmospheric sciences from Cornell University in 1984. World Meteorological Organization (WMO)-sponsored training at the National Hurricane Center and the University of Miami in 1988 garnered him several credits of masters-level meteorology courses. He attained his AMS Certified Consulting Meteorologist (CCM) designation in 1997. John is one of only a handful of AMS members with both the CCM and Certified Broadcast Meteorologist (CBM) accreditations.

Toohey-Morales is Past-President of the National Council of Industrial Meteorologists, as well as a member of the National Weather Association and the International Association of Broadcast Meteorologists. In 2005, he served as private-sector envoy to the U.S. Delegation at the 57th WMO Executive Council meeting in Geneva, Switzerland. John won the AMS Award for Outstanding Contribution to Applied Meteorology in 2007, and the AMS Award for Broadcast Meteorology in 2004.



science, service, and society through communications. Specifically, I would boost efforts to educate the population at large through sound scientific reporting in the media as facilitated by the AMS's Station Scientist program. I would also encourage all AMS members to strive to attain the highest levels of knowledge and experience. These values, along with integrity in character, represent the foundation of the AMS Certified Consulting Meteorologist (CCM) program, which I'm privileged to be a part of. In addition, I would be eager to continue to promote recruiting, mentoring, and retaining of women and minorities in our profession. Mentorship has been the cornerstone of my six years of service as AMS Commissioner on Professional Affairs. I don't expect that to change should I have the honor to serve as AMS President.

ERIC J. BARRON

The atmospheric and related sciences have never been more important to society. The challenges that face the AMS reflect our ability to address the growing importance of this connection. Our skill in weather forecasting continues to advance, and weather forecasting is the foundation for the prediction of a wide

ERIC J. BARRON

ERIC J. BARRON, director of the National Center for Atmospheric Research (NCAR), began a career in geology with an undergraduate degree from Florida State University (1973). After obtaining his master's degree in oceanography from the University of Miami (1976), his interest turned to climate studies with a Cray Supercomputing Fellowship at NCAR. Upon completing his Ph.D. in oceanography from the University of Miami (1980), he returned to NCAR as a postdoctoral research fellow and then continued as a research scientist in the global climate modeling group. In 1986, Barron went to The Pennsylvania

State University to direct the College of Earth and Mineral Sciences's newly formed Earth System Science Center (ESSC). Under Barron's leadership, the growth of ESSC resulted in the establishment of the College of Earth and Mineral Sciences' Environment Institute. Barron became the director of this new institute in 1998 and earned the title of distinguished professor in 1999. In 2002, he was named dean of the College of Earth and Mineral Sciences at Penn State. Prior to coming to NCAR in July 2008, Barron served as dean of Jackson School of Geosciences at the University of Texas at Austin.

Barron's research interests are in the areas of climatology, numerical modeling, and Earth history. He served as chair of the Climate Research Committee of the National Research Council (NRC) from 1990 to 1996. In 1997, he was named cochair of the Board on Atmospheric Sciences (BASC) of the NRC, and since 1999 he has chaired the BASC. Additional NRC panels on which Barron has served include the Committee on Global Change Research, the Assessment of NASA Post-2000 Plans, Climate Change Science, the Human Dimensions of Global Change, the Panel on Grand Environmental Challenges, and the Committee on Tools for Tracking Chemical, Biological, and Nuclear Releases in the Atmosphere: Implications for Homeland Security. In addition to serving on the National Research Council, Barron chaired the Science Executive Committee for NASA's Earth Observing System and NASA's Earth Science and Applications Advisory Committee (ESSAC).

