S. Hrg. 113–685

# NOMINATIONS TO THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION AND THE NATIONAL TRANSPORTATION SAFETY BOARD

# HEARING

BEFORE THE

# COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

DECEMBER 3, 2014

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#### SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

#### ONE HUNDRED THIRTEENTH CONGRESS

#### SECOND SESSION

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# NOMINATIONS TO THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION AND THE NATIONAL TRANSPORTATION SAFETY BOARD

#### WEDNESDAY, DECEMBER 3, 2014

U.S. SENATE, COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION, *Washington, DC.* 

The Committee met, pursuant to notice, at 12:39 p.m., in room SR-253, Russell Senate Office Building, Hon. Claire McCaskill, presiding.

#### OPENING STATEMENT OF HON. CLAIRE McCASKILL, U.S. SENATOR FROM MISSOURI

Senator McCaskill. The Committee will come to order.

Today we will hear from individuals nominated by the President to fill three positions critical to transportation safety and policy. We have Mr. Carlos Monje, nominated to serve as Assistant Secretary for Policy at the Department of Transportation. Mr. Monje is currently Counselor to U.S. Transportation Secretary Anthony Foxx, a role in which he works on the Administration's proposal to reauthorize the surface transportation programs on the TIGER discretionary grant program and on efforts to promote equity and economic development. Mr. Monje previously served as a Senior Policy Adviser and Chief of Staff at the White House Domestic Policy Council, where he worked on a wide variety of domestic policy issues. If confirmed for this position, Mr. Monje will play a critical role in working across the Executive Branch and with Congress in the coming months as we look to renewing expiring authorizations for surface transportation aviation and rail programs.

We also have Dr. Tho Bella Dinh-Zarr. Is it Dinh-Zarr or Dinh-Zarr? Nominated to serve as a Member of the National Transportation Safety Board, she will bring valuable surface transportation experience of the Board. Currently Dr. Dinh-Zarr is the Director of the U.S. Office of the FIA Foundation, an international philanthropy dedicated to promoting safe and sustainable transportation. In previous positions, she has worked at the American Automobile Association, the U.S. National Highway Traffic Safety Administration, the U.S. Centers for Disease Control and Prevention, and the Texas Transportation Institute. If confirmed for this position, Dr. Dinh-Zarr will fill a vacancy on the five-person safety board charged with determining the proper cause of transportation accidents and making recommendations to improve transportation safety.

And, finally, we have Dr. Mark Rosekind, nominated to serve as Administrator of the National Highway Traffic Safety Administration. Since 2010, Dr. Rosekind has served as a Member of the NTSB. He is considered a leading expert on human fatigue, having published more than 150 scholarly articles and having founded Alertness Solutions, a scientific consulting firm that specializes in fatigue management. Prior to that, Dr. Rosekind directed the Fatigue Countermeasures Program at the Nassau Ames Research Center, was Chief of Aviation Operations Branch in the Flight Management and Human Factors Division, and served as the Director of the Center for Human Sleep Research at Stanford University's Sleep Disorders and Research Center.

This committee and the Consumer Protection Subcommittee have held four hearings this year alone looking at NHTSA's ability to effectively identify defects and exercise its enforcement authority over the industries that it regulates. Through investigations into defects, General Motors' ignition switch and Takata airbags, we examined industry's compliance with Federal safety laws and the agency's capacity to ensure that cars on the road are safe to drive. I think it's safe to say that I speak for many members on both sides of the aisle when I say we were pleased to see the President submit a nominee for this position after calls from many of us to fill this important position that has been without a confirmed Administrator for nearly a year.

NHTSA faces a number of challenges, significant challenges, in the coming months and years as it works to catch up to an auto industry that has far outpaced it with technology. And Congress has a role to play in ensuring the agency has the resources, both financial and technical, to do its job. I look forward to hearing from Dr. Rosekind today about his plans for leading this agency and restoring confidence in its ability to protect the driving public. I hope that if the Members of this committee get the answers they are looking for today, we can move forward in the coming days with quickly confirming these nominees.

Welcome to all of our witnesses, and I look forward to hearing your testimony.

Senator Thune.

#### STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

Senator THUNE. Thank you, Senator McCaskill, for agreeing to chair this hearing to consider the nominations of Mark Rosekind to be the next Administrator of the National Highway Traffic Safety Administration, Bella Dinh-Zarr to be a Member of the National Transportation Safety Board, and Carlos Monje to be Assistant Secretary of Policy at the U.S. Department of Transportation. I appreciate the willingness of these nominees to serve the Nation in what are very important roles.

As I stated in our hearing last month regarding faulty Takata airbags, the string of recalls this year has been cause for grave concern. We are on pace to have the all-time worst year for auto recalls in U.S. history, with roughly 56 million vehicles being subject to recall so far. In many of these cases, there are legitimate questions about whether NHTSA should have identified the defective products earlier and communicated more effectively with the public. That is why Dr. Rosekind will face substantial challenges at NHTSA should he be confirmed.

Since the start of the year, I called on President Obama to nominate a qualified individual to lead without NHTSA without delay because inaction sends a terrible signal to the regulated community and the American people about automobile safety and oversight. In March of this year, over 8 months ago, as the Nation began to fully realize the severity of the problems at General Motors with regard to certain ignition switch defects, I wrote a letter to the President calling on him to nominate a new administrator for NHTSA as quickly as possible. I never received a response. In September, I sent a second letter to the President, stressing the urgency for NHTSA to have a Senate-confirmed leader as the agency dealt with the GM recalls as well as serious allegations information had been withheld from the agency by GM. In September, Senators Heller, McCaskill, the leaders of our Consumer Protection Subcommittee that oversees NHTSA, also both called on the President to nominate a new NHTSA administrator without delay. Unfortunately, President Obama didn't formally nominate a new NHTSA administrator until the evening before this committee's hearing on Takata airbags, on November 20. By contrast, this committee is moving swiftly to consider this nomination.

Dr. Rosekind has served as a Member of the NTSB since 2009. His has experiences in the developing countermeasures for fatigue in order to enhance vehicle safety. He served at NASA for a number of years and founded a technology company aimed at creating software that helps to reduce the role of fatigue and traffic incidents.

NHTSA's mission is safety. And that is paramount to all of us. I will be asking Dr. Rosekind how his experience at NHTSA and academia and in the private sector can be translated to managing an agency that many perceive to be in crisis. I will also be asking Dr. Rosekind how his expertise in fatigue and impaired driving can be utilized to lead an agency that is much different than the NTSB. I believe that NHTSA must have a leader that can hit the ground running. I will also be asking Dr. Rosekind about his familiarity with NHTSA and, in particular, about the administration's ongoing top-to-bottom review of NHTSA reported in the *New York Times*. I want to know how Dr. Rosekind will be involved in this top-tobottom review of NHTSA should he be confirmed.

If he is confirmed, Dr. Rosekind will be departing from the NTSB. And Dr. Bella Dinh-Zarr has been nominated to take over the vacancy at NTSB left by the departure of Deborah Hersman, who stepped down as Chairman earlier this year. Dr. Dinh-Zarr has a solid record as a traffic safety advocate, a compelling personal life story that includes escaping Vietnam as a small child as the Communists took over the country. The NTSB plays an important role in highway, aviation, and other modes of transportation safety. I look forward to hearing from Dr. Dinh-Zarr about what she would seek to prioritize at the NTSB should she be confirmed.

And, finally, Dr. Carlos Monje has been nominated to be Assistant Secretary for Policy at the Department of Transportation. I had the opportunity to meet Mr. Monje when he accompanied Secretary Foxx during his visit to South Dakota last month. I very much appreciated the Secretary's time and seeing firsthand a host of the transportation challenges that exist in a rural state like South Dakota. And I am glad that Mr. Monje was able to come to South Dakota.

Among other things, I will be asking Mr. Monje about his views on issues regarding changes in the department's TIGER grant review process and other issues facing the DOT as we approach the expiration of the MAP-21 extension that runs out on May 31 of next year.

Thank you again, Madam Chair, for holding this important hearing, and I look forward to hearing from our witnesses.

Senator McCASKILL. Thank you, Senator Thune.

We'll begin with you, Dr. Rosekind. We look forward to your testimony.

## STATEMENT OF DR. MARK R. ROSEKIND, MEMBER, NATIONAL TRANSPORTATION SAFETY BOARD; NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, ADMINISTRATOR-DESIGNATE

Dr. ROSEKIND. Senator McCaskill, Ranking Member Thune, members of the Committee, it is an honor to appear before you today as the nominee for administrator of the National Highway Traffic Safety Administration. I would like to thank President Obama for this nomination and Secretary Foxx for his support in my selection.

Before I begin, let me introduce some very special people that are joining me today. My wife, Dr. Debra Babcock, is here. She always provides unwavering support and has enriched my life for over 30 years. Our son, Aaron, and his new bride, Dr. Madalyn Radlauer, are viewing from Minneapolis; and our daughter, Eve, is watching from Baltimore. My mother, Marilyn, and mother-in-law, Lila Babcock, are viewing at home in the San Francisco Bay area. And my family really is a remarkable gift and a constant source of strength in my life.

Professionally, former NTSB Chairman Deborah Hersman and my other NTSB colleagues, many of them here today, have really been tremendous partners, passionate about enhancing transportation safety.

NHTSA touches all of our lives in some way every day. As drivers, passengers, pedestrians, or bicyclists, NHTSA's mission is to help keep all of us safe as we move about our nation's roadways. The agency's mission is to save lives, prevent injuries, and reduce the economic costs of crashes, but in 2012, 33,561 lives were lost and 2.36 million individuals were injured in crashes on America's roads. These are the 2.4 million reasons why roadway safety must always be a national priority and constantly improved. The numbers actually become staggering when considering over the past decade how they have grown. Of course, the actual toll is much higher when realizing that each one of these individuals has a fam-

ily, friends, coworkers, classmates, and others, whose lives are also changed forever.

It is the personal, human, and individual costs that should be foremost in our minds as we discuss NHTSA's safety mission. This discussion must acknowledge how much NHTSA's hard work has already made our roadways safer. The opportunity to protect lives now and in the future is certainly what drives the safety professionals at NHTSA. It is through their efforts, in collaboration with many others across the country, that we have made significant safety achievements over the past 60 years with fatalities on the roadways reaching their lowest level since 1950. Although much still needs to be done, in many respects, NHTSA has led the world in building data-driven processes that have sparked the advancement of safety technologies and systems contributing to this tremendous decline.

NHTSA pursues its safety mission through programs that recognize the complexity of human behavior, the evolution of automotive engineering, and innovations in technology. Core safety programs establish a foundation for crash prevention and survivability while regulation and enforcement provide crucial safety standards. This includes identifying defects and recalls, developing educational materials and activities that touch every segment of our society, improvement of fuel efficiency and emissions, the EMS system, and so much more. NHTSA leverages this diverse portfolio to enhance safety, though it is always critical to ensure that resources and authority align with mission and expectations. This must be balanced with the need for ongoing efforts to identify and pursue actions that will constantly improve the agency's effectiveness in meeting its objectives.

If confirmed, I plan to apply my knowledge, experience, and passion for safety to NHTSA's crucial safety mission. The NTSB shares the same safety objectives as NHTSA, which is to save lives and prevent injuries. And for the past four and a half years as an NTSB board member, it has been my privilege to pursue accident investigations, issue safety recommendations, and undertake advocacy efforts that make our transportation system safer. As a scientist, I developed an analytical, data-driven approach to examining problems and becoming an expert in human fatigue that is relevant to safety in all environments. While at NASA, I expanded my field of knowledge into varied human factors arenas and translated that science into effective solutions that address operational problems in safety-critical environments. Work in the private sector provided invaluable lessons in developing innovative solutions to complex, challenging, real-world safety problems.

I recognize that my nomination to lead NHTSA comes at a pivotal juncture. If confirmed, you have my commitment that I will maintain an aggressive focus on continuing to improve NHTSA's safety record and ensuring that NHTSA's regulatory regime is current for today's safety environment. To this task, I will bring a fresh set of eyes and a different perspective honed over the years as a safety professional and manager at NASA, the NTSB, and in the private sector.

Chairman, in closing, safety has also been a very personal priority for me since my earliest days. My father was a San Francisco police officer, who was killed in the line of duty when a driver ran a red light. And through this single and profound event in my own life, I share in the individual and personal stories of so many people who have been affected by preventable tragedy on our roadways.

I thank you again for your consideration of my nomination to serve as NHTSA Administrator. And I look forward to your questions.

[The prepared statement and biographical information of Dr. Rosekind follow:]

PREPARED STATEMENT OF DR. MARK R. ROSEKIND, MEMBER, NATIONAL TRANSPORTATION SAFETY BOARD; NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, ADMINISTRATOR-DESIGNATE

Chairman Rockefeller, Ranking Member Thune, and Members of the Committee, it is an honor to appear before you today as the nominee for Administrator of the National Highway Traffic Safety Administration (NHTSA). I would like to thank President Obama for this nomination and Secretary Foxx for his support in my selection.

Before I begin, please let me introduce some very special people joining me today. My wife, Dr. Debra Babcock, is here. She always provides unwavering support and has enriched my life for over 30 years. Our son, Aaron, and his new bride, Dr. Madalyn Radlauer, are viewing from Minneapolis, and our daughter, Eve, is watching in Baltimore. My mother, Marilyn, and mother-in-law, Lila Babcock, are viewing at home in the San Francisco Bay Area. My family is a remarkable gift and constant source of strength in my life. Professionally, former National Transportation Safety Board (NTSB) Chairman Deborah Hersman and my other NTSB colleagues have been tremendous partners passionate about enhancing transportation safety.

NHTSA touches all of our lives in some way every day. As drivers, passengers, pedestrians or bicyclists, NHTSA's mission is to help keep all of us safe as we move about our Nation's roadways. The agency's mission is to save lives, prevent injuries, and reduce the economic costs of crashes, but in 2012, 33,561 lives were lost and 2.36 million individuals were injured in crashes on America's roads. These are 2.4 million reasons why roadway safety must always be a national priority and constantly improved. The numbers become staggering when considered over the past decade. Of course, the actual toll is much higher when realizing that each one of these individuals has family, friends, co-workers, classmates, and others whose lives are also changed forever.

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Mr. Chairman, in closing, safety has also been a very personal priority for me since my earliest days. My father was a San Francisco Police Officer killed in the line of duty by a driver who ran a red light. Through this single and profound event in my own life, I share in the individual and personal stories of so many people who have been affected by preventable tragedy on our roadways.

Thank you again for your consideration of my nomination to serve as NHTSA Administrator. I look forward to your questions.

#### A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Mark Ralph Rosekind. 2. Position to which nominated: Administrator, National Highway Traffic Safety Administration.

3. Date of Nomination: November 19, 2014.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.

Office: National Transportation Safety Board, 490 L'Enfant Plaza SW, Washington, D.C. 20594.

5. Date and Place of Birth: February 1, 1955; San Francisco, CA.

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Spouse: Debra A. Babcock, M.D. (pediatrician) Altos Pediatrics, Los Altos, CA; son: Aaron A. Rosekind (27 years old); daughter: Eve M. Rosekind (21 years old).

7. List all college and graduate degrees. Provide year and school attended.

A.B., Stanford University, Stanford, CA, 1977.

M.S., Yale University, New Haven, CT, 1982.

M.Phil., Yale University, New Haven, CT, 1983.

Ph.D., Yale University, New Haven, CT, 1987.

8. List all post-undergraduate employment, and highlight all management level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

All previous employment relevant to nominated position.

(a) Research Director, Sleep Research Facility and Chief, Drug Evaluation Program, Stanford Sleep Disorders Clinic and Research Center, Department of Psychiatry, Stanford University School of Medicine, 1977–1979.

(b) Associate Research Director, Health Behavior Research Program, Center for Educational Research at Stanford, Stanford University, 1979–1980.

(c) Research Coordinator, Yale Psychophysiology Center, Department of Psychology, Yale University, 1982-1984.

(d) Predoctoral Clinical Fellowship, Department of Psychiatry, Yale University School of Medicine and Yale-New Haven Hospital, 1984–1985.

(e) Lecturer, Departments of Psychology and Psychiatry, Yale University and Yale University School of Medicine, 1986–1987.

(f) Director, Sleep Laboratory, Yale Psychophysiology Center, Department of Psychology, Yale University, 1982-1987.

(g) Research Fellowship in Sleep and Chronobiology, E.P. Bradley Hospital, Department of Psychiatry and Human Behavior, Brown University Program in Medicine, 1987–1989.

(h) Director, Center for Human Sleep Research, Stanford Sleep Disorders Center and Research Associate, Department of Psychiatry, Stanford University School of Medicine, 1989–1990.

(i) Research Associate, Stanford Center of Excellence, Department of Psychology, Stanford University, 1990.

(j) Research Psychologist and Team Leader, Fatigue Countermeasures Program, Aviation Safety Research Branch, Flight Management and Human Factors Division, NASA Ames Research Center, Moffett Field, CA, 1990-1997.

(k) Acting Assistant Professor, Department of Human Biology, Stanford University, January-March, 1993-1995.

(1) Chief, Aviation Operations Branch, Flight Management and Human Factors Division, NASA Ames Research Center, Moffett Field, CA, 1996-1997.

(m) President and Chief Scientist, Alertness Solutions, Cupertino, CA, 1997-2010.

(n) Board Member, National Transportation Safety Board, 2010 to present.

9. Attach a copy of your resume. See Attachment 1. 10. List any advisory, consultative, honorary, or other part-time service or posi-tions with Federal, State, or local governments, other than those listed above, within the last five years.

(a) Provided consultation on fatigue factors in accident investigations and served as a resource for current fatigue-related scientific research to National Transportation Safety Board (NTSB) staff. 1998-2010.

(b) Co-developed and co-taught a two-day NTSB Training Center course on examining fatigue factors in an accident investigation. 2004–2010.

(c) Board Member, National Scientific Advisory Board, Patient Safety Center of Inquiry, Palo Alto Veterans Administration Health Center, Palo Alto, CA, 1998– 2010.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last five vears.

(a) Advisory Board, School of Sleep Medicine, Palo Alto, CA. 1990-2010.

(b) President/Owner, Alertness Solutions, 1997-2010.

(c) Editorial Board, Journal of Sleep and Sleep Disorders Research, 2004-2010.

(d) Board of Trustees, Menlo School, Atherton, CA, 2007-2010.

12. Please list each membership you have had during the past ten years or cur-rently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap

(a) Member, International Brotherhood of Magicians, 1974 to present (no restrictions).

(b) Member, Sleep Research Society, 1977 to present (no restrictions).

(c) Member, Aerospace Medical Association, 1990-2010 (estimate) (no restrictions)

(d) Member, Aerospace Medical Association, Aerospace Human Factors Association, 1993-2010 (estimate) (no restrictions).

(e) Honorary Life Member, The Magic Castle, 1993 to present (no restrictions). (f) Member, Fremont Hills Country Club, 1999-2007 (no restrictions).

13. Have you ever been a candidate for and/or held a public office (elected, nonelected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt: No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period: None. 15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

(a) Sigma Xi (The Scientific Research Society).

(b) A.B., Honors in Psychology, Stanford University, 1977.

(c) Yale University Fellowship, 1980–1983

(d) Prize Teaching Fellowship, Yale University, 1983–1984.

(e) NASA Ames Honor Award for Excellence in the category of Group, 1992.

(f) NASA Group Achievement Award, 1993.

(g) Honorary Life Member, Academy of Magical Arts, Magic Castle, 1993.

(h) NASA Exceptional Service Medal, 1995.

(i) Flight Safety Foundation Presidential Citation for Outstanding Safety Leadership, 1997.

(j) Flight Safety Foundation Business Aviation Meritorious Award, 1999.

(k) Fellow, World Economic Forum, Annual Meeting, Davos, Switzerland, 1999, 2000.

 $\left(l\right)$  NASA Ames Honor Award for Excellence in the category of Group/Team, 2003.

(m) NASA Turning Goals into Reality (TGIR), Exceptional Progress Toward Support of MER Ops, Office of Aerospace Technology, 2003.

(n) NASA Headquarters Award for Group Achievement for the Mars Exploration Rover Mission System Development Team, 2004.

(o) William E. Collins Award, Outstanding Human Factors Publication of the Year, Aerospace Human Factors Association, 2007.

(p) Mark O. Hatfield Award for Public Policy, American Academy of Sleep Medicine, 2011.

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Please see Attachment 2 (Publications) and Attachment 3 (Presentations).

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

(a) Federal Railroad Administration Reauthorization: Human Factors Issues Hearing. Testimony provided to Committee on Transportation and Infrastructure, Committee on Transportation, U.S. House of Representatives, Subcommittee on Railroads, Washington, D.C., April 29, 1998.

(b) Managing Fatigue in Transportation: No Magic Bullet. Fatigue and Its Safety Effects on the Commercial Motor Vehicle and Railroad Industries Hearing, U.S. Senate, Committee on Commerce, Science, and Transportation, Subcommittee on Surface Transportation and Merchant Marine, Washington, D.C., September 16, 1998.

(c) Joint Committee on the Judiciary, Commonwealth of Massachusetts, on House Bill 1278, Ignition Interlocks, Boston Massachusetts, September 25, 2013.

(d) Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, U.S. House of Representatives Hearing on Coast Guard and Maritime Transportation Authorization Issues, Washington, D.C., October 29, 2013.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

(a) Member, National Transportation Safety Board (NTSB). During my term as a Board Member at the NTSB, my knowledge, skills, and experience have expanded significantly through my unique and diverse duties. Accident investigations, Board Meetings, issuing safety recommendations, advocacy activities, hearings, and forums are just some of the many NTSB efforts undertaken to enhance transportation safety. The experience and knowledge obtained through my direct involvement in this broad range of safety efforts can be directly applied to the programs and challenges at NHTSA. For example, I have led NTSB advocacy efforts related to substance impaired driving and fatigue, including the creation of stakeholder coalitions, chaired a drowsy driving forum, and provided numerous presentations to diverse audiences. As a Board Member, my responsibilities include the final determination of accident probable cause and deciding what safety recommendations are issued to prevent future occurrences. During my term, we have addressed a broad range of roadway safety issues, including distraction, fatigue, crashworthiness, seat belts, survival factors, regulatory oversight, medical conditions, graduated licensing, and training issues. The NTSB multi-modal perspective further adds to a fresh safety approach that can guide, create and implement enhanced efforts at NHTSA.

(b) Innovative leadership in academics, NASA, and private sector. Whether growing a NASA program to international significance or opening new opportunities to effectively apply fatigue management in diverse settings worldwide, my professional focus has been to enact innovative solutions to challenging safety issues. This has required a strong scientific foundation, appreciation for realworld, practical challenges and operations, an ability to translate technical information into clear and meaningful communications, and to ensure the effectiveness of activities and programs. All of the knowledge, skills, and experience acquired throughout my career can directly advance NHTSA's safety mission. (c) Safety focus and scientific expertise. My entire professional career has been focused on enhancing safety. Even my earliest academic-based research efforts involved applied issues intended to improve safety. Therefore, my fundamental worldview involves actions needed to make the world a safer place. This is reflected in the scientific expertise that I have developed over the course of my career, including fatigue (sleep and circadian rhythms), human factors, psychology/behavior change, and human performance. Given that 94 percent of all traffic crashes involve human factors, my expertise is relevant to addressing the core safety issues encompassed by NHTSA. All of this expertise is rooted in a scientific-based, data-driven approach to understanding problems and seeking solutions. My fundamental focus on safety and particular areas of scientific expertise are all relevant to NHTSA's safety mission.

(d) Why serve in the position? To enhance safety. Enhancing safety means saving lives, preventing injuries, and eliminating crashes. The NTSB has been a remarkable experience with so many opportunities to make a safety difference. Leading an operating modal administration represents a different opportunity to enhance safety. NHTSA is where safety programs get created and implemented, regulations are generated and enforced to protect the traveling public, and diverse informational resources guide and inform all of us. NHTSA is, literally, where the rubber meets the road and offers diverse, meaningful opportunities to enhance safety for drivers, passengers, pedestrians, and bicyclists. For example, one area that holds tremendous safety potential is technology. Automated vehicle technologies are currently available to warn about lane deviations, blind spots, forward collisions, and more. Future technology innovations may lead to autonomous vehicles that make substance impaired driving, distraction, and fatigue obsolete safety risks. NHTSA can help to lead the discussion and incentivize the solutions that will translate current and future technology innovations into greater safety on our roadways.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

If confirmed as Administrator, I will have ultimate responsibility to ensure that NHTSA has proper management and accounting controls in place and functioning effectively. These areas deserve an in-depth examination and, where needed, innovation to enhance these functions to reach optimal effectiveness. The same critical evaluation applied to NHTSA's safety activities should be used in these areas to identify where improvements in management and accounting controls will support the agency's safety mission.

My management experience includes my time as Chief of the Aviation Operations Branch in the Flight Management and Human Factors Division at NASA Ames Research Center, with direct oversight of 60 scientists, researchers, and administrative personnel, including budget and operational responsibilities. During my tenure as the Team Leader of the Fatigue Countermeasures Program in the Aviation Safety Research Branch at NASA Ames Research Center, I created and led multiple international coalitions conducting research, addressing policies, and collaborating on projects. As a Board Member at the NTSB, my advocacy efforts have included leading the creation of a stakeholders coalition to address substance-impaired driving. While my experience has provided a variety of management opportunities with diverse groups, it does not include an organization the size of NHTSA.

20. What do you believe to be the top three challenges facing the department/ agency, and why?

(a) Improving oversight, defect identification, investigation, and recall processes. Recent events clearly demonstrate that the current processes related to defect oversight, collection and analysis of complaints, investigating defects, and recall procedures require an in-depth examination, improvement, and innovation. All levels of the process should be examined to determine if and where greater transparency could enhance safety. Information accuracy, clear communication, and coordination need to be evaluated for their roles in improving this process. Direct interactions with automakers are critical to establishing expectations and emphasizing requirements, including the consequences and potential penalties for inaction, slowed or incomplete responses. The full range of NHTSA's authority and tools should be applied to require and enforce needed safety measures. There is an immediate need to address the current recall situation, as well as a near-term need to address the full defect-recall process. These efforts should go beyond just 'fixing' the current situation and involve improvements and innovations that represent the future of roadway safety. These efforts must be considered in the context of NHTSA's mission requirements given the agency's current resources and authority. It will be critical to determine how resources (e.g., personnel, funding, training) and authority will need to be increased for the agency to effectively meet its mission requirements and expectations. Most importantly, the NHTSA safety mission must be paramount: save lives and prevent injuries. As these issues are examined and changed, safety should be the guiding principle.

(b) Core safety program innovations. NHTSA maintains a core set of legacy safety programs that must be maintained and will potentially grow as new issues emerge. These core safety efforts that focus on seat belt use, car seats, substance impaired driving, distraction, pedestrian and bicyclist safety, school buses, motorcycles, and much more remain the foundation for driver, passenger, and vehicle safety. These efforts must continue and would benefit from innovative enhancements because of their fundamental role in roadway safety. The ever-increasing information overload of modern society creates a challenge for these core safety programs and they must be meaningful and innovative if they are going to be effective. There is a need to bring new ideas and approaches to these core programs so that the safety messages grab attention and lead to actions that will make a difference. These same challenges confront safety and health advocates outside transportation, where their successes in changing and maintaining behavior can inform and guide innovations in these core NHTSA

(c) The Future: Technology innovations. NHTSA data show that human error accounts for 94 percent of traffic crashes, and there are ongoing efforts to introduce technology solutions to reduce or eliminate these vulnerabilities. There are automated vehicle technologies available today that can dramatically reduce these human error related crashes. Forward collision warning systems, automatic braking, blind spot monitoring, and vehicle-to-vehicle (V2V) communications are only a few examples of these technologies. Future innovations may lead to self-driving vehicles that are fully autonomous. These current and future innovations need to be discussed, explored, built, evaluated, evolved, and implemented if their potential is to be fully realized. It will be exciting to see current automated vehicle technologies and future innovations integrated into a roadway safety system for drivers, vehicles, pedestrians, and bicyclists. NHTSA can lead the technology innovation discussions, incentivize development and adoption, and maintain a clear focus on the safety objectives and requirements of new technology.

#### B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

I have no deferred compensation agreements or other continuing dealings with business associates, clients or customers. The sale of my former company, Alertness Solutions, involved structured note payments. The Office of Government Ethics and the NTSB's designated agency ethics officials were consulted to identify potential conflicts of interest My retirement accounts are independent of previous employers.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain: No.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and DOT's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with DOT's designated agency ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and DOT's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with DOT's designated agency ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

During my term at the NTSB, I have participated in Board Meetings that addressed accident investigations and typically included the issuance of safety recommendations to varied organizations. The Board also has issued urgent safety recommendations and other recommendations through the agency's online notation system. The NTSB has no regulatory or enforcement authority, though NTSB safety recommendations do identify public policy actions intended to prevent the reoccurrence of transportation accidents. The NTSB maintains a Most Wanted List of transportation safety issues that is the basis for advocacy efforts intended to highlight NTSB safety recommendations. My advocacy areas have included substanceimpaired driving, fatigue, fire safety, and mass transit.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with DOT's designated agency ethics official and that has been provided to this Committee.

#### C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics by, or been the subject of a complaint to any court, administrative agency, professional association, disciplinary committee, or other professional group? If so, please explain: No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain: No.

3. Have you or any business of which you are or were an officer ever been involved as a party in an administrative agency proceeding or civil litigation? If so, please explain.

In 2001, I was named as a defendant in a patent lawsuit against the Stanford Sleep Center, where I worked. There was no complaint of personal wrongdoing on my part. I had no involvement in the litigation, which was handled by Stanford University, and I am not aware of the disposition of the suit.

versity, and I am not aware of the disposition of the suit. 4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain: No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain: No.

 $\hat{\mathbf{6}}$ . Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination: None.

#### D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

#### Attachment 1: Question #9

RESUMÉ OF MARK R. ROSEKIND, PH.D.

#### **Current Position**

Board Member, National Transportation Safety Board, Washington, D.C., June, 30 2010-present

Nominated by President Obama and confirmed by the U.S. Senate as the 40th Member of the National Transportation Safety Board for a 5-year term ending December 31, 2014

#### **Previous Professional Positions**

President and Chief Scientist, Alertness Solutions, Cupertino, CA, December, 1997–June, 2010.

Research Scientist and Team Leader, Fatigue Countermeasures Program, Aviation Safety Research Branch, Flight Management and Human Factors Division, NASA Ames Research Center, Moffett Field, CA. December, 1990–November, 1997.

Chief, Aviation Operations Branch, Flight Management and Human Factors Division, NASA Ames Research Center, Moffett Field, CA. January, 1996–April, 1997. Director, Center for Human Sleep Research, Stanford Sleep Disorders and Research Center, Department of Psychiatry, Stanford University School of Medicine, 1989– 1990.

#### Education

A.B., Psychology, Stanford University, Stanford, CA, 1977

M.S., Psychology (Psychophysiology/Clinical), Yale University, New Haven, CT, 1982 M.Phil., Psychology (Psychophysiology/Clinical), Yale University, New Haven, CT, 1983

Ph.D., Psychology (Psychophysiology/Clinical), Yale University, New Haven, CT, 1987

## Honors and Awards

Sigma Xi

A.B., Honors in Psychology, Stanford University, 1977

Yale University Fellowship, 1980–1983

Prize Teaching Fellowship, Yale University, 1983–1984

NASA Ames Honor Award for Excellence in the category of Group, 1992

NASA Group Achievement Award, 1993

Honorary Life Member, Academy of Magical Arts, Magic Castle, 1993

NASA Exceptional Service Medal, 1995

Flight Safety Foundation Presidential Citation for Outstanding Safety Leadership, 1997

Flight Safety Foundation Business Aviation Meritorious Award, 1999

Fellow, World Economic Forum Annual Meeting, Davos, Switzerland, 1999, 2000 NASA Turning Goals into Reality (TGIR) for Outstanding Contributions to the Fatigue Countermeasures Program Research Team and Exceptional Progress Towards Aviation Safety, 2000

NASA Ames Honor Award for Excellence in the category of Group/Team, 2003

NASA Turning Goals into Reality (TGIR) for Exceptional Progress Toward Support of MER Ops, Office of Aerospace Technology, 2004

NASA Headquarters Award for Group Achievement for the Mars Exploration Rover Mission System Development Team, 2004

William E. Collins Award, Outstanding Human Factors Publication of the Year, Aerospace Human Factors Association, 2007

Mark 0. Hatfield Award for Public Policy, American Academy of Sleep Medicine, 2011

#### **Academic Appointments**

Lecturer, Departments of Psychology and Psychiatry, Yale University and Yale University School of Medicine,  $1986{-}1987.$ 

Research Associate, Department of Psychiatry, Stanford University School of Medicine, 1989–1990,

Research Associate, Stanford Center of Excellence, Department of Psychology, Stanford University, 1990.

Acting Assistant Professor, Department of Human Biology, Stanford University, January-March, 1993-1995.

### **Professional Training**

Predoctoral Clinical Fellowship, Department of Psychiatry, Yale University School of Medicine and Yale-New Haven Hospital, July, 1984–June, 1985.

Research Fellowship in Sleep and Chronobiology, E.P. Bradley Hospital, Department of Psychiatry and Human Behavior, Brown University Program in Medicine, 1987–1989.

#### **Editorial Activities**

Ad Hoc Reviewer: Psychophysiology; Health Psychology; American Journal of Diseases of Children; Psychiatric Research; Pediatrics; EEG Journal; Plenum Press; Sleep; Sleep Research; Journal of the American Geriatrics Society; Psychological Bulletin; Aviation Space and Environmental Medicine.

Editorial Board, Journal of Sleep and Sleep Disorders Research, January, 2004–June, 2010.

#### **Professional Affiliations**

Sleep Research Society

#### ATTACHMENT 2: QUESTION #16 (PUBLICATIONS)

## Book Chapters

Thoresen, C.E., Coates, T.J., Zarcone, V.P., Kirmil-Gray, K., and Rosekind, M.R. Treating the complaint of insomnia: Self-management perspectives. In J.M. Ferguson and C.B. Taylor (Eds.), *The Comprehensive Handbook of Behavioral Medicine*. New York: Spectrum Publications, 1980.

Bagian T. and Rosekind M.R. Human factors in aerospace systems design and operations. In R. DeHart and J. Davis, (Eds.) *Fundamentals of Aerospace Medicine*, 3rd ed., Philadelphia, Lippincott Williams & Wilkins, 2002.

Rosekind, M.R., Boyd, J.N., Gregory, K.B., Glotzbach, S.F., and Blank, R.C. Alertness management in 24/7 settings: Lessons from aviation. In K. Green (Ed.), *Occupational Medicine: State of the Art Reviews*. Philadelphia: Hanley and Belfus, Inc., 2002.

Rosekind, M.R., Managing work schedules: An alertness and safety perspective. In Kryger, M.A., Roth, T., and Dement, W.C. (Eds.), *Principles and Practice of Sleep Medicine*, 4th ed., Philadelphia: Elsevier Science, 2005.

Rosekind M.R., Flower D.J.C., Gregory, K.B., and Jung W.E. General occupational implications of round-the-clock operations. In Kushida C.A. (Ed.), *Sleep Deprivation*. New York: Marcel Dekker, 2005.

#### Encyclopedia Entries

Rosekind, M.R. Pilots. In Carskadon, M.A. (Ed.), *The Encyclopedia of Sleep and Dreaming*. New York: MacMillan Publishing, 1992.

Rosekind, M.R. Biofeedback. In Carskadon, M.A. (Ed.), *The Encyclopedia of Sleep and Dreaming*. New York: MacMillan Publishing, 1992.

Rosekind, M.R. Relaxation Therapy. In Carskadon, M.A. (Ed.), *The Encyclopedia of Sleep and Dreaming*. New York: MacMillan Publishing, 1992.

Rosekind, M.R. Behavioral Modification. In Carskadon, M.A. (Ed.), *The Encyclopedia of Sleep and Dreaming*. New York: MacMillan Publishing, 1992.

#### Journal Articles

Rosekind, M.R., Coates, T.J., and Thoresen, C.E. Telephone transmission of polysomnographic data from subjects' homes. *Journal of Nervous and Mental Disease*, 1978, 166:438-441.

Coates, T.J., Rosekind, M.R., and Thoresen, C.E. All-night sleep recordings in clients' homes via telephone. *Journal of Behavior Therapy and Experimental Psychiatry*, 1978, 16:339–346.

Coates, T.J., Rosekind, M.R., Strossen, R.J., Thoresen, C.E., and Kirmil-Gray, K. Sleep recordings in the laboratory and the home: A comparative analysis. *Psychophysiology*, 1978, 9:157–162.

Guilleminault, C. and Rosekind, M.R. The arousal threshold: Sleep deprivation, sleep fragmentation, and obstructive sleep apnea syndrome. *European Bulletin of Respiratory Pathophysiology*, 1981, 17:341–349.

Guilleminault, C., Simmons, F.B., Motta, J., Cummiskey, J., Rosekind, M.R., Schroeder, J.S., and Dement, W.C. Obstructive sleep apnea syndrome and tracheostomy: Long term follow-up experience. *Archives of Internal Medicine*, 1981, 141:985–988.

Thoresen, C.E., Coates, T.J., Kirmil-Gray, K. and Rosekind, M.R. Behavioral selfmanagement in treating sleep-maintenance insomnia. *Journal of Behavioral Medicine*, 1981, 4:41–52.

Burnett, K., Taylor, C.B., Thoresen, C.E., Rosekind, M.R., Miles, L.E. and DeBusk, R. Toward computerized scoring of sleep using ambulatory recordings of heart rate and physical activity. *Behavioral Assessment*, 1985, 7:261–271.

Carskadon, M.A., Cavallo, A., and Rosekind, M.R. Sleepiness and nap sleep following a morning dose of clonidine. *Sleep*, 1989, 12(4):338-344.

Cavallo, A., Carskadon, M.A., Rosekind, M.R., and Cattell-Harvey, G. Sleep, clonidine, and their interaction on growth hormone secretion in normal men. *Psychoneuroendorinology*, 1990, 15(1):15–21.

Rosekind, M.R. The epidemiology and occurrence of insomnia. *The Journal of Clinical Psychiatry*, 1992, 53(6, suppl.):4–6.

Gander, P.H., Nguyen, D., Rosekind, M.R., and Connell, L.J. Age, circadian rhythms, and sleep loss in flight crews. Aviation, Space and Environmental Medicine, 1993, 64(3):189–195.

Rosen, R.C., Rosekind, M.R., Rosevear, C., Cole, W.E., and Dement, W.C. Physician education in sleep and sleep disorders: A national survey of U.S. Medical Schools. *Sleep*, 1993, 16(3):249–254.

Rosekind, M.R., Gander, P.H., Miller, D.L., Gregory, K.B., Smith, R.M., Weldon, K.J., Co, E.L., McNally, K.L., and Lebacqz, J.V. Fatigue in operational settings: Examples from the aviation environment. *Human Factors*, 1994, 36(2):327–338.

Smith-Coggins, R., Rosekind, M.R., and Hurd, S. The relationship of day vs. night sleep to physician performance and mood. *Annals of Emergency Medicine*, 1994, 24:928–934.

Rosekind, M.R., Smith, R.M., Miller, D.L., Co, E.L., Gregory, K.B., Webbon, L.L., Gander, P.H., and Lebacqz, J.V. Alertness management: Strategic naps in operational settings. *Journal of Sleep Research*, 1995, 4:62–66.

Rosekind, M.R., Gander, P.H., Gregory, K.B., Smith, R.M., Miller, D.L., Oyung, R.L., Webbon, L.L., and Johnson, J.M. Managing Fatigue in Operational Settings 1: Physiological Considerations and Countermeasures. *Journal of Behavioral Medicine*, 1996, 21:157–165.

Rosekind, M.R., Gander, P.H., Gregory, K.B., Smith, R.M., Miller, D.L., Oyung, R.L., Webbon, L.L., and Johnson, J.M. Managing Fatigue in Operational Settings 2: An Integrated Approach. *Journal of Behavioral Medicine*, 1996, 21:166–170.

Smith-Coggins, R., Rosekind, M.R., Buccino, K.R., Dinges, D.F., and Moser, R.P. Rotating shift schedules: Can we enhance physician adaptation to night shifts? *Journal of Academic Emergency Medicine*, 1997, 4:951–961.

Gander, P.H., Graeber, R.C., Connell, L.J., Gregory, K.B., Miller, D.L., and Rosekind, M.R. Flight crew fatigue I: Objectives and methods. *Aviation, Space, and Environmental Medicine*, 1998, 69(9, Suppl.):B1-7.

Gander, P.H., Gregory, K.B., Graeber, R.C., Connell, L.J., Miller, D.L., and Rosekind, M.R. Flight crew fatigue II: Short-haul fixed-wing air transport operations. Aviation, Space, and Environmental Medicine, 1998, 69(9, Suppl.):B8–15.

Gander, P.H., Barnes, R.M., Gregory, K.B., Graeber, R.C., Connell, L.J., and Rosekind, M.R. Flight crew fatigue III: North Sea helicopter air transport operations. Aviation, Space, and Environmental Medicine, 1998, 69(9, Suppl.):B16-25.

Gander, P.H., Gregory, K.B., Connell, L.J., Graeber, R.C., Miller, D.L., and Rosekind, M.R. Flight crew fatigue IV: Overnight cargo operations. *Aviation, Space, and Environmental Medicine*, 1998, 69(9, Suppl.):B26-36.

Gander, P.H., Gregory, K.B., Miller, D.L., Graeber, R.C., Connell, L.J., and Rosekind, M.R. Flight crew fatigue V: Long-haul air transport operations. *Aviation*, *Space, and Environmental Medicine*, 1998, 69(9, Suppl.):B37–48.

Gander, P.H., Rosekind, M.R., and Gregory, K.B. Flight crew fatigue VI: A synthesis. Aviation, Space, and Environmental Medicine, 1998, 69(9, Suppl.):B49–60.

Drake, C.L., Roehrs, T.A., Burduvali, E., Bonahoom, A., Rosekind, M.R., Roth, T. Effects of rapid versus slow accumulation of eight hours of sleep loss, *Psychophysiology*, 2002, 38(6):979–87.

Howard, S.K., Rosekind, M.R., Katz, J.K., Berry, A.J. Fatigue in anesthesia: implications and strategies for patient and provider safety. *Anesthesiology*, 2002, 97:1281–94.

Howard, S.K., Gaba, D.M., Rosekind, M.R., & Zarcone, V.P. The risks and implications of excessive daytime sleepiness in resident physicians. *Academic Medicine*, 2003, 77(10):1019–25.

Hartenbaum, N., Collop, N., Rosen, I.M., Phillips, B., George, C.F.P., Rowley, J.A., Freedman, N., Weaver, T.E., Gurubhagavatula, I., Strohl, K., Leaman, H.M., Moffitt, G.L., & Rosekind, M.R. Sleep apnea and commercial motor vehicle operators: Statement from the Joint Task Force of the American College of Chest Physicians, American College of Occupational and Environmental Medicine, and the National Sleep Foundation. *Journal of Occupational and Environmental Medicine*, 2006, 48(9, Suppl.):S1–37.

Smith-Coggins, R., Howard, S.K., Mac, D.T., Wang, C., Kwan, S., Rosekind, M.R., Sowb, Y., Balise, R., Levis, J., & Gaba, D.M. Improving alertness and performance in emergency department physicians and nurses: the use of planned naps. *Annals of Emergency Medicine*, 2006, 48:596–604, 604.e1–3.

Rosekind, M.R., Gregory, K.B., Mallis, M.M. Alertness management in aviation operations: Enhancing performance and sleep. Aviation, Space, and Environmental Medicine, 2006, 77(12):1256-65.

Mallis, M.M., Brandt, S.L., & Rosekind, M.R. The challenges of modern day work schedules: Effects on alertness, performance, safety, and health. *Int J Sleep Wake-fulness*, 2007, 1(1):7–13.

Gregory K, Winn W, Johnson K, Rosekind M. Pilot Fatigue Survey: Exploring Fatigue Factors in Air Medical Operations. *Air Medical Journal*, 2010 Nov-Dec; 29(6):309–19.

Rosekind, M.R., Gregory, K.B., Mallis, M.M., Brandt, S.L., Seal, B., & Lerner, D. The cost of poor sleep: workplace productivity loss and associated costs. *Journal of Occupational and Environmental Medicine*, 2010, 52(1):91–98.

Rosekind, M.R. & Gregory, K.B. Insomnia Risks and Costs: Health, Safety, and Quality of Life. *The American Journal of Managed Care*, 2010, 16(8):617–26.

Zammit, G.K., Joish, V.N., Kong, M.C., Balkrishnan, R., Lerner, D., & Rosekind, M. (2010, May). Impact of nighttime awakenings on worker productivity and performance. J Occup Environ Med, 52(5):513–8.

Swanson, L.M., Arnedt, J.T., Rosekind, M.R., Belenky, G., Balkin, T.J., Drake, C. (2011). Sleep disorders and work performance: findings from the 2008 National Sleep Foundation Sleep in America poll. Journal of Sleep Research, 20(3), 487–494. Epub 2010 Sep 30.

#### Abstracts

Rosekind, M.R., Phillips, R., Rappaport, J., Babcock, D., and Dement, W.C. Effects of the waterbed surface on sleep: A pilot study. *Sleep Research*, 1976, 5:132.

Bell, I., Rosekind, M.R., Isaacs, J., Guilleminault, C., and Dement, W.C. Provocation-neutralization food injection testing in excessive daytime sleepiness patients. *Sleep Research*, 1976, 5:158. Bell, I., Rosekind, M.R., Palmer, M., Babcock, D., Guilleminault, C., and Dement, W.C. MMPI and sleep-habit profiles of young adults with different degrees of postprandrial drowsiness. *Sleep Research*, 1977, 6:138.

Bell, I., Rosekind, M.R., Hargrave, V., Guilleminault, C., and Dement, W.C. Lunchtime and nap sleep after specific foods in normals. *Sleep Research*, 1977, 6:45.

Coates, T.J., Thoresen, C.E., Strossen, R.J., and Rosekind, M.R. Obtaining reliable all-night sleep recording data: How many nights are needed? *Sleep Research*, 1978, 7:285.

Coates, T.J., Strossen, R.J., Rosekind, M.R., and Thoresen, C.E. How reliable are sleep scoring procedures? *Sleep Research*, 1978, 7:284.

Coates, T.J., Thoresen, C.E., Rosekind, M.R., Kirmil-Gray, K., and Strossen, R.J. Home and laboratory sleep recordings: A comparative analysis. *Sleep Research*, 1978, 7:283.

Kirmil-Gray, K., Coates, T.J., Thoresen, C.E., Rosekind, M.R., and Price, V.A. Treating insomnia in adolescents. *Sleep Research*, 1978, 7:237.

Rosekind, M.R., Thoresen, C.E., Coates, T.J., Kirmil-Gray, K., Garson, G., George, J.M., and Hamilton, S. Transmission of polysomnographic data from subjects' homes via telephone. *Sleep Research*, 1978, 7:299.

Thoresen, C.E., Coates, T.J., Kirmil-Gray, K., and Rosekind, M.R. Treating insomnia: A self-management approach. *Sleep Research*, 1978, 7:284.

Rosekind, M.R., Coates, T.J., and Zarcone, V.P. Lateral dominance during wakefulness, NREM stage 2 sleep, and REM sleep. *Sleep Research*, 1979, 8:36.

Rosekind, M.R., Seidel, W.F., Brown, E.D., Davison, H., Van den hoed, J., Carskadon, M.A., and Dement, W.C. The evaluation of daytime sleepiness in insomnia. *Sleep Research*, 1979, 8:214.

Rosekind, M.R., Seidel, W.F., Brown, E.D., Davison, H., Van den hoed, J., and Dement, W.C. 28-night sleep laboratory evaluation of Flunitrazepam. *Sleep Research*, 1979, 8:104.

Guilleminault, C., Simmons, F.B., Motta, J., Cummiskey, J., Rosekind, M.R., Schroeder, J.S., and Dement, W.C. Obstructive sleep apnea syndrome and tracheostomy: Long-term follow-up experience. *Sleep Research*, 1980, 9:201.

Rosekind, M.R., Babcock, D. Carskadon, M., Mitler, M., and Dement, W.C. Dose level and efficacy study of a new compound on chronic insomniacs. *Sleep Research*, 1977, 6:80.

Stavosky, J.M., Rosekind, M.R., England W.R., Miles, L.E., and Dement, W.C. Circadian rhythms of body temperature and sleep latency in blind subjects. *Sleep Research*, 1980, 9:227.

Thoresen, C.E., Burnett, K.F., Rosekind, M.R., George, J.M., Clark, J.R., and Hamilton, S. Chronic stress and reported sleep disturbance. *Sleep Research*, 1980, 9:250. Burnett, K.F., Taylor, C.B., Thoresen, C.E., Rosekind, M.R., Stavosky, J.M., Bragg-Remschel, D.A., Miles, L.E., and Debusk, R.F. Validation of a computerized sleep onset detection program utilizing ambulatory heart rate and activity level recordings. *Sleep Research*, 1981, 10:274.

Thoresen, C.E., Burnett, K.F., Rosekind, M.R., Bracke, P., Kirmil-Gray, K., Dexter, G., Jacobson, S., and Clark, J. Psychosocial contrasts between normal and sleep disturbed subjects with onset, maintenance, and combined complaints. *Sleep Research*, 1981, 10:236.

Thoresen, C.E., Rosekind, M.R., Burnett, K.F., Stavosky, J., Jacobson, S., Dexter, G., and Miles, L. Ambulatory physiological monitoring in the natural environment of normal and sleep disturbed subjects with latency, maintenance, and combined complaints. *Sleep Research*, 1981, 10:237.

Rosekind, M.R. and Schwartz, G.E. The perception of sleep and wakefulness I: Accuracy and certainty of subjective judgments. *Sleep Research*, 1988, 17:89.

Rosekind, M.R. and Schwartz, G.E. The perception of sleep and wakefulness II: Information used for discrimination and effects of personality style. *Sleep Research*, 1988, 17:131.

Rosekind, M.R. and Ronan, K.J.C. Improving sleep and wakefulness discrimination in subjective insomnia: A case study. *Sleep Research*, 1989, 18:297.

Carskadon, M.A., Rosekind, M.R., Galli, J., Sohn, J., Herman, K.B. Classroom multiple sleep latency tests. *Sleep Research*, 1989, 18:385. Carskadon, M.A., Rosekind, M.R., Galli, J., Sohn, J., Herman, K.B., Davis, S.S. Adolescent sleepiness during sleep restriction in the natural environment. *Sleep Research*, 1989, 18:115.

Carskadon, M.A., Mancuso, J., Rosekind, M.R. Impact of part-time employment on adolescent sleep patterns. *Sleep Research*, 1989, 18:114.

Carskadon, M.A., Wyatt, J., Etgen, G., Rosekind, M.R. Nonvisual sensory experiences in dreams of college students. *Sleep Research*, 1989, 18:159.

Carskadon, M.A., Cavallo, A., Rosekind, M.R., Mancuso, J., Cattell-Harvey, G. Effects of clonidine on sleepiness and nap sleep. *Sleep Research*, 1989, 18:49.

Cavallo, A., Carskadon, M.A., Rosekind, M.R., Mancuso, J., Cattell-Harvey, G. Effects of clonidine and sleep on growth hormone (GH) secretion. *Sleep Research*, 1989, 18:87.

Carskadon, M.A., Millman, R.P., Rosenberg, C.L., Babcock, D.A., Rosekind, M.R. Cephalometric measurements may predict sleep-disordered breathing due to nasal occlusion in adolescents. *Sleep Research*, 1989, 18:213.

Rosekind, M.R., Cohen, S., Welsh, B., Yost, D., Rountree, M., Dement, W.C. Recent experience recruiting a population of older insomniacs. *Sleep Research*, 1990, 19:273. Rosekind, M.R., Yost, D., Rountree, M., Welsh, B., Cohen, S., Seidel, W.F., Dement, W.C. Laboratory investigation of sleepiness in night shiftworkers. *Sleep Research*, 1990, 19:403.

Rosekind, M.R., Townsend, B., Rountree, M., Connell, L., Yost, D., Graeber, R.C., Spinweber, C., Dinges, D.F., Dement, W.C. Modification of the Medilog 9000–II recorder to reduce 400 HZ noise in the cockpit environment. *Sleep Research*, 1990, 19:377.

Dinges, D.F., Graeber, R.C., Connell, L.J., Rosekind, M.R., and Powell, J.W. Fatigue-related reaction time performance in long-haul flight crews. *Sleep Research*, 1990, 19:117.

Rosekind, M.R., Connell, L.J., Dinges, D.F., Rountree, M.S., and Graeber, R.C. Preplanned cockpit rest: EEG sleep and effects on physiological alertness. *Sleep Research*, 1991, 20, 129.

Connell, L.J., Dinges, D.F., Rosekind, M.R., Gregory, K.B., Rountree, M.S., and Graeber, R.C. Preplanned cockpit rest: Changes in aircrew subjective alertness during long-haul flights. *Sleep Research*, 1991, 20, 119.

Dinges, D.F., Connell, L.J., Rosekind, M.R., Gillen, K.A., Kribbs, N.B., and Graeber, R.C. Effects of cockpit naps and 24-hr layovers on sleep debt in long-haul transmeridian flight crews. *Sleep Research*, 1991, 20, 406.

Cohen, S., Seidel, W.F., Yost, D., Rountree, M., Bailey, R., Rosekind, M.R., and Dement, W.C. Triazolam used in the treatment of jet lag: effects on sleep and subsequent wakefulness. *Sleep Research*, 1991, 20, 61.

Smith-Coggins, R., Rosekind, M.R., Hurd, S., Buccino K. The relationship of day vs. night sleep to physicians performance and mood. *Annals of Emergency Medicine*, 1991, 20(4):455.

Dinges, D.F., Rosekind, M.R., Connell, L.J., Graeber, R.C., and Gillen, K.A. Eastbound night flights vs. westbound day flights: Directionally dependent effects on flight crew layover sleep. *Sleep Research*, 1992, 21, 118.

Rosekind, M.R., Dinges, D.F., Gregory, K.B., Gillen, K.A., Smith, R.M., Powell, J.W., and Miller, D.L. Estimating nap sleep in operational settings: A comparison of actigraphy vs. ambulatory polysomnography. *Sleep Research*, 1993, 22:380.

Smith, R.M., Rosekind, M.R., Gregory, K.B., Miller, D.L., and McNally, K.L. Comparison of disposable vs. disc electrodes in ambulatory recordings. *Sleep Research*, 1993, 22:388.

Smith-Coggins, R., Rosekind., M.R., Buccino K.R., Cole., W. Promoting alertness and performance on the night shift: An intervention study. *Annals of Emergency Medicine*, 1993, 22(5):946.

Rosekind, M.R., Gander, P.H., Co, E.L., Miller, D.L., Weldon, K.J., Smith, R.M., Gregory, K.B., and Lebacqz, J.V. Fatigue Countermeasures: A NASA Education and Training Module. *Sleep Research*, 1994, 23:143.

Gander, P.H., Gregory, K.B., and Rosekind, M.R. Flight schedules and the circadian clock influence sleep loss during overnight cargo operations. *Sleep Research*, 1995, 24:520.

Dinges, D.F., Gillen, K.A., Powell, J.W., Pack, F., Williams, K.S., Kribbs, N.B., Orne, E.C., Carlin, M.C., Ott, G.E., Rosekind, M.R., Orne, M.T., and Pack, A.I. Mood re-

ports during total and partial sleep deprivation: Is anger inevitable? *Sleep Research*, 1995, 24:441.

Dinges, D.F., Ott, G.E., Gillen, K.A., Orne, E.C., Powell, J.W., Carlin, M.C., Kribbs, N.B., Rosekind, M.R., and Orne, M.T. Homeostatic and circadian control of waking during sleep deprivation. *Sleep Research*, 1995, 24:442.

Rosekind, M.R., Miller, D.L., Gregory, K.B., and Dinges, D.F. Flight crew sleep in long-haul aircraft bunk facilities: Survey results. *Sleep Research*, 1995, 24:112.

Howard, D.K., Gaba, D.M., and Rosekind, M.R. Evaluation of daytime sleepiness in resident anesthesiologists. *Anesthesiology*, 1995, 83:A1007.

Howard, D.K., Gaba, D.M., and Rosekind, M.R. Subjective assessment of sleepiness and sleep onset perception of resident anesthesiologists. *Anesthesiology*, 1995, 83:A1009.

Rosekind, M.R., Smith, R.M., Gregory, K.B., and Miller, D.L. NASA AIRLOG: An Electronic Sleep/Wake Diary. *Sleep Research*, 1996, 25:525.

Howard, S.K., Rosekind, M.R., and Gaba, D.M. Improving daytime alertness in resident anesthesiologists: The effects of sleep extension. *Sleep Research*, 1996, 25:468.

Gander, P.H., Gregory, K.B., Miller, D.L., and Rosekind, M.R. Circadian and environmental factors affecting sleep of longhaul flight crews. *Sleep Research*, 1996, 25:549.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Co, E.L., Lebacqz, J.V., and Brenner. M. Crew fatigue factors in the Guantanamo Bay aviation accident. *Sleep Research*, 1996, 25:571.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Oyung, R.L., Neri, D.F., & Dinges, D.F. Sleep quantity and quality of augmented long-haul flight crews in on-board crew rest facilities. *Sleep Research*, 1997, 26:41.

Rosekind, M.R., Co, E.L., Gregory, K.B., Miller, D.L., & Neri, D.F. A survey of fatigue factors in corporate/executive aviation operations. *Sleep Research*, 1997, 26:213.

Dijkman, M., Sachs, N., Levine, E., Mallis, M., Carlin, M.M., Gillen, K.A., Powell, J.W., Samuel, S., Mullington, J., Rosekind, M.R., & Dinges, D. F. Effects of reduced stimulation on neurobehavioral alertness depend on circadian phase during human sleep deprivation. *Sleep Research*, 1997, 26:265.

Howard, S.K., Keshavacharya, S., Smith, B.E., Rosekind, M.R., Weinger, M., Gaba, D.M. Behavioral evidence of fatigue during a simulator experiment. *Anesthesiology* 1998, A-1236.

Herndon, C.N., Weinger, M.B., Smith, B.E., Howard, S.K., Rosekind, M.R., Gaba, D.M. Use of task analysis to evaluate the effects of fatigue on performance during simulated anesthesia cases. *Anesthesiology* 1998, A–1180.

Roth, T., Roehrs, T., Bonahoom, A., Rosekind, M., Koshorek, G., and Rosenthal, L. Cumulative effects of sleep loss. *Sleep*, 1998, 21(3, Suppl.):239.

Åkerstedt, T., comp. Consensus Statement: Fatigue and accidents in transport operations. J. Sleep Res., 2000, 9:395. (Written and endorsed by 27 authors including M. R. Rosekind).

Rosekind, M.R., Neri, D.F., Gregory, K.B., Mallis, M.M., Bowman, S.L., Oyung, R.L., A NASA Education and Training Module on Alertness Management: A Survey of Implementation and Application. *Sleep*, 2001, 24(Suppl.):A415.

Smith-Coggins, R., Howard, S., Kwan, S., Wang, C., Mac, D.T., Rosekind, M.R., Sowb, Y., Balise, R., Gaba, D. Do naps during the night shift improve performance in the emergency department. *Annals of Emergency Medicine*, 2002, 9(5):466.

Smith-Coggins, R., Howard, S., Kwan, S., Wang, C., Mac, D.T., Rosekind, M.R., Sowb, Y, Balise, R., Gaba, D. Do naps during the night shift improve performance in the emergency department. *Sleep*, 2002, 25:A116–A117.

Mallis, M.M., Co, E.L., Rosekind, M.R., Neri, D.F., Oyung, R.L. Brandt, S.L., Colletti, L.M., Reduta, D.D.: Evaluation of a web-based fatigue education and training module in the general aviation (GA) population. Aviation, Space and Environmental Medicine, 2003, (Suppl.):382.

Mallis, M.M., Rosekind, M.R., Chapman, P.M., Colletti, L.M., Neri, D.F.: Evaluation of the NASA education and training module on alertness management: knowledge gained an organizational impact. *Sleep*, 2004, 27(Suppl.):A376.

Rosekind, M.R. (2005). Underestimating the societal costs of impaired alertness: safety, health and productivity risks. *Sleep Medicine*, 6(Suppl. 1), S21–S25.

Mallis, M., Gregory, K., Brandt, S., Grubb, W., and Rosekind, M. Effects of insomnia subtypes on perceived occupational functioning: survey of nursing professionals. *Sleep*, 2007, 30 (Abstract Suppl.):A266.

Mallis, M., Brandt, S., Gregory, K., Grubb, W., and Rosekind, M. Effects of insomnia subtypeson perceived health, mood, and help-seeking: survey of nursing professionals. *Sleep*, 2007, 30 (Abstract Suppl.):A267.

Rosekind, M. R., Brandt, S. L., Mallis, M. M., Seal, B., Gregory, K. B., & Balkrishnan, R. (2007). Sleep disruption and insomnia: Relation to work productivity and treatment use [Abstract]. *Journal of Managed Care Pharmacy*, 13(8), 706. Rosekind, M. R., Gregory, K. B., Brandt, S. L., Mallis, M. M., Joish, V. N., & Lerner, D. (2008, June). Insomnia and sleep loss: Reported effects on performance, safety, and productivity. *Sleep*, 31(Abstract Suppl.), A247.

Balkrishnan R., Joish V., Koerber C., Rosekind M., Lerner D., Kong M., & Zammit G. (2009, June). Impact of nighttime awakenings on worker productivity and performance. *Sleep*, 32 (Abstract Suppl.), A257.

Swanson L., Arnedt J., Rosa R., Rosekind M., Belenky G., Balkin T., & Drake C. (2009, June). Sleep, health, and work outcomes for shift workers: results from the 2008 Sleep in America Poll. *Sleep*, 32, (Abstract Suppl.), A58–59.

#### NASA/Government Technical Memoranda

Rosekind, M.R., Graeber, R.C., Dinges, D.F., Connell, L.J., Rountree, M.S., Spinweber, C.L. and Gillin, K.A. (1994). Crew Factors in Flight Operations: IX. Effects of Planned Cockpit Rest on Crew Performance and Alertness in Long-Haul Operations. (Technical Memorandum 103884). Moffett Field, CA: NASA.

Kelly, T.L., Rosekind, M.R., & Naitoh, P. (1994). Sleep Management Manual. Naval Health Research Center Report NHRC-TD-5E-1994.

Gander, P.H., Connell, L.J., Gregory, K.B., Miller, D.L., Rosekind, M.R., and Graeber, R.C. (1996). Crew Factors in Flight Operations: VII. Psychophysiological Responses to Overnight Cargo Operations. (Technical Memorandum 110380). Moffett Field, CA: NASA.

Dinges, D.F., Graeber, R.C., Rosekind, M.R., Samel, A., and Wegmann, H.M. (1996). Principles and Guidelines for Duty and Rest Scheduling in Commercial Aviation. (Technical Memorandum 10404). Moffett Field, CA: NASA.

Rosekind, M.R., Gander, P.H., Connell, L.J., and Co, E.L. (1999). Crew factors in flight operations X: Alertness management in flight operations (Technical Memorandum 1999–208780). Moffett Field, CA: NASA.

Co, E. L., Gregory, K. B., Johnson, M. J., Rosekind, M. R. (1999). Crew factors in flight operations XI: A Survey of Fatigue Factors in Regional Airline Operations (Technical Memorandum 208799). Moffett Field, CA: NASA.

Co E.L., Gregory K.B., Johnson J.M., Rosekind M.R., (1999): Crew factors in flight operations XIV: Alertness Management in Regional Flight Operations (Technical Memorandum 208799). Moffett Field, CA: NASA.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Co, E.L. (2000). Crew factors in flight operations XII: A survey of sleep quantity and quality in on-board crew rest facilities. (Technical Memorandum 2000–20961). Moffett Field, CA: NASA.

Rosekind, M.R., Co, E.L., Gregory, K.B., Miller, D.L. (2000): Crew factors in flight operations XIII: A survey of fatigue factors in corporate/executive aviation operations. (Technical Memorandum 209610). Moffett Field, CA: NASA.

Rosekind, M.R., Co, E.L., Neri, D.F., Oyung, R.L., Mallis, M.M. (2002): Crew factors in flight operations XIV: Alertness management in regional flight operations education module. (Technical Memorandum 2002–211393). Moffett Field, CA: NASA.

Rosekind, M.R., Co, E.L. Neri, D.F., Oyung, R.L., Mallis, M.M. (2002). Crew factors in flight operations XV: Alertness management in general aviation. (Technical Memorandum 2002–211394). Moffett Field, CA: NASA.

#### Technical Papers

Rosekind, M.R., Gander, P.H., and Dinges, D.F. Alertness management in flight operations: Strategic napping. SAE Technical Paper Series #912138, September, 1991. Rosekind, M.R., Weldon, K.J., and Lebacqz, J.V. Pegasus Launch Anomaly: Evaluation of Contributory Fatigue Factors. In Special Investigation Report: Commercial Space Launch Incident, Launch Procedure Anomaly, Orbital Sciences Corporation, Pegasus/SCD-1, 80 Nautical Miles east of Cape Canaveral, Florida, February 9, 1993 (NTSB/SIR-93/02). Washington, D.C.: National Transportation Safety Board. 1993. (NTIS No. PB93-917003).

Kelly, S.M., Rosekind, M.R., Dinges, D.F., Miller, D.L., Gillen, K.A., Gregory, K.B., Aguilar, R.D., and Smith, R.M. Flight controller alertness and performance during MOD shiftwork operations. Proceedings of a workshop at Space Operations, Applications and Research (SOAR'93) Conference, NASA Johnson Space Center, Houston, TX., August, 1993. NASA Conference Publication #3240.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Co, E.L., & Lebacqz, J.V. Analysis of Crew Fatigue Factors in AIA Guantanamo Bay Aviation Accident. In Aircraft Accident Report: Uncontrolled Collision with Terrain, American International Airways Flight 808, Douglas DC-8, N814CK, U.S. Naval Air Station, Guantanamo Bay, Cuba, August 18, 1993 (NTSB/AAR-94/04). Washington, D.C.: National Transportation Safety Board. 1994. (NTIS No. PB94-910406).

Rosekind, M.R., Weldon, K.J., Co, E.L., Miller, D.L., Gregory, K.B., Smith, R.M., Johnson, J.M., Gander, P.H., and Lebacqz, J.V. Fatigue factors in regional airline operations. In Public Forum on Commuter Airline Safety, National Transportation Safety Board, Atlanta, GA, June 14–16, 1994.

Rosekind, M.R., Smith, R.M., Miller, D.L., Co, E.L., Gregory, K.B., Gander, P.H., and Lebacqz, J.V. (1994). Naps as an alertness management strategy. In T. Akerstedt, & G. Kecklund (Eds.), Stress Research Reports: Work Hours, Sleepiness and Accidents—Sept 8–10, Proceedings and Abstracts (pp. 87–90). Stockholm, Sweden: National Institute for Psychological Factors and Health.

Neri, D.F. & Rosekind, M.R. (March, 1997). Recommended principles and guidelines for shuttle astronaut crew scheduling. Moffett Field, CA: NASA Ames Research Center.

Neri, D.F., Dinges, D.F., & Rosekind, M.R. (June, 1997). Sustained carrier operations: sleep loss, performance, and fatigue countermeasures. Moffett Field, CA: NASA Ames Research Center.

Rosekind, M.R., Neri, D.F., and Dinges, D.F. (September, 1997). From laboratory to flightdeck: Promoting operational alertness. Fatigue and Duty Time Limitations— An International Review, Proceedings of the Royal Aeronautical Society, London, UK.

Rosekind, M.R. (1999). Fatigue in Transportation: Physiological, Performance, and Safety Issues. In Evaluation of U.S. Department of Transportation Efforts in the 1990s to Address Operator Fatigue (pp. 68–81, NTSB SR–99/01). Washington, D.C.: National Transportation Safety Board. (NTIS No. PB99–917002 Notation 7155).

#### Industry/Specialized Articles

Graeber, R.C., Rosekind, M.R., Connell, L.J., & Dinges, D.F. Cockpit Napping. *ICAO Journal*, 1990, 45(10):6–10.

Graeber, R.C. and Rosekind, M.R. The NASA Nap. Airworthy Aviator: The Newsletter of Human Factors in Aviation, 1990, 1(4).

Rosekind, M.R., Gander, P.H., Miller, D.L., Gregory, K.B., McNally, K.L., Smith, R.M., and Lebacqz, J.V. NASA Ames Fatigue Countermeasures Program. FAA Aviation Safety Journal, 1993, 3(1).

Co, E.L., Rosekind, M.R., Johnson, J.M., Weldon, K.J., Smith, R.M., Miller, D.L., Gregory, K.B., Gander, P.H., and Lebacqz, J.V. Fatigue Countermeasures: Alertness Management in Flight Operations. In *Proceedings of the Eleventh Annual International Aircraft Cabin Safety Symposium*. Southern California Safety Institute, Long Beach, CA, 1994.

Rosekind, M.R., Co, E.L., Johnson, J.M., Smith, R.M., Weldon, K.J., Miller, D.L., Gregory, K.B., Gander, P.H., and Lebacqz, J.V. Alertness management in long haul flight operations. In *Proceedings of the Thirty-Ninth Corporate Aviation Safety Seminar*, Flight Safety Foundation, St. Louis, Missouri, 1994.

Rosekind, M.R., Gander, P.H., Smith, R.M., Weldon, K.J., Co, E.L., and McNally, K.L. Fatigue in Aviation. *Air Line Pilot*, 1994, 63(10), 22–25.

Rosekind, M.R., Neri, D.F., Miller, D.L., Gregory, K.B., Webbon, L.L., & Oyung, R.L. (May, 1997). Crew fatigue research focusing on development and use of effective countermeasures. *ICAO Journal* 52(4), 20–22.

Rosekind, M.R., Hamilton-Oravetz, S.H., Sweet, D.N., McCoy, J.M., Co, E.L., & Gregory, K.B. (March, 1999). Show me the data: Which fatigue countermeasures work? Paper presented at 11th annual European Aviation Safety Seminar (EASS): "Flight Safety: Management, Measurement, and Margins," Amsterdam, Netherlands.

Rosekind, M.R., Boyd, J.N., Dement, W.C. Managing Alertness in Sleep Center Personnel. *Sleep Review*, 2001, 2(2):17–21, 58.

Rosekind, M.R. Managing fatigue in the 24/7 practice of healthcare: Opportunities to improve patient safety. In Howard S.K. & Morell R.C. (eds) Anesthesia Patient Safety Foundation Newsletter, Pittsburgh, PA, (Spring, 2005).

Rosekind, M.R. Peak performance requires optimal sleep and alertness. In *Olympic Coach Magazine*, 20(2), Colorado Springs, CO, (Spring, 2008).

Rosekind, M.R. Managing Fatigue in EMS Flight Operations: Challenges and Opportunities. Invited Industry White Paper, (October 2008).

#### ATTACHMENT 3: QUESTION #16 (PRESENTATIONS)

#### Papers and Posters

Rosekind, M.R. Evaluating treatment effects using home polysomnography. In Thoresen, C.E. (Chair), Behavioral self-management in the treatment of insomnia. Symposium presented at meetings of the American Psychological Association, San Francisco, CA, August, 1977.

Thoresen, C.E., Rosekind, M.R., Coates, T.J., Kirmil-Gray, K., Garson, G., George, J.M., and Hamilton, S. Telephone transmission of all-night polysomnographic data from subjects' homes. Scientific exhibit presented at meetings of the Association for the Psychophysiological Study of Sleep, Palo Alto, CA, April, 1978.

Stavosky, J.M., Rosekind, M.R., England, W.R., Miles, L.E., and Dement, W.C. Circadian rhythms of body temperature and sleep latency in blind subjects. Poster presented at meetings of the Association for the Psychophysiological Study of Sleep, Mexico City, Mexico, April, 1980.

Thoresen, C.E., Burnett, K.F., Rosekind., George, J.M., Clark, J.R., and Hamilton, S. Chronic stress and reported sleep disturbance. Poster presented at meetings of the Association for the Psychophysiological Study of Sleep, Mexico City, Mexico, April, 1980.

Burnett, K.F., Taylor, C.B., Thoresen, C.E., Rosekind, M.R., Stavosky, J.M., Bragg-Remeschel, D.A., Miles, L.E., and DeBusk, R.F. Validation of a computerized sleep onset detection program utilizing ambulatory heart rate and activity level recordings. Poster presented at meetings of the Association for the Psychophysiological Study of Sleep, Hyannis, MA, June, 1981.

Rosekind, M.R. Applying to graduate school in psychology: Why and how. In Rosekind, M.R. (Chair) and Harvey, J.H. (Discussant), Symposium presented at meetings of the American Psychological Association, Los Angeles, CA, August, 1981. Thereach, C.F. Burnott, K.F. Beschind, M.P. Brecke, P. Kirmil Cray, K. Davtor

Thoresen, C.E., Burnett, K.F., Rosekind, M.R., Bracke, P., Kirmil-Gray, K., Dexter, G., Jacobson, S.G., and Clark, J. Psychosocial contrasts between normal and sleep disturbed subjects with onset, maintenance, and combined complaints. Poster presented at meetings of the Association for the Psychophysiological Study of Sleep, Hyannis, MA June, 1981.

Thoresen, C.E., Rosekind, M.R., Burnett, K.F., Stavosky, J., Jacobson, S., Dexter, G., and Miles, L. Ambulatory physiological monitoring in the natural environment of normal and sleep disturbed subjects with latency, maintenance, and combined complaints. Poster presented at meetings of the Association for the Psychophysiological Study of Sleep, Hyannis, MA, June 1981.

Rosekind, M.R. Going to graduate school in psychology: Why, how, and where. In Salovey, P. (Chair), Going to graduate school in psychology: A first hand account. Symposium presented at meetings of the Eastern Psychological Association, Baltimore, MD, April, 1982.

Rosekind, M.R. A preventive intervention: Helping physically ill children cope with hospitalization. In Weissberg, R. (Chair), Community-based interventions with children: Graduate and undergraduate training issues and experiences. Symposium presented at meetings of the Eastern Psychological Association, Baltimore, MD, April, 1984.

Rosekind, M.R. and Schwartz, G.E. The perception of sleep and wakefulness I: Accuracy and certainty of subjective judgments. Poster presented at the Third Annual Meetings of the Association of Professional Sleep Societies, San Diego, CA, June, 1988.

Rosekind, M.R. and Schwartz, G.E. The perception of sleep and wakefulness II: Information used for discrimination and effects of personality style. Poster presented at the Third Annual Meetings of the Association of Professional Sleep Societies, San Diego, CA, June, 1988. Sohn, J., Rosekind, M.R., Galli, J., Herman, K., Davis, S., Carskadon, M.A. Subjective perception of sleep and sleepiness in the classroom. Poster presented at the Third Annual Meeting of the Northeastern Sleep Society, White Plains, NY, April 1989.

Carskadon, M.A., Rosekind, M.R., Galli, J., Sohn, J., Herman, K.B. Classroom multiple sleep latency tests. Oral presentation (Carskadon, M.A.) at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989. Carskadon, M.A., Rosekind, M.R., Galli, J., Sohn, J., Herman, K.B., Davis, S.S. Adolescent sleepiness during sleep restriction in the natural environment. Oral presentation (Carskadon, M.A.) at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989.

Carskadon, M.A., Mancuso, J., Rosekind, M.R. Impact of part-time employment on adolescent sleep patterns. Oral presentation (Carskadon, M.A.) at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989. Carskadon, M.A., Cavallo, A., Rosekind, M.R., Mancuso, J., Cattell-Harvey, G. Effects of clonidine on sleepiness and nap sleep. Oral poster presentation (Rosekind, M.R.) at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989.

Cavallo, A., Carskadon, M.A., Rosekind, M.R., Mancuso, J., Cattell-Harvey, G. Effects of clonidine and sleep on growth hormone (GH) secretion. Oral poster presentation and poster at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989.

Rosekind, M.R. and Ronan, K.J.C. Improving sleep and wakefulness discrimination in subjective insomnia: A case study. Poster presented at the Annual Meetings of the Association of Professional Sleep Societies, Washington, D.C., June, 1989.

Rosekind, M.R. Jet lag and sleep problems. Invited symposium (Cheryl Spinweber, Ph.D., Chair), Western Psychological Association Annual Meeting, Los Angeles, CA, April, 1990.

Rosekind, M.R., Townsend, B., Rountree, M., Connell, L., Yost, D., Graeber, R.C., Spinweber, C., Dinges, D.F., Dement, W.C. Modification of the Medilog 9000–II recorder to reduce 400 HZ noise in the cockpit environment. Oral poster presentation and poster at the Annual Meetings of the Association of Professional Sleep Societies, Minneapolis, Minnesota, June, 1990.

Rosekind, M.R., Rountree, M., Yost, D., Welsh, B., Cohen, S., Seidel, W.F., Dement, W.C. Laboratory investigation of sleepiness in night shiftworkers. Oral presentation at the Annual Meetings of the Association of Professional Sleep Societies, Minneapolis, Minnesota, June, 1990.

Graeber, R.C., Rosekind, M.R., Dinges, D.F., Connell, L.J., Powell, J.W. Fatigue-related reaction time performance in long-haul flight crews. Oral presentation at the Annual Meetings of the Association of Professional Sleep Societies, Minneapolis, Minnesota, June, 1990.

Rosekind, M.R. and Rountree, M.S. Preplanned cockpit rest: Physiological effects on alertness in long-haul flight crews. Oral presentation in "Flight Crew Fatigue in Transport Operations," Graeber, R.C. (Chair), at the Sixth International Symposium on Aviation Psychology, Ohio State University, Columbus, Ohio, May, 1991.

Rosekind, M.R., Connell, L.J., Dinges, D.F. and Graeber, R.C. Preplanned cockpit rest: Effects on physiological alertness in long-haul flight crews. Oral presentation at the Annual Meetings of the Aerospace Medical Association, Cincinnati, Ohio, May, 1991.

Dinges, D.F., Connell, L.J., Rosekind, M.R. and Graeber, R.C. Preplanned cockpit rest: Effects on vigilance performance in long-haul flight crews. Oral presentation at the Annual Meetings of the Aerospace Medical Association, Cincinnati, Ohio, May, 1991.

Smith-Coggins, R., Rosekind, M.R., Hurd, S. and Buccino, K. Relationship of day vs. night sleep to physician performance and mood. Oral presentation at the Annual Meetings of the Society for Academic Emergency Medicine, May, 12–15, 1991.