Barron is a Fellow of the AMS, the American Geophysical Union, the Geological Society of America, and the American Association for the Advancement of Science. In 2003, he received the NASA Distinguished Public Service Medal.

variety of environmental information valued by diverse segments of society. The prospect of climate change has acted as a catalyst for new research directions, while climate records and predictions are creating a strong foundation for climate services. Our focus on the importance of the transition from research to operational products reflects the value of our investment in scientific exploration. Our community is essential in societal efforts to protect life and property, promote stewardship of the environment, and enable economic vitality. In order to enable this vision, the AMS should: 1) celebrate the perspectives and capabilities that stem from its unique membership that spans the academic, private and public sectors; 2) foster fundamental research; 3) promote the connections to other disciplines that foster our science and enable service to society; 4) reassess our capabilities to act as an advocate for the atmospheric sciences, as the demand for resources will continue to be pressing; and 5) create a focus on "communication" in the atmospheric sciences and promote innovations in education that foster the growing scope of the atmospheric sciences. There is an enormous opportunity to educate society and therefore increase the value of atmospheric information. The challenges in education reflect more than disciplinary scope. We

need to meet the challenge of developing future atmospheric scientists capable of delivering innovative observations, improved predictive capability, and enhanced value to society. Our greatest strengths reside in the different roles and capabilities of the academic, private, and public sectors that embody our membership.

KENNETH F. CAREY

It is my distinct honor and privilege to be nominated to serve on the AMS Council, and if elected, I will work with other Council members to enhance our Society's many benefits to you, our AMS colleagues, and community collaborators. The well-being of our atmosphere, oceans and rivers, land, and space that surround us are critical to the well-being of our way of life. I will, therefore, work with you to better observe, understand, and predict each of these areas and their interrelationships, and develop professional relationships and trust to enhance their strength, vitality, and overall resiliency since they directly impact the quality of our lives, and those that will follow us.

Our profession has created a growing and increasingly robust global atmospheric, oceanic, hydrologic, and space-observing system, leading to new discoveries about our planet. Weather and other environmental satellites now provide imagery and soundings at resolutions not envisioned just a few decades ago. The combined strengths of numerical weather prediction models, data assimilation schemes, and ensemble systems now accurately predict weather on time scales ranging from minutes to days. Coupled land-ocean-atmosphere prediction models have become increasingly skillful in recreating past climates and depicting future climate-related scenarios. Hurricane-track forecasts routinely provide warnings to vulnerable coastlines days in advance. A strengthening public-private-academic partnership has led to a growing suite of tailored applications for the specialized needs of commercial and private users.

I am proud to be a member and serve with my colleagues as part of the AMS. The breadth of our membership is impressive and is the envy of the applied sciences. We engage academia, civilian government, the military, and a broad population of industries over several economic sectors. The AMS continues to play a major role in meeting the challenges of the future—as

participant, leader, enabler, communicator, and educator. The Society's members, council, and staff are challenged both to continue and further strengthen this rich heritage. As Councilor, I would welcome the responsibility of helping to address many key challenges facing the AMS, to include facilitating effective win-win partnerships between the public, private, and academic sectors; increasing the multidisciplinary and interdisciplinarity of AMS activities and membership; entraining young professionals from diverse backgrounds; bridging gaps in the Society between the work of the most basic of researchers and the most applied operational forecasters, forensic meteorologists, and policy makers; and fostering greater inclusiveness within AMS and outreach beyond the Society.

It is an honor to have been asked to run for AMS Councilor, and I would feel privileged to serve. I thank you for your consideration.

KENNETH F. CAREY

KENNETH F. CAREY is a senior principal systems engineer for oceans, atmosphere, and space systems at Noblis, a nonprofit science, technology, and strategy organization that helps clients solve complex systems, process and infrastructure challenges.

Carey provides strategic planning, systems engineering, and project management support for NOAA. He works with federal and state clients to meet requirements for the next generation of environmental satellites; is helping to develop a science and technology road map and a national system for air quality products for the NWS; and is providing business planning, program management, and leading technical outreach for the Joint Center for Satellite Data Assimilation. He was

part of a team that helped create a prototype coastal flooding and inundation tool that is capable of aiding decisions to protecting critical infrastructure and the public.