Rosekind, M.R., Connell, L.J., Dinges, D.F., Rountree, M.S. and Graeber, R.C. Preplanned cockpit rest: EEG sleep and effects on physiological alertness. Oral poster presentation at the Annual Meetings of the Association of Professional Sleep Societies, Toronto, Canada, June, 1991.

Connell, L.J., Dinges, D.F., Rosekind, M.R., Gregory, K.B., Rountree, M.S. and Graeber, R.C. Preplanned cockpit rest: Changes in aircrew subjective alertness during long-haul flights. Oral poster presentation at the Annual Meetings of the Association of Professional Sleep Societies, Toronto, Canada, June, 1991.

Dinges, D.F., Connell, L.J., Rosekind, M.R., Gillen, K.A., Kribbs, N.B. and Graeber, R.C. Effects of cockpit naps and 24-hr layovers on sleep debt in long-haul transmeridian flight crews. Poster presentation at the Annual Meetings of the Association of Professional Sleep Societies, Toronto, Canada, June, 1991.

Rosekind, M.R., Gander, P.H. and Dinges, D.F. "Alertness management in flight operations: Strategic napping." SAE Aerotech '91, Aerospace Technology Conference and Exposition, Long Beach, CA, September, 1991.

Rosekind, M.R. and Gander, P.H. Alertness management in two-person long-haul flight operations. Invited presentation for panel on "Flight Fatigue in Long-Haul Aircraft," Aerospace Medical Association 63rd Annual Scientific Meeting, Miami Beach, FL, May, 1992.

Dinges, D.F., Rosekind, M.R., Connell, L.J., Graeber, R.C. and Gillen, K.A. Eastbound night flights vs. westbound day flights: Directionally dependent effects on flight crew layover sleep. Poster presentation at the Association of Professional Sleep Societies Annual Meeting, Phoenix, Arizona, May 31-June 3, 1992.

Smith-Coggins-R., Rosekind, M.R., Bucciono, K.R., Cole, W. Promoting alertness and performance on the night shift: An intervention study. Poster presentation at the Society for Academic Emergency Medicine Annual Meeting, San Francisco, CA, May 17–20, 1993. Poster received Best Poster award for 1993 Annual Meeting.

Gander, P.H. and Rosekind, M.R. Age, Circadian Rhythms, and Sleep Loss in Flight Crews. Oral presentation at the Aerospace Medical Association Annual Meeting, Toronto, Canada, May 24, 1993.

Rosekind, M.R., Gander, P.H., McNally, K.L., Miller, D.L. and Lebacqz. J.V. Fatigue Countermeasures: A NASA Education and Training Module. Poster presentation at the Aerospace Medical Association Annual Meeting, Toronto, Canada, May 27, 1993. Rosekind, M.R., Dinges, D.F., Gregory, K.B., Gillen, K.A., Smith, R.M., Powell, J.W. and Miller, D.L. Estimating nap sleep in operational settings: A comparison of actigraphy vs. ambulatory Polysomnography. Oral poster presentation at the 7th Annual meeting of the Association of Professional Sleep Societies, Los Angeles, CA, June 26, 1993.

Smith, R.M., Rosekind, M.R., Gregory, K.B., Miller, D.L. and McNally, K.L. Comparison of disposable vs. disc electrodes in ambulatory recordings. Poster presentation at the 7th Annual meeting of the Association of Professional Sleep Societies, Los Angeles, CA, June 26, 1993.

Kelly, S.M., Rosekind, M.R., Dinges, D.F., Miller, D.L., Gillen, K.A., Gregory, K.B., Aguilar, R.D. and Smith, R.M. Flight controller alertness and performance during MOD shiftwork operations. Presented at Space Operations, Applications and Research (SOAR) Conference, NASA Johnson Space Center, Houston, TX, August 4, 1993.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Co, E.L. and Lebacqz, J.V. Analysis of crew fatigue factors in AIA Guantanamo Bay Aviation Accident. Presented at "Work hours, sleepiness, and accidents," Karolinska Institute, National Institute for Psychosocial Factors and Health, Stockholm, Sweden, September 8, 1994.

Rosekind, M.R., Smith, R.M., Miller, D.L., Co, E.L., Gregory, K.B., Gander, P.H. and Lebacqz, J.V. Naps as an alertness management strategy. Presented at "Work hours, sleepiness, and accidents," Karolinska Institute, National Institute for Psychosocial Factors and Health, Stockholm, Sweden, September 10, 1994.

Rosekind, M.R., Miller, D.L., Gregory, K.B. and Dinges, D.F. Survey of sleep quality and quantity in on-board crew rest facilities. Poster presentation at Aerospace Medical Association annual meeting, Anaheim, CA, May 10, 1995.

Gander, P.H., Gregory, K.B., Miller, D.L., Connell, L.J., Graeber, R.C. and Rosekind, M.R. Flight crew sleep and circadian rhythms during overnight cargo operations. Poster presentation at Aerospace Medical Association annual meeting in Anaheim, CA, May 10, 1995.

Rosekind, M.R. Naps as an alertness management strategy in shiftwork environments. In Management of sleep/wake disturbances associated with shiftwork, course presented prior to Association of Professional Sleep Societies Annual Meeting, Nashville, TN, May 31, 1995.

Dinges, D.F., Ott, G.E., Gillen, K.A., Orne, E.C., Powell, J.W., Carlin, M.C., Kribbs, N.B., Rosekind, M.R. and Orne, M.T. Homeostatic and circadian control of waking during sleep deprivation. Oral presentation at Association of Professional Sleep Societies Annual Meeting, Nashville, TN, June 2, 1995.

Dinges, D.F., Gillen, K.A., Powell, J.W., Pack, F., Williams, K.S., Kribbs, N.B., Orne, E.C., Carlin, M.C., Ott, G.E., Rosekind, M.R., Orne, M.T. and Pack, A.I. Mood Re-

ports During Total and Partial Sleep Deprivation: Is Anger Inevitable? Oral presentation at Association of Professional Sleep Societies Annual Meeting, Nashville, TN, June 2, 1995.

Rosekind, M.R., Miller, D.L., Gregory, K.B. and Dinges, D.F. Flight crew sleep in long-haul aircraft bunk facilities: Survey results. Oral poster presentation at Association of Professional Sleep Societies Annual Meeting, Nashville, TN, June 2, 1995.

Gander, P.H., Gregory, K.B. and Rosekind, M.R. Flight schedules and the circadian clock influence sleep loss during overnight cargo operations. Oral presentation at Association of Professional Sleep Societies Annual Meeting, Nashville, TN, June 3, 1995.

Rosekind, M.R., Gander, P.H., Webbon, L.L. and Miller, D.L. Managing Fatigue in Aviation Operations: Education and Training. Presentation at Aerospace Medical Association annual meeting, Atlanta, GA, May 8, 1996.

Rosekind, M.R., Miller, D.L., Gander, P.H., Gregory, K.B., Oyung, R.L., Webbon, L.L., Johnson, J.M., Smith, R.M. and Co, E.L. Fatigue Countermeasures in Aviation Operations. Oral presentation at Aerospace Medical Association annual meeting, Atlanta, GA, May 8, 1996.

Gander, P.H., Gregory, K.B., Miller, D.L. and Rosekind, M.R. Circadian and Environmental Factors Affecting Sleep of Long-Haul Flight Crews. Poster presentation at Association of Professional Sleep Societies Annual Meeting, Washington D.C, May 31, 1996.

Rosekind, M.R., Smith, R.M., Gregory, K.B. and Miller, D.L. NASA AIRLOG: Sleep/ Wake Diary. Poster presentation at Association of Professional Sleep Societies Annual Meeting, Washington D.C, May 31, 1996.

Rosekind, M.R., Gregory, K.B., Miller, D.L., Co, E.L., Lebacqz, J.V., and Brenner, M. Crew Fatigue Factors in the Guantanamo Bay Aviation Accident. Poster presentation at Association of Professional Sleep Societies Annual Meeting, Washington D.C, May 31, 1996.

Neri, D.F. & Rosekind, M.R. Sleep and rest requirements: physiological considerations. Panel presentation at the 68th annual scientific meeting of the Aerospace Medical Association, Chicago, IL, May, 1997.

Rosekind, M.R. & Neri, D.F. Operational issues: What science is available? Panel presentation at the 68th annual scientific meeting of the Aerospace Medical Association, Chicago, IL, May, 1997.

Roth, T., Roehrs, T., Bonahoom, A., Rosekind, M.R., Koshorek, G., and Rosenthal, L. Cumulative effects of sleep loss. Poster presentation at Association of Professional Sleep Societies Annual Meeting, New Orleans, LA, June 10, 1998.

Rosekind, M.R., Neri, D.F., Gregory, K.B., Mallis, M.M., Bowman, S.L., Oyung, R.L. A NASA Education and Training Module on Alertness Management: A Survey of Implementation and Application. Poster presentation at Association of Professional Sleep Societies Annual Meeting, Chicago, IL, June 9, 2001.

Mallis, M., Gregory, K., Brandt, S., Grubb, W., and Rosekind, M. Effects of insomnia subtypes on perceived occupational functioning: survey of nursing professionals. Poster presented at the Annual Meetings of the Association of Professional Sleep Societies, Minneapolis, MN, June 9–14, 2007.

Mallis, M., Brandt, S., Gregory, K., Grubb, W., and Rosekind, M. Effects of insomnia subtypes on perceived health, mood, and help-seeking: survey of nursing professionals. Poster presented at the Annual Meetings of the Association of Professional Sleep Societies, Minneapolis, MN, June 9–14, 2007.

Mallis, M.M., Rosekind, M.R., Lerner, D., Seal, B., Brandt, S.L., Gregory, K.B. Insomnia and sleep loss: Workplace productivity loss and associated costs. Poster presentation at International Society for Pharmacoeconomics and Outcomes Research 10th Annual European Congress, Dublin, Ireland, October 20–23, 2007.

Rosekind, M.R., Brandt, S.L., Mallis, M.M., Seal, B., Gregory, K.B., Balkrishnan, R. Sleep disruption and insomnia: Relation to work productivity and treatment use. Poster presentation at Academy of Managed Care Pharmacy Annual Educational Conference, Boston, MA, October 24–27, 2007.

Mallis, M.M., Rosekind, M.R., Lerner, D., Seal, B., Brandt, S.L., & Gregory, K.B. (2007, October). Insomnia and sleep loss: Workplace productivity loss and associated costs. Poster presentation at the International Society for Pharmacoeconomics and Outcomes Research 10th Annual European Congress, Dublin, Ireland.

Rosekind, M.R., Brandt, S.L., Mallis, M.M., Seal, B., Gregory, K.B., & Balkrishnan, R. (2007, October). Sleep disruption and insomnia: Relation to work productivity

and treatment use. Poster presentation at the Academy of Managed Care Pharmacy Educational Conference, Boston, MA.

Rosekind, M.R., Gregory, K.B., Brandt, S.L., Mallis, M.M., Joish, V.N., & Lerner, D. (2008, June). Insomnia and sleep loss: Reported effects on performance, safety, and productivity. Poster presentation at the 23rd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD.

#### Invited

Narcolepsy and animal related research. Invited lecture presented to Community Medicine 149: Introduction to Sleep and Sleep Disorders, University of California at San Diego, School of Medicine, April, 1978.

Rosekind, M.R. and Nowack, K.M. Sleep and sleep disorders for health professionals. University Extension, University of California at Davis. Full-day seminar accredited for continuing education credit by the University of California at San Francisco, Nursing, February, 1979 and March, 1980.

Sleep disorders: An introduction to their diagnosis and treatment. Psychopharmacology Grand Rounds, Department of Psychiatry, Yale University School of Medicine, November, 1983.

An introduction to the diagnosis and treatment of sleep disorders. In service presentation, Capital Region Mental Health Center, Hartford, CT, March, 1985.

Sleep disorders: Past, present and future. Grand Rounds, Department of Psychiatry, Yale University School of Medicine and Yale-New Haven Hospital, February, 1985. A biopsychosocial approach to the evaluation and treatment of sleep disorders. Adult and Pediatric Sleep Disorders Conference sponsored by the Hospital of St. Raphael and the New Haven Sleep Disorders Center, New Haven, CT, September, 1986.

An introduction to behavioral and cognitive-behavioral therapy. Neuropsychiatry Rounds, Department of Psychiatry, Yale University School of Medicine, August, 1986.

An introduction to sleep disorders: Diagnosis and treatment. Psychosomatic Grand Rounds, Department of Psychiatry, Yale University School of Medicine, May, 1982, August, 1984, 1985, 1986.

Schwartz, J.I. and Rosekind, M.R. Behavioral medicine: Behavioral approaches to treatment. Mini-Course, Psychopharmacology Rounds, Department of Psychiatry, Yale University School of Medicine, Spring, 1986.

Sleep and sleep disorders: Circa 1988. Psychology Section, West Haven Veterans Medical Center, West Haven, CT, September, 1988.

The diagnosis and treatment of sleep disorders. Cape Cod Hospital, Cape Cod, MA, August, 1988.

Sleep disorders: An introduction. Quincy City Hospital, Quincy, MA, September, 1988.

Sleep disorders: State-of-the-art diagnosis and treatment. 97th Army General Hospital, Frankfurt, West Germany, March, 1989.

An introduction to the diagnosis and treatment of sleep disorders. Institute of Living, Hartford, CT, April, 1989.

Sleep disorders medicine: State-of-the-art, 1989. Annual Medical Staff Conference, St. Francis Hospital, Santa Barbara, CA, December, 1989.

Conducting research in applied settings. Sleep Medicine and Technology Training and Education Center, 8 presentations, Palo Alto, CA, 1989–1990.

Shiftwork, jet lag and biological rhythm disruptions. Medical Aspects of Foreign Travel, Mountain Medicine Institute and University of California, San Francisco, Treasure Island, San Francisco, CA, May, 1990; 1991; 1992.

Sleep disorders medicine: State-of-the-art, 1990. Invited address, Annual Scientific Meeting of the Missouri Academy of Family Physicians, Osage Beach, MO, June, 1990.

Time travel: Sleep and circadian disruptions. Invited presentation to the 1990 Annual Cross-Tell Navy Divers Conference held at the Naval Diving and Salvage Training Center, Panama City, FL, October, 1990.

Rosekind, M.R., Graeber, R.C. and Connell, L.J. Continuous EEG recordings during long-haul flights: Effects of preplanned cockpit rest. Presented at CEC-Workshop on "Psychophysiological measures in transport operations," DLR-Institute for Aerospace Medicine, Cologne, Germany, October, 1990. Adaptation to shiftwork. Invited presentation for Emergency Department Attending Physicians, Stanford University School of Medicine, July 1991.

Role of fatigue in commercial vehicle accidents. Presented to National Transportation Safety Board (NTSB) members, researchers, and investigators organizing a study on commercial truck accidents related to fatigue. One of three presentations (others by R. Mackie and W.C. Dement). Participated in discussion of study design and objectives. Met and/or spoke with John Lauber, Ph.D., NTSB member, Susan Coughlin, NTSB member, Bernard Loeb, Ph.D., Director of Research, and J. Kolstad, NTSB Chairman, October, 1991.

Fatigue Countermeasures. Presented to Annual Cross-Tell Diving Conference at the Naval Diving and Salvage Training Center, Panama City, FL; second year in a row presenting to this group, only 1 other presenter has been asked back in the last 8 years, November, 1991.

Fatigue Countermeasures. Presented to the U.S. Army Priority Air Transport Detachment, Andrews Air Force Base, Washington, D.C., December, 1991.

Biological Rhythms and the Transportation Industry: Implications for the Airline Industry. 1992 Industrial Symposium: Importance of Biological Rhythms for Industry; sponsored by The Center for Biological Timing, a National Science Foundation Science and Technology Center, February, 1992.

Flight Crew Fatigue. Invited presentation for first annual Beechjet/Diamond Operators Conference, Beechcraft, Wichita, Kansas, April, 1992.

NASA Ames Fatigue Countermeasures Program. Presented to Independent Pilots Association, UPS and UPS Management Personnel, Louisville, Kentucky, May, 1992.

Rosekind, M.R., Lebacqz, J.V., Miller, D.M., Gregory, K.B., McNally, K.L., Smith, R.M. and Boyle, M. Fatigue countermeasures: Managing alertness and performance in shiftwork operations. Presented to NASA Ames Research Center 80 X 120 wind tunnel personnel (Code FFN), June, 1992.

Strategies for Alertness Management in Flight Operations. Presented to Chief Pilot, management, pilot, flight attendant, training, and other personnel at American, United, Delta, Northwest, UPS, and DHL, August, 1992–February, 1993.

NASA Ames Fatigue Countermeasures Program and Strategies for Alertness Management in Flight Operations. Presented to Human Factors in Aviation course, Department of Biological Sciences, San Jose State University, David Wood and Dr. Dan Holley, Instructors, March, 1993.

Strategies for Alertness Management in Flight Operations presented to 89th Presidential/Congressional Airlift Wing, Andrews Air Force Base, Washington, D.C., March 30, 1993.

Fatigue, sleep, and sleep disorders. Presented to Health Psychology masters (M.A.) students in the Counseling Psychology Dept., Stanford Univ., Professor Carl E. Thoresen, May 18, 1993.

Alertness Management in Flight Operations. Presented to FAA Aviation Rulemaking Advisory Committee Working Group on Flight/Duty/Rest requirements; meeting held at United Airlines Training Center, Denver, CO, May 27, 1993.

NASA Ames Fatigue Countermeasures Program activities, as part of a shared presentation with Dr. David Dinges, Univ. of Pennsylvania School of Medicine; presented to the Air Freight Association, Washington, D.C., June 30, 1993.

Alertness Management in Flight Operations. Presented to National Transportation Safety Board, Washington, D.C., including Carl Vogt, Chairman, Dr. John Lauber, Member, Susan Coughlin, Member and 35 NTSB staff, July, 1, 1993.

Alertness Management in Flight Operations. Presented to Dept of Aeronautics and Astronautics, Naval Postgraduate School, Dept of Navy, Monterey, CA, July 8, 1993. Fatigue, Sleep, and Sleepiness in Operational Settings. Presented to Command and Controls Seminar, co-sponsored by NASA Johnson Space Center Mission Operations Directorate and University of Houston-Clear Lake, Houston, TX; (with Sean Kelly, JSC), July 13, 1993.

JSC/ARC MOD Shiftwork Project Status Briefing. Presented to Flight Directors Office, Mission Operations Directorate, NASA JSC; included Lee Briscoe, Lead Flight Director; Houston, TX; (with Sean Kelly, JSC and Dr. Dave Dinges, Univ. of Pennsylvania School of Medicine), July 13, 1993.

JSC/ARC MOD Shiftwork Project Status Briefing. Presented to Program Operations Management Team, Mission Operations Directorate, NASA JSC; included Gene Kranz, Chief, MOD and 60 other MOD Directorate and Division Chiefs, July 14, 1993.

NASA Ames Fatigue Countermeasures Program,. Presented to New Zealand Civil Aviation Authority, including Kevin Ward, Executive Director and Program Chiefs (e.g., medical), July 21, 1993.

Fatigue in Operational Settings: Examples from Aviation,. Presented to Invited Seminar, Department of Psychiatry and Behavioral Sciences, University of Auckland School of Medicine, Auckland, New Zealand, July 22, 1993.

Alertness Management in Flight Operations. Presented to Air New Zealand personnel including Manager of Flight Operations, Medical Department, Flight Operations, representatives of pilot groups and line pilots, Auckland, New Zealand, July 23, 1993.

Fatigue Research in Aviation: Current Activities and Issues. Presented to the ICA-RUS Committee as a special brief; invited by Dr. John Lauber, Member, NTSB and Jack Enders, Flight Safety Foundation, co-chair ICARUS Committee; Seattle, Washington, July 26, 1993.

Alertness Management in Flight Operations. Presented to SAE G10 (Human Behavior Technology) Committee, San Diego, CA, August 3, 1993.

Rosekind, M.R. and Dinges, D.F. Invited workshop—Alertness Management in Flight Operations: Education and Training; presented at the IATA 22nd Technical Conference on Human Factors in Aviation, Montreal, Quebec, Canada, October 5, 1993.

Alertness Management in Flight Operations. Invited presentation in Developing Trends in Flight Operations symposium (Capt. Neil Johnston, Aer Lingus, Chair), presented at the IATA 22nd Technical Conference on Human Factors in Aviation, Montreal, Quebec, Canada, October 8, 1993.

Fatigue Countermeasures in Flight Operations. Invited presentation at Independent Pilot Association's 1993 Aviation Health and Safety Symposium, Louisville, KY, Oct. 12, 1993.

Alertness Management in Flight Operations (NASA Education and Training Module). Presented at Southwest Airlines, Dallas, TX, October 13, 1993.

Fatigue Factors in AIA Guantanamo Bay Accident. Presented as expert testimony to National Transportation Safety Board hearing investigating accident. Analyzed sleep/wake and related data provided by NTSB Investigators and presented relevant information regarding physiological factors (*i.e.*, sleep loss, circadian disruption) that may have played a role in the accident. Honorable John Hammerschmidt, NTSB Board Member presided over the hearing, January 7, 1994.

Fatigue and Alertness Management in Flight Operations. Presented at the request of the Director General, Transport Canada for the initial meetings of working groups examining Canadian light/duty/rest requirements. Provided information to two groups—a major airline group; and a regional, commuter, air taxi, rotorcraft group, January 26–27, 1994.

Fatigue Countermeasures: Alertness Management in Flight Operations. Presented to the 11th Annual International Aircraft Cabin Safety Symposium and Technical Conference, Jan. 31–Feb. 5, 1994, Long Beach, CA, sponsored by the Southern California Safety Institute and Civil Aeromedical Institute, February 3, 1994.

Is it really safe to fly? Presented at Scripps Clinic and Research Foundation Symposium, "Sleep and the Public Safety: Issues of Alertness, the Work Place, and Unintentional Injury," La Jolla, CA, February 25, 1994.

Alertness Management in Flight Operations. Presented to Aviation Human Factors, San Jose State University; Instructors David Wood and Professor Dan Holley, March 15, 1994.

Sleep and Alertness in Operational Settings. Presented to Health Psychology Education graduate students, Department of Education, Stanford University; Professor Carl Thoresen, March 29, 1994.

Alertness Management in Flight Operations presented to VP Flight Operations and Chief Pilots, Continental Airlines, Houston, TX, April 6, 1994.

Alertness Management in Flight Operations presented to Operational Problems in Aerospace Physiology, School of Aerospace Physiology, Brooks AFB, San Antonio, TX, April 8, 1994.

Alertness Management in Long-Haul Corporate Flight Operations presented to 39th Annual Corporate Air Safety Symposium, Flight Safety Foundation, St. Louis, MO, April 14, 1994. Alertness Enhancement in Flight Operations presented as part of a Human Factors Panel at Delta Airlines, ALPA Safety Forum, San Diego, CA, April 22, 1994.

Sleep Loss and Alertness in Operational Settings, Colloquium, Department of Psychology, University of Arizona, Tucson, AZ, April 29, 1994.

Sleep, Sleepiness, and Performance. Presented to Airline Medical Directors Association, Aerospace Medical Association Annual Meeting, San Antonio, TX; entire program organized on flight crew fatigue, June 7, 1994.

Alertness Management in Flight Operations. Presented to Airline Medical Directors Association, Aerospace Medical Association Annual Meeting, San Antonio, TX; entire program organized on flight crew fatigue, June 7, 1994.

Fatigue Issues in the Aviation Industry. Presented to Air Transport Assoc. Operations Council, including 14 VPs of Flight Operations from major U.S. air carriers, ATA personnel (VP Operations and others), and FAA representatives, June 11, 1994.

Alertness Management in Flight Operations. Presented to Naval Postgraduate School Seminar, Monterey, CA, June 26, 1994.

Sleep, circadian rhythms, alertness, and performance in flight operations. Briefing presented to Anthony Broderick, Assoc. Administrator, Charles Huettner, Assoc. Administrator, Dave Herrington, Division Chief, Larry Youngblut, Rulemaking Team Leader, Flight/Duty/Rest Rulemaking Team, and General Counsel representatives, FAA, Washington, D.C., July 1, 1994.

Alertness Management in Flight Operations. Presented to America West Airlines personnel (about 65) representing flight operations, management, pilots, flight attendants, scheduling, safety, training, and others, Phoenix, AZ, July 21, 1994.

Alertness management in flight operations. Presented to 1994 Aerospace Physiologist Course, USAF School of Aerospace Medicine, Brooks AFB, San Antonio, TX, August 12, 1994.

Rosekind, M.R. and Gander, P.H. Alertness management in flight operations. Presented to Federal Express management personnel, Memphis, TN, August 24, 1994. Fatigue in aviation operations. Presented at Air Transport Association Ops Forum, Blaine, WA, September 19, 1994.

Alertness management in flight operations. Presented to U.S. Coast Guard Commanding Officer Conference, Washington, D.C. (attended by 28 COs of U.S. Coast Guard Stations), September 22, 1994.

Alertness management in corporate flight operations. Presented to Gulfstream Pilot Advisory Board, Savannah, GA, November 8, 1994.

Alertness management in flight operations. Presented to Pacific Rim International Pilot Group sponsored by Air Transport Association, Honolulu, HI, November 11, 1994.

Alertness management in flight operations. Presented to U.S. Coast Guard Station flight crews, San Diego, CA, January 4, 1995.

Alertness management in flight operations. Presented to National Business Aircraft Association Annual Dispatchers and Schedulers meeting, San Francisco, CA, January 12, 1995.

Alertness management in flight operations. Presented to NTSB Board Members (Hammerschmidt and Francis) and staff, Washington D.C., January 19, 1995.

Alertness management in flight operations. Presented to California Air National Guard command personnel, Sacramento, CA, January 28, 1995.

Managing fatigue in aviation operations. Keynote presentation at New Zealand Civil Aviation Authority Symposium, Auckland, New Zealand, February 9, 1995.

Managing fatigue in operational settings. Presented to Santa Clara Valley Medical Group, Santa Clara, CA, February 28, 1995.

NASA Ames Fatigue Countermeasures Program and Strategies for Alertness Management in Flight Operations. Presented to Human Factors in Aviation course, Department of Biological Sciences, San Jose State University, David Wood and Dr. Dan Holley, Instructors, March 7, 1995.

Sleep and sleep disorders. Presented to Health Psychology Graduate Seminar, Department of Education, Stanford University (Professor Carl Thoresen), March 14, 1995.

Alertness management in flight operations. Presented to Air Canada senior management and scheduling personnel, Toronto, Canada, March 17, 1995.

Alertness management in flight operations. Presented to Air National Guard senior safety personnel, Denver, CO, March 22, 1995.

Alertness management in flight operations. Presented to Delta Airlines Annual ALPA Safety Forum, Fort Lauderdale, FL, March 24, 1995.

Managing fatigue in operational settings. Presented to Sleep and Public Policy Forum, sponsored by Sleep Disorders Clinic, Presbyterian Hospital, Dallas, TX, March 25, 1995.

Alertness management in flight operations. Presented to National Business Aircraft Association Annual International Operators Conference, Dallas, TX, March 29, 1995.

Alertness Management in Flight Operations. Presented to Operational Problems in Aerospace Physiology, School of Aerospace Physiology, Brooks AFB, San Antonio, TX, April 5, 1995.

Time travel: Managing shiftwork and jet lag. Presented to Medical Aspects of Foreign Travel, Mountain Medicine Institute, Treasure Island, CA, April 29, 1995.

Alertness management in flight operations. Presented to FAA Crew Resource and Safety Management Course for senior and mid-level FAA managers, FAA HQ, Washington D.C., May 24, 1995.

Managing fatigue in corporate aviation operations. Presented to Gulfstream Annual Operators Conference, Savannah, GA, June 7, 1995.

Evaluating human fatigue factors in aviation accident investigations. Presented to first annual Accident Investigation Course for Medical Personnel, FAA Civil Aeromedical Institute, Oklahoma City, OK, June 19, 1995.

Alertness management in flight operations. Presented to Delta Airlines Corporate Safety Dept., Flight Operations, In flight, and Human Factors Group personnel. Invited/arranged by Dr. John Lauber, VP, Corporate Safety and Compliance, Atlanta, GA, August 22, 1995.

Alertness management in flight operations. Presented to safety meeting for Maryland State Police, Baltimore area Emergency Services personnel, FAA, and aviation personnel. Maryland National Guard facility, MD, September 26, 1995.

Alertness management in flight operations. Presented to Continental Airlines Human Factors Group, Houston, TX, September 29, 1995.

Fatigue countermeasures in flight operations: Implications for FAA activities. Presented to FAA HQ, Washington, D.C., October 31, 1995.

Corporate flight operations: Fatigue issues and potential countermeasures. Presented to Corporate Safety Seminar, Flight Safety Foundation, Seattle, WA, November 9, 1995.

Fatigue countermeasures: Implications for airline maintenance operations. Presented to United Airlines Maintenance Safety/Training Working Group, San Francisco International Airport, November 28, 1995.

Managing fatigue in the workplace: Addressing safety, productivity, and efficiency. Presented to San Jose State University Business Alumni Association, San Jose, CA, November 30, 1996.

Alertness Management in Flight Operations. Presented to Operational Problems in Aerospace Physiology, School of Aerospace Physiology, Brooks AFB, San Antonio, TX, January 24, 1996.

Fatigue countermeasures: Considerations in law enforcement. Presented to Santa Clara County Sheriff's Department, San Jose, CA, February 2, 1996.

Managing fatigue in longhaul corporate flight operations. Presented to International Operators Conference, National Business Aircraft Assoc., Orlando, FL, February 29, 1996.

Fatigue in the Operating Room: Implications for anesthesia and medicine. Presented to Department of Anesthesiology, Columbia University School of Medicine, New York, NY, May 9, 1996.

Alertness management in flight operations: Implications for shuttle and station ops. Presented to JSC Safety Program (including astronaut office, flight operations, training, etc.), Houston, TX, May 21, 1996.

Alertness Management in Flight Operations. Presented to Operational Problems in Aerospace Physiology, School of Aerospace Physiology, Brooks AFB, San Antonio, TX, May 22, 1996.

Introduction to sleep physiology. Presented to National Sleep Foundation International Drive Alert, Arrive Alive Conference, Washington, D.C., May 28, 1996. Fatigue research in transportation. Presented to American Trucking Association Litigation Center Annual Conference, Vail, CO, July 15, 1996.

Human factors and automation: Future considerations. Keynote dinner presentation to Maritime Institute symposium on Human Factors in Marine Operations, Baltimore, MD, October 1, 1996.

Fatigue factors in corporate aviation: Initial survey results. Presented to Flight Safety Foundation Corporate Advisory Committee, Savannah, GA, October 30, 1996. Managing performance and alertness in professional athletics. Presented to New York Giants Football Team (about 12 players), Giants Stadium, New York, NY, November 1, 1996.

Alertness management: A student perspective. Presented to DeAnza College student intern program, NASA Ames Research Center, Moffett Field, CA, November 6, 1996. Corporate aviation approaches to managing fatigue. Presented to National Business Aircraft Association Annual Meeting, Orlando, FL, November 19, 1996.

Augmented long-haul flight operations: Initial results of field study. Presented to Air New Zealand Scientific Advisory Group, Tahiti, November 27, 1996.

Managing fatigue in transportation operations: Lessons from aviation. Presented to Burlington Northern Santa Fe Railroad executives and union representatives, Dallas, TX, January 27, 1997.

Fatigue in transportation: Management strategies. Presented to Chief Operating Officer's Safety Council, Burlington Northern Santa Fe Railroad, Dallas, TX, January 28, 1997.

Alertness Management in Flight Operations. Presented to U.S. Navy Safety Officers meeting, Jacksonville, FL, January, 29, 1997.

Strategies to manage fatigue in corporate aviation operations. Presented to Corporate Aviation Directors Roundtable, West Palm Beach, FL, March 2, 1997.

Neri, D.F., Rosekind, M.R., Co, E.L., Gregory, K.B., & Miller, D.L. Research on the effects of fatigue within the corporate/business aircraft arena. Paper presentation at 9th annual European Aviation Safety Seminar (EASS): "Safety—The Global Challenge," Amsterdam, Netherlands, March, 1997.

Managing fatigue in healthcare settings. Presented to Surgery Grand Rounds, Department of Surgery, University of California San Francisco School of Medicine, March 12, 1997.

Alertness management in flight operations. Presented to NASA Ames Research Center, Moffett Field, CA, March 27, 1997.

Alertness management in flight operations. Presented to Professional Helicopter Pilots Society (primarily fire and law enforcement pilots), Van Nuys, CA, April 5, 1997.

Alertness management in flight operations. Presented to MCI and Mobil Corporate Aviation Departments, Dulles Airport, Washington, D.C., April 9, 1997.

Time travel: Managing shiftwork and jet lag. Presented to Medical Aspects of Foreign Travel, Mountain Medicine Institute, Treasure Island, CA, April 26, 1997.

Strategic napping: an effective fatigue countermeasure. Presented to American Trucking Association multi-modal symposium on "Managing Fatigue in Transportation," Tampa, FL, April 30, 1997.

Fatigue in corporate aviation operations: initial survey results. Presented to Flight Safety Foundation Corporate Aviation Safety Seminar, Phoenix, AZ, May 1, 1997. Managing fatigue in corporate aviation operations. Presented to Senior Executives, Aviation Methods, Inc., Burlingame, CA, May 16, 1997.

Corporate strategies to manage fatigue in aviation operations. Presented to Gulfstream Operators Conference, Savannah, GA, June 3, 1997.

Managing performance and alertness in law enforcement operations. Presented to Federal Bureau of Investigation Special Operations Group, including Hostage Rescue Team (HRT) and Critical Incident Response Team (CIRT), FBI Academy, Quantico, VA, June 27, 1997.

Alertness management in flight operations. Presented to U.S. Navy Safety Officers meeting, San Diego, CA, July 7, 1997.

Corporate survey update. Presented to Corporate Aviation Directors Roundtable, San Diego, CA, July 8, 1997.

Introduction to sleep and sleep disorders. Presented to cardiac patient group, Kaiser Permanente Hospital, South San Francisco, CA, July 23, 1997; July 22, 1998.

From laboratory to flightdeck: Promoting operational alertness. Fatigue and Duty Time Limitations—An International Review, Proceedings of the Royal Aeronautical Society, London, UK, September 16, 1997.

Fatigue in transportation. American Trucking Association meeting, Charleston, SC, January 14, 1998.

Sleeper berths: A fatigue countermeasure for trucking. Webasto Thermosystems press conference, Miami, FL, January 28, 1998.

Managing fatigue in transportation: The future challenges. Keynote lunch address, American Public Transit Association fatigue symposium, Washington, D.C., February 19, 1998.

Managing driver fatigue: Practical information for motor carriers, trucking schools, and insurance providers. Driver Training & Development Alliance, National Forum, Alexandria, VA, March 2, 1998.

Managing fatigue longhaul flight operations: Corporate strategies. National Business Aircraft Association International Operators Conference, San Antonio, TX, March 17, 1998.

Commercial flight operations: Practical fatigue countermeasures. Civil Aviation Authority, New Zealand and Air New Zealand Safety Seminar, Auckland, New Zealand, March 31, 1998.

Fatigue countermeasures. Canadian Aviation Safety Seminar, Transport Canada, Civil Aviation, Toronto, Ontario, Canada, April 21, 1998.

Managing fatigue in transportation. Department of Transportation Safety Council, composed of Modal Administrators and other safety personnel, Washington, D.C., April 24, 1998.

Managing fatigue corporate flight operations. Bombardier Operators Conference, San Antonio, TX, April 28, 1998.

Trucking Hours of Service Issues. Panel Moderator, American Trucking Association Foundation annual meeting, Key Largo, FL, April 30, 1998.

Managing jet lag: Practical strategies for the traveler. Disney corporate retreat, Orlando, FL, May 30, 1998.

Addressing fatigue in railroad operations. Association of American Railroads Safety Meeting, San Antonio, TX, June 2, 1998.

Managing fatigue in flight operations: Pilot strategies and Managing fatigue in flight operations: Maintenance strategies. Gulfstream Operators Conference, Savannah, GA, June 3, 1998.

Fatigue in the railroad industry: Issues and strategies. United Transportation Union Regional Meetings, June 23, July 12, and August 11, 1998.

Promoting good sleep: Lodging considerations. Lodging Enterprises, Wichita, KS, September 11, 1998.

The new science of fatigue countermeasures. American Trucking Association Litigation Center, Scottsdale, AZ, September 14, 1998.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, November 9, 1998.

Real Docs Don't Need Sleep: Sleep Strategies for Managing Fatigue. Kaiser Permanente 12th Annual Anesthesia Symposium, San Francisco, CA, November 7, 1998.

Shift Work Factors: How They Affect Us and Strategies to Manage Shift Work Fatigue: An Integrated Approach. Oregon Health Sciences University, Center for Research on Occupational and Environmental Toxicology, Portland, OR, January 22, 1999.

The Alert Traveler (presented twice), panel on Peak Performance: Managing the Health of the CEO. World Economic Forum, Davos, Switzerland, January 28—February 1, 1999.

Alertness Technology: Medications, Diet and the Scientific Findings. Flight Safety Foundation, 11th Annual EASS, Amsterdam, Holland, March 10, 1999.

Fatigue and Cockpit Resource Management, panel moderator. National Business Aviation Association 26th Annual International Operator's Conference, Orlando, FL, March 24, 1999.

Aviation Fatigue Conference, Taupo, New Zealand, March 29, 1999.

Driver Fatigue: Physiological Considerations and Appropriate Countermeasures for Detection and Prevention. ALFA, Coral Gables, FL, April 29, 1999.

Managing Fatigue in Aviation Operations; Reducing Crew Fatigue: Alertness Management Strategies. International Air Transport Association, Amman, Jordan, May 4, 1999.

Alert Traveler, Egypt International Economic Forum, Cairo, Egypt, May 6, 1999. Gulfstream Operator's Conference, Savannah, GA, June 9, 1999.

Sleep and Transportation: Meeting the Challenge. 1999 Associated Professional Sleep Societies Annual Meeting, Orlando, FL, June 20, 1999.

Third Annual Safety Congress Meeting, Indiana Harbor Belt Railroad, Hammond, IN, September 8, 1999.

Promoting Alertness and Performance in Flight Operations. Aircraft Builders' Council Annual Seminar, San Francisco, CA, September 13, 1999.

Scientific Foundations: Sleep, Circadian Factors, and Performance; and Scientific Frontiers: The Latest Findings; and Hours of Service and Fatigue: Industry Perspectives (moderator). Federal Bar Association Symposium, Washington, D.C., October 25, 26, 1999.

Managing Fatigue at Your Trucking Company: A Practical Approach. American Trucking Association Foundation Meeting, Orlando, FL, November 1, 1999.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, November 5, 1999, January 14, 2000.

India Economic Summit, New Delhi, India, December 5-7, 1999.

The State of the CEO: A Health Review; and What Keeps Memory in Good Shape (moderator); and What Will Be the Biggest Advances in Sciences in the Next 100 Years? (table host). World Economic Forum, Davos, Switzerland, January 27–31, 2000.

Jet Lag and the Business Traveler-Mood, Behavior, and Work Functioning; and Overcoming Jet Lag: Alternative Models. World Bank Symposium, Washington, D.C., April 27, 2000.

The Internal Body Clock, Jet Lag, and Modern Society. The Times of Our Lives Workshop, Stanford University, Stanford, CA, April 29, 2000.

Physiology of Fatigue and Countermeasures. Fatigue and Performance Seminar, Teterboro Users' Group, Teterboro, NJ, May 10, 2000.

Translating Sleep Research into Real World Applications: Examples from Alertness Solutions. School of Sleep Medicine, Palo Alto, CA, May 19, 2000.

Long Haul Flight Operations. International Association for Accident and Traffic Medicine, Stockholm, Sweden, May 26, 2000.

Behavioral Strategies to Treat Sleepiness and Fatigue; and Promoting Alertness and Safety in Sleep Center Staff: Using Our Expertise At Our Own Labs (Meet the Professor). Associated Professional Sleep Societies, June 18, 19, 2000.

Managing Fatigue in Corporate Flight Operations. Bombardier Maintenance and Ops Seminar, Dallas, TX, June 29, 2000.

Managing Fatigue in Corporate Flight Operations. Bombardier Aerospace, Wichita, KS, August 19, 2000.

The ATA Alertness Management Initiative. Air Transport Association Ops Forum, Jacksonville, FL, September 26, 2000.

Business Aviation Professionals of New England, Chelmsford, MA, September 28, 2000.

Science Tells Us About Why Fatigue Management is of Critical Importance; and Sleep Disorders. Federal Transit Administration Symposium, Washington, D.C., October 26, 2000.

Your Eyes to Practical New Strategies. Association Management Conference, San Diego, CA, October 31, 2000.

Safety in Sleep Center Staff: Using Our Expertise at Our Own Labs. Keynote address, Pacific Northwest Sleep Association, Stevenson, WA, March 10, 2001.

Managing Alertness in 24/7 Settings: Safety and Productivity Perspectives. University of Texas Medical Branch, Galveston, TX, April 11, 2001.

Managing Fatigue in Flight Ops. Grand Rounds, University of Texas Medical Branch, Galveston, TX, April 10, 2001.

Well-being, Sleep and Jetlag. British Airways Wellness Conference, Los Angeles, CA, May 2, 2001.

Making the Best Use of Your Most Valuable Resource. Annenberg Foundation, Minneapolis, MN, May 16, 2001.

Scientific basics: Introduction to Alertness Management. Air Transport Association Alertness Management Symposium, Arlington, VA, May 23, 2001.

Fatigue Management for Sleep Center Personnel (Meet the Professor). Associated Professional Sleep Societies, Chicago, IL, June 8, 2001.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, July 20, 2001.

Alertness Management in Healthcare Settings: Barriers and Strategies for Change; and Alertness Management in Healthcare Settings: Risks, Issues, and Approach. Summit on Effective Practices to Improve Patient Safety, Department of Veterans Affairs, Washington, D.C., September 6–7, 2001.

Lessons Learned: Alertness Management Applications in Medical Training. Physician Heal Thyself: Sleep Loss, Fatigue and Medical Training, Brown University, Providence, RI, October 19, 2001.

Evaluation and Management of Fatigue in Non-Medical Occupations: Lessons Learned. Sleep, Fatigue and Medical Training; Optimizing Learning and the Patient Care Environment, American Academy of Sleep Medicine/American Medical Association, Alexandria, VA, October 28, 2001.

Managing Fatigue and Alertness. International Association of Chiefs of Police, Toronto, Canada, October 30, 2001.

It's Better to Sleep Flat. British Airways media event, Hong Kong, January 15, 2002.

Stress Management, Fatigue, Duty Times and Other Human Factors in Long Range Flying. NBAA International Operators Conference, Nashville, TN, March 11–12, 2002.

NASA Education and Training Workshop, NASA Ames Research Center, Mountain View, CA, March 20–21, 2002 and October 9–10, 2002.

Alertness Management in Law Enforcement. San Mateo County Police Chief's and Sheriff's Association Spring 2002 Training Conference, Pacific Grove, CA, April 3, 2002.

Sleepwalking Through the Shift? Alertness Management in Healthcare. Virginia Partnership for Nursing, Williamsburg, VA, April 16–17, 2002.

Managing Alertness 24/7 in Health Care Settings: Enhancing Patient and Provider Safety. VHA Chief Nursing Officers' Network Meeting, Chicago, IL, April 20–21, 2002.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, April 26, 2002 and November 8, 2002.

Sleep, Safety, and Public Policy in Understanding Sleep Medicine: What the Psychiatrist Needs to Know. American Psychiatric Association, Philadelphia, PA, May 19–20, 2002.

Fatigue in Long Range Flight Operations. European Business Aviation Conference and Exhibition, Geneva, Switzerland, May 27–30, 2002.

Managing Fatigue and Alertness. Colorado Chief's of Police, Breckenridge, CO, June 4, 2002.

Fatigue and Alertness Management for the Sleep Professional. APSS Conference, Seattle, WA, June 9, 2002.

Awake at the Wheel: How to be an Alert Driver. Johnson and Johnson Fleet of Champions Conference, Boston, MA, June 12, 2002.

Managing Alertness 24/7 in Health Care Settings: Enhancing Patient and Provider Safety. VHA Perioperative Executive Advisory Council, New Orleans, LA, September 5, 2002.

NASA Education and Training Workshop. Jet Propulsion Laboratories, Pasadena, CA, September 17, 2002 and October 24, 2002.

Alertness Management in Healthcare. BETA Healthcare Group Fall Network Meeting, San Diego, CA, September 18, 2002, Walnut Creek, CA, September 19, 2002, Reno, NV, September 20, 2002.

Managing Fatigue in Healthcare. Ground Rounds, Cardinal Health Systems, Muncie, IN, September 25, 2002.

Managing Fatigue in Aviation Operations. San Jose State University, San Jose, CA, October 1, 2002.

Improving Patient and Provider Safety in 24/7 Healthcare Settings: Fatigue Risks, Issues & Solutions. The VHA Partnership Symposium 2002: Smart Designs for Patient Safety, Washington, D.C., October 15, 2002.

Managing Jet Lag, A Healthy Journey to Heathrow. British Airways media event, Denver, CO, October 29, 2002 and San Diego, CA, November 1, 2002.

Managing Alertness in 24/7 Settings. Atherton Police Department Annual Safety Meeting, Atherton, CA, October 30, 2002.

Sleep, Dreams and Health. Burlingame Lion's Club, Burlingame, CA, October 31, 2002.

The Hidden Cost of Fatigue. The Virginia Hospital Research and Education Foundation 76th Annual Meeting of the Members, Homestead, VA, November 14, 2002.

Overview of the Risks and Consequences of Shift Work: Implications for Research, Public Policy and Public Education. National Sleep Foundation Drowsy Driving Summit, Washington, D.C., November 21–22, 2002.

Fatigue Countermeasures. Boeing Executive Flight Operations Annual Safety Seminar, Palm Springs, CA, January 7, 2003.

NASA Education and Training Workshop. Jet Propulsion Laboratories, Pasadena, CA, January 23, 2003 and October 9, 2003.

Awake at the Wheel: How to be an Alert Driver. Advanced Sterilization Products, Division of Johnson & Johnson, National Sales Conference, Carlsbad, CA, February 4, 2003.

Awake at the Wheel: How to be an Alert Driver. Biosense Webster, Division of Johnson & Johnson, Global Sales Meeting, Calgary, Canada, February 5, 2003.

Enhancing Patient and Provider Safety: The Challenge of 24/7 Healthcare. VA Patient Safety Meeting, Las Vegas, NV, February 25, 2003.

Managing Alertness in 24/7Settings. South San Francisco Police Department Dispatchers, San Francisco, CA, February 26, 2003.

Sleep, Dreams and Health. Kaiser Permanente, South San Francisco, CA, February 26, 2003.

Alertness Management in 24/7 Healthcare Settings: Improving Patient and Provider Safety. Web-based Teleconference, Premier Inc., February 27, 2003.

Alertness Management: Enhancing Patient and Provider Safety. Health Insurance Forum Annual Meeting, Scottsdale, AZ, March 10, 2003.

High Performance Fatigue. Keynote Presentation, North Eastern Sleep Society, Hartford, CT, March 13–15, 2003.

Fatigue and Human Factors in the Long-Range Flight Environment. International Operators Conference, National Business Aviation Association, Colorado Springs, CO, March 18, 2003.

Managing Fatigue in 24/7 Healthcare Settings: Improving Patient and Provider Safety. American Organization of Nurse Executives Annual Meeting, New Orleans, LA, March 30, 2003.

Alertness Management in 24/7 Healthcare Settings: Improving Patient and Provider Safety. Western Anesthesia Residents Conference, Stanford, CA, April 5, 2003.

NASA Education and Training Workshop, NASA Ames Research Center, Mountain View, CA, April 15–16, 2003 and October 15–16, 2003.

Alertness Management in Healthcare: Enhancing Patient and Provider Safety. VHA Empire State, Webex Conference Training, April 17, 2003.

Managing Fatigue in Healthcare: Enhancing Patient and Provider Safety. VHA Operating Room Director's Meeting, Edina, MN, May 16, 2003.

Managing Fatigue in Maintenance Operations: Risks, Issues and Solutions. National Business Aviation Association Maintenance Manager's Conference, Charlotte, NC, May 20, 2003.

Fatigue Countermeasures for Corporate Aviation. Tag Aviation, Burlingame, CA, May 23, 2003.

Alertness in the Workplace and Strategies to Combat Fatigue. San Carlos Police Department, San Carlos, CA, June 10, 2003.

Managing Fatigue in Healthcare: Enhancing Patient and Provider Safety. New Mexico VA Healthcare System Ground Rounds and Town Hall Meeting, Albuquerque, NM, June 26, 2003.

Managing Fatigue in Law Enforcement: The 24/7 Challenge. Annual International Association of Women in Police Training Conference, San Francisco, CA, September 4, 2003.

Combating Drowsy Driving. Traffic Alliance for a Safer California Annual Meeting, Sacramento, CA, September 9, 2003.

Alertness Management in Law Enforcement. San Bruno Police Department, San Bruno, CA, September 17, 2003.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, September 17, 2003.

AvAlert Training Workshop. DelMar Jets, La Jolla, CA, September 22, 2003.

Managing Alertness in Business Aviation: Enhancing Flight Safety. National Business Aviation Association Workshop, Orlando, FL, October 5–6, 2003.

Alert Traveler: Your Passport to Managing Jet Lag. Sierra Heart Institute, Squaw Creek, CA, October 11, 2003.

Managing Fatigue in 24/7 Healthcare Settings: Improving Patient and Provider Safety. Connecticut Hospital Association's Annual Nursing Leadership Forum, Wallingford, CT, October 22, 2003.

Fatigue Countermeasures in Corporate Aviation. Bombardier Aerospace Safety Standdown, Wichita, KS, October 30, 2003.

Sleep and Dreams. Burlingame High School, October 31, 2003.

Human Fatigue: Practical Strategies that Improve Safety and Productivity in Health. Denver Safety Patient Coalition Meeting, Littleton, CO, November 7, 2003. Sleepiness, Vigilance and Alertness. Respironics Medical Advisory Conference, Philadelphia, PA, December 3–4, 2003.

Battle Fatigue. Association of California Nurse Leaders Annual Program, San Diego, CA, February 10, 2004.

Circadian Shifting, Fatigue, and Fatigue Countermeasures. Pushing the Envelope VI Conference and the 25th Annual U.S. Army Operational Aeromedical Problems Course, Galveston, TX, February 17–18, 2004.

Shift Work and Accidents. National Sleep Foundation Workshop on Shift Work Sleep Disorder, Washington, D.C., March 4–5, 2004.

Investigating Human Fatigue Factors in Transportation Accidents. National Transportation Safety Board Academy Course, Ashburn, VA, March 10–11, 2004 and September 28–29, 2004.

NASA Education and Training Workshop, NASA Ames Research Center, Mountain View, CA, March 17–18, 2004 and December 8–9, 2004.

Circadian Physiology: The Biologic Clock; Circadian Disruption and Rhythm Abnormalities; and Managing Shift Work: Issues and Strategies. Sleep Disorders 2004, Las Vegas, NV, March 22–24, 2004.

Fatigue and Sleep Issues. National Business Aviation Association International Operator's Conference, Anaheim, CA, March 23, 2004.

Sleep and Dreams. Burlingame High School, Burlingame, CA, March 26, 2004.

Occupational Groups (shiftwork, transportation, health care, military). Frontiers of Knowledge in Sleep and Sleep Disorders: Opportunities for Improving Health and Quality of Life, National Center on Sleep Disorders Research; National Heart, Lung and Blood Institute and Trans-NIH Sleep Research Coordinating Committee, Bethesda, MD, March 29–30, 2004.

Managing the Physiological and Safety Challenges of Night Flying: A Shared Responsibility. Air Cargo Safety Forum, National Transportation Safety Board Academy, Ashburn, VA, March 31, 2004.

Awake at the Wheel: How to be an Alert Driver. Johnson and Johnson Training Meeting, Braselton, GA, April 1, 2004.

Enhancing Patient and Provider Safety: The Challenge of 24/7 Health Care. Parkview Medical Center Retreat, Pueblo, CO, April 13, 2004.

Human Fatigue: Practical Strategies that Improve Safety and Productivity in Healthcare. Surgical Infection Prevention: The Colorado Collaborative Experience Project, Colorado Foundation for Medical Care, Denver, CO, May 5, 2004.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, May 7, 2004.

Alertness Management: Enhancing Patient and Provider Safety. Kentucky Hospital Association Annual Convention, Louisville, KY, May 25, 2004.

Caring for Children: How Managing Fatigue will Improve Safety, Quality of Care and Health. Third Annual Pediatric Trends: What Every Nurse Caring for Children Needs to Know. Children's National Medical Center, Greenbelt, MD, June 11, 2004. Sleep, Dreams and Health. Kiwanis Club, San Carlos, CA, July 19, 2004. Enhancing Performance and Alertness in Our 24/7 Global Society. Egypt's International Economic Forum, 4th Conference on Telecommunication and Information Technology in the Arab World, Cairo, Egypt, September 5–7, 2004.

Underestimating the Societal Costs of Impaired Alertness: Safety, Health, and Productivity Risks. Sanofi-Synthelabo's Second International Sleep Disorders Forum, Paris, France, September 10–12, 2004.

Managing Fatigue in Aviation Operations. Human Factors Seminar, Marine Aircraft Wing, Miramar, San Diego, CA, September 21, 2004.

Living in a 24/7 Global Society: Alertness and Safety Challenges. Keynote Presentation, Provigil National Consultants Meeting for Primary Care Physicians, Las Vegas, NV, October 1–3, 2004.

Fatigue Countermeasures in Corporate Aviation. Bombardier Aerospace Safety Standdown, Wichita, KS, October 27, 2004.

Managing Fatigue in Organizations: Safety and Productivity Issues. Penn Arts & Sciences, Center for Organizational Dynamics, University of Pennsylvania, Philadelphia, PA, November 2, 2004.

Eyes Wide Open: How to Sleep Better and be More Alert in Our 24/7 World. Penn Humanities Forum, University of Pennsylvania, Philadelphia, PA, November 3, 2004.

Extended Working Hours: Managing the Health and Safety Consequences. Mining and Resource Contractors Safety Training Association One-Day Workshop, Perth, Australia, November 17, 2004.

Fatigue Countermeasures in Flight Operations. Safety Standdown, Navel Test Wing, Atlantic, Patuxent River, MD, January 20, 2005. (Conducted with Captain Robert Agostino, Director, Flight Operations, Learjet and Captain Gene Cernan, Apollo XVII Astronaut).

Managing Fatigue in Law Enforcement. California Police Chiefs Association's 28th Annual Conference, Sacramento, CA February 9, 2005.

Conducting Effective Technical Presentations. National Transportation Safety Board Academy Course, Ashburn, VA, February 23–24, 2005.

Disease State and Treatment Overview: Insomnia and the American Worker. Workplace Council on Insomnia, Pfizer/Neurocrine Biosciences Meeting, Sonoma, CA, February 27–28, 2005.

Living in a 24/7 Global Society: Alertness and Safety Challenges. Provigil Speaker Training Meeting, San Francisco, CA, March 12–13, 2005.

Invited Panelist. Health and Wellness. Transportation Research Board Conference on Future Truck and Bus Safety Research Directions, Washington, D.C., March 23– 24, 2005.

Managing Alertness in the 24/7 Society. Johnson & Johnson 2005 Safe Fleet Executive Breakfast, New Brunswick, NJ, April 5, 2005.

Investigating Human Fatigue Factors in Transportation Accidents. National Transportation Safety Board Academy Course, Ashburn, VA, April 21–22, 2005 and November 17–18, 2005.

Best Practices in the Workplace. Neurocrine Pfizer Workplace Council on Insomnia, Task Force Meeting, Phoenix, AZ, April 27–28, 2005.

Managing Fatigue in Law Enforcement. Grass Valley Police Department's Annual Meeting, Grass Valley, CA, May 27, 2005.

The Effects of Sleep Deprivation and Countermeasure Strategies. Bombardier Aerospace 2005 Maintenance and Operations Seminar, Quebec, Canada, June 1, 2005. Managing Fatigue in Law Enforcement: The 24/7 Challenge. Redwood City Police Department, Redwood City, CA, June 16, 2005.

Invited Panelist. Sleep, Health and Society, Pfizer Roundtable discussion, Lake Tahoe, NV, July 28-29, 2005.

Invited Panelist. Fatigue Risk Management Programs: How Can They Improve Operational Safety and Performance? U.S. Department of Transportation Fatigue Management in Transportation Operations International Conference, Seattle, WA, September 13–15, 2005.

Alertness Matters Presentation Provided at the Following:

United Airlines, Elk Grove, IL, September 22, 2005.

Greyhound Bus Lines, Chicago, IL, September 23, 2005.

Northwestern Memorial Hospital, Chicago, IL, September 23, 2005.

Mercy Hospital, Chicago, IL, September 28, 2005.

RML Specialty Hospital, Hinsdale, IL, September 28, 2005.

Rush North Shore Medical Center, Skokie, IL, September 29, 2005.

Rush University Medical Center, Chicago, IL, September 29, 2005.

Fatigue Countermeasures in Aviation. Bombardier Aerospace Safety Standdown, Wichita, KS, October 26, 2005.

The Impact of Fatigue and Sleep Deprivation on First Responders and Other Caregivers. King County Chief's Meeting, Bellevue, WA, November 11, 2005.

Stop! You May be Too Tired to Work Without Injury. Kentucky Sleep Society, 7th Annual Sleep Medicine Conference, Louisville, KY, November 12, 2005.

Managing Fatigue in 24/7 Operations: Risks, Issues and Solutions (presented six times). United States Marine Corps, Holiday Safety Standdown, Honolulu, HI, December 6-7, 2005.

Sleep, Dreams and Health. Young Presidents' Organization, Palo Alto, CA, January 11, 2006.

Sleepwalking Through the Shift. The Forum for Healthcare Learning and Excellence, Grand Rounds, Virginia Commonwealth University Medical Center, Richmond, VA, February 22, 2006.

Are you Sleepwalking Through the Trauma? The Forum for Healthcare Learning and Excellence, Virginia Commonwealth University Medical Center, Richmond, VA, February 23, 2006.

Sweet Dreams: A Good Night's Sleep for Your Child and You. Los Altos Parent Preschool, Los Altos, CA, March 13, 2006.

Circadian Physiology; Circadian Rhythm Abnormalities; Sleep, 24/7, and the Transportation Industry. Sleep Disorders 2006—All You Ever Wanted to Know About Sleep, Las Vegas, NV, March 27–28, 2006.

Investigating Human Fatigue Factors in Transportation Accidents. National Transportation Safety Board Academy Course, Ashburn, VA, April 26–27, 2006 and October 18–19, 2006.

Best Practices in the Workplace and Workplace Safety, Building the Optimal Model: Insomnia and Safety in the Workplace. Neurocrine Pfizer Workplace Council on Insomnia, Task Force Meeting, Scottsdale, AZ, April 28, 2006.

Alertness Matters Presentation Provided at the Following:

Greyhound Bus Lines, Cincinnati, OH, May 2, 2006.

TriHealth Bethesda North Hospital, Cincinnati, OH, May 2, 2006.

Sleep Deprivation, Shift Work, Jet Lag and Performance Decrement. Providence Everett Medical Center, Sleep, Sleepiness and Sleeplessness Conference, Everett, WA, May 5, 2006.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, May 12, 2006.

Alertness Matters Presentation Provided at the Following:

Greyhound Bus Lines, Charlotte, NC, May 23, 2006.

Coca-Cola, Charlotte, NC, May 24, 2006.

Wachovia Bank, Charlotte, NC, May 24, 2006.

AvAlert Training Workshop. Bombardier Aerospace Flight Operations, Windsor Locks, CT, May 25, 2006.

Alertness Management in Aviation Operations. Emirates Group Safety Day, Human Performance in Aviation Safety, Dubai, United Arab Emirates, June 6, 2006.

Sleep Challenges of a 24/7 Global Society. Awakening Insomnia Management: A Collaborative Approach to Improved Care, Sanofi-Aventis Satellite Symposium, Salt Lake City, UT, June 20, 2006.

Alertness Matters Presentation Provided at the Following:

General Motors, Detroit, MI, June 27, 2006.

Con-Way Freight Central, Ann Arbor, MI, June 27, 2006.

St. Joseph Mercy Hospital, Ypsilanti, MI, June 27, 2006.

Greyhound Bus Lines, Detroit, MI, June 28, 2006.

Aerodynamics, Waterford, MI, June 28, 2006

Centennial Airport Business Pilots Association, Englewood, CO, August 8, 2006. CAE, Denver, CO, August 8, 2006.

Frontier Airlines, Denver, CO, August 9, 2006.

Managing Alertness in 24/7 Law Enforcement Operations: Enhancing Public and Officer Safety. Arthur J. Gallagher's all-day Law Enforcement Seminar, Vineland, NJ, September 28, 2006.

Fatigue Countermeasures in Aviation. Bombardier Aerospace Safety Standdown, Wichita, KS, October 4, 2006.

Sleep Challenges of the Teenage Years. University High School Assembly, San Francisco, CA, October 11, 2006.

Sweet Dreams: A Good Night's Sleep for Your Child and You. West Hillsborough School District Speaker Series, West Hillsborough, CA, October 26, 2006.

Alert in Adolescence: Sleep Challenges of the Teenage Years. Menlo-Atherton High School, Atherton, CA, October 24, 2006.

Managing Alertness in 24/7 Operations. Association of Bay Area Governments allday Workshop, Redwood City, CA, November 16, 2006.

Clinician Fatigue and the Safety of Patients and Providers. Strategic Nap Program, Veterans' Administration Hospital, Portland, OR, January 10, 2007.

Sleep Challenges of the Teenage Years. Gunn High School, Palo Alto, CA, February 5, 2007.

The Impact of Fatigue and Sleep Deprivation on First Responders and Other Caregivers. Olympia Fire Department, Olympia, WA, February 13, 2007.

Sleep Loss and Fatigue: Effects on Performance, Safety and Health. A Scientific Workshop on Women and Sleep by the National Sleep Foundation and Atlanta School of Sleep Medicine, Washington, D.C., March 6, 2007.

AvAlert Training Workshop. Procter & Gamble Corporate Aviation Department, Cincinnati, OH, March 21, 2007.

Managing Fatigue in Pipeline Operations (4 half-day workshops). Alyeska Pipeline, Valdez, AK, March 27–28, 2007.

Managing Fatigue in Maintenance Operations: Risks, Issues & Solutions. National Business Aviation Association, Maintenance Management Conference, San Diego, CA, April 4, 2007.

Managing Fatigue in 24/7 Healthcare Settings: Improving Patient and Provider Safety. American Association of Neuroscience Nurses 39th Annual Educational Meeting, Kissimmee, FL, May 2, 2007.

Alertness Management in Aviation Operations. Tag Aviation Operators Management Conference, Burlingame, CA, May 9, 2007.

Invited Panelist. Neurocrine Biosciences Sleep Advisory Board Meeting, San Diego, CA, May 18, 2007.

Fatigue Issues in Today's Aviation Environment. Presentation at European Business Aviation Conference and Exhibition for Medaire, Geneva, Switzerland, May 24, 2007.

Fatigue Countermeasures in Aviation. Bombardier Aerospace Safety Standdown, Geneva, Switzerland, May 25, 2007.

Alertness Management in 24/7 Operations. Federal Bureau of Investigation, Critical Incident Response Group, Regional Aviation Safety Conference, Warrenton, VA, September 18, 2007.

Who Needs Sleep?—Why We Sleep and Behavioral Countermeasures (2 presentations). Michigan Network of Employers for Traffic Safety, Wake Up Michigan Symposium, Grand Rapids MI, September 20, 2007.

Managing Alertness in 24/7 Law Enforcement Operations: Enhancing Public and Officer Safety. Santa Rosa Police Department, Santa Rosa, CA, September 26, 2007. Invited Panelist. Sanofi Aventis Employer Advisory Board, Boston, MA, September 28–29, 2007.

The Impact of Fatigue and Sleep Deprivation on First Responders and Other Caregivers. Thurston County Fire Chief's 2007 Leadership Conference, Olympia, WA, October 3, 2007.

The Effects and Impact of Fatigue on Patient Safety. Los Angeles County Department of Health Services Patient Safety Conference, Culver City, CA, October 16, 2007.

Presentations to the United States Olympic Committee and U.S. National Teams:

Performance Services Group, January 22, 2007.

Games Staff Leadership, April 18, 2007.

Men's Volleyball Team, May 16, 2007.

Women's Water Polo Team, May 17, 2007.

Men's Water Polo Team, May 17, 2007.

Women's Soccer Team, July 20, 2007.

Women's Soccer Team, August 19, 2007.

Alertness Management in 24/7 Operations. Federal Bureau of Investigation, The Aviation and Surveillance Branch, Critical Incident Response Group, Safety Conference, Las Vegas, NV, October 18, 2007.

Alertness Management in Corporate Flight Operations. Bombardier Aerospace Safety Standdown, Wichita, KS, October 25, 2007.

Managing Fatigue in 24/7 Operations. British Petroleum Strategic Planning Meeting to Address Overtime, Chicago, IL, November 6, 2007.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, November 9, 2007.

Investigating Human Fatigue Factors in Transportation Accidents. National Transportation Safety Board Academy Course, Ashburn, VA, December 3–4, 2007.

Fatigue Countermeasures in Aviation. American Express Flight Department Safety Standdown, Newburgh, NY, December 11, 2007.

Alert in Adolescence: Sleep Matters. El Camino Hospital Pediatric Conference, Mountain View, CA, December 17, 2007.

Fatigue Management in 24/7 Work Settings. British Petroleum Education and Training Session, Toledo, OH, February 25, 2008.

Invited Panelist. Findings and Strategies from Research Literature and Other Industries, Workshop for The Committee on Optimizing Graduate Medical Trainee (Resident) Work Schedules to Improve Patient Safety, Institute of Medicine, Irvine, CA, March 4, 2008.

Fatigue Countermeasures: Signs & Symptoms. Homeland Security National Safety Conference, Ashburn, VA, March 12, 2008.

Why Drivers Need Sleep and What is it Good For? 13th Annual Michigan Traffic Safety Summit, East Lansing, MI, March 13, 2008.

Presentations to the United States Olympic Committee and U.S. National Teams:

Women's Ice Hockey, March 25, 2008.

Women's Field Hockey, June 2, 2008.

Women's Water Polo, June 5, 2008.

Men's Volleyball, June 6, 2008.

Women's Volleyball, June 9, 2008.

Fatigue Management in Trucking: Does it Make Business Sense for Carriers? Canadian Trucking Alliance Board of Directors and Annual General Meeting, Scottsdale, AZ, April 7, 2008.

Fatigue Management in 24/7 Work Settings (10 presentations). British Petroleum Education and Training Sessions, BP Refinery, Toledo, OH, April 21–24, 2008.

Beyond Crew Rest: Fatigue Management and Countermeasures for the Flight Test Team. Flight Test Safety Workshop, Melbourne, FL, May 6, 2008.

Fatigue Countermeasures. Bombardier Aerospace Safety Standdown, European Business Aviation Conference and Exhibition, Geneva Switzerland, May 19, 2008. Invited Panelist (Chair). Operational Evidence of Fatigue: Flight Operations. FAA Sponsored Aviation Fatigue Management: Partnerships for Solutions Symposium, Vienna, VA, June 17–19, 2008.

Fatigue for Aircrews in the Global Environment: 24/7 when do we ever sleep? National Business Aviation Association 13th Annual Flight Attendants Conference, Tucson, AZ, June 27–28, 2008.

Fatigue Management in 24/7 Work Settings (6 Presentations). British Petroleum Education and Training Sessions, BP Refinery, Whiting, IN, July 1–2, 2008.

Fatigue Management in 24/7 Work Settings (14 Presentations). British Petroleum Education and Training Sessions, BP Refinery, Whiting, IN, July 14–18, 2008.

"The View" of Fatigue Challenges in Aviation Maintenance. 2008 FAA/ATA International Symposium on Human Factors in Maintenance and Ramp Operations, Orlando, FL, September 4, 2008.

Fatigue Countermeasures in Aviation. Verizon Flight Department Safety Standdown, Morristown, NJ, September 5, 2008.

Fatigue Management in 24/7 Operations: British Petroleum's Risks and Opportunities. British Petroleum U.S. Leadership Meeting, Bellingham, WA, September 9, 2008.

Fatigue and the California Public Safety Officer. Northern California Cities Self-Insurance Fund Meeting, Lincoln, CA, September 11, 2008.

Psychomotor Vigilance Testing: The Sensitivity of PVT Data in the OSA Patient Population and Administering the PVT in-Lab and Extracting Subject Data. Ventus Medical AERO Investigator Meeting, Chicago, IL, September 20, 2008.

Managing Commercial Driver Fatigue: Challenges & Solutions (Keynote). Saskatchewan Trucking Association's 71st Annual Management Conference, Saskatchewan, Canada, October 17, 2008.

Alertness Management in Corporate Flight Operations. Bombardier Aerospace Safety Standdown, Wichita, KS, October 23, 2008.

Human Factors and Team Performance (Keynote). Saint Joseph Health System Fall Leadership Development Institute, Lexington, KY, November 6, 2008.

Optimal Mental and Physical Health: The Critical Role of Sleep and Common Sleep Problems among Students. Presentation for Mental Health Professionals in the Tokyo Community. Tokyo, Japan, November 17, 2008.

Time Travel: Managing Jet Lag to Achieve Optimal Sleep and Performance. Yale Club of Tokyo, Foreign Correspondents' Club of Japan, Tokyo, Japan, November 18, 2008.

Investigating Human Fatigue Factors in Transportation Accidents. National Transportation Safety Board Academy Course, Ashburn, VA, February 25–26, 2009.

Managing Fatigue in 24/7 Operations. U.S. Customs and Border Protection, 2009 Safety Symposium, San Diego, CA, March 3, 2009.

Effective Fatigue Countermeasures for Corporate Crews. Pacific Northwest Business Aviation Association Safety Symposium, The Human Side of Aviation, Seattle, WA, March 5, 2009.

Presentations to the United States Olympic Committee and U.S. National Teams:

Men's Beach Volleyball, March 17, 2009.

Men's Volleyball, May 27, 2009.

Women's Volleyball, May 27, 2009.

Invited Panelist. Use of Biomathematical Models of Fatigue: Safety, Liability, Confidentiality, Adherence and Consequences. Fatigue and Performance Modeling 101, 2009 International Conference on Fatigue Management in Transportation Operations: A Framework for Progress, Boston, MA, March 23–25, 2009.

Law Enforcement: Enhancing Public and Officer Safety. Redwood Empire Municipal Insurance Fund Police Chief's Training. San Francisco, CA, April 3, 2009.

Drowsy Driving: Challenge and Solutions to Improve Traffic Safety (Keynote). California Office of Traffic Safety 2009 Summit, San Francisco, CA, April 10, 2009.

Advanced AvAlert Workshop. Bombardier Maintenance & Operation Conference, Dallas, TX, April 23, 2009.

Fatigue Management Programs: Addressing the Challenges of 24/7 Operations. American Occupational Health Conference, San Diego, CA, April 26, 2009.

Fatigue Countermeasures. Federal Bureau of Investigation Aviation Safety Coordinators Conference, Houston, TX, April 30, 2009.

Fatigue Management in 24/7 Work Settings (8 Presentations). British Petroleum Education and Training Sessions, BP Refinery, Whiting, IN, May 5–6, 2009.

Fatigue Countermeasures. Bombardier Safety Standdown, European Business Aviation Conference and Exhibition Geneva, Switzerland, May 10–12, 2009.

Managing Alertness in 24/7 Law Enforcement Operations. Association of Bay Area Governments all-day Workshop, Oakland, CA, May 14, 2009.

Fatigue Countermeasures in 24/7 Aviation Operations. Federal Bureau of Investigation Regional Safety Conference, Point Mugu, CA, May 21, 2009.

Fatigue Countermeasures. Naval Test Wing Pacific Safety Standdown, Point Mugu, CA, May 22, 2009.

Fatigue Management in 24/7 Work Settings (5 Presentations). British Petroleum Education and Training Sessions, BP Refinery, Toledo, OH, June 2–3, 2009.

Planes, Trains and Automobiles: Sleep and Performance Challenges in Operational Settings. Providence Sleep Research Interest Group Presentation Hosted by Sleep and Chronobiology Research Laboratory, Brown University, Providence, RI, September 15, 2009.

Managing Fatigue in Flight Operations: Risks and Solutions. Bombardier Aerospace Safety Standdown, Wichita, KS, September 30, 2009.

Managing Fatigue in 24/7 Operations (Keynote). Air Medical Transport Conference, San Jose, CA, October 27, 2009.

Conducting Research in a Clinical Setting. School of Sleep Medicine, Palo Alto, CA, October 30, 2009.

Managing Fatigue in Flight Operations: Risks & Solutions. Northern California Aviation Business Users Group Meeting, San Ramon, CA, November 9, 2009.

Managing Alertness in 24/7 Law Enforcement Operations. Santa Clara County Sheriff's Department Education and Training Session, Morgan Hill, CA, December 11, 2009, January 8, 2010 (2 Presentations), February 2, 2010, February 17, 2010 (2 Presentations).

Sleep Loss and Fatigue: Effects on Performance, Safety & Health. Redwood Empire Municipal Insurance Fund Board of Directors Meeting, Sonoma, CA, January 28, 2010.

Effectively Managing Fatigue in 24/7 American Airlines Operations. American Airlines Maintenance Human Factors Workshop, Dallas, TX, February 25, 2010.

Reducing Injuries and Accidents: Managing Fatigue in Our 24/7 Society. Moving Children Safely Injury and Prevention Conference, Burlingame, CA, March 16, 2010.

Fatigue Countermeasures in 24/7 Aviation Operations. Mylan Pharmaceutical Aviation Department Safety Standdown, Pittsburgh, PA, March 22, 2010.

Alertness Management in Corporate Flight Operations (Keynote). Morristown Aviation Association International Operations Seminar, Morristown, NJ, April 13, 2010. Managing Fatigue in Flight Operations: Risks and Solutions. McKesson Corporate Flight Department Annual Safety Day, San Francisco, CA, May 25, 2010.

Managing Alertness in 24/7 EMS/Health Care Settings: Improving Patient and Provider Safety. University of Michigan Annual Safety Day, Ann Arbor, MI, June 4, 2010.

Community and School Presentations

Palo Alto High School Parent Education Event, Palo Alto, CA, January 9, 2008.

Woodside Priory Parent Association Event, Portola Valley, CA, January 15, 2008. Jewish Community High School of the Bay Parent Event, San Francisco, CA, February 7, 2008.

Woodside Priory School Student Assembly, Portola Valley, CA, March 19, 2008.

Los Altos Parent Preschool, Los Altos, CA, April 7, 2008.

Psychology Class, Burlingame High School, April 28, 2008.

Marin Academy All School Assembly and Parent Presentation, San Rafael, CA, September 17, 2008.

Castilleja High School Student Assembly, Palo Alto, CA, September 24, 2008.

Castilleja Middle School Wellness and Fitness Day, Palo Alto, CA, October 20, 2008. Castilleja Junior Class Travel Recommendations to China, Palo Alto, CA, November 7, 2008.

American School in Japan, Middle School Students and Faculty, Tokyo, Japan, November 17, 2008.

American School in Japan, School Guidance Counselors, Tokyo, Japan, November 17, 2008.

American School in Japan, High School Students and Faculty, Tokyo, Japan, November 18, 2008.

American School in Japan, Parent Presentation, Tokyo, Japan, November 18, 2008. American School in Japan, Early Learning Center, Tokyo, Japan, November 19, 2008.

Las Madres Bay Area Parenting Presentation, Cupertino, CA, January 28, 2009.

Mid-Peninsula High School Parent Meeting, Menlo Park, CA, February 10, 2009. Saratoga/Los Gatos High School Parent Education Event, Saratoga, CA, April 28, 2009.

The Magnolia of Millbrae, A Senior Living Community, Millbrae, CA, August 18, 2009.

# Education and Training Activities

Developed an education and training module on fatigue countermeasures for the aviation industry (Rosekind, M.R., Gander, P.H., Connell, L.J., and Co, E.L. Crew Factors in Flight Operations: X. Alertness Management in Flight Operations. NASA Technical Memorandum 1999–208780). The module was distributed to the aviation industry through two-day workshop provided by the Fatigue Countermeasures Program and held at NASA Ames Research Center. The workshop presentations were provided by M.R. Rosekind, D.F. Neri, and colleagues.

A total of 39 workshops were held for 779 participants representing 243 different organizations, within aviation and other operational environments (*e.g.*, medicine, marine). The average overall rating for the workshops was 9.2 (1=poor to 10=excellent).

Over 75 organizations, including commercial (US and International), corporate, and military aviation groups implemented the NASA Ames Education and Training Module reaching about 125,000 flight crew and other personnel with the information. Workshops and implementation continued until ~2005

# Sponsored Symposium

Co-chair, NTSB/NASA Symposium, "Managing Fatigue in Transportation: Promoting Safety and Productivity." Co-sponsored by the NTSB and NASA Ames Research Center with 600 participants from 16 countries. Provided organization, materials, three formal presentations, moderator for symposium, and proceedings, Tysons Corner, Virginia, November 1–2, 1995.

Created and produced, the Fatigue Resource Directory, a joint publication of the NASA Ames Fatigue Countermeasures Program and the NTSB for this symposium, November 1, 1995.

Rosekind, M.R., Dinges, D.F. & Neri, D.F. Managing Fatigue in Corporate Aviation Operations. Flight Safety Foundation sponsored symposium, Paris, France, September 17–18, 1996.

# National Transportation Safety Board (NTSB)

Member, National Transportation Safety Board Presentations

Managing Fatigue in Air Transport Operations. Presented to American Academy of Pediatrics Annual Conference, San Francisco, CA, October 4, 2010.

Managing Fatigue: An NTSB Perspective. Presented at Bombardier Safety StandDown, Wichita, KS, October 7, 2010.

Enhancing Motorcycle Safety: An NTSB Perspective. Presented to Motorcycle Industry Council 2010 Annual Communication Symposium, Carson, CA, October 28, 2010. Effects of Commuting on Pilot Fatigue: An NTSB Perspective. Presented to National Research Council, National Academies of Science, Washington, D.C., November 22, 2010.

Enhancing Motorcoach Safety: Issues and Opportunities. Presented to United Motorcoach Association Safety Management Seminar, Ashburn, VA, December 2, 2010.

Enhancing Aviation Safety: Issues and Opportunities. Presented to Air Transport Association Safety Council, Orlando, FL, January 12, 2011.

Opportunities to Enhance Motorcoach Safety: An NTSB Perspective. Presented to the International Motorcoach Group, Tampa, FL, January 19, 2011.