Prior to his work at Noblis, Carey retired from the U.S. Air Force after serving nearly 21 years as an operational and research meteorologist and analyst, systems and training director, and toxic dispersion modeling program lead. He also commanded a weather organization supporting front-line combat units stationed in Europe in the Gulf War, and supported warfighters in the Army on the Korean peninsula. Carey directed 52-person training and software applications sections while a part of the air force global weather center.

Carey earned M.S. degrees from George Mason University (technology management) and North Carolina State University (meteorology, with a minor in oceanography), completed a basic meteorology certificate from Texas A&M University, and graduated with a B.S. in physical sciences from the University of Maryland. He is an adjunct faculty member for Embry-Riddle Aeronautical University. A Fellow of the AMS, he was a winner of the Charles Franklin Brooks Award for Outstanding Services to the AMS and chairs the AMS's Board for Private Sector Meteorologists. He is also especially proud to have helped, for the last seven years, develop the curricula for and host a weather camp for high school teenagers, and mentor students in meteorology.

WILLIAM B. GAIL

The prosperity and security of Earth's seven billion people depend increasingly on our ability to create and apply knowledge. Among the most important domains for this purpose are weather and climate. Though the weather community has contributed substantially to global progress over the last century, we have even greater potential to serve society's needs in the future. The next decade will test our willingness to assume

such increased responsibility.

AMS has already shifted in this direction, as reflected in the 2007 Strategic Goals and the Constitution's clear objective to work for "the benefit of society." Yet society's emerging requirements are enormous and broad reaching. Globalization has increased the sensitivity of trade and economics to weather events. Weather-related deaths and property damage are rising. Consumers are beginning to demand more precise weather information as they discover the benefits of internet-based "just for me" weather for structuring their daily activities. In the climate arena, transitioning from our current focus on acquiring scientific knowledge to one of implementing actions demands that we better understand the steps required to perform needed mitigation and adaptation actions and to anticipate the resulting geopolitical and intergenerational impacts.

With its century-long foundation of respected leadership and broad community reach, AMS is the right organization to spearhead this applications revolution. I am honored to be a candidate for Councilor; if elected, I will advocate for three fundamental AMS initiatives in areas where my personal experience can be helpful. First, AMS should strengthen its position as an international

WILLIAM B. GAIL



WILLIAM B. GAIL received his B.S. in physics and his Ph.D. in electrical engineering from Stanford University, where his research focused on plasma physics in the Earth's magnetosphere. During this period, he spent a year as upper-atmospheric scientist at South Pole Station in Antarctica. He is currently a director within the Startup Business Accelerator group at Microsoft, responsible for enabling breakthroughs in consumer software; he previously held similar positions in the Public Sector and Virtual Earth organizations. Before that, he was vice president of the geospatial products division at Vexcel Corporation, where he initiated Vexcel's acquisition by Microsoft; and director of Earth

science programs at Ball Aerospace, where he developed Earth science and meteorology satellites.

Much of his career has focused on bridging the "valley of death" between science and practical applications of Earth information, working across organizations and linking science to technology and policy. He is a board member of Peak Weather Resources Inc., a company founded by UCAR to transition NCAR weather applications technology into the commercial domain. In this role, he has supported a successful spin-off that builds weather radars, and is presently starting a second business to provide precision weather forecasts for mobile devices. Concurrently, he is founding his own company to deliver business-relevant climate change information and analysis to smaller companies that lack access to high-priced consulting.