Managing Fatigue: An NTSB Perspective. Presented to Cessna Safety StandDown, Wichita, KS, January 20, 2011.

Managing Fatigue Risks to Enhance Transportation Safety: Issues and Opportunities. Opening and Closing remarks to Transportation Research Board Fatigue Modeling Workshop and Annual Meeting, National Academies of Science, Washington, D.C., January 23, 2011.

The Biggest Risk in Transportation Safety: Human Behavior. Presented to Alpert Medical School of Brown University, Department of Psychiatry and Human Behavior, Academic Grand Rounds, Providence, RI, February 2, 2011. Inside the NTSB: A NASA Alum's Perspective. Presented to Exploration Technology Directorate, NASA Ames Research Center, Moffett Field, CA, February 8, 2011.

Sleep: A Critical Factor to Enhance Transportation Safety. Presented to Sleep Health & Safety 2011 Symposium, National Sleep Foundation, Washington, D.C., March 18, 2011.

Sleep and Circadian Factors in Transportation Safety: An NTSB Perspective. Presented to 33rd Annual Southern Sleep Society Meeting, New Orleans, LA, March 25, 2011.

Fatigue Management: Embrace Change to Enhance Safety and Health. C.O. Sappington Memorial Lecture, American Occupational Health Conference, American College of Occupational and Environmental Medicine, Washington, D.C., March 26, 2011.

*Enhancing Safety with Simulation: Lessons Learned from Transportation.* Presented to Advanced Initiatives in Medical Simulation Conference, Washington, D.C., March 29, 2011.

Fatigue-Impaired Driving: Safety Risks and Challenges. Presented to Tort, Trial & Insurance Practice Session, American Bar Association, Phoenix, AZ, April 1, 2011. Work Hours vs. Fatigue Management: The Transportation Experience. Presented to National Orthopaedic Leadership Conference, American Academy of Orthopaedic Surgeons, Washington, D.C., April 8, 2011.

Enhancing Commercial Vehicle Safety: Challenges and Opportunities. Presented to Commercial Vehicle Safety Alliance, Rosemont, IL, April 13, 2011.

Fatigue Management: Advancing Aviation Safety. Presented to MITRE Corporation CAASD Aviation Safety Town Hall Series, McLean, VA, April 29, 2011.

Managing Fatigue: An NTSB Perspective. Presented to Bombardier 1st Annual Commercial Aircraft Safety StandDown, Toronto, Canada, May 2, 2011.

Enhancing Aviation Safety: RAA Progress and Opportunities. Presented to Regional Airline Association Annual Convention, Nashville, TN, May 17, 2011.

Managing Fatigue in 24/7 Operations: Advancing Transportation Safety. Presented to Annual Staff Development Seminar, Delaware Police Chiefs' Council, Rehoboth Beach, DE, May 19, 2011.

*Examining Fatigue in an Accident Investigation: An NTSB Perspective.* Presented to Federal Bureau of Investigation Aviation Safety Conference, Ashburn, VA, May 25, 2011.

Managing Fatigue to Enhance Aviation Safety: Issues and Opportunities. Presented to MITRE Aviation Fatigue Symposium, McLean, VA, June 6–8, 2011.

An NTSB Perspective on Sleep/Fatigue Risks in Transportation: Accidents, Recommendations and Future Needs. Presented to 2011 Shiftwork Congress, The Sleepy Brain Symposium, Stockholm, Sweden, June 27, 2011.

Driver and Vehicle Safety Issues: An NTSB Perspective. Presented to American Association of Motor Vehicle Administrators, Baltimore, MD, July 18, 2011.

Fatigue in the Workplace and on the Road. Presented to Stanford Medical Center Trauma Symposium, Palo Alto, CA, August 18, 2011.

The Future: What We Can Expect from Fatigue Risk Management Systems. Presented to ICAO Fatigue Risk Management Systems Symposium, Montreal, Canada. August 31, 2011.

Fatigue Management: Enhancing Safety and Performance. Presented to Leadership and Advice in Crisis, Critical Incident Advisory Group, Charlottesville, VA, September 15, 2011.

Enhancing Transportation Safety: The Importance of Managing Fatigue. Presented to Transportation Research Board, Fatigue in Transit Operations, National Academies of Science, Washington, D.C., October 12, 2011.

Managing Fatigue in Aviation Operations: An NTSB Perspective. Presented to Bombardier Safety Stand-down, Wichita, KS, October 25, 2011.

Managing Fatigue in Aviation Operations: An NTSB Perspective. Presented to Citation Jet Pilots 2010 Annual Convention. October 28, 2011.

Managing Fatigue in 24/7 Ops: Lessons Learned from Transportation. Presented to Federal Bureau of Investigation Crisis Management Coordinators Conference, Quantico, VA, November 2, 2011.

Future of Sleep Apnea in Transportation—Research Needs and Applications. American Sleep Apnea Association 2011 Sleep Apnea & Multi-Modal Transportation Conference, Baltimore, MD, November 9, 2011. Sleep and Fatigue in Transportation Safety: An NTSB Perspective. Presented to Sleep Grand Rounds, Division of Sleep Medicine, Harvard Medical School, Cambridge, MA, November 14, 2011.

Managing Fatigue in 24/7 Ops: Lessons Learned from Transportation. Presented to Transportation Disaster Response Course, Ashburn, VA. November 17, 2011.

Managing Fatigue During An Accident Investigation Launch. Presented to National Transportation Safety Board Investigator In Charge Course, Washington, D.C., November 29, 2011.

Statement of Member Mark Rosekind—Advocates for Highway and Auto Safety— Roadmap to State Highway Safety Laws, National Press Club, Washington, D.C., January 11, 2012.

Managing Fatigue in Helicopter Operations: Risks and Opportunities. Remarks to Safety Symposium at HELI–EXPO, Dallas, TX, February 11, 2012.

Chronobiology and Transportation Safety: Risks and Opportunities. Remarks at University of California San Diego Center for Chronobiology Symposium, San Diego, CA, February 17, 2012.

Enhancing Transportation Safety: NTSB Investigations and Recommendations. Remarks to San Francisco Chapter, International Society of Air Safety Investigators, San Francisco CA, February 24, 2012.

Managing Fatigue in Aviation: NTSB Investigations and Recommendations. Remarks to Air Safety Foundation, Ashburn, VA, February 29, 2012.

Drowsy Driving and Safety. Remarks at National Sleep Foundation Sleep, Health and Safety Symposium, Washington, D.C., March 3, 2012.

*The NTSB: Overview, Addressing Fatigue and Safety Tools.* Remarks to Southern California Aviation Association, Van Nuys, CA, March 5, 2012.

Enhancing Transportation Safety with Sleep Science: Challenges and Opportunities. Remarks at Sleep Grand Rounds, Center for Sleep Sciences and Medicine, Stanford Medical School, Palo Alto, CA, March 9, 2012.

Stanford Sleep and Dreams: Enhancing Transportation Safety. Remarks to Sleep and Dreams, Stanford University, Palo Alto, CA, March 9, 2012.

The San Bruno Accident and Where We Go From Here. Remarks to Annual Pipeline Opportunities Conference, Houston, TX, April 4, 2012.

Perspectives on Flight Time/Duty Time for All-Cargo Operations. Remarks at Airline Pilots Association International Air Cargo Safety and Security: Closing the Gaps Symposium, Washington, D.C., April 16, 2012.

Managing Fatigue in Maritime Operations: Challenges and Opportunities. Remarks at American Waterways Operators Board of Directors Meeting, Washington, D.C., April 20, 2012.

Managing Fatigue to Enhance Transportation Safety: Challenges and Opportunities. Remarks at Eastern Virginia Medical School, Internal Medicine Grand Rounds, Norfolk, VA, April 25, 2012.

Human Behavior: The Most Significant Risk in Transportation Safety. Remarks at Eastern Virginia Medical School, Psychiatry Grand Rounds, Norfolk, VA, April 25, 2012.

Managing Fatigue in Flight Operations: FRMP Commitment, Policy and Procedures. Remarks at A4A/CAA/NACA/RAA Fatigue Risk Management Program Symposium, Dulles, VA, April 27, 2012.

Managing Fatigue in 24/7 Ops: Risks, Fatigue Factors and Strategies. Remarks at United States Coast Guard Senior Executives Conference, Washington, D.C., May 10, 2012.

Managing Fatigue in Aviation Ops: Risks, Fatigue Factors and Strategies. Remarks at Regional Airline Association 37th Annual Convention, Minneapolis, MN, May 23, 2012.

Stanford Sleep and Dreams: Enhancing Transportation Safety. Remarks to Sleep and Dreams, Stanford University, Palo Alto, CA, May 30, 2012.

From Bench to Planes, Trains and Automobiles: How Sleep Science Can Enhance Transportation Safety. Keynote Address at 26th Annual Meeting of Associated Professional Sleep Societies, LLC, Boston, MA, June 11, 2012.

Reaching Zero: A Critical Role for DWI/Drug Courts. Remarks at Closing Ceremony of National Association of Drug Court Professionals Training Conference, Nashville, TN, June 2, 2012.

NTSB Accident Investigations and Recommendations: Making Your County Safer. Remarks at National Association of Counties Annual Conference, Pittsburgh, PA, July 14, 2012.

Managing Fatigue in GA: Challenges and Opportunities. Presentation to GAMA at EAA AirVenture 2012, Osh Kosh, WI, July 25, 2012.

Pay Attention: Challenges and Opportunities to Enhance Transportation Safety. Presentation to Center for Automotive Research at Stanford, Palo Alto, CA, August 6, 2012.

Managing Fatigue in Aviation Ops: An NTSB Perspective. Presentation to Malibu Mirage Owners and Pilots Association, Colorado Springs, CO, September 21, 2012. Fatigue, Shift Work and Sleep Disorders: Key Lessons from Transportation Accidents. Presentation at Harvard Sleep and Shiftwork Symposium, Boston, MA, September 27, 2012.

Good Sleep, Safe Travels: Managing Fatigue Risks in Transportation. Keynote Address to Harvard Division of Sleep Medicine, Boston, MA, September 27, 2012.

The NTSB: Enhancing Transportation Safety. Presentation to Ship Operations Cooperative Program Fall Meeting, New Orleans, LA, October 23, 2012.

Managing Fatigue in Aviation Ops: An NTSB Perspective. Presentation to TBM Owners and Pilots Association, Amelia Island, FL, October 26, 2012.

Enhancing Transportation Safety: Addressing Fatigue, Shiftwork and Sleep Disorders. Presentation to Kentucky Sleep Society, Louisville, KY, October 27, 2012.

Sleep Deprivation, Shift Work, Jet Lag and Performance Decrement: Safety Challenges. Keynote Address to North Puget Sound Center for Sleep Disorders, Everett, WA, November 2, 2012.

Beyond "Trust But Verify": What is Next for Pipeline Safety? Opening Address at Pipeline Safety Trust Conference, New Orleans, LA, November 8, 2012.

Managing Fatigue in Aviation Ops: An NTSB Perspective. Presentation at FAA Hangar 6 Safety Stand Down, National Airport, Alexandria, VA, November 15, 2012.

What Happens on the Roads, Rails and in the Skies: Sleep, Fatigue and Transportation. Presentation to Introduction to Sleep Class, Brown University, Providence, RI, November 29, 2012.

Meaningful Performance Metrics: Their Role and Value in Pipeline Safety. Presentation at PHMSA Pipeline Data Workshop, Washington, D.C., January 7, 2013.

Managing Fatigue to Enhance Personal Safety. Presentation on Managing Fatigue to Enhance Personal Safety at NTSB All Hands Meeting, Washington, D.C., January 8, 2013.

Risky Human Behavior: Threats to Transportation Safety. Hyatt Lecture, St. Joseph's University, Philadelphia, PA, February 19, 2013.

The Role of Sleep Loss in Transportation Accidents: NTSB Investigations and Recommendations. Presentation to Sleep and Chronobiology Division at University of Pennsylvania School of Medicine, Philadelphia, PA, February 20, 2013.

The Role of Sleep in Transportation Safety: NTSB Investigations and Recommendations. Presentation to National Sleep Awareness Roundtable, National Sleep Foundation Sleep and Health 2013 Conference, National Harbor, MD, February 28, 2013.

Good Sleep Enhances Transportation Safety: Risks, Progress and Gaps. Keynote Presentation at Sleep Health and Safety 2013 Annual Conference, National Sleep Foundation, National Harbor, MD, March 1, 2013.

Managing Fatigue to Enhance Safety: Lessons from Transportation. Presentation to Occupational Injury Prevention Graduate Seminar Series in Injury Research and Policy, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, March 4, 2013.

Stanford Sleep and Dreams: Enhancing Transportation Safety. Presentation to Sleep and Dreams, Stanford University, Palo Alto, CA, March 8, 2013.

Enhancing General Aviation Safety: NTSB Investigations, Managing Fatigue and New GA Safety Alerts. Presentation at Spruce Creek Safety Meeting, Daytona Beach, FL, March 24, 2013.

Managing Fatigue to Enhance Safety: Lessons Learned from Transportation. Presentation to Halifax Health Grand Rounds, Daytona Beach, FL, March 26, 2013.

Managing Fatigue in 24/7 Operations: Lessons from Transportation. Presentation to Mid Atlantic Association for Women in Law Enforcement, Dover, DE, March 27, 2013. Examining Fatigue Factors in Accident Investigations: An NTSB Perspective. Presentation at Fatigue Risk Management Symposium, Orlando, FL, April 16, 2013.

Managing Fatigue Risk in Transportation: Challenges and Opportunities. Presentation at Fatigue Risk Management in Aviation Symposium, George Mason University, Arlington, VA, May 1, 2013.

NTSB Mission and Investigative Process: The Journey from Accident Launch to Probable Cause. Presentation at Coalition for Airline Pilots Associations (CAPA) Safety Meeting, Washington, D.C., May 7, 2013.

Fatigue Factors in Accident Investigations: Using Science to Enhance Safety. Presentation to Transportation Safety Board of Canada, Ottawa, Canada, May 16, 2013. Stanford Sleep and Dreams: Enhancing Transportation Safety. Presentation to Sleep and Dreams, Stanford University, Palo Alto, CA, May 29, 2013.

The NTSB and Impaired Driving: Actions Needed to Reach Zero. Keynote Opening Presentation at Alcohol Monitoring Systems (AMS) SCRAMcon 2013, Englewood, CO, May 31, 2013.

Managing Fatigue in Aviation Ops: An NTSB Perspective. Presentation to Pilatus Owners and Pilots Association, Monterey, CA, June 1, 2013.

Managing Fatigue in Aviation Ops: An NTSB Perspective. Presentation at The Twin Cessna Flyer Convention, Wichita, KS, June 28, 2013.

Reaching Zero: Actions to Eliminate Substance-Impaired Driving. Presentation to National Association of Drug Court Professionals (NADCP) Board Of Directors, National Harbor, MD, July 13, 2013.

Managing Fatigue in Aviation: Enhancing Flight Safety. Presentation to Aviation Safety Coordinators Conference, Ashburn, VA, July 24, 2013.

The NTSB Safety Mission: From Investigation to Recommendation. Presentation at Brotherhood of Locomotive Engineers and Trainmen Legislative Representatives Workshop, Washington, D.C., September 23, 2013.

NTSB Recommendations and Fatigue Countermeasures. Presentation at NTSB Investigating Human Fatigue Factors Course, Ashburn, VA, November 22, 2013.

*Fire Safety: An NTSB Perspective.* Presentation at FAA 7th Triennial International Fire & Cabin Safety Research Council, Philadelphia, PA, December 2, 2013.

Managing Fatigue to Enhance Transportation Safety: Challenges and Opportunities. Presentation at Naval Strike and Air Warfare Center Safety Standdown, Fallon, NV, December 17, 2013.

Creating a Culture of Safety: Challenges and Opportunities. Keynote Address at American Waterways Organization Coastal and Interregion Safety Committees Joint Annual Meeting, New Orleans, LA January 15, 2014.

Enhancing Fire Safety: Opportunities for Innovation. Keynote Presentation at National Alliance for Advanced Technology Batteries Annual Meeting and Symposium, San Diego, CA, January 22, 2014.

Stanford Sleep and Dreams: Enhancing Transportation Safety. Presentation at Stanford Sleep and Dreams, Palo Alto, CA, January 31, 2014.

Sleep and Sleep Disorders in Transportation Safety: Challenges and Opportunities. Presentation at State Sleep Medicine Conference, Yale School of Medicine, New Haven, CT, February 19, 2014.

Managing Fatigue in Flight Ops: NTSB Investigations and Recommendations. Presentation at 36th Annual Neonatal and Pediatric Transport Conference Salt Lake City, UT, February 26, 2014.

The NTSB Mission to Enhance Transportation Safety: Investigations, Recommendations and Advocacy. Presentation to Aviation Department Utah Valley University, Provo, UT, February 26, 2014.

The NTSB Mission to Enhance Transportation Safety: Investigations, Recommendations and Advocacy. Presentation at Salt Lake City Community College, Salt Lake City, UT, February 27, 2014.

Enhancing Rail Safety: NTSB Investigations and Recommendations. Presentation to Transportation and Infrastructure Services Committee, Energy, Environment and Natural Resources Committee, National League of Cities, Washington, D.C., March 9, 2014.

International Flight Ops: An NTSB Perspective on Fatigue Challenges. Presentation at National Business Aviation Association International Operators Conference, Tampa, FL, March 19, 2014.

NTSB Efforts to Enhance Safety: Reducing Distraction and Fatigue in Transportation. Presentation at Southern District Institute of Transportation Engineers 2014 Annual Meeting, Greensboro, GA, March 31, 2014.

Fatigue as a Safety Risk in Flight Operations: Challenges and Opportunities. Presentation at CHC Safety and Quality Summit, Vancouver, BC, Canada, April 1, 2014. Sleepless in America: The Deadly Cost of Fatigue in Transportation. Presentation to Maryland College of Occupational and Environmental Medicine Update, Johns Hopkins Education and Research Center for Occupational Safety and Health, Baltimore, MD, April 5, 2014.

Sleep Loss in Transportation: Safety Risks and Opportunities. Presentation at Leadership Summit, National Sleep Foundation, Washington D.C., April 7, 2014.

The Critical Role of Sleep to Enhance Transportation Safety: NTSB Investigations and Recommendations. Presentation at Maryland Sleep Society Annual Meeting, Townson, MD, April 25, 2014.

Promoting Good Sleep to Enhance Transportation Safety; NTSB Investigations and Recommendations. Keynote Opening Address at Illinois Sleep Society Conference, Oak Lawn, IL, April 26, 2014.

Managing Sleep and Sleep Disorders to Enhance Transportation Safety: NTSB Investigations and Recommendations. Presentation at American Sleep and Breathing Academy, Sleep and Wellness 2014 Conference, Scottsdale, AZ, May 3, 2014.

Reaching Zero: Actions Needed to Eliminate Substance-Impaired Driving. Presentation at 111th Automobile Association of America (AAA) Annual Meeting, Indian Wells, CA, May 6, 2014.

Stanford Sleep and Dreams: Enhancing Transportation Safety. Presentation at Stanford Sleep and Dreams, Stanford University, Palo Alto, CA, May 12, 2014.

Reaching Zero: Actions to Eliminate Substance-Impaired Driving. Presentation at National Association of Drug Court Professionals (NADCP) 20th Annual Training Conference, Anaheim, CA, May 31, 2014.

Promoting Good Sleep to Enhance Transportation Safety: NTSB Investigations and Recommendations. Presentation to American Academy of Sleep Medicine and Sleep Research Society leadership meeting, Washington D.C., June 12, 2014.

The NTSB Safety Mission: From Investigation to Recommendation. Presentation to Brotherhood of Locomotive Engineers and Trainmen, Washington, D.C., July 16, 2014.

Transit Board Members and the NTSB: Engagement, Investigations, and Enhanced Safety. Presentation at Transit Board Members & Board Support Seminar, American Public Transportation Association, Cleveland, OH, July 21, 2014.

The Vital Role of Sleep for Safety, Health and Performance. Keynote presentation at the 6th Annual Meeting of the Integrated Sleep Medicine Society Japan, Kobe, Japan, August 2, 2014.

Managing Fatigue in Aviation: Challenges and Opportunities. Presentation at FAA Hangar 6 Safety Standdown, Arlington, VA, August 21, 2014.

Substance-Impaired Driving: Actions Needed to Reach Zero. Presentation at RIDOT Northeast Transportation Safety Conference, Providence, RI, September 3, 2014.

Senator McCASKILL. Thank you, Doctor. Mr. Monje.

# STATEMENT OF CARLOS A. MONJE, JR., COUNSELOR TO THE SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION; ASSISTANT SECRETARY OF TRANSPORTATION FOR POLICY-DESIGNATE

Mr. MONJE. Thank you, Senator. Chairman McCaskill, Ranking Member Thune, members of the Committee, I am humbled to appear before you today as President Obama's nominee for Assistant Secretary of Transportation for Policy.

I would like to thank my wife, Anne Filipic, for being with me, and for her support and love. I would like to thank my friends and colleagues who are here backing me up. Finally, I would like to recognize my parents and my sisters, who couldn't be here but who taught me the values that led to my career in public service.

Transportation has a particular meaning for me because my parents immigrated to the United States because my dad, who is a naval architect, accepted a job at the New Orleans shipyards. I literally wouldn't be an American today if it wasn't for the transportation industry.

As a former Senate staffer, I have a deep respect for the confirmation process. And so I am honored for your time and for your consideration today.

I have served in a variety of positions in the Executive and legislative branches for more than a decade. Currently, I serve as Counselor to the Secretary at the U.S. Department of Transportation. I have been privileged to work in an agency with a visionary leader, a clear mission, a dedicated work force, and a very strong partnership with its congressional oversight committees. Secretary Foxx has directed me to focus on some high-priority policy initiatives, such as the GROW AMERICA Act, the TIGER discretionary grant program, and promoting mobility, equity, and economic development in rural and urban areas across the country. I have also had the opportunity to see firsthand the impact that infrastructure has on communities, how critical freight movement is to our economy, how much workers depend on reliable transit and uncongested roads to get to work, how good jobs and opportunity can flow from well-planned projects.

I have also seen the consequences when infrastructure doesn't keep up with demand: crumbling overpasses, warped rail lines, missed opportunities for economic development. To address this nationwide challenge, the Administration has proposed the GROW AMERICA Act, which would provide reliable and substantial funding for road, rail, and transit projects. The Act includes a number of critical investments and improvements to our safety programs. It improves rail and freight planning, and it streamlines project delivery so that our roads and bridges can get built more quickly.

I hope to consult closely with this committee as we work together to strengthen our surface transportation programs. If confirmed, I also look forward to working with the Committee on the reauthorization of our important aviation laws so that we can maintain our position as a global leader in aviation safety, deliver a modern air traffic control system, and ensure aviation access to communities across the country.

Prior to coming to DOT, I worked for 5 years in the White House. For 3 of those years, I served as Chief of Staff at the Domestic Policy Council, where I helped manage a team of 50 senior policy aides. I helped supervise agency budgets, advocated administration positions, and planned policy actions. DPC's portfolio includes a wide cross-section of the President's domestic agenda, including transportation. Before that, in the White House, I worked to improve our Federal disaster recovery efforts, to support our veterans, and to give more Americans the opportunity to volunteer in their communities. I worked within the White House Office of Social Innovation, which sought new ways for the Federal Government to work with our nonprofit and private sectors.

My most personal work came in making the Federal Government a better partner to local communities following disasters. When the Administration began in 2009, too many Gulf Coast residents, including those in my hometown of New Orleans, were trapped in Post-Katrina red tape. One Mississippi official compared the Federal Government to "a dysfunctional grocery store," where you have to check out at the end of each aisle. I am proud that the administration has improved dramatically on that record by focusing on outcomes on the ground and by breaking down administrative stovepipes. And the lessons we learned from our efforts have also improved how we partner with communities every day.

I am very grateful to Secretary Foxx and to President Obama for their support. If confirmed, I will work to promote innovation to get more out of the taxpayer dollars that are entrusted to us, to strengthen our safety framework, to help our infrastructure projects serve as the foundation for stronger communities.

I will work with this committee to strengthen the department and achieve better results for the American people. I know that you and your staff have a deep expertise of our shared infrastructure challenges, that your knowledge of the needs of your constituents is unrivaled, and that your role as a partner in governing is vital to our shared success.

Chairman McCaskill, Ranking Member Thune, members of the Committee, thank you again for your consideration and for the op-portunity to appear before you. I look forward to your questions.

[The prepared statement and biographical information of Mr. Monje follow:]

PREPARED STATEMENT OF CARLOS A. MONJE, JR., COUNSELOR TO THE SECRETARY, TRANSPORTATION; U.S. DEPARTMENT OF ASSISTANT SECRETARY TRANSPORTATION FOR POLICY-DESIGNATE

Chairman Rockefeller, Ranking Member Thune, Members of the Committee, I am humbled to appear before you today as President Obama's nominee for Assistant

Secretary of Transportation for Policy. I'd like to thank my wife, Anne Filipic, for being with me, and for her support and love. I'd like to thank my friends and colleagues who are here. Finally, I'd like to recognize my parents and big sisters who couldn't be here, but who taught me to recognize my parents and big sisters who couldn't be here, but who taught me the values that led to my career in public service. Transportation has a particular meaning for me. My parents immigrated to the United States because my dad, a naval architect, accepted a job at the New Orleans shipyards. I literally wouldn't be an American if it wasn't for the transportation industry. As a former Senate staffer, I have a deep respect for the confirmation process, so I am honored for your time and consideration today.

I have served in a variety of positions in the executive and legislative branches for more than a decade. Currently, I serve as Counselor to the Secretary at the U.S. Department of Transportation. I've been privileged to work at an agency with a visionary leader, a clear mission, a dedicated workforce, and a strong partnership with its congressional oversight committees.

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I've also had the opportunity to see firsthand the impact that infrastructure has on communities. How critical freight movement is to our economy. How much workers depend on reliable transit and uncongested roads to get to work. How good jobs and opportunity can flow from well-planned projects. I've also seen the consequences when infrastructure doesn't keep up with de-

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Before that, I worked to improve Federal disaster recovery efforts, to support our veterans, and to give more Americans the opportunity to volunteer in their communities. I worked within the White House Office of Social Innovation, which sought new ways for the Federal Government to work with the nonprofit and private sectors.

tors. My most personal work came in making the Federal Government a better partner to local communities following disasters. When the administration began in 2009, too many Gulf Coast residents, including those in my home town of New Orleans, were trapped in Post-Katrina red tape. One Mississippi official compared the Federal Government to quote—a dysfunctional grocery store—where you have to check out at the end of each aisle. The administration has dramatically improved that track record by focusing on outcomes on the ground and cutting down administrative stovepipes. And lessons learned from our efforts have also improved how we partner with communities every day.

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Chairman Rockefeller, Ranking Member Thune, and Members of the Committee, thank you again for your consideration and the opportunity to appear before you today. I look forward to your questions.

#### A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used):

Carlos Alberto Monje, Jr.

2. Position to which nominated: Assistant Secretary for Transportation Policy, Department of Transportation.

3. Date of Nomination: September 8, 2014.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.

Office: 1200 New Jersey Ave., SE, Washington, D.C. 20590.

5. Date and Place of Birth: July 17, 1978; New Orleans, LA.

6. Provide the name, position, and place of employment for your spouse (if mar-

ried) and the names and ages of your children (including stepchildren and children by a previous marriage).

Spouse: Anne Elizabeth Filipic, President, Enroll America.

7. List all college and graduate degrees. Provide year and school attended.

Harvard University

A.B., History and Literature (Magna Cum Laude) (2000)

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

# Managerial/Related positions are in italics below:

U.S. Department of Transportation Counselor to the Secretary February 2014–Present White House Domestic Policy Council Special Assistant to the President and Chief of Staff of the Domestic Policy Council (DPC) January 2011–February 2014 Senior Policy Advisor February 2009–December 2010

Presidential Transition Project National Security Policy Working Group November 2008–February 2009

Obama for America Deputy Policy Director March 2007–November 2008

U.S. Senator Barack Obama (D–IL) Special Assistant for Policy and Communications January 2006–March 2007

U.S. Senator Ken Salazar (D–CO) Legislative Assistant February 2005–December 2005

Erskine Bowles for U.S. Senate Press Secretary March 2004–November 2004

John Edwards for President Deputy Press Secretary August 2003–March 2004

U.S. Senator John Edwards (D-NC) Deputy Press Secretary November 2001–August 2003

U.S. Senator Chuck Schumer (D–NY) Deputy Press Secretary August 2001–October 2001

Fleishman-Hillard Assistant Account Executive November 2000–July 2001

Chris Petrini for State Representative Field Director June 2000–September 2000

9. Attach a copy of your resume.

A copy is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last five years: None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last five years: None.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

I am a member of the Catholic Church. I do not hold any leadership positions within my local parish.

13. Have you ever been a candidate for and/or held a public office (elected, nonelected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt: No.

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14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period: None.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

#### Harvard University:

Lyman Scholarship (1997)

Harvard College Scholarship (1996–1999)

Dean's List (1996-2000)

Harvard College Research Fellowship (1999)

2013 Presidential Leadership Workshop (Professional Development Program for Appointees)  $% \mathcal{A}(\mathcal{A})$ 

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

I have done my best to identify all books, articles, columns, or other publications and relevant speeches, including a thorough review of my personal files and searches of publicly available electronic databases. Despite my searches, there may be other materials that I have been unable to identify, find or remember. I have located the following:

Speeches:

- Various informal stakeholder events to discuss GROW AMERICA Act (Spring 2014)
- Grantmakers Income Security Taskforce—Grantmakers for Children Youth and Families: Budget and Tax Briefing (March 19, 2013)
- White House Long-Term Disaster Recovery Working Group, Salt Lake City Session: Closing Remarks (January 18, 2012)
- Philanthropy Northwest 2009 Annual Conference Keynote Address (September 2009)
- Philanthropy and Rural America Conference speech: "The Social Innovation Fund and Rural America" (July 2009)
- Stanford Business School Silicon Valley Roundtable for White House Office of Social Innovation (June 23, 2009)
- $\bullet$  Entrepreneurship in Education, Center for American Progress Roundtable (May 7, 2009)
- 10th Annual Social Enterprise Summit: Keynote Address "Harnessing Policy Opportunities at the National Level" (April 17, 2009)
- White House Champions of Change:
- Southwest Border Region (September 2011)
- Space Coast Technology and Innovation (June 2011)
- ° Gulf Coast Oil Spill (July 2010)

Federal Publications Contributed to:

- Hurricane Sandy Rebuilding Strategy (August 2013) http://portal.hud.gov/hudportal/documents/huddoc?id=hsrebuilding strategy.pdf
- National Disaster Recovery Framework (September 2011) http://www.fema.gov/national-disaster-recovery-framework
- Deepwater Horizon Recovery Plan (September 2010) http://www.restorethegulf.gov/sites/default/files/documents/pdf/gulf-recoverysep-2010.pdf

Online Content:

• White House Video Message: Continuing to strengthen our economy in 2014 (January 11, 2014)

http://www.whitehouse.gov/the-press-office/2014/01/11/white-house-videomessage-continuing-strengthen-our-economy-2014

- Innovation with Crawfish Sauce: What a New Orleans Nonprofit Can Teach the Rest of the Country (October 30, 2009) http://www.whitehouse.gov/blog/2009/10/30/innovation-with-crawfish-sauce-
- http://www.whitehouse.gov/blog/2009/10/30/innovation-with-crawfish-saucewhat-a-new-orleans-nonprofit-can-teach-rest-country
- A Special Moment for Service (March 27, 2009) http://www.nationalservice.gov/newsroom/official-statements/2009/specialmoment-service

I have numerous articles that I authored while a Reporting Intern in college with both *The Boston Globe* and *The Times-Picayune*. They are available publically online through the publications' respective archives and websites, www.bostonglobe.com and www.nola.com .

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony: None.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

For more than a decade, I have served in a variety of positions in the executive and legislative branches. Most recently, I have served as Counselor to the Secretary at the U.S. Department of Transportation where I worked on the administration's proposal to reauthorize surface transportation programs, on the TIGER discretionary grant program, and on efforts to promote equity and economic development.

ionary grant program, and on efforts to promote equity and economic development. Previously, I served for five years at the White House Domestic Policy Council ("DPC"). For two of those years, I worked to improve disaster recovery, to keep the sacred trust with our Nation's veterans, and to give more Americans the opportunity to volunteer in their communities. I worked within the Office of Social Innovation, which sought new ways for the Federal Government to be a partner with the nonprofit industry and private sector.

profit industry and private sector. In my final three years at the White House, I served as Chief of Staff of the DPC, where I helped lead a team that managed a wide waterfront of the President's domestic agenda, including education, energy, health care, immigration, poverty, criminal justice, civil rights, veterans, rural policy, tribal issues, social innovation, and faith. During those years, I worked with a team of 50 senior policy aides that had deep reach into the administration. I supervised agency budgets, advocated administration positions, and planned major executive actions and policy rollouts.

My most fulfilling work involved place-based policy, both in disaster recovery and in marquee programs like Strong Cities/Strong Communities and Promise Zones. I helped Navy Secretary Ray Mabus write the recovery plan for the Gulf Coast following the *Deepwater Horizon* oil spill, helped clear bureaucratic obstacles to recovery following Hurricane Katrina, and helped lead the Hurricane Sandy Task Force. I also worked with FEMA and HUD to explore how the Federal Government can be a better partner to communities facing long-term disaster recovery. These experiences taught me the importance of common-sense and collaboration, local primacy, and clear roles and responsibilities across levels of government and with affected communities.

The Department of Transportation has been a great partner to state and local governments, and the impacts of infrastructure investments are long-lasting and concrete. If confirmed, I will work to deepen and strengthen those relationships even as the Department works to promote performance-based management, share best practices, and modernize the transportation network for the 21st century demands it faces.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

Taxpayers deserve to know that their dollars are spent well and in the public service. It is imperative that the Department maintain that trust to make the most of limited resources and to maintain public faith that infrastructure projects are worth the investment.

The policy office at the Department of Transportation (OST-P) has a number of roles in this regard. First, OST-P manages the TIGER discretionary grant program, which has supported innovative and hard-to-fund projects across the country. I joined the Department in 2014 just as the TIGER VI process was beginning. I have been instrumental in implementing reforms to the evaluation process and am working to improve grants management and evaluation moving forward. I have learned the value of proper management and accounting controls, in particular the impor-

tance of clearly written policies and the documentation of decisions. Second, OST-P reviews and provides guidance to the modes on their grant programs, including approving Notices of Funding Availability.

I have held a number of management positions, including a team of 50 senior policy staffers at the White House. Through these roles, I've learned the value of clear lines of authority and accountability and of objective reporting of results.

20. What do you believe to be the top three challenges facing the department/ agency, and why?

Infrastructure investments have long been an area of bipartisan agreement in the Congress. How Congress addresses the upcoming insolvency of the Highway Trust Fund and the expiration of MAP-21 represents a test of this tradition. Infrastructure planners need multi-year certainty in order to begin ambitious projects. The good news is that we have seen substantial cooperation across the aisle, and there is momentum for a longer-term bill.

Safety remains the top priority of the Department. This means a combination of long-term, patient vigilance on perennially difficult issues, such as reducing impaired and distracted driving, supervising motor coaches and reducing aircraft accidents. It also means staying ahead of rapidly developing issues, such as the safety of transporting crude oil by rail, incorporating unmanned aircraft into the Nation's airspace, and implementing new technologies, such as NextGen, positive train control and intelligent transportation systems.

trol and intelligent transportation systems. Finally, implementation of the MAP-21 performance measures has the potential to be the most transformative innovation in the partnership between USDOT and our state and local partners. However, we must nurture this opportunity, filling gaps in data and knowledge, setting ambitious, but achievable goals and listening to the stakeholders who have had the most experience implementing programs, namely states and transit agencies.

# B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

As of September 19, 2014, my Thrift Savings Plan (TSP) account balance is \$61,695.50.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain: None.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Department of Transportation's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the designated agency ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest. 4. Describe any business relationship, dealing, or financial transaction which you

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Department of Transportation's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the designated agency ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

As a member of the Domestic Policy Council, I was the White House lead in negotiating the Serve America Act with bipartisan leaders in the U.S. House (Education and the Workforce Committee) and Senate (HELP Committee). This legislation reauthorized the Corporation for National and Community Service. I also worked within the White House on several key pieces of legislation, most notably the Hurricane Sandy disaster appropriations bill. As Chief of Staff of the DPC, I played important roles supporting the President's Domestic Policy Advisor as she advocated

for key legislation, including comprehensive immigration reform and lowering student loan interest rates. In my current position, I have briefed congressional staff and advocacy groups about the GROW AMERICA Act, the administration's proposal to reauthorize surface transportation programs.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items. In connection with the nomination process, I have consulted with the Office of

Government Ethics and the Department of Transportation's designated agency eth-ics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the designated agency ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

#### C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics by, or been the subject of a complaint to any court, administrative agency, professional association, disciplinary committee, or other professional group? If so, please explain: No\_\_\_\_\_

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or munic-ipal entity, other than for a minor traffic offense? If so, please explain: No. 3. Have you or any business of which you are or were an officer ever been in-

volved as a party in an administrative agency proceeding or civil litigation? If so, please explain: No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain: No. 5. Have you ever been accused, formally or informally, of sexual harassment or

discrimination on the basis of sex, race, religion, or any other basis? If so, please explain: No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination.

None to my knowledge.

#### D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for infor-mation set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and

disclosures? Yes. 3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

## RESUMÉ OF CARLOS MONJE JR.

## Work Experience

U.S. Department of Transportation, Washington, D.C. Counselor to the Secretary, February 2014–Present

Helped develop and roll out the administration's proposal to reauthorize surface transportation programs. Managed the TIGER discretionary grant program, and led efforts to promote equity and economic development through grant funding, regulations and guidance. Advised Secretary Foxx on policy matters.

White House Domestic Policy Council, Washington, D.C. Special Assistant to the President and Chief of Staff of the DPC, January 2011–Febrûary 2014

Oversaw all aspects of policy, message and event development of more than 40 pol-icy staff across a wide spectrum of domestic policy issues. Counseled Domestic Pol-icy Advisor on strategic and tactical considerations. Directed DPC-wide policy exercises, including executive actions and regulations. Advocated for the DPC across White House offices and Federal agencies. Instituted system changes to improve communications between front office and staff. Directed all personnel, budget and administrative activities. Coordinated White House efforts on Hurricane Sandy Rebuilding Task Force.

White House Domestic Policy Council, Washington, D.C.

# Senior Policy Advisor, February 2009–December 2010

Coordinated passage of the Edward M. Kennedy Serve America Act, bipartisan legislation that improved volunteer opportunities and established the Social Innovation Fund. Oversaw Corporation for National and Community Service, including its annual budget. Coordinated the development of America's Gulf Coast, Navy Secretary Ray Mabus' plan to recover from the *Deepwater Horizon* oil spill. Coordinated the Long-Term Disaster Recovery Working Group, and oversaw efforts to rebuild the Gulf Coast following the 2005 hurricanes.

Presidential Transition Project, Washington, D.C. National Security Policy Working Group, November 2008–February 2009 Participated in confirmation teams of Secretaries Janet Napolitano and Eric Shinseki.

Obama for America, Chicago, IL Deputy Policy Director, March 2007–November 2008 Handled homeland security, veterans, national service, rural policy, and government reform policy portfolios. Developed policy plans utilizing outside experts and worked with communications and political staff to plan policy rollouts. Served as policy surrogate at press events and conducted outreach to constituency groups. Managed 14 battleground state policy directors who each localized policy rollouts, triaged policy requests and conducted outreach. Served as New Mexico state director during the February 5 primary.

U.S. Senator Barack Obama (D-IL), Washington, D.C. Special Assistant for Policy and Communications, January 2006–March 2007 Staffed homeland security and veterans committees. Introduced legislation to improve care for wounded troops. Passed bipartisan legislation to reduce homelessness among veterans and to improve screening for Traumatic Brain Injury. Introduced chemical security legislation. Worked with press department to earn media coverage on legislative efforts.

# U.S. Senator Ken Salazar (D-CO), Washington, D.C. Legislative Assistant, February 2005-December 2005

Handled homeland security and veterans. Passed bipartisan legislation to improve benefits for military widows and widowers. Introduced bills to improve intelligence sharing with local emergency officials, improve health care for rural veterans and services for blinded veterans.

Erskine Bowles for U.S. Senate, Raleigh, NC

Press Secretary, March 2004-November 2004

Served as primary on-the-record spokesman. Developed and executed earned media strategy. Wrote campaign policy plans. Conducted radio and television interviews. Assisted with paid media, polling, debate preparation and speechwriting.

John Edwards for President, Raleigh, NC

Deputy Press Secretary, August 2003–March 2004 Traveled extensively with candidate across country. Wrote op-eds, press releases, and speeches. Served as campaign press secretary in Minnesota and New Mexico.

U.S. Senator John Edwards (D-NC), Washington, D.C. Deputy Press Secretary, November 2001–August 2003

Handled press materials, media inquiries and events. Launched Spanish website.

U.S. Senator Charles Schumer (D-NY), Washington, D.C. Deputy Press Secretary, August 2001-October 2001

Handled press materials, and media inquiries.

# Fleishman-Hillard, New York, NY

Assistant Account Executive, November 2000–July 2001 Developed press materials and developed media strategy. Handled media requests.

Chris Petrini for State Representative, Framingham, MA Field Director, June 2000–September 2000

Coordinated Get Out The Vote efforts for state legislature race.

Shorenstein Center on Press, Politics and Public Policy, Cambridge, MA Office Assistant, September 1996–June 2000 Assisted with coordinating fellows program and events at the think tank.

Boston Globe, Boston, MA

Reporting Intern, Summer 1999

Served as a full-time correspondent and wrote more than 40 published articles.

*Times-Picayune*, New Orleans, LA Reporting Intern, Summer 1997 Served as a staff writer and wrote published news and feature stories.

# Education

Harvard University, Cambridge, MA

A.B. Magna Cum Laude) in History and Literature, June 2000 Lyman Scholarship. Harvard College Scholarship. Dean's List. Harvard College Research Fellowship. *The Harvard Crimson. The Harvard Current.* 

# STATEMENT OF DR. THO BELLA DINH-ZARR, NOMINEE, MEMBER, NATIONAL TRANSPORTATION SAFETY BOARD (NTSB)

Dr. DINH-ZARR. Thank you, Chairman McCaskill, Ranking Member Thune, and members of the Committee. I sincerely appreciate the opportunity to appear before you today, and I am honored to be President Obama's nominee for Member of the National Transportation Safety Board.

Before I begin, I would like to introduce my family, who has always been so supportive of me. With me today is my husband, Dr. Robert Zarr, a pediatrician; and my 6-year-old son, Kairan. My mother, Tonia; my three older brothers and their families are supporting me from the states of Texas, Florida, New Jersey, Washington, and North Carolina. I would also like to thank the Honorable Norman Y. Mineta, whom I consider a mentor and an inspiration. I am grateful to my friends and colleagues who are able to be here and who are watching from around the country.

I believe strongly in public service, and if confirmed, it would be my great honor to serve our country by supporting the mission of the NTSB to advance transportation safety. I have had a lifelong passion for transportation in all its forms, and I am committed to ensuring that transportation is as safe as possible for everyone.

My personal and professional background has uniquely prepared me to be an NTSB board member. My childhood on the Gulf Coast and my early years working at the Railroad Museum in Galveston, Texas have made me acutely aware of rail, marine, and pipeline safety. My graduate training and work in highway safety and injury prevention reinforced in me the critical importance of transportation safety to the health of our country. And, of course, I will never forget that it was an American airplane that carried my family to safety when we fled Vietnam in 1975, an airplane that we were able to board because of my father's life-saving work as a physician and his wartime friendships with his American colleagues.

My late father instilled in our family a deep respect and love for this country, a love that my three brothers demonstrate every day in their life-saving work as surgeons. After witnessing firsthand the devastating effects of traffic crashes while working as a young volunteer in a level 1 trauma center, I became committed to finding ways to prevent families from experiencing this needless suffering.

I have a diverse background of experience working in both the public and the private sectors, and I am proud of a long history of collaboration with state and local organizations throughout the country, as well as with safety colleagues around the world. My training and practical experience in public health and injury prevention has prepared me for an approach to safety that translates to all modes of transportation. My passion for keeping people safe and my expertise in data analysis consistently drive me to find good solutions to real problems threatening people's lives. I am especially proud that my highway safety work has spanned the generations, from keeping children safe on the roads to innovative transportation solutions to ensure that seniors stay safely mobile for as long as possible.

If confirmed, I will not forget the grieving families I have met over the years. I will work hard to do everything I can to provide victims, their families, and the American public with answers they need and to ensure that data from crash investigations and safety studies are used to prevent future tragedies.

The NTSB is in a unique position of being an independent body whose mandate can prevent countless deaths and injuries. If confirmed, it would be my honor to dedicate myself to the life-saving mission and legislative mandate of the NTSB. It has always been my belief that each of us must strive to serve our country and our communities in the best way that we are able. I can think of no greater privilege than to serve my country by ensuring that transportation in every mode is as safe as possible for all people, now and for generations to come.

Thank you again for the opportunity to appear before you today, and I look forward to answering any questions you may have.

[The prepared statement and biographical information of Dr. Dinh-Zarr follow:]

#### PREPARED STATEMENT OF THO BELLA DINH-ZARR, NOMINEE, MEMBER, NATIONAL TRANSPORTATION SAFETY BOARD (NTSB)

Thank you, Chairman Rockefeller, Ranking Member Thune, and Members of the Commerce Committee. I sincerely appreciate the opportunity to appear before you today and I am honored to be President Obama's nominee for Member of the National Transportation Safety Board.

today and I am nonored to be President Obama's nonlinee for Memoer of the National Transportation Safety Board. Before I begin, I would like to introduce my family who has always been so supportive of me. With me today is my husband, Dr. Robert Zarr, a pediatrician, and my 6 year old son, Kairan Zarr. My mother, my three brothers and their families are supporting me from the states of Texas, Florida, New Jersey, Washington, and North Carolina. I would also like to thank the Honorable Norman Y. Mineta, whom I consider a mentor and an inspiration. I am grateful to my friends and colleagues who are able to be here or who are watching from around the country. I believe strongly in public service and, if confirmed, it would be my great honor

I believe strongly in public service and, if confirmed, it would be my great honor to serve our country by supporting the mission of the NTSB to advance transportation safety. I have had a lifelong passion for transportation in all its forms and I am committed to ensuring that transportation is as safe as possible for everyone. My personal and professional background has uniquely prepared me to be an NTSB Board Member. My childhood on the Gulf Coast and my early years working at the Railroad Museum in Galveston, Texas, have made me acutely aware of rail, marine and pipeline safety. My graduate training and work in highway safety and injury prevention at the University of Texas and the Texas A&M Transportation Institute reinforced in me the importance of transportation safety to the health of our country. And, of course, I will never forget that it was an American airplane that carried my family to safety when we fled Vietnam in 1975—an airplane that we were able to board because of my father's lifesaving work as a physician and his friendships with American colleagues. My late father instilled in our family a deep respect and love for this country—a love that my three older brothers demonstrate every day in their lifesaving work as surgeons. After seeing the devastating effects of traffic crashes while working as a young volunteer in a Level 1 Trauma Center, I became committed to finding ways to *prevent* families from experiencing this needless suffering.

I have a diverse background of experience working in both the public and private sectors, and I am proud of a long history of collaboration with state and local organi-

zations throughout the country, as well as with safety colleagues around the world. My training and practical experience in public health and injury prevention has prepared me for an approach to safety that translates to all modes of transportation. My passion for keeping people safe and my expertise in data analysis constantly drive me to find good solutions to real problems threatening people's lives. I am especially proud that my highway safety work has spanned the generations, from child passenger safety research and legislation to innovative transportation solutions to ensure that seniors stay safely mobile for as long as possible.

tions to ensure that seniors stay safely mobile for as long as possible. If confirmed, I will not forget the grieving families I have met over the years. I will work hard to do everything I can to provide victims and the American public with the answers they need, and to ensure that data from crash investigations and safety studies are used to prevent future such tragedies.

The NTSB is in the unique position of being an independent body whose mandate can help prevent countless deaths and injuries. If confirmed, it would be my honor to dedicate myself to the lifesaving mission and legislative mandate of the NTSB. It has always been my belief that each of us must strive to serve our country and our communities in the best way that we are able. I can think of no greater privilege than to serve my country by ensuring that transportation, whether by air, land or sea, is as safe as possible for all people, now and for generations to come.

Thank you again for the opportunity to appear before you today and I look forward to answering any questions you might have.

#### A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used):

Tho Bella Dinh-Zarr

Tho Dinh-Zarr

Bella Dinh-Zarr

Tho Anh Dinh (maiden)

2. Position to which nominated: Member, National Transportation Safety Board.

3. Date of Nomination: September 18, 2014.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.

Office: 60 Trafalgar Square, London, United Kingdom.

5. Date and Place of Birth: March 16, 1971; Danang, Vietnam.

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Spouse—Dr. Robert Zarr, Pediatrician, Unity Health Care; son—Kairan Zarr, age 6.

7. List all college and graduate degrees. Provide year and school attended.

B.A. 1993—Rice University, Houston, Texas

M.P.H. 1997—University of Texas School of Public Health, Houston, Texas

Ph.D. 2001—University of Texas School of Public Health, Houston, Texas

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

As AAA National Director of Traffic Safety Policy for 4 years, I managed staff, collaborated with colleagues and ensured a large federation of independent and unique AAA clubs around the U.S. addressed the most important safety priorities. In my 8 years with the FIA Foundation, I have managed people with a wide range of responsibilities and skills on road safety projects and collaborations around the world. These employment experiences have given me the managerial and issue-related credentials to, if confirmed, help advance the important goal of increased transportation safety.

Director of the U.S. Office, FIA Foundation, Washington, D.C. & London, UK, 1/2014 to present

Road Safety Director, FIA Foundation, Washington, D.C. & London, UK, 12/ 2007-1/2014

**Director,** North America, Make Roads Safe—The Campaign for Global Road Safety, Washington, D.C., 7/2006–1/2014

National Director of Traffic Safety Policy, American Automobile Association (AAA), Washington, D.C., 3/2002-6/2006

Social Scientist, U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA), Washington, D.C., 8/2001-3/2002

Research Fellow, U.S. Centers for Disease Control & Prevention (CDC), National Center for Injury Prevention and Control (NCIPC), in conjunction with the U.S. Guide to Community Preventive Services Branch, Atlanta, Georgia, 4/2000-5/2001

Research Associate, Texas Transportation Institute, The Texas A&M University System, College Station, Texas, 5/1998–5/2001

Production Editor, International Journal of Technology Assessment in Health Care, Houston, Texas (Secretariat: Stockholm, Sweden) 1/1997-5/1999

Community Liaison, RDI Inc., Houston, Texas, 1/1995-5/1997 (dates approximate)

Evaluator, Houston-Harris County Community Partnership, University of Texas School of Public Health, Center for Health Promotion, Houston, Texas 5/1995-5/1996 (dates approximate)

9. Attach a copy of your resumé. A copy is attached. 10. List any advisory, consultative, honorary, or other part-time service or posi-tions with Federal, State, or local governments, other than those listed above, within the last five years: None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last five years.

Positions below are current positions except where dates are indicated. All positions are uncompensated.

- Independent Transportation Network of America (ITNAmerica)—Member, Council of Advisors (previously, member of Board of Directors)
- National Association of Women Highway Safety Leaders (NAHWSL)—Co-Chair of the Board of Advisors
- UN NGO Committee on Sustainable Development-Co-Chair (2013-2014)
- American Public Health Association, Injury Control and Emergency Health Services Section—Past Chair, Current Development Committee Co-Chair
- Transportation Research Board Global Road Safety Subcommittee-Co-Chair
- Carnegie Mellon University Transportation Center-Board Member
- Make Roads Safe (U.S.)-Board President

12. Please list each membership you have had during the past ten years or cur-rently hold with any civic, social, charitable, educational, political, professional, fra-ternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any or-ganization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Membership was not restricted in any of these organizations.

Capitol Hill Garden Club	2003-present	Member
Ludlow-Taylor Elementary School Parent Teacher Association (PTA)	2011–2013	Member
Tyler Elementary School Parent Teacher Organization (PTO)	2013–present	Member
Capitol Hill Public School Parents Organization (CHPSPO)	2012-present	Member

13. Have you ever been a candidate for and/or held a public office (elected, nonelected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt: No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period: None. 15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

- Youth Choice Award, Individual Winner, Global Youth Traffic Safety Month,2013
- Car & Travel Magazine—Named "Green Light in Transportation" by AAA, 2005
   NHTSA—Recognition Award, Outstanding Contribution to Traffic Safety, April 2003
- CDC Outstanding Scientific Contribution to Public Health Award, June 2002
- U.S. Department of Health and Human Services Secretary's Award, July 2001
- Fellow, CDC, U.S. Guide to Community Preventive Services Branch, Atlanta, Georgia 2000–2001

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

#### Publications:

Sleet, D., Naumann, R., Baldwin, G., *Dinh-Zarr, T.B.,* Ewing, R. (2012). Eco-Friendly Transportation and the Built Environment. Vol. 1, Ch.21. in Friis, R.H. (Ed.). *Praeger Handbook of Environmental Health* (2012). New York: Oxford University Press.

Dinh-Zarr, T.B. (2011). Envisioning a Traffic Safety Culture. Texas Transportation Researcher, August 2011.

Dinh-Zarr, T.B., Goss, C.W., Heitman, E., Roberts, I.G., DiGuiseppi, C. (2009) Interventions for preventing injuries in problem drinkers. *The Cochrane Library* 2009, Issue 1.

Dinh-Zarr, T.B. (2008). United Nations Debates Road Safety This Spring. ITE Journal. Institute of Transportation Engineers, April 2008.

Sleet, D.A., *Dinh-Zarr, T.B.*, & Dellinger, A.M. (2007). Traffic safety in the context of public health and medicine. *Improving Traffic Safety Culture in the U.S.: The Journey Forward*. AAA Foundation for Traffic Safety, 41–58.

*Dinh-Zarr, T.B.* & Hargarten S.W. (2007). Road Crash Deaths of American Travelers: The Make Roads Safe Report. An Analysis of U.S. State Department Data on Unnatural Causes of Death to U.S. Citizens Abroad (2004–2006). FIA Foundation report, April 25, 2007.

Staplin, L. & *Dinh-Zarr, T.B.* (2006). Promoting rehabilitation of safe driving abilities through computer-based clinical and personal screening techniques. *Topics in Geriatric Rehabilitation* 22(2), 129–138.

Eberhard, J.W., Stutts, J., Burkhardt, J., Finn, J., Hunt, L., Staplin, L., Molnar, K.J., Peters-Beumer, L, *Dinh-Zarr, T.B.*, Carr, D.B., Trilling, D.R., & McCarthy, D.P. (2006). Strategies and tools to enable safe mobility for older adults. *Topics in Geriatric Rehabilitation* 22(1), 3–19.

Zaza, S., Sleet, D.A., Shults, R.A., Elder, R.W., *Dinh-Zarr, T.B.*, Nichols, J.L., Compton, R., Thompson, R.S., & Task Force on Community Preventive Services (2005). Motor vehicle occupant injury. In S. Zaza, PA Briss, KW Harris (Eds.), *The Guide to Community Preventive Services* (pp. 329–384), New York: Oxford University Press.

Reininger, B., Martin, D., Ross, M., Sinicrope, P., & *Dinh-Zarr, T.* (2005). Advancing the Theory and Measurement of Collective Empowerment: A Qualitative Study. Int Q Community Health Education 2005–2006: 25(3): 211–38.

Lin, M., Porretta, K., Shope, J., *Dinh-Zarr, T.B.*, Griffin, L., & Stutts, J. (Eds.) (2003). Special Issue: Senior Transportation Safety and Mobility. *Journal of Safety Research*, Volume 34 (4).

Dinh-Zarr, T.B., Heitman, E., Baker, S.P., Vaca, F.E., Wen, W., Osberg, S., & DiGuiseppi, C. (2002). Health risks of Latino children (Letter to the Editor). JAMA (Journal of the American Medical Association), 288 (16).

Dinh-Zarr, T.B., Sleet, D.A., Shults, R.A., Zaza, S., Elder, R.W., Nichols, J.L., Thompson, R.S., & Sosin, D.M. (2001). Reviews of evidence regarding interventions to increase the use of safety belts. *American Journal of Preventive Medicine*, 21(4) Suppl 1, 48–65. Dinh-Zarr, T., DiGuiseppi, C., Heitman, E., & Roberts, I. (1999). Preventing Injuries through Interventions for Problem Drinking. A Systematic Review of Randomized Controlled Trials. Alcohol & Alcoholism, 34 (4), 609–621.

Reininger, B., Dinh-Zarr, T., Sinicrope, P., & Martin, D. (1999). Dimensions of Participation and Leadership: Implications for Community-based Health Promotion for Youth. Family & Community Health, 22 (2), 72–82.

Zarr, R., Heitman, E., Delclos, G., & Dinh, T. (1998). Tuberculosis in Texas: Trends and Issues in Surveillance. *Texas Medicine*, August. (Winner of Harriet Cunningham Award for Meritorious Scientific Writing).

Jerger, S., Martin, R., Pearson, D., & Dinh, T. (1995). Childhood hearing impairment: Auditory and linguistic interactions during multidimensional speech processing. Journal of Speech & Hearing Research, 38(4):930–48. (The Hearing Journal's Best of '95 Award Article).

Jerger, S., Elizondo, R., *Dinh, T.*, Sanchez, P., & Chavira, E. (1994). Linguistic influences on the auditory processing of speech by children with normal hearing or hearing impairment. *Ear & Hearing*, 15(2): 138–60.

Speeches:

National Association of Women Highway Safety Leaders (NAWHSL). September 5, 2014. Grand Rapids, Michigan. "The Key Role of Women Worldwide."

Canadian Multidisciplinary Road Safety Conference. June 3, 2014. Vancouver, B.C. "The Decade of Action for Road Safety."

2014 Society of Professional Engineers Conference on Health, Safety, and Environment. March 18, 2014. Long Beach, California. "How to Save a Million Lives (and a Billion Dollars)."

Global Health Mini-University. March 7, 2014. Washington, D.C. "An Epidemic on Wheels: How to Save a Million Lives (and a Billion Dollars)."

NAWHSL Annual Meeting. August 2013. San Diego, CA. "Update on the UN Decade of Action for Road Safety & The Long Short Walk: NAWHSL Historical Perspective."

Transportation Librarians Roundtable. June 13, 2013. Washington, D.C. (virtual conference). "The Decade of Action for Road Safety."

New York Auto Show Safety Summit. April 5, 2013. New York, New York. "The Decade of Action for Road Safety."

XIX International AIDS Conference. July 19, 2012. Washington, D.C. "What's Road Safety Got to Do With It? The Intersection of Road Safety with Public Health and Development in the Context of HIV/AIDS."

Lifesavers Conference. June 15, 2012. Orlando, Florida. "We're All in This Together (Road Safety)."

AID Forum. June 7, 2012. Washington, D.C. "Road Safety: Child vs. Road."

Best Practices in Work Zone SafetyVirtual Conference & Innovation Showcase (American Road and Transportation Builders Association, ARTBA). May 29, 2012. Washington, D.C. "Work Zone Safety in the Decade of Action."

Automotive Safety Council Annual Meeting. March 22, 2012. Scottsdale, Arizona. "The Decade of Action for Road Safety."

Texas Traffic Safety Conference. March 21–23, 2010. Austin, Texas. "We're All in This Together: The Decade of Action for Global Road Safety."

NAWHSL Annual Meeting. September 2010. Kansas City, Missouri. "The Five Pillars of the Decade of Action for Road Safety."

NAWHSL Annual Meeting. September 2007. Portland, Oregon. "Make Roads Safe: The Campaign for Global Road Safety."

AAA Roadwise Review Press Conference at the National Press Club. January 12, 2005. Washington, D.C. "Roadwise Review: A Tool to Help Senior Drivers Keep Driving Safely."

The White House Conference on Aging—Listening Session. January 8, 2005. Washington, D.C. "A Senior Friendly Transportation Environment: The Consumer Perspective."

NAWHSL Annual Meeting. August 23, 2003. New Orleans, Louisiana. "Traffic Safety: A Public Health Challenge."

*Note:* I have written or given hundreds of speeches over the past 15 years (because giving speeches is a key component of my work), so it would be difficult to

list all of them, but I have tried to list major speeches and at least one version of all similar speeches.

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

Committee: House Subcommittee on Highways and Transit of the House Committee on Transportation and Infrastructure

Date: June 27, 2002

Topic: Highway Safety and Reauthorization of the Transportation Equity Act for the 21st Century (TEA-21)

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I believe in public service and would be honored to serve my country by supporting the mission and legislative mandate of the NTSB if confirmed. My personal and professional background has uniquely prepared me to be an NTSB Board Member. From my early years working at the Railroad Museum in Galveston, Texas, and being acutely aware of marine safety on the Gulf Coast, to my formal training in motor vehicle safety and injury prevention, I have always believed in the importance of transportation safety. And, of course, I will never forget that it was an American airplane that carried my family to safety when we fled Vietnam-an airplane that we were able to board because of my father's lifesaving medical work as a physician and his friendships with Americans.

The NTSB is in the unique position of being an independent body which can help save lives and prevent injuries across all modes of transportation. My training and experience in public health have prepared me to objectively assess and utilize infor-mation from different sources towards the ultimate goal of preventing deaths and injuries. If confirmed, I will be dedicated to continually improving transportation safety.

Furthermore, I have an excellent history of collaboration and have always ensured that my priorities and opinions are expressed clearly and taken into consideration. My strengths are my background in public health and injury prevention, which, if confirmed, will enable me to contribute to all modes of transportation. Also, if confirmed, my specific training and experience in traffic safety will contribute toward the advancement of NTSB's surface transportation safety activities.

I strongly believe that each of us must strive to serve our country and our communities in the best way possible. This means that we each should use our unique skills and experience, in my case in transportation safety and injury prevention, to provide our country and our communities with the information and tools needed to help ensure that people are safe, secure, and have the opportunity to live healthy, productive, and happy lives.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

I believe transparency, collaboration, and appropriate oversight are essential to a healthy, well-functioning agency. If confirmed, I will work closely with the NTSB Chairman, Board Members, and staff to review procedures to ensure that there are proper and consistent checks and controls throughout the agency.

I have an excellent history of management of people, diverse groups and organizations. My experience as AAA National Director of Traffic Safety Policy involved both managing individuals and collaborating with colleagues, as well ensuring a large federation of independent and unique AAA clubs around the country addressed the most important safety priorities. My current work with the FIA Foundation and my chairmanships of the Injury Control and Emergency Health Services Section of the American Public Health Association and the Transportation Research Board Global Road Safety Subcommittee have involved managing and collaborating with people with a wide range of responsibilities and skills around the world. In addition, my work with the U.S. Guide to Community Preventive Services at the CDC has given me a good understanding of how research can be used to promote safety, how to manage research as part of an organization, and how to use the best available evidence to keep safety as the top priority. 20. What do you believe to be the top three challenges facing the department/

agency, and why?

The NTSB's top challenges are:

- (1) The NTSB must continue to adapt to the evolving transportation environment in order to address emerging safety challenges in all modes of transportation. To do this, the NTSB must be agile in understanding and developing solutions to the new risks presented by our ever-changing world (such as new technology and changing demographics). My strengths of flexibility and adaptability, coupled with my strong sense of vision, equip me well to contribute, if confirmed, to the agency's continued success in the midst of rapid changes in transportation.
- (2) The NTSB faces the challenges of maintaining objectivity and independence, while at the same time, making use of available resources and collaborating with other organizations and agencies. A Federal safety agency such as the NTSB must utilize data from as many credible sources as possible, including fellow government agencies, in order to maximize resources and have the most up-to-date transportation data. The challenge will be for the NTSB to do this while continuing to maintain its objectivity and independence, which is integral to its success and identity. I am confident that, with continued good leadership, the NTSB will be able to use widely acquired information to formulate its own independent views and continue in its important role of ensuring and improving transportation safety.
- (3) The NTSB has an excellent reputation, but, as with all well-respected organizations, it faces the challenge of maintaining, and even improving, its image in the face of vigilant media and a well-informed public. The assets of NTSB are many, and it will be important to ensure that the public recognizes these assets in times of disaster. The NTSB can capitalize on its lesser-known strengths such as using research and prevention data to complement its well-known work such as crash investigations. It will be critical for NTSB to be pro-active, control its own image, and build an even stronger positive reputation for the media and the public. When the agency addresses difficult issues highlighted by the media, NTSB will continue to build on its foundation of good will and public support, thus advancing transportation safety.

#### B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts: None.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain: No.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated: None.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated: None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy: None.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

I have consulted with the NTSB's Acting Designated Agency Ethics Official, and any potential conflicts of interest that arise will be resolved in accordance to the terms of my ethics agreement with the agency.

#### C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics by, or been the subject of a complaint to any court, administrative agency, professional association, disciplinary committee, or other professional group? If so, please explain: No. 2. Have you ever been investigated, arrested, charged, or held by any Federal,

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain: No.

3. Have you or any business of which you are or were an officer ever been involved as a party in an administrative agency proceeding or civil litigation? If so, please explain: No. 4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain: No. 5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please

discrimination on the basis of sex, race, religion, or any other basis? If so, please explain: No. 6. Please advise the Committee of any additional information, favorable or unfa-

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination: None.

#### D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

#### RESUMÉ OF T. BELLA DINH-ZARR, PHD, MPH

# Employment

**Director of the U.S. Office,** *FIA Foundation* (a private philanthropy), Washington, D.C., January 2014–present.

Road Safety Director, FIA Foundation, Washington, D.C., December 2007–January 2014.

Director, North America, Make Roads Safe—The Campaign for Global Road Safety, Washington, D.C., July 2006–January 2014.

National Director of Traffic Safety Policy, AAA (American Automobile Association), Washington, D.C., March 2002–June 2006.

**Social Scientist,** U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA), Washington, D.C., August 2001–March 2002.

**Research Fellow**, U.S. Centers for Disease Control & Prevention (CDC), National Center for Injury Prevention and Control (NCIPC), in conjunction with the U.S. Guide to Community Preventive Services Branch, Atlanta, Georgia, April 2000–May 2001.

**Research Associate,** Texas Transportation Institute, The Texas A&M University System, College Station, Texas, May 1998–May 2001.

**Production Editor,** International Journal of Technology Assessment in Health Care, Houston, Texas, January 1997–May 1999.

**Community Liaison,** *RDI Inc.*, Houston, Texas, January 1995–May 1997 (dates approximate).

**Evaluator,** Houston-Harris County Community Partnership, University of Texas School of Public Health, Center for Health Promotion, Houston, Texas, USA, May 1995–May 1996 (dates approximate).

# Selected Honors and Awards

- Youth Choice Award, Global Youth Traffic Safety Month, 2013
- Global Traffic Safety Achievement Award. World Traffic Safety Summit at the New York International Auto Show, 2012 (with the FIA Foundation)
- Car & Travel Magazine—Named "Green Light in Transportation" by AAA, 2005
  US DOT NHTSA—Recognition Award, Outstanding Contribution to Traffic Safety, April 2003 (with the CDC Motor Vehicle Team)
- CDC Outstanding Scientific Contribution to Public Health Award, June 2002 (with the Guide to Community Preventive Services Team)
- U.S. Department of Health and Human Services Secretary's Award, July 2001 (with the CDC Motor Vehicle Team)

## Memberships & Professional Service

Co-Chair, Global Road Safety Subcommittee ANB 10(8), Transportation Research Board (National Academy of Sciences)

Chair, Board of Advisors, National Association of Women Highway Safety Leaders Advisory Board Member, ITN America (Independent Transportation Network of America)

Past Chair and Current Development Co-Chair, Injury Control & Emergency Health Services (ICEHS) Section of the American Public Health Association (APHA)

#### Education

**PhD in Management and Health Policy Sciences,** University of Texas School of Public Health, Houston, Texas, 2001. Minors: Injury Epidemiology, Health Economics. Dissertation: Systematic reviews of interventions to increase safety belt use: Safety belt laws, primary enforcement laws, and enhanced enforcement. Delta Omega Public Health Honor Society.

Master of Public Health (MPH), University of Texas School of Public Health, Houston, Texas, 1997. Thesis: Do Interventions for Problem Drinking Prevent Injuries? A Systematic Review of Randomized Controlled Trials.

**Public Health Traineeship**, Institute of Child Health & Great Ormond Street Hospital, University College London and The Cochrane Collaboration, London, UK, 1996.

**Bachelor of Arts,** Rice University, Houston, Texas, 1993. Spanish Honors Graduate and Sigma Delta Pi National Hispanic Honor Society. Study Abroad at La Universidad Católica de Valparaíso, Chile.

# **Selected Publications**

Sleet, D., Naumann, R., Baldwin, G., *Dinh-Zarr, T.B.*, Ewing, R. (2012). Eco-Friendly Transportation and the Built Environment. Vol. 1, Ch.21. in Friis, R.H. (Ed.). *Praeger Handbook of Environmental Health* (2012). New York: Oxford University Press.

Dinh-Zarr, T.B. (2011). Envisioning a Traffic Safety Culture. Texas Transportation Researcher, August 2011.

Dinh-Zarr, T.B., Goss, C.W., Heitman, E., Roberts, I.G., DiGuiseppi, C. (2009) Interventions for preventing injuries in problem drinkers. *The Cochrane Library* 2009, Issue 1.

Sleet, D.A., Dinh-Zarr, T.B., & Dellinger, A.M. (2007). Traffic safety in the context of public health and medicine. Improving Traffic Safety Culture in the U.S.: The Journey Forward. AAA Foundation for Traffic Safety, 41–58.

Dinh-Zarr, T.B. & Hargarten S.W. (2007). Road Crash Deaths of American Travelers: The Make Roads Safe Report. An Analysis of U.S. State Department Data on Unnatural Causes of Death to U.S. Citizens Abroad (2004–2006). FIA Foundation report, April 25, 2007.

Staplin, L. & Dinh-Zarr, T.B. (2006). Promoting rehabilitation of safe driving abilities through computer-based clinical and personal screening techniques. *Topics in Geriatric Rehabilitation* 22(2), 129–138.

Eberhard, J.W., Stutts, J., Burkhardt, J., Finn, J., Hunt, L., Staplin, L., Molnar, K.J., Peters-Beumer, L, *Dinh-Zarr, T.B.*, Carr, D.B., Trilling, D.R., & McCarthy, D.P. (2006). Strategies and tools to enable safe mobility for older adults. *Topics in Geriatric Rehabilitation* 22(1), 3–19.

Zaza, S., Sleet, D.A., Shults, R.A., Elder, R.W., *Dinh-Zarr, T.B.*, Nichols, J.L., Compton, R., Thompson, R.S., & Task Force on Community Preventive Services (2005). Motor vehicle occupant injury. In S. Zaza, PA Briss, KW Harris (Eds.), *The Guide to Community Preventive Services* (pp. 329–384), New York: Oxford University Press.

# Languages

Spanish (fluent) and Vietnamese (conversational)

Senator McCASKILL. Thank you so much.

We thank all of you for being here. And I think I am going to spend most of my time because of the work I have done in this area on the Subcommittee, Dr. Rosekind, with NHTSA.

It's a sad state of affairs when an airbag manufacturer has now refused NHTSA's request to do a nationwide recall of airbags that are killing people. It says a lot about where we are in this country right now and how your agency is viewed. It has become fairly clear to me in the hearings that we have had on both the ignition switches at GM and the Takata hearing that these companies are way more afraid of a civil lawsuit than they are of NHTSA. And I think it's really important that you keep that at the top of your list in terms of priorities. If you are not feared and respected, then you cannot do a good job policing the safety of automobiles in this country. You have to be feared and respected. And I don't think NHTSA is either feared or respected at this point.

So let's talk about the budget. It has been flat-lined for over a decade. Now, keep in mind what has been going on with technology over this decade. Keep in mind how automobiles have changed over this decade. But, yet, the budget for NHTSA has been flat-lined, particularly in the area where you need to keep up with this technology. And, once again, this year, the request is another about \$10.5 million. I need both for you to talk about working on the budget and what the real needs are, and then, Mr. Monje, I would like you to speak to that also, working with Dr. Rosekind, if confirmed, to really for the first time in a decade look to see if we are even taking this job seriously in light of the resources that we are committing to it.

Dr. ROSEKIND. Senator McCaskill, thank you for the question. And I want to thank you for the hearings that you have held. I come from the NTSB. It's all about transparency. Those hearings have been critical for the American people to understand what's going on.

If you want to come back to the enforcement side a little bit more, I'd be happy to do that later, but, specifically to your question, I think the—and I am at the same place where you are, seeing a lot of this in the public sphere, but I think all of us actually don't realize how severe the situation is.

Typically 45,000 complaints come to NTSA because of the visibility of the hearings here and elsewhere. Those are up to 75,000 now. Of the 50 people you keep hearing about in the Office of Defect Investigation, 9 people look at those 75,000 complaints. Only 16 are actual investigators who go out in the field. But I think what you are highlighting that is really critical, it's not just about the individual personnel, but it's the technology. What computer systems and other kinds of technology solutions do we have to process, evaluate, identify, and connect the dots when you are getting 75,000 complaints every year? You want those complaints. Every voice should count. But we need to increase not just the people but also the technology.

So I think, budget-wise, while there has been a lot of focus on personnel, I really think that that entire system needs to be considering how an upgrade is going to help us deal not just with those complaints but the other data sources that are available to determine where we are seeing defects early so that decisions can be acted on quickly.

Senator MCCASKILL. And I want to also weigh in that it's not just how many you have but the kinds of people you have. If you are not hiring the kinds of engineers that these automakers would want to hire away from you because of their incredible competence and capability, you can't regulate an industry. If you don't know the right questions to ask, you don't know what is being omitted, you don't know what else you need to know if you don't have the same training and competence as the engineers you are going head to head with.

So let's talk about the Inspector General's report. We have talked about it before in the Subcommittee. There were ten recommendations made by the Inspector General, the DOT Inspector General, for NTSA. One of them has not been addressed. And that is determining what I was just referencing: the appropriate mix between the work force assessment. What should your workforce look like?

You missed the May—you didn't. They missed the May 2014 target. And he testified, Deputy Administrator Friedman testified, back in September that it would be done by mid November. Well, we have gone through mid November, and it is now December. And we still do not have it. It is critical we have this.

It is my understanding that NHTSA hired a contractor to conduct the original workforce assessment but was dissatisfied with the findings and then has spent the last months trying to revise it. I would like your commitment that we get the revised report when it is ready, but I would also like your commitment that we get that report that they are revising. I would like to see what the outside—we paid for it. The Government paid for this outside assessment that is now busy being revised. I want to see what that original assessment said before the revisions occurred so we can get a sense of if, in fact, it was inaccurate. I think it is important that we have the ability to check that. Would you make a commitment that we could see both of those if you are confirmed?

Dr. ROSEKIND. Absolutely. And if confirmed, you can you can pretty much guarantee that I am going to have the same level of not just review but eyes to what actions need to actually take place to change what is going on at NHTSA.

Senator MCCASKILL. Thank you. Senator Heller. Oh, excuse me. Senator Blumenthal.

#### STATEMENT OF HON. RICHARD BLUMENTHAL, U.S. SENATOR FROM CONNECTICUT

Senator BLUMENTHAL. Thank you, Madam Chairman. And thank you for your leadership of the Consumer Protection Subcommittee and this committee today.

Dr. Rosekind, wouldn't you agree with me that Takata's rejection of a national recall is simply unacceptable and unconscionable?

Dr. ROSEKIND. I have to be a little cautious just as a nominee talking about where I am going to go. I think that I can—that is my balanced perspective.

On the other hand, I am a driver and passenger and a pedestrian. And I can tell you that I not only agree but am very concerned, like all of you have been, with the slowness across all of the recalls, timing, their responsiveness, and the information they have been forthcoming with.

Senator BLUMENTHAL. And what will you do as NHTSA Administrator to enforce a national recall?

Dr. ROSEKIND. If confirmed, I am going to look to every one of the legal tools that are available to enforce the regulations and the laws. And this came up in Senator McCaskill's question as well.

I think, as you know, there are a lot of concerns about the authorities, the fines and penalties, et cetera. In a safety culture, people aren't worried they are not going to act in a proactive safety way. That has to be established.

There is a concern, of course, that sometimes the legal course takes time. And so I understand the ability to try and have companies take their own action. If that is not happening, though, NHTSA needs to be the enforcer.

Senator BLUMENTHAL. My impression—and I think it is widely shared—is that NHTSA has been an agency recently adrift, even aground, because of the lack of the aggressive kind of action that I believe ought to be taken and that you have supported, at least implicitly, in your response today. And I would suggest that with respect to that enforcement action, that you can make a profoundly important first impression—and you only get to make a first impression once—by taking that kind of aggressive no-holds-barred action to help eliminate the widely held perception that regulatory capture has taken hold at NHTSA and that this watchdog agency has become too cozy with the industry that it is supposed to oversee and scrutinize.

When Mr. Friedman was here last, I asked him about the potential action that NHTSA could take to make sure that there are sufficient airbags available to do the repairs that are necessary for the literally millions of cars, perhaps 15 million or more cars. And at the rate that the Takata witness at that point said that airbags would be available, about 300,000 a month, perhaps as high as 450,000 a month, it will take years. So I asked Mr. Friedman whether he would commit to recommending to the Secretary of Transportation that NHTSA use its power under section 301-20(c)(3) of the Motor Vehicle Safety Act to order car manufacturers to use replacement parts that other airbag manufacturers make, even if it means requiring Takata to share proprietary information. Do you agree with me that NHTSA has this power?

Dr. ROSEKIND. Thank you for that question. I agree that NHTSA has that power. And I think there have been questions about sort of the authority tools that are available. Absolutely, those need to be looked at.

I think the more important question is what you are highlighting. You have to be ready to act and use them.

Senator BLUMENTHAL. And will you commit to using that power? I think there is no question in my mind that that power resides in the Department of Transportation to order effective steps that make available sufficient airbags in the interest of public safety. And I am asking for your commitment that you will do whatever is necessary to use that power and invoke the Secretary's name and authority to require Takata and the auto manufacturers to do the right thing. Dr. ROSEKIND. If confirmed, you can count on my commitment to use every possible legal mechanism as enforceable as possible to the greatest extent to get these things enacted. You have already said it. I said it in my statement. This is all about public safety. We cannot be shy. We cannot withhold all of the tools available to us to get what needs to be done to help save lives and prevent injuries.

Senator BLUMENTHAL. My last question, would you agree with me that a regional recall policy simply makes no sense in an era when drivers from different parts of our nation drive to the more humid or heated parts and where products have to be designed for nationwide markets?