Gail is a lifetime national associate of the National Research Council, and participated on the Executive Committee of the recent "Decadal Survey" chartered with recommending a 10-year satellite-observing plan for NASA and NOAA. He serves on a variety of corporate and organizational boards, including Women in Aerospace, *Imaging Notes* magazine, and the NASA Applied Sciences advisory group. He is associate editor for the *SPIE Journal of Applied Remote Sensing* and director of industry relations for the IEEE Geoscience and Remote Sensing Society. He received recent awards from the Geospatial Information and Technology Association for best conference speaker and the American Geophysical Union for excellence in scientific journal review.

thought leader through its technical committees and policy program; it should be widely recognized as the first organization to promote debates, establish clear standards, and set policy positions as difficult climate and weather issues arise (for example, geoengineering). Second, it should build on areas of its expertise to lead communication and coordination among the diverse professional organizations that address climate change, weather forecast globalization, and other multidisciplinary issues. Finally, it should promote accelerated adoption of emerging technologies for improving public access to weather information, including mobile phones, community-based data collection, advanced alerting systems, and social networks.

F. MARTIN RALPH

Challenges facing the AMS include the economic crisis, sustaining transformational research capabilities and associated training of new scientists, transitioning new science and technology into forecasting operations to meet new requirements in water resources, emergency management and aviation, and improving the major infrastructure (including equipment and people) upon which our enterprise depends.

The approach I would take is to identify the key underlying issues that inhibit progress, developing implementable alternatives and road maps to address these issues (e.g., via technical, programmatic, and organizational solutions), and working to focus and develop the necessary resources. A key approach is to bring the research, operational and related business communities together with key forecast users to better define requirements. Once defined, these requirements can empower the research community to innovate, the operational community to modernize, and the business community to help implement solutions. Specifically, I would continue to foster Testbeds on key forecast challenges (e.g., hurricanes, precipitation, severe weather) and strategies (mesoscale modeling, data assimilation), as well as link each to societal impact studies to quantify their value to the nation.

My passion for meteorology emerged from childhood experiences with the southwest monsoon in Arizona, and drives me to help advance precipitation science and prediction, and its linkages to hydrology. While precipitation information is key for hydrology, precipitation forecasting remains one of the great challenges in our field. Finally, applying new approaches to meet the policy challenges related to climate projections for water resources and flood control would be a priority. I would address this by bringing together experts from the weather, climate, and hydrologic communities, as has occurred through the Hydrometeorology Testbed.

Achieving these goals will require engaging and developing stakeholders and constituencies that can help meet these objectives, tasks I have embraced in the past and will continue to pursue.

F. MARTIN RALPH

F. MARTIN RALPH is a research meteorologist who has studied phenomena that cause variations in daily weather and how these variations are affected by short-term climate variability. A key area of interest is exploring how to best observe the atmosphere, with an emphasis on what observations and physical understanding are needed to improve forecasts of precipitation. He has worked closely with the operational weather forecasting community to develop new forecasting techniques based on better physical understanding of the weather and on better use of observations to guide predictions. These efforts have

converged in the establishment of testbeds as a method to accelerate the development and infusion of new science and technology into weather and climate forecasting operations.

Ralph has published over 50 peer-reviewed scientific articles, 20 as the lead author, including several that have advanced the scientific understanding of atmospheric rivers, which are critical to both the global water cycle and to the distribution of precipitation and flooding in key parts of the world. Better understanding, monitoring, and prediction of atmospheric rivers are important to both precipitation forecasting and to reliable regional climate projections of flooding and water supplies in several areas of the world. He is currently the program manager of NOAA's Weather & Water/Science, Technology and Infusion Program and chief of the Water Cycle Branch at NOAA's Earth System Research Laboratory/Physical Sciences Division. He is a research associate at Scripps Institution of Oceanography and a Fellow of the AMS, and has experience communicating work in atmospheric sciences with elected officials and the public. He was born in Detroit, Michigan, and has lived in Arizona, Florida, California, Colorado, and France. He received a B.S. in meteorology at the University of Arizona and M.S. and Ph.D. degrees from UCLA in atmospheric sciences. He enjoys hiking, skiing, golf, and other activities with family and friends.