Dr. ROSEKIND. Well, and I appreciate that question because it highlights that NHTSA is extremely data-driven. You have to go with the data. But what you are raising are just some practical, normal, common sense things that need to be applied as well. And I think that has been one of the challenges. If the data aren't there, sometimes there is no action. And the reality is there still might be a defect that's a concern. You just don't have the data. So that is where common sense and other kinds of decisionmaking need to come in so that you are protecting lives and preventing injuries.

Senator BLUMENTHAL. I appreciate your very forthright answers to my questions. And if there is a second round, I look forward to following up.

Thank you, Madam Chair.

Senator McCASKILL. Senator Markey is not here. Senator Heller.

#### STATEMENT OF HON. DEAN HELLER, U.S. SENATOR FROM NEVADA

Senator HELLER. Thank you, Madam Chairwoman. Thank you for holding this hearing. And I want to thank you personally for your hard work and effort on this particular issue. We have worked together on our Subcommittee and have had interesting hearings, to say the least.

I want to thank the nominees that are here today and congratulate you. I also want to welcome the families also, whether they're here or elsewhere watching today's hearing. And they should be proud of this moment.

Like the others, I think my questions will more be towards you, Dr. Rosekind, because of the Subcommittee hearings and the issues that have been brought up because of that.

Obviously it is imperative for the American people to know their cars are safe. I know you agree with that. We all agree with that. But you are walking into an agency that has lost trust with the American people.

I guess my question is this. When you had this conversation with the President, did he acknowledge the loss of trust for this particular agency?

Dr. ROSEKIND. We haven't had that discussion directly, but I would say part of my nomination is to come before you acknowledging the work that needs to be done.

And I appreciate that question because it gives me a chance to highlight in my statement I understand the specific juncture which I am about to step into if confirmed. And I think the challenges are tremendous, but there is a—I also view this as a tremendous opportunity, frankly, because I think there is a chance that there these hearings and other activities have clearly identified many directions that need to be examined, pursued, acted on. And I think that some of those opportunities are going to mean actually safer roads, safer vehicles for all of us.

Senator HELLER. Did you have a specific conversation with the President about restoring credibility to the agency?

Dr. ROSEKIND. Not specifically with the President, no.

Senator HELLER. Did you have a specific conversation with him about what your detailed plan is to turn the agency around?

Dr. ROSEKIND. I appreciate the question to say it has not been with the President. I have talked—those kinds of conversations have been more with the Secretary.

Senator HELLER. OK. OK. I want to change topics for just a minute. And we bore on this a little bit earlier, about what we're doing in Nevada. They are building probably the most advanced cars in the country in the State of Nevada. Tesla announced a new gigafactory to build their vehicles here. Here is my concern. You know, GM has even said publicly that they didn't understand how their cars worked. Takata, we had that discussion last week. Now we have a new discussion with Graco about their child safety seats. And things are moving in all directions. Here is my concern. If GM doesn't understand how their vehicles work, how does NHTSA come to the conclusion about how their vehicles work?

Dr. ROSEKIND. I appreciate that question because it gives me a chance to highlight how there is an ongoing technological challenge to always make sure you're not just keeping pace but actually trying to stay ahead.

So I am third generation San Francisco. I come from Silicon Valley. It is about bleeding-edge technology, not leading-edge. So I totally get this and, in fact, Senator McCaskill's early question. NASA, NTSB, it is always a challenge to figure out how these agencies maintain highly trained technical individuals who can be doing their jobs with these different industries that they are interacting with. So the challenge there is identifying the people, keeping them, but most important is what you have just stated, frankly. And that is knowing that that challenge is out there.

The worst thing that happens is the boredom, complacency basically, where people aren't continuing to learn and stay up to speed on what is going on.

Senator HELLER. Do you believe that NHTSA today has the right employees to do that?

Dr. ROSEKIND. I appreciate that question because as a nominee, I haven't seen yet the specific layout of all the particular expertise. I think that is a question that needs to be asked, that needs to be not only asked, but some of the evaluations of personnel, that needs to be one of the specific things that you look for. That is part of what I am committing to, is take a new, a fresh new set of eyes and a different approach and go after those questions. And if you find where improvements can be made, make them.

Senator HELLER. Obviously resources are the questions, probably the most important question, as they talked about, your flat budget over the last few years. And I am just concerned that you will have the employees and the expertise in your shop in order to stay ahead of the new technology that's coming down the road. How can you convince me that that is your top priority?

Dr. ROSEKIND. One, I'm just going to repeat. I'm from Silicon Valley. It's all about the technology part. And, having worked at NASA and NTSB, which are two technical organizations, if your technical expertise isn't up to speed, things don't fly, things don't get investigated accurately, et cetera. It is critical. And so that's why I have to admit I am less about counting the numbers as to looking at what you are talking about, which is the expertise of the personnel to get their job done.

Senator HELLER. Yes. I think in some of the Subcommittee hearings we have, we have noticed that it has been difficult to connect the dots. NHTSA has had problems connecting the dots. And that is why we are where we are today.

Again, congratulations to all of you and thank you.

Madam Chairman, I yield back.

Senator McCASKILL. Senator Thune.

Senator THUNE. Thank you, Madam Chair.

Dr. Rosekind, I really didn't intend to make this a hearing about NHTSA. It sounds like most of the questions have been regarding the record number of recalls and the growing concern that, as Senator Heller stated, that NHTSA can't connect the dots when it matters the most, the public, American public, seemed to be losing confidence in NHTSA and the administration to get it right on vehicle safety. And I think it is fair to say 2014 has not been a good year for NHTSA. And so I guess the question is kind of a general one. But if you are confirmed as the next administrator, what specific steps do you plan to take to restore the public's trust in NHTSA?

Dr. ROSEKIND. Thank you for the question. They are not written down, but at the NTSB, there are three things that I would almost call principles and practices of the agency: independence, transparency, and accuracy. So that gives you a sense of my perspective and viewpoint. So I am going to take the same critical eye used in the investigations, using independence, transparency, and accuracy that have been done at the NTSB, and apply those at NHTSA. So when you think about having a critical eye, mine, if confirmed, would probably be the most critical to look at every single area where things could change and then not hesitate to make those changes.

I really believe that we need to drive safety forward at the agency. There is no question about it. We have to acknowledge its successes. We are at the lowest fatality rate since 1950. Seatbelt use is up at a high. We have to balance that with the improvements that are clearly being identified and the need to change.

Senator THUNE. I mentioned this earlier in my opening statement, but according to the *New York Times*, the Obama administration is conducting a comprehensive review of NHTSA to determine if it has "the dial set correctly on safety." The inquiry is being conducted by the Department of Transportation. It is in addition to an internal investigation that is being done by DOT's IG. Are you familiar with the comprehensive review that is being conducted by the Administration? And if so, could you provide us with details of this review ,including when you might expect it to be concluded?

Dr. ROSEKIND. I appreciate the question. I am familiar with it. But as a nominee and external to the agency right now, I don't have all of the details, but I will commit to not only reviewing but discussing. I think that is a perfect example of how much I am actually looking forward to working with you, staff, and this committee in not just reviewing those but identifying the actions that need to be taken to fulfill getting a safer NHTSA moving forward.

Senator THUNE. So you would make those findings available to Congress at the appropriate time if confirmed? Dr. ROSEKIND. Absolutely. Senator THUNE. Terrific. Thank you. Dr. Dinh-Zarr, some of your academic work focused, as I men-

tioned, on driver impairment. In South Dakota, we have got a State law that provides alternative methods of enforcement on drunk driving sanctions through a program that is known as 24/ 7 Sobriety. As an example, rather than only using ignition interlocks, the state also uses twice-daily breathalyzers and alcoholmonitoring devices to enforce mandatory sobriety and to prevent repeat drunk driving incidents. These programs provide different but comparable safety enhancements that have dramatically re-duced repeat offenses. Would you support recommendations for al-ternative programs that provide an equivalent level of safety?

Dr. DINH-ZARR. Thank you, Senator Thune. I appreciate that question because I have actually been keeping an eye on your state, as you know. And that is a specific interest of mine. And my background because it has spanned many different states, I am very sensitive to the differences in cultures in every state and the need to ensure that any type of recommendation is implemented in the states in a way that we will save the most lives.

As you mentioned in your case, in South Dakota, you found a way that has been very effective and has been welcomed, it seems, by South Dakotans, at least the ones I have talked to.

So, absolutely, I would do everything I can to ensure that any recommendations, if confirmed, that I acted upon as an NTSB member, I would work closely with my Chairman and the fellow board members to ensure that the states can utilize them in a way that is most helpful and that can save the most lives and that can prevent the most injuries and can utilize innovative practices, such as in your state.

Senator THUNE. Terrific. Thank you.

Mr. Monje, in your work at the Department of Transportation, you have worked on the unauthorized infrastructure grant program known as TIGER. How can the program be more transparent and efficient so that the American taxpayer can have confidence in the use of their tax dollars?

Mr. MONJE. Thank you very much, Senator, for the question. The TIGER program is one of the most innovative programs at the department. We have been very proud of the projects we have been able to fund, innovative projects that bring in additional funding that wouldn't otherwise happen were if not for the program.

There have been a number of steps we have taken over the last year to improve the transparency of the program, of improving the documentation. And those are things we need to continue to work on as the years move forward. I think what I would like to see out

of the TIGER program moving forward is proposed in the GROW AMERICA Act, is an increasing of that program and as well as taking some of the lessons learned that we have had from that program and bringing it to other programs within the department.

Senator THUNE. OK. Great. My time has expired. Madam Chair, thank you. Thank you all very much.

Senator McCaskill. Senator Markey.

#### STATEMENT OF HON. EDWARD MARKEY, U.S. SENATOR FROM MASSACHUSETTS

Senator MARKEY. Thank you, Madam Chair.

And congratulations to each of you, very important positions in our society, especially in this era.

I know Senator Blumenthal touched upon this, but I just want to reinforce that, you know, Takata is rejecting NHTSA's call to make this a nationwide recall. And I just want to say that it is entirely unacceptable that Takata is refusing to accept this common sense resolution of this issue.

Right now there are thousands of people from Massachusetts driving down to Florida. They are called snowbirds. And they are not going to come back until after the Red Sox leave spring training. They are down there. The State of Florida estimates that there are one million of these snowbirds per year from the northern states that go down to Florida. And they are in automobiles that did not originate in humid states. And so there is a real danger here, and we have to make sure that there is a complete compliance by Takata with NHTSA's request that they, in fact, have a nationwide recall.

So I guess what I can say to you is, Dr. Rosekind, that you must make Takata recall all of these airbags. You must force the automobile companies to comply with a nationwide recall. There is no choice. The safety of the American people is at stake. Takata is toying with the safety of the American people when they refuse to recognize this danger, and I just want to say that to you, Doctor, and hope that you understand how much we want this issue to be resolved.

Now, let me move on to a related issue. And that's in 2007, NHTSA asked for and received secret documents from GM related to the death of 2 Wisconsin teenagers. That document was first made public by me at our May 7 hearing, and it is referenced repeatedly in Mr. Valukas' report. It included a report by the Wisconsin State Patrol Academy that said that the ignition switch defect prevented the airbags from deploying. It also found other examples of the same problems happening in other cars and identified a 2005 GM warning to dealers about the issue. In short, it correctly identified the safety defect.

Do you agree with me that GM's CEO, Mary Barra, and others, that the public had been told about this secret document and warned about its conclusion at the time, it is possible that some of the deaths and injuries caused by this defect could have been avoided?

Dr. ROSEKIND. And thank you for that question. Yes. And I think what you are highlighting is the need for greater transparency at many different levels to understand where complaints are coming

from, where defects are, et cetera. And that is one area I should just mention from the NTSB I am going to apply at NHTSA: independence, transparency, and accuracy. And I think that is something—if you look at NTSB investigations, you know what is going on.

Senator MARKEY. OK. Thank you. Now, in October, Senator Blumenthal and I sent a letter to NHTSA informing NHTSA that the 2009 death of an Oklahoma teenager caused by an exploding airbag that was settled by Honda and Takata in a secret court decision had never been reported by either Honda or Takata to NHTSA's early warning reporting data base. I have also learned of five other serious injuries that were not

reported to the early warning reporting data base by Honda.

Do you disagree that if the public knew about all of the deaths and serious injuries caused by exploding airbags at the time that the companies knew, that it is possible that some of the later deaths and injuries caused by this defect could have been avoided?

Dr. ROSEKIND. And I appreciate that question because, again, it is about transparency, transparency, transparency. What you are highlighting is a number of areas that need to be examined to see where transparency could be increased.

Senator MARKEY. Well, a lawsuit over the 2009 Oklahoma death that Honda and Takata both failed to report to the early warning reporting database was settled secretly in 2009. Do you disagree that if the public knew that the Oklahoma death and knew that Honda and Takata had been sued about this death, that it is possible that some of the later deaths and injuries could have been avoided?

Dr. ROSEKIND. And what you are highlighting is transparency. The more the public knows where the defects and problems are, the more they get to make their personal choice about what to do.

Senator MARKEY. Thank you. Well, Senator Blumenthal and I have authored legislation to require more information to be publicly available to NHTSA's early warning reporting data base, including documents like the ones that were kept secret by GM, Honda, and Takata that could have saved lives if only the public had known that they existed. GM and we have reached substantial agreement on a slightly modified version of that legislation. If confirmed, would you commit to work with me on this legislation and other ways to increase transparency and public disclosure by automakers and NHTSA itself?

Dr. ROSEKIND. Absolutely. I look forward to working with you, the Committee, and your staff to do exactly that.

Senator MARKEY. Thank you. Thank you, Madam Chair. Senator McCaskill. Thank you, Senator Markey.

Senator Klobuchar.

#### STATEMENT OF HON. AMY KLOBUCHAR, U.S. SENATOR FROM MINNESOTA

Senator KLOBUCHAR. Thank you very much. Thank you to all of you. Congratulations on your nominations. My state has had a lot of interaction with all of your agencies. Secretary Foxx made it his second visit after he got in to see our bridge and that disaster that had occurred and how we were able to build a new bridge within

a year, but we lost 13 people. And it was a tragedy and certainly shook our citizens up about the status of our transportation infrastructure and the need for safety. So I thank you for taking on these important roles.

I will tell you, Ms. Dinh-Zarr that I have been amusing myself by watching your son behind you. I cannot figure out if he is doing homework or taking notes on our questions.

[Laughter.]

Dr. DINH-ZARR. I think he would like to be a Senator, Senator. Senator KLOBUCHAR. Yes. He looked like he was a little critical as he was writing these notes. It's better than my daughter, who once during a major speech I gave when she was around that age took a Harry Potter book and put it in front of her face in the front row.

[Laughter.]

Senator KLOBUCHAR. So this is much more mature.

I wanted to ask you specifically first about rail derailments. I know that NTSB has a unique perspective on safety, and we have had some derailments in our state, as they have had across the country. And where do you think we should be focusing our attention and resources? And what do you think we need to do differently in the rail area to avoid these crashes?

Dr. DINH-ZARR. Thank you, Senator, for that question and for giving some attention to my son as well.

Rail obviously is very important to the health of our country. And it is also a personal priority for me. And, as I understand it, the NTSB has quite a few recommendations related to rail safety, as you know, everything from related—longstanding recommendations related to positive train control and other areas. And I think that, if confirmed, what I would make a priority is to work with the excellent staff of the NTSB as well as with the Chair and other members of NTSB to ensure that those longstanding and very important recommendations are implemented as quickly as possible.

Senator KLOBUCHAR. I mean, really, all three of you, as you go forward, I hope you will continue the focus on distracted driving. I know, as you know, Secretary LaHood made this a major focus and Secretary Foxx. There are some problems with the grant programs. Senator Hoeven and I have a bipartisan bill to fix them. I think the only state last year that got the grant was Connecticut. And, you know, we love Connecticut, but I think that that we can maybe make the grant program better and more accessible to other states as we look at trying to push states gradually to change their laws. This, as you all know,—I don't have to tell you—is a major problem.

I wanted to shift to the last issue, which we have been focused on a lot today. And that is the issue of Takata and the airbags and just make sure that you are aware, Mr. Rosekind, about what happened in Minnesota. I spent a few hours at this family's home over Thanksgiving, a woman named Shashi Chopra from North Oaks, Minnesota. She was simply a passenger in a 2002 BMW crash. They were going about 30 miles an hour near their house. Someone ran into them. And it deployed a Takata airbag and left her permanently blind. They were only going 30 miles an hour. And the airbag somehow had too much force in it, and it ruptured both of the veins leading into her eyes, and she cannot see. She has been at Mayo Clinic for multiple surgeries. She is a businesswoman, ran an Indian restaurant in our state that is pretty well-known. And her kids have completely changed their lives to take care of her. And that is what I saw when I was at home. So I want to start with that question there about just—you have talked a lot about these recalls. And what concrete changes do you think you should implement? Because you should know in their case, they sent a complaint in to NHTSA in May 2013 or in March 2013. The accident happens in May 2013. They submit the letter to NHTSA about the case, and they really didn't hear back. So if you could comment on that, the change of the complaint process?

Dr. ROSEKIND. Yes. Thank you for that question, and thank you. I think this committee and your hearings and your statement just there, you have got to put names and faces to these things. You know, we keep talking about saving lives and preventing injuries, but these are all people. And their lives are changed forever. So thank you very much for doing that.

And I think what you have also highlighted is—you know, if confirmed, one of my first immediate focuses is going to be the defect recall system. And, again, there has been a lot of focus on the investigation, but what you have highlighted is we have just gone from 45,000 complaints to like 75,000 complaints that the agency is getting. And with only nine people looking at those, we're not even talking about connecting the dots. We are just talking about the overload of having that many complaints.

I also think what you are pointing out is every voice counts. So we have to look at just the systems of data that are available to be analyzed. And another thing, just as a thought, is we need to be looking at other systems that are available, public health surveillance. There are other things in aerospace. There are a lot of different systems that are looking for defects in high-reliability kind of organizations. And, if confirmed, I would go in to see how those systems could be applied to the challenges that are at NHTSA today.

Senator KLOBUCHAR. You might want to look at the University of Minnesota on food safety. They have this award-winning way they look at it. When complaints start coming in across the country, 2 or 3 times they have been able to identify the national—peanut butter, those kinds of things. And they do it very quickly with sort of old-fashioned detective work of calling the immediate places. It is a completely different problem, but clearly you have got a problem where you have disparate information coming in from so many places and find it hard, I think, to identify more quickly what the problem is.

And, like my colleagues, I am also supportive of this nationwide recall. When I heard Senator Markey say a million people go down to Florida, when you add in Arizona, probably half of them are from my state. So we are very aware of the snowbird issue and the fact that these vehicles are traveling up and down. And we saw the map from NHTSA when we had the hearing last week, 2 weeks ago. And we were able to see the tragedies that occurred in some other states that were not in the Deep South. And so we ask you to continue to push on that issue as well. So thank you.

Senator MCCASKILL. Senator Klobuchar. Excuse me. Senator Cantwell.

#### STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Thank you, Madam Chair. And thanks for holding this hearing.

Congratulations to all of the nominees.

Mr. Rosekind, I wanted to start with you. What do we need to do to ensure 100 percent repair recalls? Dr. ROSEKIND. Thanks for that question. And one of my first im-

Dr. ROSEKIND. Thanks for that question. And one of my first immediate focuses is going to be understanding the whole defect recall process. And I appreciate you raising that because there has been a lot of discussion about the identification side but not, as some of the other questions have pointed out, the recall because none of it matters if it doesn't get fixed.

Senator CANTWELL. Right.

Dr. ROSEKIND. And if there aren't enough parts and they are not done in a timely manner, every time a person is in their car, they are at risk. As so that is part of my first look, is to understand that whole system from the identification side to the final fix.

Senator CANTWELL. Do you support 100 percent recall?

Dr. ROSEKIND. I'm sorry? A hundred percent recall?

Senator CANTWELL. Yes. Do you support getting to a 100 percent recall? That has been accomplished in Germany. And so I want to know, as a nominee, do you support that same process for the United States, getting to 100 percent?

Dr. ROSEKIND. Great. Thank you for that question.

I don't think there's—this is one of those common sense kinds of issues. If you've got a defect and you're recalling because they all have to be fixed, I'm not sure there's another—there's no other number that's your target except 100 percent.

Senator CANTWELL. Well, that is good to hear you say because when we had some of these individuals before our committee just a short time ago, most of them blamed the fact that they weren't going to pursue 100 percent recall on the fact that it wasn't being required by the Federal Government. And I'm sure today what is happening now in them denying whether they are going to move forward on 100 percent is also because they believe that they're operating within the legal framework that they have to operate in. So if we can get to 100 percent, which I think that is what we are asking for, I think that the American people will be safer. Obviously, Germany has proven that they can get there. So we should do the same.

OK. Mr. Monje—is that right, Monje? Is that the right—Monje, is that?

Mr. MONJE. Monje. Yes, ma'am.

Senator CANTWELL. Monje. Thank you.

I obviously care a lot about what the Department of Transportation has been doing on freight mobility. And that is going to be something that is in your purview. So I wanted to ask you about some of the recommendations and implementing those recommendations and whether you are fully committed to implementing the recommendations of the task force that was created by Secretary LaHood.

Mr. MONJE. Thank you very much, Senator. And thank you for your advocacy on freight. You are known in our building as Senator Freight. And if it weren't for you, the Freight Advisory Committee wouldn't be.

Senator McCaskill. A new nickname for you.

Senator CANTWELL. Well, I like to say Washington, when it comes to Washington State—

Mr. MONJE. Yes, ma'am.

Senator CANTWELL.—courts are us. So I will certainly take the Senator Freight title. Thank you.

Mr. MONJE. Yes, ma'am. Well, as I mentioned in my opening statement, freight really is the lifeblood of our economy. And I had the opportunity with the National Freight Advisory Committee to visit Memphis, where they really integrated freight into their entire economy, and the factories that have built up all around the airport just because of their ability to bring goods in and out.

The National Freight Advisory Committee had 81 recommendations that they gave to us. And a lot of those we can act upon within existing authority, including thinking about freight multimodally. Our national freight strategic plan really takes that tack.

Some of the other things that they have recommended to us is figuring out where our data gaps are. And that's where you'll see in our conditions and performance report that is upcoming, a real emphasis on where our data gaps are.

And also they have addressed—they have asked us to look at the workforce issues. And we have got a partnership that we have been working with the Department of Ed and the Department of Labor to figure out what the workforce needs are in the freight industry and how we can address them. But there are a lot of things we can't do within existing authorities. And that is why the GROW AMERICA Act proposes a \$10 billion freight program to find where those national chokepoints are and encourage multistate planning.

So, again, thank you for your advocacy.

Senator CANTWELL. Well, I certainly support this as an economic development strategy for our country. There is a huge growing middle class around the globe. They want our products, but if we can't get them there, they will obviously look to other markets. And so making sure our corridors are expediting product is very important.

But I wanted to ask you specifically, so you do believe in streamlining the—these are things you can do internally. You do believe in streamlining the multimodal approval process?

Mr. MONJE. We are doing everything we can to promote permitting reform and to try to find those last mile and intermodal solutions. That is one of the things the TIGER program really has focused on. There aren't a lot of grant programs that are able to do exactly what you are talking about, and that is why we have proposed the \$10 billion program within GROW AMERICA.

Senator CANTWELL. OK. And do you support identifying corridors, not just projects but corridors?

Mr. MONJE. Yes, ma'am, absolutely.

Senator CANTWELL. OK. And do you think—well, I already know you support a dedicated funding source to these projects. Right?

Mr. MONJE. Yes, ma'am. Thank you.

Senator CANTWELL. All right. Thank you very much. Thank you. Senator McCASKILL. Thank you.

Senator Blumenthal, we will go to you. We are also waiting for Senator Ayotte to arrive. I believe she is coming. So you can have a second round, and then I will take another second round if Kelly is not here yet.

Senator BLUMENTHAL. Thank you. Thank you, Madam Chairman.

Dr. Rosekind, we focused on the need for a national recall. I don't know of any scientific evidence for a regional recall with respect to airbags. Do you?

Dr. ROSEKIND. I appreciate that question because it highlights trying to be evidence-based in driving, and I think that is an excellent question. And, frankly, that is part of my understanding the defect recall system better and what criteria they used.

Senator BLUMENTHAL. But with all of your knowledge—and you are a distinguished scientist—you don't know of any evidence or facts that would justify a regional recall?

Dr. ROSEKIND. No.

Senator BLUMENTHAL. Do you know of any evidence that would justify a recall directed at the driver's side but not the passenger's side?

Dr. ROSEKIND. And I appreciate the question again. This is an area I am less familiar with. I actually think my more general response would be, again, to the bottom line, it is the traveling public and keeping them safe.

Senator BLUMENTHAL. And——

Dr. ROSEKIND. So that means going for as broad a safety net as possible so that your evidence actually has to be that it is OK to decrease that safety net, not the other way.

Senator BLUMENTHAL.—the burden would be on anyone saying that we should limit it to the driver's side airbags?

Dr. ROSEKIND. Yes.

Senator BLUMENTHAL. And that burden has not been satisfied so far, has it?

Dr. ROSEKIND. To my understanding. But, again, I am the nominee. I have only seen what you have seen, including things today.

Senator BLUMENTHAL. Let me turn to another piece of legislation. You know, at the end of the day, Senator McCaskill is absolutely right about the resource challenges that this agency faces. But even an agency fully and abundantly resourced will be ineffective if it lacks teeth, if the penalties are ineffective. And right now the \$35 million cap on penalties for nondisclosure or inadequate disclosure is absolutely a mockery of justice. Wouldn't you agree?

Dr. ROSEKIND. I appreciate that question because I am just going to preface this by saying in the aviation industry, the NTSB just released this week its report about the Dreamliner 787 battery. I would like to point out when there was a problem there, the FAA grounded worldwide the entire fleet until something was fixed. That is a safety culture that says we are stopping everything in honoring safety.

Senator BLUMENTHAL. And that is the same culture that this agency has to adopt. Is that correct?

Dr. ROSEKIND. That is why I am bringing it up, because I think the questions about what the incentives versus punishments are, the safety has to be proactive where people are—they see that being safe is really the more—not just the safe thing to do but the business and economic thing that needs to be done as well.

Senator BLUMENTHAL. So, on the economic aspect of these decisions, the only point, if not the major point, that most of this industry is going to understand is ineffective, strong penalties. And would you support the legislation that I have introduced along with Senator Markey and Senator Nelson to completely eliminate the cap on penalties for nondisclosure?

Dr. ROSEKIND. And I think the Secretary and deputy administrator have already come out and said right now it is pocket change and the cost of doing business. There is no question it needs to go up. If confirmed, I would be pleased to work with you to review and see how we could support increasing those penalties.

Senator BLUMENTHAL. Thank you.

Another proposal that I have made is to put the burden on any parties seeking a secret settlement, seeking secrecy and sealing of a settlement, of litigation involving safety that could endanger the public, including defective parts. Would you support the bill that I have introduced along with Senator Lindsey Graham? It is a bipartisan measure that would, in effect, require a judge to make a finding that it is in the public interest to seal any settlement involving defective parts.

Dr. ROSEKIND. And I appreciate that question because it gets to the transparency issue again. And that's not just about complaints coming in, but it's the kind of data that you are talking about that is not available to the American public because of some of these. So, if confirmed, again, I would be very willing and pleased to work with you to review and make any measure as strong as possible.

Senator BLUMENTHAL. I want to conclude on an area where you are maybe one of the Nation's experts: fatigue management and sleep apnea. The Federal Railway Administration still has not issued regulations recommended by the NTSB or the other agencies regarding developing a—requiring a fleet management plan. Wouldn't you think that the FRA has an immediate and urgent obligation to issue such rules and regulations?

Dr. ROSEKIND. I am going to switch hats very quickly. And I really appreciate that question. The saddest thing for an NTSB board member is to show up at the scene of an accident and realize that lives got lost and there are already recommendations that could have saved those lives. And that is what you have just highlighted.

Those recommendations that are out there, if acted on now, all those people who are out there right now on those railroads with apnea are not being identified, diagnosed, or treated.

Senator BLUMENTHAL. Because of a lack of regulations from the Federal Railway Administration?

Dr. ROSEKIND. Correct.

Senator BLUMENTHAL. And regulations from the Federal Railway Administration could have avoided very likely four deaths that occurred in Spuyten Duyvil one year ago this week or last week.

Dr. ROSEKIND. And in the NTSB report on that accident, we specifically identified that if criteria used to identify people with apnea, that engineer would either have been not on the job or would have been treated for sleep apnea.

Senator BLUMENTHAL. Thank you. Thank you, Madam Chairman.

Senator MCCASKILL. Thank you.

# STATEMENT OF HON. KELLY AYOTTE, U.S. SENATOR FROM NEW HAMPSHIRE

Senator AYOTTE. I want to thank the Chair. I appreciate all of you being here.

Dr. Rosekind, I wanted to ask about the ignition switch recall situation. And, in fact, previously coming before our committee was Deputy Administrator David Friedman. And I have also asked Mr. Millikin, the head of GM's Legal Department, about this issue. There was an article in the New York Times which described the course of action during the ignition switch situation in which, on numerous occasions, GM told the agency that they were not going to answer questions about accidents potentially involving the ignition switch because it was either attorney-client privilege or they lacked insufficient information. It seemed to me in those circumstances that, as the regulatory agency that is charged with getting to the bottom of these situations to ensure consumer safety, that that was an unacceptable answer to hear from those you are regulating. I wanted to get your viewpoint on that because I didn't think that it was acceptable for GM to answer NHTSA that, "I'm not going to tell you about a fatality or the circumstances of it or what we are doing to undertake the investigation of it based on attorney-client privilege" given the charge that your agency has been

given and the importance of it. Dr. ROSEKIND. Well, thank you for that question. And for me, it is pretty simple. I agree that is unacceptable. You are asking for information that is going to save lives, prevent injuries, keep the American public safe. You want that information to be able to do that job. So no, that should not be withheld.

Senator AYOTTE. Well, I really appreciate your commitment and your taking over this important position that has obviously been vacant for too long, so I am appreciative of your willingness to do that. And so when you receive that answer, your agency, when you are confirmed, I hope that NHTSA will follow up and say to those that are being regulated, "We are not going to accept that for an answer. We are also not going to accept that there is insufficient information. You have a responsibility to provide us. the regulator, with that information." So I appreciate your taking an aggressive stance on that issue.

I also wanted to follow up on another issue. As you look back at the GM ignition switch recall, there did appear to be numerous opportunities where this issue should have been discovered earlier. Putting aside what I think were numerous opportunities and some outrageous behavior on GM's part, which we have had hearings on in this Committee, at NHTSA, I think that there were many failures as well, specifically in terms of the delay of recalling the ignition switch and recognizing the dangers that this presented to the public earlier to hopefully save lives. So as you have looked at that situation, what are the lessons you take from that? Dr. ROSEKIND. I appreciate that question because it gets us to two really important things. The thing that most people characterize as is connecting the dots. And I think there has been some discussion here already that part of this gets to what the data sources are that are available, including when people aren't giving you sufficient information. So, again, one of my immediate concerns is taking a look at the defect recall system fully to understand how to identify as well as the full recall process.

Just knowing that we have gone to 75,000 complaints and there are 9 people looking at it, you need to understand not just the personnel but the technology that you are using to search through that kind of a database to get your answers.

The second thing, though, I think that's really important that you have just highlighted is we just learned that people were withholding intentionally for a long time information. Well, that's a game-changer. That's a new scenario. You know, the agency is looking for certain kinds of patterns and stuff, but I am not sure the scenario was there "Well, somebody is intentionally withholding this from you over time." So I think that's another piece that now has to be integrated basically into that detection system, understanding that that can happen.

Senator AYOTTE. As you know, we recently, of course, had the hearings on the Takata airbag recall issue, too. And I know that my colleagues have asked you some important questions about that recall. Let me echo their concerns about the regional nature of the recall. As someone who represents a northern state, I have plenty of constituents that drive their cars down to more humid climates in the winter, as much as we love New Hampshire winters. So I appreciate that you are very concerned about that and will follow up on that issue as well.

I would like to see, as you get confirmed for this position, you come back within several months to this committee and let us know what changes that you feel have been made or need to continue to be made to the oversight process of the agency and the recall process, so that looking back on these truly tragic situations, that we are doing everything we can, working with you, to rectify those going forward and to give you the support you need to do that.

Dr. ROSEKIND. And I am actually very much looking forward to working with this committee. I think, again, you have played a critical role in bringing this information out to the American people. And I hope to be able to come back to you, if confirmed, and not just tell you what we have learned but what we are doing.

Senator AYOTTE. Great. I appreciate your commitment. Thank you.

Senator McCaskill. Thank you, Senator Ayotte.

I am going to ask. I have one remaining question that I wanted to get on the record. And then I'm going to turn it over to—Senator Cantwell has another question. And, then, obviously, Senator Nelson just arrived. And I will leave the Committee to his leadership and because I have a commitment I cannot avoid at 2 o'clock.

But I wanted to talk a little bit about crude moving by rail. While Senator Cantwell may be Senator Freight, Kansas City and St. Louis are the second and third largest freight hubs in the country. And, obviously, we are very aware of the increase in the movement of crude by rail across our country. It is, in fact, one of the reasons I support the pipeline because I think that product is going to move. We are not going to stop it from coming out of the ground. So the question is, how do we move it in a way that is most safe, both to the environment and the people of this country? And I think a pipeline is the safest way to move it, not rail.

Having said that, rail is now obviously very busy moving crude. And I have heard from local first responders, both in Kansas City and St. Louis, while we have had some crude-by-rail accidents, they have primarily been in more rural locations. Obviously, if that were to occur in a major metropolitan area like Kansas City or St. Louis, we would have a much more significant problem to deal with. And the first responders are concerned that they are not getting enough information about what is the right response, what is the best response. They fear they are not as trained and as knowledgeable as they need to be on this issue.

And so I wanted to ask you first, Mr. Monje, what can you do, what can the Department of Transportation do, to ensure that the first responders in these major metropolitan areas have every bit of information they need in terms of their ability to respond to, God forbid, that we would have a crude oil spill by a rail accident in these major metropolitan areas?

Mr. MONJE. Thank you very much, Chairman, for that question. We agree with you at the department that this is a—this is something that we didn't anticipate, the growth of crude by rail over the last few years. But we have been moving extremely quickly as a department to address those safety issues, over two dozen activities with the industry to increase the transparency, to better communicate with our first responders, to reduce speeds and be thoughtful about routes. And the department is in the process of finalizing a crude-by-rail bill, regulation that will do a lot of things that you are discussing.

But you are right that the first responders on the ground are the folks that need the training. They need to understand what is being transferred, and they need to ensure, to understand that the tanks that are bringing these, these materials, are safe, which is why the department is taking such a deliberate step to get the rules right.

Senator McCASKILL. Well, I will follow up. Hopefully you will be confirmed and quickly. And I will follow up about—but, really, what they are asking for, which I think is very reasonable, it won't even require a regulation or a period of comment or all of the controversy that always goes with those, just requires them getting best practices on what are the best tactics and methods to respond to an accident like this if it were to occur, taking into account that their challenges they have in a metropolitan area are much different than they are in rural areas.

Let me finish by saying that we are going to try to expedite the confirmation process. And so I am requesting that the Members of the Committee submit any QFRs, questions for the record, by noon tomorrow. There is no staff over there, but if the staff that is here for the Republican Senators, if you would make sure that all of the staffs understand that the QFRs need to be in by noon tomorrow and that the nominees must provide responses to those QFRs by noon on Monday in order for us to have even an opportunity? I don't know that we can but even for there to be an opportunity for confirmation before the end of the year, that would have to occur.

And I will now turn the gavel over to my colleague Senator Nelson.

#### STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA

Senator NELSON [presiding]. Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

Mr. Rosekind, I just wanted to ask you, do you believe that the rule for cargo pilots that was basically carved out of the fatigue rule should be reversed?

Dr. ROSEKIND. So I'm going to change my hat again. And I appreciate that question, Senator. I and the NTSB are on record. There is no physiological difference between a pilot flying cargo and pallets and passengers. There's no reason for the distinction.

Senator CANTWELL. So you think it should be reversed and they should be covered?

Dr. ROSEKIND. They should all be covered with the same rules. Senator CANTWELL. Great. Thank you very much.

Thank you, Mr. Chairman.

Senator NELSON. Senator Blumenthal.

Senator BLUMENTHAL. I have asked two sets of questions. So I will yield to you, Senator. And then if there is time remaining, I would be happy to follow up. Thank you.

Senator NELSON. OK. Dr. Rosekind, first of all, I am absolutely delighted that you have been named for the position which has been vacant since, I believe, January of this year. That's about 11 and a half months. The organization, although with an Acting Administrator, has needed leadership at a time. And before I arrived, you have had some discussion of the Takata airbags. One of the things that as we bored in on Takata and on Honda was whether or not since there doesn't appear to be enough replacement parts, Honda would, in fact, provide a loaner or a rental car given the fact that people are driving around with a live grenade in their steering column. The Honda representative, the Vice President of Honda in the U.S. said, yes, they would. And, yet, I have yet to have evidence that, in fact, that is the case. So what would you like to do about it as Chairman?

Dr. ROSEKIND. Thank you for the question. And I think there has been some discussion. This lets me to—gives me a chance to both elaborate and reinforce. In fact, I will just highlight. I don't talk about it often, about my father, but I come from a law enforcement family. And there are laws. You've got to follow them.

And the second part that you are talking about is, well, if you don't have to go to recall because you have said you are going to do something, then you need to do it. And what I can do is basically commit that, if confirmed, I am going to go and find every tool authority, legal and otherwise, to get that job done.

We did talk about this earlier. And it gives me a chance to there has been a lot of focus on defect. If we don't get the recall 100 percent and fully done, people are still at risk. So I don't think it's, you know, my job to come up with all those solutions, especially right now, but there has to be a 100 percent solution to make sure those people are safe.

Senator NELSON. There has been some discussion about an immediate fine on a per-day basis. I would suggest to you that the fine ought to be on a per-vehicle basis, that if they are not replacing the vehicles and people are at risk for either being maimed or killed, there needs to be a very stiff financial penalty so that the penalty becomes so severe to the company that it behooves them, in fact, to provide loaners or rental cars so that people do not have to try to drive around in these loaded vehicles or, in the alternative, where they try to disable the airbag in their existing vehicle.

Now, the *New York Times* came out with a story that said that after the fact, after this committee had had a hearing, that, indeed, they admitted that they had never said publicly and released the information that an additional 1,700 people had been harmed by exploding Takata airbags. And I think in one case, one person was killed. This seems to me to be the height of irresponsibility, that in the midst of us having them all there at that table, they are still not revealing information. What do you intend to do about that as Chairman?

Dr. ROSEKIND. Thank you for that question. And it gives me an opportunity to highlight again two things. One is transparency is critical, and that's getting information and making it available, not just to NHTSA and others but to the American public so they know what's going on and can make their own personal decisions about what is safe for them.

The other is I believe that when NHTSA asks for information, it needs to be provided. There's no "We don't have it," et cetera. It needs to be provided. And then every tool needs to be used to obtain that information.

Senator NELSON. Are you sufficiently briefed on the law with regard to NHTSA as to what kind of penalties could be imposed for an auto manufacturer that specifically hides information from the Federal regulator?