WALTER A. ROBINSON

I am writing this “inside the Beltway,” at my desk in the National Science Foundation (NSF). Climate change activity is all around me: NOAA is planning to deliver climate services, NSF is developing an emphasis on climate change, two of my colleagues are off attending the Community Climate System Model workshop, and this week the White House released a new report on climate change impacts in the United States. Nearly

everyone in the U.S. who works on this problem belongs to the AMS, putting our Society at the very center of one of the great issues of our time. This challenges us to do our very best at “promot[ing] the development and dissemination of information and education on the atmospheric and related oceanic and hydrologic sciences and the advancement of their professional applications.” The AMS contributes to climate change research through its meetings and journals. These are excellent but can be even better and have greater impact. AMS education initiatives at the K–12 and undergraduate levels can expand to include climate and the environment. The AMS can increase its public outreach and education, in all areas, by drawing on the expertise of its members—for example, establishing a database of member speakers for schools and public gatherings. Our highest priority, however, should be to encourage young people to engage with our science and to make it their life’s work, providing them with the best possible professional training and nurturing their careers. These young people

WALTER A. ROBINSON



WALTER A. ROBINSON received his B.S. and M.S. in physics from the University of Pennsylvania. After wintering in Antarctica as a cosmic radiation observer, he pursued graduate studies in geological sciences at Columbia University, receiving his Ph.D. in 1985 for research at NASA’s Goddard Institute for Space Studies. In 1992, he received a Summer Student Fellowship in the Geophysical Fluid Dynamics Program at the Woods Hole Oceanographic Institution. Following

his Ph.D., he was a postdoctoral fellow at the University of Washington, working on stratospheric dynamics with the late James Holton. He joined the Department of Atmospheric Sciences at the University of Illinois, Urbana-Champaign, in 1988, where he received promotions to associate professor in 1993 and to full professor in 2001, with an affiliate appointment in the Department of Electrical and Computer Engineering. From 2006 to 2009, Robinson served as a program director in the Climate and Large-scale Dynamics Program at the National Science Foundation (NSF). In August 2009, he joined the faculty of North Carolina State University as a professor in the Department of Marine, Earth, and Atmospheric Sciences.

Since 2004, Robinson has served as editor of the *Journal of Atmospheric Sciences*. He has been a member of the U.S. CLIVAR scientific steering committee, and, in 2004, was cochair of the U.S. CLIVAR Atlantic Implementation Panel. At NSF, Robinson was the lead program director responsible for the VOCALS project to study the stratocumulus cloud deck in the Southeast Pacific Ocean, and for the Drought in Coupled Models Project, and he was active in the U.S. Climate Change Science Program.

Robinson has published widely, primarily in AMS journals, on climate dynamics and on the dynamics of the lower and middle atmosphere. He is author of the book, *Modeling Dynamic Climate Systems*.

will provide the ideas and results we need to successfully confront climate change and many other pressing issues related to AMS science.

It is a privilege to work in the atmospheric sciences, work enabled and supported by the activities of the AMS; it would be an honor to serve the Society as a Councilor.

JOHN C. SCHAAKE

The AMS is an outstanding and unique professional organization serving diverse interests in government, the private sector, and academic organizations. A global organization serving a broad range of scientific interests in the atmospheric and related sciences, the AMS helps people with varied interests and backgrounds work together toward common goals.

I'm honored to be a candidate for AMS Council and look forward to the opportunity to help further our strategic goal "to advance the atmospheric and related sciences, technologies, applications and services for the benefit of society." One of our greatest scientific and service challenges is to improve our understanding of uncertainty and how to communicate appropriately to different people. This is especially important for application of weather, water, and climate information in the water and energy sectors. And, I think this challenge brings new opportunities for the private sector to help the water and energy sectors extract and make the best use of information from observations, analyses, model output, and expert opinion.

I've enjoyed opportunities to work creatively in academia, the federal government, and private practice. I've been especially fortunate to work with young people to help them use their talents and interests, and have continued to serve on Ph.D. committees since leaving academia more than 30 years ago.

If elected a member of AMS Council, I anticipate helping all of us continue to work together to serve our community and society.

JOHN C. SCHAAKE

JOHN C. SCHAAKE received his B.E.S. and Ph.D. degrees from Johns Hopkins University with specialization in hydrology and water management. He was awarded a postdoctoral fellowship at Harvard University's Division of Engineering and Applied Physics in water management and public policy. He was assistant professor of environmental and systems engineering at the University of Florida (1966–68) and assistant/associate professor of civil engineering at Massachusetts Institute of Technology (MIT) (1968–74). While at MIT, he helped form the hydrologic consulting firm

Resource Analysis, Inc., now part of Camp Dresser and McKee.

Schaake joined the NOAA hydrology program in 1974 as deputy director of its Hydrologic Research Laboratory, where he led the early development of the National Weather Service River Forecast System. From 1977 to 1987, he served as chief, Hydrologic Services Division and deputy director, Office of Hydrology. From 1987 to 2000, he was senior scientist for special projects, where he helped to forge close ties between water, weather, and climate communities, especially through the Global Energy and Water and cycle Experiment (GEWEX). Since 2001, after retiring from federal service, he has worked under contract to NOAA helping lead development of hydrologic ensemble forecast procedures.

He is a Fellow of AMS and the American Geophysical Union. He is the 2010 AMS Horton Lecturer. In 2004, he cofounded the international Hydrologic Ensemble Prediction Experiment (HEPEX), and serves as cochair.

RICHARD W. SPINRAD

The AMS is at the nexus of a set of increasingly urgent societal issues: global climate change, the role of science and technology in society, and the nature of public/private relationships, just to name a few. We have seen AMS emerge as a leader among professional societies in the past, and this history of forward-

RICHARD W. SPINRAD



RICHARD W. SPINRAD earned his bachelor's degree from the Johns Hopkins University and then earned an M.S. in physical oceanography and a Ph.D. in marine geology in 1982 from Oregon State University. He is the Past-President of The Oceanography Society and served as editor in chief of *Oceanography* magazine. Spinrad also served on the faculty of the U.S. Naval Academy and George Mason University.

His experiences include working as a research scientist at Bigelow Laboratory for Ocean Sciences; serving as the president

of Sea Tech, Inc.; managing oceanographic research at the Office of Naval Research (including serving as the Navy's first manager of its ocean optics program); and directing research and education for the Consortium for Oceanographic Research and Education (CORE).

Spinrad has published more than 50 scientific articles and is the editor of a textbook on ocean optics and several special issues of marine science journals. He has coauthored or contributed to many fundamental documents that impact the oceanographic community, such as a report by CORE titled, "Oceans 2000: Bridging the Millennia," which he coauthored with Admiral James Watkins, and which served as the guiding document for the establishment of the National Oceanographic Partnership Program (NOPP). Spinrad is a Fellow of the AMS, the Marine Technology Society, and the Institute of Marine Engineering, Science, and Technology. He is the recipient of a Presidential Rank Award, as well as the Distinguished Civilian Service Award, the highest award given to a civilian by the U.S. Department of Navy. Spinrad has served as the United States permanent representative to the Intergovernmental Oceanographic Commission of UNESCO, and he cochairs the White House Joint Subcommittee on Ocean Science and Technology.

leaning engagement is what makes the Society an important element to define future directions in issues such as those identified above.

We must be willing to engage and inject into the societal issues that hinge on our information and expertise. That's a difficult task to tackle individually. We, as meteorologists, climatologists, oceanographers, etc., have shown that we can engage on and influence decisions and directions regarding programs and policies of social relevance, and we've done that best when we've used the tools that a society like AMS can proffer. The dilemma right now, though, is that the challenges before us are manifold, and we need to determine where best to apply the AMS strengths. For example, how might we expect climate services to be developed, tested, delivered, and evaluated in the future to address emerging societal issues? Similarly, a new administration has come into Washington, D.C. with clear, bold statements about invigorating math and sciences education. So, what does our community believe are the most appropriate next steps for our math and sciences in this

regard? We cannot afford to wait for outside communities and interests to ask us these questions; we have an obligation to lean forward and project ourselves into these dialogues. The AMS Council can put these questions into perspective and prioritize them, thus giving guidance to the full "toolbox" of AMS capabilities (staff, boards, committees, etc.). As an AMS Councilor I would eagerly embrace the opportunity to help call out these issues, and help guide a campaign of engagement by the Society.

AHSHA N. TRIBBLE

One of the biggest challenges I see facing AMS is the engagement of expertise outside of traditional disciplines and integrating that knowledge into our society while still maintaining our core purpose of meteorological and related hydrological and oceanic sciences.

As extreme weather events are observed, coastal populations increase, and impacts of a changing climate are being realized, the demands for weather and climate information are becoming more targeted and complex. New and existing users are challenging our community to enhance products and services to inform their decisions. To meet the expectations from the emergency management community, homeland security, city planners, water resource managers, and sectors such as energy, agriculture, and insurance, we need to incorporate nontraditional types of information into our research and analyses. In other words, relevant contributions from disciplines such as sociology, economics, and political science as well as those coming from the newer interdisciplinary programs at academic institutions would support more meaningful products and services.

The integration of physical and social sciences is certainly not a new idea, but the progress to make it a reality has been slow across the community as a whole. AMS is well positioned to address this issue by providing numerous opportunities for professional collaboration through meetings, symposia, and the new AMS publication, *Weather, Climate and Society*. I look forward to the possibility of new AMS sessions and committees to bring together these disciplines to support the nation's weather and climate needs.

AHSHA N. TRIBBLE

AHSHA N. TRIBBLE has recently moved to NOAA Headquarters as a senior policy advisor for climate and weather in the Office of the Under Secretary and NOAA Administrator. Prior to this assignment, Tribble was the chief of the Climate Services Division, which is the lead organizational unit overseeing National Weather Service (NWS) climate services and prediction operations plans, policies, and procedures. It is the primary link to the

public and the climate user community to identify and validate climate service needs and establish operational requirements for climate observations. She was also responsible for ensuring that the 135 NWS field offices have the climate tools and information they need to serve the public on a regional and local basis. In this capacity, she also served as an ex-officio member of the Executive Board of the American Association of the State Climatologists.

From 2006 to 2008, Tribble was selected for the first executive officer position established at the NOAA National Hurricane Center (NHC) in Miami, Florida. The duties in this position ranged from strategic and scientific planning and budgeting to handling congressional correspondence and liaising with NOAA and NWS headquarters on matters regarding the NOAA hurricane program. Tribble reported to the director of the NHC and represented the director in various scientific, policy, and outreach venues. She also served as co-lead for the NOAA Hurricane Forecast Improvement Project.

Prior to her position at NHC, Tribble served as the technical chief of staff/senior science advisor to the assistant secretary of commerce for oceans and atmosphere/deputy NOAA administrator from 2003 to 2006. She advised the assistant secretary on scientific and policy issues within NOAA as well as those that pertain to the Climate Change Science Program (CCSP). During this period, she represented the U.S. on panels at the United Nations Framework Convention on Climate Change Conference of Parties and participated in regular meetings with the Council on Environmental Quality, Office of Science and Technology Policy, and the deputy secretary of commerce on climate science and policy issues. She also led the ground work on the process for the CCSP Synthesis and Assessment Products, and developed numerous talking points and briefing papers for congressional inquiries regarding climate science.

Tribble is a member of the AMS and serves on the AMS Board on Women and Minorities. She also participated in the AMS Summer Policy Colloquium, which created an interest for her in the science/policy interface. Tribble is also a member of the American Association for the Advancement of Science (AAAS) and served on multiple selection panels for the AAAS Diplomatic Fellows.

Tribble received her B.S. in mathematics (with a minor in business administration) from Florida A&M University, M.S. in meteorology from Florida State University, and Ph.D. in meteorology from the University of Oklahoma.