Dr. ROSEKIND. I appreciate that question because I have been briefed on some of those things. I'm not an expert on them yet. I have really tried to emphasize that I do know who the Chief Counsel is and who is in charge of the enforcement. And I know who to call to get that information. More important, I'm willing to commit to use every one of those and whatever enforcement action is needed. So I am all about the action part. I will find people that have those, the technical information, that I need. But it's basically give me the tool to get the job done. And that's all about keeping all of us safer.

Senator NELSON. Well, I want to commit to you that at least some of us on this committee are going to be rather vigorous in our oversight function to make sure that the Executive Branch; *i.e.*, you once you are confirmed, in fact, are following through because this egregious breach of the public safety by the way this thing has been drug out and these head fakes and sleights-of-hand and then not revealing information, it has reached the limit of this Senator's patience as I have visited with families whose relative is dead or in one case a firefighter that has no right eye anymore. And we will use to the full extent of our capability the opportunity to oversee that, in fact, you as the Chairman and your regulatory agency are doing your job. I hope that's clear.

Dr. ROSEKIND. Absolutely. And I appreciate not only the statement and the opportunity to tell you that I will actually be looking forward to working with you on that oversight and pursuing both budget and other kinds of authorities that will help us get the job done.

Senator NELSON. Senator Blumenthal, I am going to turn the Committee over to you-

Senator BLUMENTHAL. That is very dangerous.

Senator NELSON.—because of this intelligence briefing that has just started 10 minutes ago.

Senator BLUMENTHAL. Thank you very much, Senator.

Senator NELSON. Thank you.

Senator BLUMENTHAL [presiding]. I have a couple of quick questions. And I appreciate your patience and diligence in staying. And I want to express again my appreciation to each of you for your willingness to serve in these very critical positions.

Ms. Dinh-Zarr, the recommendation of the National Transportation Safety Board was for there to be a fatigue management plan made a matter of rules by the Federal Railway Administration. That's 1 of more than 60, by my count 64, separate rulemaking procedures that have not been concluded by the Federal Railway Administration, vitally affecting the safety of passengers as well as freight on our nation's rails. What can be done to compel the Federal Railway Administration to obey the law? And I know that Dr. Rosekind may have some observations because of his present membership on the NTSB as to answer that question as well. And I invite Mr. Monje as well if you have thoughts about it.

Dr. DINH-ZARR. Thank you, Senator. As a safety professional, I absolutely share your concern about ensuring that safety recommendations are implemented as soon as possible. As you might have heard when I mentioned before, if I were to be-to have the honor of being confirmed, I would absolutely do everything in my power to work to make sure that these recommendations are taken seriously and are implemented. I think that the NTSB has a good and long history of working with Government agencies as well as with industry and I hope with this committee as well. And I think that if I were to be confirmed, I would absolutely use every manner that is available to me as a member to push for the adoption of that life-saving recommendation but also all of the other ones that are related to rail and other modes.

Senator BLUMENTHAL. Thank you.

Any other responses? Mr. MONJE. Thank you very much, Senator. I haven't worked on that particular rule, but Secretary Foxx has said that safety is everyone's primary responsibility at the department. And I know that from my vantage point, the relationship with NTSB is one of a partnership for safety. And often the recommendations, it is an iterative process to get to a solution. A lot of the recommendations are focused on individual incidents, where the solutions often rely in rulemakings that take a lot of time to develop, require and benefit from public involvement and that have to address the industry as a whole. So if I have the privilege of being confirmed, I will vow to you to work with you and with these two other nominees to make it as good as possible.

Senator BLUMENTHAL. I don't know whether the—I am more than happy to let you off the hook on this one, Dr. Rosekind. You have really been carrying a substantial burden during his hearing. But if you have a response, I would welcome it.

Dr. ROSEKIND. And thank you for offering that because I will just say over 80 percent of NTSB recommendations are acted on in an acceptable manner. But I really thank you because it's the other 20 percent we should be worried about, and that is what you are highlighting because those are the ones that are continuing to cost lives and create injuries.

Senator BLUMENTHAL. Well, costing lives and creating injuries is exactly what the failure to issue those regulations can do. And we saw it at Spuyten Duyvil. We saw injuries in Bridgeport, Connecticut when there was a derailment there. Many of these recommendations are invisible or unknown to the public, but the failure to issue them can have real-life consequences, literally life or death consequences, certainly injury and dollar consequences. So I want to thank each of you and Secretary Foxx as well for your commitment on this issue of safety.

And I want to ask one last question although it's outside of your jurisdiction. But the ignition switch defect has been raised. And we are fast approaching the December 31 deadline under the compensation fund, which also has a deadline of March of next year for acceptance by the victims or their families of any compensation fund decisions. These decisions must, therefore, be made before the bankruptcy court may decide what their rights are in overcoming the shield that GM has invoked, the new GM has invoked, in the bankruptcy court procedures and before the Department of Justice finishes its criminal investigation that might enlighten the decisions made as to whether to accept compensation fund decisions.

One microcosm of the potential injustice that could be done by these deadlines is illustrated by the Averill family of Washington, Connecticut, who were unnotified, completely uninformed, by GM of their potential eligibility for the fund. Had it not been for a *New York Times* reporter, who dug into the deaths resulting from the ignition defect, they still would be in the dark. They have been informed now, and their plight illustrates, I think, the need to extend the December 31 deadline and the March deadline.

I know that you have no direct jurisdiction or power over the compensation fund, but my hope is that the Department of Transportation, and your agencies in particular, may join in calling for an extension of those deadlines in the interest of simple justice and humanity. You may not have the legal authority to compel it, but you certainly have the moral authority to ask for it publicly. And I believe that there is a responsibility to exercise that moral authority.

If you have a comment on my suggestion or plea to you, I again would welcome it. I know it may not be a question that you anticipated, but I would respect and invite you to comment. Mr. MONJE. Thank you, Senator. I haven't followed Ken Feinberg's process very closely, but I do understand that you have been tracking the tragedy of the Averill family. And I feel like they are lucky to have someone like you fighting for them. And the role of NHTSA in this process is to force GM as much as possible to get the best cars on the road to address these crises and to get better at identifying the recalls before they cause this kind of tragedy.

at identifying the recalls before they cause this kind of tragedy. Senator BLUMENTHAL. Thank you very much. With that, I'm going to close the hearing. I don't have the gavel in front of me, but we are over. And thank you again. And thank you to your families for their service in supporting you and the vital work that I anticipate you will do.

Thank you.

[Whereupon, at 2:17 p.m., the hearing was adjourned.]

### APPENDIX

### Response to Written Questions Submitted by Hon. John D. Rockefeller IV to Dr. Mark R. Rosekind

Question 1. Last August, the National Highway Traffic Safety Administration (NHTSA) issued a Notice of Proposed Rulemaking (NPRM) for a Federal Motor Vehicle Safety Standard (FMVSS) on the structural integrity of motorcoach roofs and retention of side windows in the event of a rollover. Stakeholders have criticized this proposed FMVSS, because the proposed standard relies on tests that do not replicate real-world conditions. That is, NHTSA relied on a quarter-turn roll test and a weak window retention test. The proposed FMVSS addressing rollover motorcoach crashes will affect the safety of millions of riders for decades, and the standard must ensure the safety of passengers in real world crashes. If confirmed, can you pledge that NHTSA will utilize a more stringent test that replicates real world crash conditions to prevent passenger ejection, which is the leading cause of death among motorcoach passengers?

Answer. The NTSB has investigated and issued recommendations related to motorcoach safety so it is an area of interest to me. Keeping people safe in all modes of transportation is critical and I pledge to make the best judgments to do this. If confirmed, I pledge to consider all relevant facts and public comments in the docket.

*Question 2.* MAP-21 directs NHTSA to promulgate a FMVSS on anti-ejection countermeasures for motorcoaches. If confirmed, will NHTSA use a more rigorous test for window retention and require the use of advanced or laminated window glazing as recommended by the National Transportation Safety Board?

Answer. As stated in Answer to Question 1, I pledge to make the best judgments to keep people safe. If confirmed, I pledge to consider all relevant facts and public comments in the docket.

*Question 3.* NHTSA has missed the statutory deadlines for completing the following motorcoach safety regulations and requirements from MAP-21:

- Roof strength/crush resistance (Sec. 32703(b)(1))
- Anti-ejection countermeasures (Sec. 32703(b)(2))
- Anti-ejection retrofit (Sec. 32703(e)), and
- Rollover crash avoidance (Sec. 32703(b)(3)).

If confirmed, can you pledge that NHTSA will complete these statutorily required rulemakings?

Answer. If confirmed, I will commit to review all of the statutory requirements and congressional deadlines and evaluate what steps NHTSA can take to address the concerns you raise.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO DR. MARK R. ROSEKIND

#### Reaching to 100 percent repair rates

Question 1. Mr. Rosekind, what do you think we need to do to ensure we get 100percent repair rates for cars under safety recall? I know that is how well they do in Germany.

Answer. If confirmed, my first focus will be to address the safety defect recall process. And that process cannot be fully effective unless the defect under the recall gets fixed. Notifying the owner of the recall is part of that process, but just as important is the manufacturers' responsibility for making sure the recalls get remedied in a timely manner. I can assure you that I will use all of the powers and authorities available to NHTSA to achieve this.

*Question 2.* As a safety investigator, do you think that the best safety outcome is to require dealers and mechanics to check every single car coming in the door for open recalls?

Answer. People need to know if there is a safety recall on their vehicle so that they can be safe and have their vehicle repaired as quickly as possible. This process should be as seamless as possible, and as such, dealers and mechanics should absolutely be checking people's VIN numbers each and every time that a vehicle is brought in for service.

#### **Resources at NHTSA**

*Question 3.* Cars are only getting more complex, with millions of lines of code, and advanced technologies. This is an industry that is evolving quickly. And with evolution comes challenges that arise as new, different products come on line. Can fifty-one investigators across the country *really* investigate possible defect trends and recall equipment that poses a threat in a reasonable amount of time? Or are they completely outmatched by the challenge? Give us your perspective as a NTSB investigator.

So, my question to you is, as head of NHTSA, will you request more funding for the Safety Defects Investigation program? Or is staff for that program not one of the answers?

Answer. I was surprised to learn that there are only nine people at NHTSA reviewing the thousands of complaints that they receive each year and that they look at every single one of them as they work to identify possible safety defects. If confirmed, I plan to take a hard look at the question of what resources are needed for all of NHTSA's important safety programs, including its Office of Defects Investigation. And the work NHTSA does searching for trends and safety defects doesn't only depend on the number of people at the agency. It also depends on technology and robust data systems that are available to it. If confirmed, I plan to look to every available system that could potentially be used to improve on the process of identifying trends and safety defects.

### Response to Written Questions Submitted by Hon. Edward Markey to Dr. Mark R. Rosekind

Question 1. The Energy Independence and Security Act directed NHTSA to promulgate a national tire fuel efficiency rating system for replacement tires. It required, among other things, the development of a national tire maintenance consumer education program. NHTSA has issued tire fuel efficiency rating system regulations, but those regulations did not include any requirements for the consumer information program. If you are confirmed, will you commit to working to issue regulations to implement this program?

lations to implement this program? Answer. As a nominee I do not have the full details on this issue. However, if confirmed, I commit to ensuring that NHTSA stays on track in its consumer protection and information programs.

Question 2. The Tire Pressure Monitoring System provisions in the TREAD Act were added by me during House consideration of that bill. NHTSA's implementation of the TPMS provisions (FMVSS No. 138 is the implementing rule for the TPMS provision in TREAD) has been the subject of litigation and a court decision that the rule was arbitrary and capricious under the Administrative Procedures Act. Of particular concern in these court cases was the manner in which the rule addressed indirect TPMS technology. On October 31, Mazda recalled approximately 100,000 vehicles as their TPMS systems were found to be noncompliant with FMVSS No. 138. Given that NHTSA's test procedure for FMVSS No. 138 (TP 138–03) was unable to detect the failure mode responsible for this recall, if you are confirmed, will you work to ensure that NHTSA (a) considers a modification to the test procedures to ensure that it can detect this failure mode in the future, (b) tests other indirect TPMS technologies used in other vehicles to determine whether NHTSA's test procedures can accurately detect any failure modes in these technologies?

Answer. As a nominee I do not have the full details on the particular case you reference. However, I agree with you regarding the benefits of TPMS. Maintaining proper tire pressure is important to vehicle safety. Tire under inflation can lead to a number of safety hazards, such as skilding and/or loss of control of the vehicle, hydroplaning, increases in stopping distance, flat tires and blowouts, and overloading of the vehicle. It is my understanding that all light vehicles have been required to have TPMS beginning on September 1, 2007, to inform drivers when their tires are significantly underinflated. As with any Federal Motor Vehicle Safety Standard, non-compliance with the standard would lead to an increase in the safety

risk that the standard was designed to prevent. Thus, if confirmed, you have my commitment that I will take a close look at this issue.

# Response to Written Questions Submitted by Hon. John Thune to Dr. Mark R. Rosekind

Question 1. In response to my question to you at the hearing about what specific actions you would take to restore the public's trust in the National Highway Traffic Safety Administration (NHTSA), you responded that you would apply the three guiding principles of the National Transportation Safety Board (NTSB)—namely, "independence, transparency, and accuracy"—to your work at NHTSA. If confirmed, what are some of the specific steps will you take in the first 100 days to implement those three principles?

Answer. Independence, transparency, and accuracy represent guiding principles that require parallel practices to ensure they translate into enhanced safety. Eventually, these principles and practices have the greatest effect when they become part of an organization's safety culture. If confirmed, I plan to apply these principles when looking at NHTSA's recall process, defect identification-recall system, core safety programs, and innovations in technology. The objective would be to identify specific actions that could enhance safety in each of these areas with a focus on reinforcing independence, increasing transparency, and ensuring accuracy. All of these would be approached and balanced in the context of timely and decisive actions.

Question 2. The Department of Transportation (DOT) Office of Inspector General (OIG) is currently reviewing NHTSA's handling of the GM ignition switch recall. As set forth by the Inspector General Act, the OIG has autonomy to complete its work without interference. Will you commit to maintaining this autonomy and to providing complete and timely access to information or personnel for the OIG to complete its audits and investigations?

Answer. Yes, you have my assurance that I will do so. The NTSB conducts independent investigations and so I appreciate that the independent role of the OIG is an important function of government.

*Question 2a.* Will you also commit to keeping this Committee updated on the steps NHTSA is taking to implement all OIG recommendations?

Answer. Yes, I look forward to keeping the Committee updated and working with Congress on these and other efforts to improve the safety of the traveling public.

Question 3. You have an impressive background as a specialist on human fatigue. Your doctorate is in psychology. As a Member of the NTSB, you have a staff of two, but if confirmed you will lead a staff of nearly 600 people. How does your experience and expertise translate to leading NHTSA, an agency that, according to some critics, is slow to identify problems, and has failed to connect the dots on auto defects like the faulty ignition switches on certain GM vehicles?

Answer. As a scientist, I will apply an analytical, data-driven approach to examining these issues. My NASA experience in a variety of human factors arenas, such as human-machine interaction and translating science into effective solutions to address operational problems in safety-critical environments, is directly relevant, in concert with my private sector experience developing innovative solutions for complex, challenging, real-world safety problems. All of my experience and expertise are applicable to the issues currently confronting NHTSA, and I will bring a fresh set of eyes to leading the agency, taking action, and connecting the dots.

*Question 3a.* Won't you have a steep learning curve with respect to the management of a large workforce at a time when NHTSA needs strong leadership at the helm immediately?

Answer. I will bring strong leadership to the helm of NHTSA immediately and, where needed, leverage the agency's existing talent to address workforce management issues.

Over the course of my career, I have been in many leadership roles including: Chief of the Aviation Operations Branch in the Flight Management and Human Factors Division at NASA Ames Research Center and Team Leader of the Fatigue Countermeasures Program in the Aviation Safety Research Branch at NASA Ames Research Center. While at NASA, I created and led multiple international coalitions conducting research, addressing policies, and collaborating on projects. As an NTSB Board Member, my advocacy efforts have included leading the creation of a national stakeholder coalition to address substance-impaired driving.

*Question 4.* Last month, I introduced a bill along with Senator Nelson, and cosponsored by Senators Heller, McCaskill, Ayotte, and Klobuchar, that would incentivize individuals who uncover serious allegations of vehicle defects or noncompliance with motor safety laws to blow the whistle and provide original information to government regulators. Under my bill, if such information leads to an enforcement action with more than \$1 million in monetary sanctions, the whistleblower may receive up to 30 percent of the total penalties collected. Is this a concept you could support?

Answer. Every voice counts when it comes to identifying defects that put the traveling public at risk. Where appropriate, individuals may need protection, incentives, or other accommodations to ensure they are willing to raise their voice on behalf of safety.

*Question 4a.* Will you commit to reviewing this bill and offering your input to me and my staff within 30 days of your confirmation?

Answer. If confirmed, I will commit to an expeditious review of this bill and providing my recommendations to you and your staff as soon as possible.

Question 5. The Obama Administration wants to increase fuel economy for cars and light-duty trucks to an average of 54.5 mpg by model year 2025. While automakers can focus on engine efficiency and electric vehicles, a new survey by WardsAuto reported that automakers have shifted their top focus to so-called "lightweighting" and the use of lightweight structural materials as new products are designed to meet the tougher fuel economy rules. If confirmed, how do you plan to work with the EPA going forward on CAFE issues? And how will you work with automakers to ensure that the passenger protection of vehicles is not compromised as manufacturers focus on lightweighting their vehicles going forward? Answer. I am aware that EPA and NHTSA have been working jointly on CAFE standards. Achieving increased fuel economy for cars and light-duty trucks is very

Answer. I am aware that EPA and NHTSA have been working jointly on CAFE standards. Achieving increased fuel economy for cars and light-duty trucks is very important, and if confirmed, I plan to continue to work closely with the EPA. Manufacturers have a variety of tools to achieve higher standards, and as a safety agency, I believe it is important to ensure that whatever tools are used to meet CAFE standards do not compromise vehicle safety.

Question 6. Ethanol continues to be an important fuel for the Nation and for the state of South Dakota. If confirmed, will you commit to working with the Environmental Protection Agency and Congress to ensure that automakers continue to receive just credit for the production of ethanol flex fuel vehicles?

Answer. I think it is important to explore all available avenues as we seek to increase fuel economy, and I will look at all possible ways to do that.

Question 7. On December 2, 2014, Takata sent a letter to NHTSA stating that NHTSA's demand for a nationwide recall isn't supported by the evidence, and that NHTSA does not have the authority to order a parts maker to do a recall. How do you respond to Takata's claim that NHTSA does not have the authority to order a parts maker to conduct a recall? Does NHTSA need additional authority in your view, or does NHTSA have the requisite authority it needs for such a recall?

parts maker to conduct a recall? Does NHTSA need additional authority to order a view, or does NHTSA have the requisite authority it needs for such a recall? Answer. If confirmed I will take a close look at NHTSA's current authorities, but I can assure you that I will use all the tools and authorities at NHTSA's disposal to aggressively protect the public from safety defects.

*Question 8.* In 2011, the NTSB recommended a nationwide ban on driver use of portable electronic devices, whether used hands-free or handheld. Do you still agree with this recommendation? Why or why not? If so, do you think this ban should extend to in-dash systems that are designed for drivers?

Answer. In 2002, five lives were lost and one person injured in a crash due to a driver's distraction ". . . caused by the use of a handheld wireless telephone." That NTSB investigation included recommendations related to education, research, and novice drivers. Over the past 12 years, the NTSB has identified distraction as causal or contributory to accidents in which lives were lost and people injured in all modes of transportation. In 2010, two individuals lost their lives, including a student in a school bus, and 37 others were injured in a crash in which the NTSB determined: ". . . that the probable cause of the initial *Gray Summit* collision was distraction, likely due to a text messaging conversation being conducted by the GMC pickup driver, . . ." The NTSB recommendations included: "Ban the nonemergency use of portable electronic devices, other than those designed to support the driving task, for all drivers." The Board voted unanimously in support of the recommendations and that included my vote. Distraction is a known and established safety risk that has cost lives and caused injuries in all modes of transportation.

At the NTSB, safety recommendations can be based on individual crash investigations. At NHTSA, the decision-making process about what safety actions to pursue involves consideration of a much broader array of factors including safety concerns, diverse research findings, crash investigations, practical implementation, public acceptance, enforcement issues, cost/benefit analysis, educational strategies, and others. If confirmed as NHTSA Administrator, I would be approaching all safety issues, including distraction, from this broader context than individual crash investigations.

In-dash systems have the potential to provide safety benefits by using humanmachine interaction design principles that support the driving task and acknowledge potential distraction risks. NHTSA has specifically supported the safety potential and innovation of these systems by creating Phase I guidelines to address this opportunity.

*Question 9.* Do you interpret NHTSA's jurisdiction as including general use mobile devices like smartphones? If so, on what legal basis? Do you think NHTSA should exercise that regulatory authority?

Answer. If confirmed, I am committed to focusing on all of the safety issues NHTSA is working on to reduce death and injury on our Nation's roads. Distracted driving is a huge safety concern and a challenging issue because of the many human behavior factors involved. It will require multiple approaches to address it, similar to efforts with seat belts and alcohol-impaired driving. With the increased presence of technologies in our lives and in our vehicles, it makes sense to look at ways to reduce their contribution to driver distraction while ensuring industry can continue to provide innovations to consumers. This includes educating drivers about the risks, working with states to enact distracted driving laws, and looking to technical innovations for solutions. My understanding is that NHTSA does not intend to regulate in this area, but rather intends to provide guidelines with regard to the human-machine interfaces for products that link to motor vehicles in order to reduce distraction. If confirmed, I will give serious consideration to the issues you raise.

*Question 10.* Do you agree that speech-based interfaces designed for drivers have significant potential to allow drivers to interact with mobile devices more safely?

Answer. Technology offers tremendous safety benefits. To be most effective, technology design and use should involve understanding the known safety risks and exploring innovative enhancements that drive safety forward. Speech-based interfaces are one example of how technology has the potential to improve safety. I am excited about technological solutions that have the potential to reduce distraction and improve safety for the motoring public. I understand that NHTSA is investigating this technology and if confirmed, I will work to ensure that NHTSA stays current on these technological developments and their safety potential.

*Question 11.* What are your thoughts about some of the ways that Congress, NHTSA and auto manufacturers can help facilitate safer automobiles via active safety systems (*e.g.*, using radar and camera systems) that can save lives and reduce costs for drivers by lower insurance rates?

Answer. Coming from Silicon Valley and having worked at NASA, I am a strong believer in leveraging technology to improve safety. I absolutely agree that it is important to stay ahead of the curve of evolving technology, and if confirmed, I will actively pursue this. I am excited about the possibilities that are on the horizon as technologies are evolving to make vehicles safer.

Question 12. The Commerce Committee recently heard testimony from Air Force Lieutenant Stephanie Erdman, one of the victims who was injured by shrapnel from a defective Takata airbag. Lt. Erdman testified that she took her vehicle, a 2002 Honda Civic, to a dealership three times after Honda had received the recall notice for her car, and that neither the company nor its dealer informed her of the pending recall. Moreover, the Honda dealership never performed a recall repair on Lt. Erdman's vehicle, nor did it warn her about the danger she faced if the airbag deployed. Is there more that Congress or NHTSA can do to ensure that certified repair facilities or dealerships provide notice and perform repairs for active recalls when vehicles are brought in for service?

Answer. It is unacceptable to me that neither Honda, nor the dealer, informed Lt. Erdman of her vehicle defect, which resulted in this tragedy that could have, and should have, been avoided. People need to be informed so that they can take actions to stay safe. Every recalled vehicle should be remedied quickly by manufacturers. If confirmed, you can count on my commitment to use every possible legal mechanism available to hold manufacturers accountable for the safety of their vehicles. I would be pleased to work with the Committee on the resources NHTSA needs to accomplish its safety mission.

# Response to Written Questions Submitted by Hon. Marco Rubio to Dr. Mark R. Rosekind

Question 1. Mr. Rosekind, do you believe that the recent regional, then national Takata airbag recall, has been handled appropriately by NHTSA? If you had been the Administrator issuing these recalls, would you have handled it differently?

Answer. I believe one of NHTSA's greatest strengths is the agency's data-driven approach. However, even when there are no data, there may still be a safety concern or defect. Therefore, other information sources, common sense, and alternate decision options need to drive actions in the absence of data. If confirmed, my approach would be to focus on the safety of the entire nation—with the exceptions justified by data—and to take every possible step to provide the public with the latest, most accurate information and hold manufacturers accountable to remedy in full any identified safety defect.

*Question 2.* If you are confirmed for the position, will you commit to ensuring that when evaluating a recall, the safety of a passenger is the greatest priority no matter the cost that may be affiliated with a passenger's safety?

Answer. Throughout my professional career, my primary focus has been safety. Most recently, my safety focus has been on enhancing the safety of the traveling public as a Board Member of the National Transportation Safety Board. It is my greatest priority, and it will continue to be so, if confirmed, as NHTSA Administrator. The value of just one life and the human costs borne by just one catastrophic injury cannot be weighed against anything less than the complete and total commitment by government and industry to protect every driver on the Nation's roads.

## Response to Written Questions Submitted by Hon. Deb Fischer to Dr. Mark R. Rosekind

*Question 1.* Do you interpret NHTSA's jurisdiction as including general use mobile devices like smartphones? If so, on what legal basis and do you think NHTSA should exercise that regulatory authority?

Answer. The rapid adoption of technology in motor vehicles brings with it many new issues including regulatory issues, cybersecurity related issues and driver distraction issues. These issues will only grow as vehicles adopt more technology as we move toward ever more automated vehicles. I commit to looking carefully at these questions should I be confirmed.

Question 2. In September, then NHTSA Deputy Administrator, David Friedman, informed the Senate Commerce Committee that the agency had the authority to regulate smartphones as "motor vehicle equipment" to address driver distraction, despite the fact that Congress never vested such authority with the agency. The statement also ignored that 44 state legislatures have outlawed texting while driving and companies are quickly launching voice-powered technologies for drivers, so they can pair and stow their phones while driving. How will you ensure that the agency refocuses on its legislative mandate to address automotive safety issues and major recalls instead of attempting to regulate how our cell phones work?

Answer. If confirmed, I am committed to focusing on all of the safety issues NHTSA is working on to reduce death and injury on our Nation's roads. Distracted driving is a huge safety concern and a challenging issue because of the many human behavior factors involved. It will require multiple approaches to address it, similar to efforts with seat belts and alcohol-impaired driving. With the increased presence of technologies in our lives and in our vehicles, it makes sense to look at ways to reduce their contribution to driver distraction. This includes educating drivers about the risks, working with states to enact distracted driving laws, and looking to technical innovations for solutions. My understanding is that NHTSA does not intend to regulate in this area but rather intends to provide guidelines with regard to the human-machine interfaces for products that link to motor vehicles in order to reduce distraction. If confirmed, I will give serious consideration to the issues you raise.

*Question 3.* Will NHTSA engage with Congress before issuing any new guidelines or regulations related to mobile technologies? Will you consult with Members of Congress on the relevant congressional committees prior to publishing any new announcements on this issue in the *Federal Register*? If yes, how do you plan to consult with Congress?

Answer. I am absolutely committed to consulting with Congress on all of the safety issues NHTSA addresses. I am aware that NHTSA has held public meetings on this issue and has presented before Congress many aspects of its distraction program. It is my understanding that NHTSA's stated position is that it only plans to provide guidance and not to regulate handheld devices used in motor vehicles. Question 4. Phase 1 of NHTSA's distracted driving guidelines was incredibly long and prescriptive, making recommendations on issues like the number or characters that should be readable while driving, for example. With the rapid development of smartphones and apps, how would the agency keep up with such an innovative industry without applying vague guidelines that would inhibit innovation or lead to expensive liability risks for American job creators?

Answer. I believe it is important for NHTSA to keep ahead of technological developments so that its guidance remains current and relevant. If confirmed, I can assure you that I will pay close attention to technological developments as they impact traffic safety.

*Question 5.* NHTSA has argued that it intends to develop driver distraction guidelines that are voluntary and nonbinding. Please explain in specific detail what "voluntary, nonbinding guidance" means and how innovative businesses can be assured Phase 2 guidelines will not have any similar effect, intended or not, to a rule or regulation.

Answer. At this point, as a nominee, I cannot speak to NHTSA's specific position or plans on this but if confirmed, I can assure you that I will look at this closely.

Question 6. The American public clearly wants NHTSA to focus its resources and efforts on addressing some of the troubling developments with vehicle recall issues. Can you commit to addressing these major recall issues before the agency in an effective manner prior to continuing any further development on Phase 2 guidance?

Answer. All safety issues are important to the American public and to me. If confirmed, I would want to give attention to everything that has the potential to help NHTSA reduce death and injury on our Nation's roads.

Question 7. In 2011, the NTSB recommended a nationwide ban on driver use of portable electronic devices, whether used hands-free or handheld. Do you still agree with this recommendation? Why or why not? If so, do you think this ban should extend to in-dash systems that are designed for drivers like Apple's CarPlay?

Answer. In 2002, five lives were lost and one person injured in a crash due to a driver's distraction ". . . caused by the use of a handheld wireless telephone." That NTSB investigation included recommendations related to education, research, and novice drivers. Over the past 12 years, the NTSB has identified distraction as causal or contributory to accidents in which lives were lost and people injured in all modes of transportation. In 2010, two individuals lost their lives, including a student in a school bus, and 37 others were injured in a crash in which the NTSB determined: ". . . that the probable cause of the initial Gray Summit collision was distraction, likely due to a text messaging conversation being conducted by the GMC pickup driver, . . ." The NTSB recommendations included: "Ban the nonemergency use of portable electronic devices, other than those designed to support the driving task, for all drivers." The Board voted unanimously in support of the recommendations and that included my vote. Distraction is a known and established safety risk that has cost lives and caused injuries in all modes of transportation.

In-dash systems have the potential to provide safety benefits by using human-machine interaction design principles that support the driving task and acknowledge potential distraction risks. NHTSA has specifically supported the safety potential and innovation of these systems by creating Phase I guidelines to address this opportunity.

*Question 8.* Do you agree that speech-based interfaces designed for drivers have significant potential to allow drivers to interact with mobile devices more safely?

Answer. Technology offers tremendous safety benefits. To be most effective, technology design and use should involve understanding the known safety risks and exploring innovative enhancements that drive safety forward. Speech-based interfaces are one example of how technology has the potential to improve safety. I am excited about technological solutions that have the potential to reduce distraction and improve safety for the motoring public. I understand that NHTSA is investigating this technology and if confirmed, I will work to ensure that NHTSA stays current on these technological developments and their safety potential.

### Response to Written Questions Submitted by Hon. Maria Cantwell to Carlos A. Monje, Jr.

*Question 1.* Mr. Monje, what specific recommendations made by the National Freight Advisory Committee do you think can be adopted by the Administration under existing statutory authorities?

Answer. In June 2014, NFAC members submitted 81 recommendations to Secretary Foxx for the Department to consider during development of the National Freight Strategic Plan on topics ranging from improving project delivery to increasing funding for multimodal freight projects to boosting freight research and implementation of technology to make goods movement safer and more efficient

Each of the 81 recommendations was unique and addressed specific concerns regarding freight movement. However, broad themes emerged on safety and security; streamlining; harmonization of freight policy and programs across modes; improving freight data, research and education; and implement technology—all areas the Department is considering as we write the National Freight Strategic Plan.

Already, as NFAC reminded us, the Department is looking at freight movement multimodally. Just as shippers tell us that do not care what mode their travels on so long as it gets there on time and at a low cost, we are seeking freight policies in the Freight Conditions and Performance Report and the National Freight Strategic Plan that cover all modes on which freight moves.

We are also increasing the Department's effort to collect meaningful freight data. The freight Conditions and Performance Report which will be coming out soon explores national freight data gaps and opportunities to collect data to better plan and address challenges of the freight system.

The NFAC also sent an important signal that addressing freight workforce needs is critical to the efficient movement of freight. The Department is engaged in an ongoing study with the Departments of Labor and Education to quantify workforce gaps. The data show huge transportation workforce needs (4.2 million jobs) over the next decade, a majority of which are in logistics related industries and exploring opportunities to help address this gap.

*Question 2.* Are there things that the NFAC recommended that you think got left out of the GROW AMERICA policy proposal but should be considered by us in Congress as we look to a surface transportation authorization bill next year?

Answer. Many of the NFAC recommendations addressed the need for increased funding for freight projects and environmental streamlining along the lines of what the Administration included in the GROW AMERICA proposal. As we continue to promote and develop freight policies, I urge you to consider the NFAC's attention to the unique challenges of first and last mile connectors, especially in urban areas, in the overall freight system.

#### RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO CARLOS A. MONJE, JR.

Question. The Administration has proposed a transition to a "Transportation Trust Fund," rather than the current Highway Trust Fund. In an era of limited funding, how do you propose to manage the competing funding demands of different modes without placing or shifting the burden for funding one mode onto another? Answer. The GROW AMERICA Act is a \$302 billion, four-year transportation re-

Answer. The GROW AMERICA Act is a \$302 billion, four-year transportation reauthorization proposal that provides increased and stable funding for our Nation's highways, bridges, transit and rail systems. Much like the highway trust fund today, which contains separate accounts for highways and transit, the transportation trust fund proposed in the GROW AMERICA Act would have separate accounts that provide funding for highways, transit, and rail, as well as a new multimodal account. State and local governments have made it clear that the budgetary certainty provided by long-term trust fund authorization is an absolutely critical element to being able to plan and make the transformational investments necessary to grow our economy.

The Administration's proposal is funded by supplementing current revenues with \$150 billion in one-time transition revenue from pro-growth business tax reform. This will prevent Trust Fund insolvency for four years and avoid placing the burden of funding one mode onto another while increasing investments to meet national economic goals.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO CARLOS A. MONJE, JR.

*Question 1.* A priority for DOT should be encouraging private sector initiatives and projects for all modes of transportation. With funding issues facing transportation projects, the private sector must play a role in meeting our transportation challenges, and DOT will need to encourage public-private partnerships and private sector investment.

In your current role as Counselor to the Secretary at DOT, can you tell me how you have advised the Secretary to encourage private sector investments and partnerships with the Federal Government to advance transportation projects in the United States?

Answer. The Secretary and the President are committed to improving and increasing the number of opportunities for public and private sector collaboration in transportation infrastructure. The Build America Investment Initiative, established in July of this year, is focused directly on increasing private sector investment into our Nation's infrastructure. At the Department of Transportation, I have supported the development of the Build America Transportation Investment Center, a one-stop shop for state and local governments, public and private developers and investors seeking to utilize innovative financing strategies for transportation infrastructure projects, especially public-private partnerships. I have also played a significant role in the TIGER Discretionary Grant program,

I have also played a significant role in the TIGER Discretionary Grant program, which has remained one of our most powerful tools in attracting private sector funding into transportation projects. Through TIGER, we have incentivized state and local project sponsors to seek out private match funding as a means of making their projects more competitive in our merit based selection process. Before coming to USDOT, I served in the Office of Social Innovation at the White House, which has the mission of developing stronger relationships with the private sector.

Question 1a. If confirmed, will you continue to look for ways the private sector can partner with the Federal Government to meet our transportation challenges?

Answer. Yes. While I believe there is no substitute for adequate Federal funding for the transportation system, I share the Secretary's view that innovative financing and public private-partnerships (P3s) represent a great opportunity for state and local governments to improve the way they deliver large, complex, transportation projects.

Question 2. Currently, the structure of the Highway Trust Fund is unsustainable with major shortfalls in our ability to pay for the improvements that our transportation system desperately needs. Yet, proposals in Congress to address the issue have been nothing more than gimmicks that don't resolve the long term issue.

With continued shortfalls in the Highway Trust Fund, what should be the appropriate Federal role in transportation policy? Is there an opportunity for some of our states to better manage and prioritize funding that is currently being collected for the Highway Trust Fund?

Answer. Receipts into the Federal Highway Trust Fund comes from a variety of taxes on highway fuel, tires, heavy vehicle use tax, truck/trailer sales taxes. The motor fuel excise tax, currently 18.4 cents per gallon for gasoline/gasohol, and 24.4 cents for special fuel (primarily diesel) raises the majority of the revenue. This revenue is then placed into the Highway Trust fund by the U.S. Treasury Department, after collection by the Internal Revenue Service. These funds are then distributed to the states based on formulas provided in Federal legislation.

On a monthly basis, each state is required to report to the Department's Federal Highway Administration (FHWA), the amount of gallons taxed by that state. This data is analyzed and compiled by FHWA staff. The data on the amount of on-highway fuel use for each state is then used to attribute Federal revenue to each state.

The reason for the Highway Trust Fund shortfall is simple—not enough revenue is coming into the fund to support the ongoing work necessary to maintain our roads, bridges, highways, and transit system.

The Highway Trust Fund shortfall matter is of great concern to all of us who are engaged in the work of building our Nation's infrastructure, particularly because the Highway Trust Fund supplies a significant portion of the funds that each state depends upon for critical infrastructure repairs and new construction. We understand the difficulties that each state faces in trying to plan construction work, significant infrastructure projects, and even state of good repair work, without a clear sense of how—or even whether—that work will be funded.

Congress has for decades funded highway infrastructure and safety, transit, and aviation programs through multi-year authorizations that provide guaranteed funding; this enables states, local governments, private industry, and other stakeholders to plan and make large-scale infrastructure investments on a year-to-year basis. This type of predicable, dedicated funding is critical to providing stakeholders with the certainty they have long required to effectively plan and execute projects that will improve transportation infrastructure, allow regions and states to achieve their long-term visions for rail transportation, and to support economic growth across the country.

President Obama spoke publicly about shortfall threats and called upon Congress to significantly increase investments in transportation so that agencies can continue to address the many road, rail and transit needs in the states. The passage of the GROW AMERICA Act would address the major funding shortfalls in the short term. We support closing corporate tax loopholes, as well as a repatriation tax holiday and other tax reforms to finance the four-year \$302 billion transportation bill proposal.

If confirmed, I commit to working with Congress to pass a long term agreement on surface transportation funding on a bipartisan basis.

Question 3. The U.S. Government Accountability Office (GAO) released a report in May that found DOT did not document key decisions made in evaluating grant applications and selecting projects during the fifth round (FY 2013) of the TIGER grant program. While DOT has selection criteria for the TIGER grant program, it has awarded grants to lower-ranked projects while bypassing higher-ranked projects, accepted applications received after the published deadline, and changed technical ratings of lower rated projects selected for funding to the highest technical rating category without explaining why it did so, raising questions about the integrity of the selection process. In response, DOT revised its application evaluation guidelines for the 2014 funding round to require additional documentation. However, GAO points out that the revised guidelines do not specify who may request the advancement of a lower-rated project and at what point in the process those decisions can occur.

If confirmed, will you commit to ensuring the utmost transparency in the selection process for TIGER projects and DOT cooperation with the GAO's recommendations?

Answer. Yes. The Department of Transportation with the only recommendations: Answer Yes. The Department of Transportation with the only recommendations: ensure that projects receiving funding from the TIGER discretionary grant program are fairly and competitively evaluated, and selected to provide the Nation with useful transportation benefits in accordance with statutory requirements. In the most recent round of TIGER, the Department implemented programmatic improvements to the evaluation and selection process consistent with GAO recommendations, including but not limited to more streamlined input from the relevant Operating Administrations, clarification of the late application policy, and an overall improvement of process documentation. However, there is always room for improvement. If confirmed, I will be committed to ensuring transparency in the TIGER evaluation and selection process.

Question 4. NASA and DOT—If confirmed, will you work with NASA and the commercial industry, and ensure that DOT is fostering innovation and encouraging the development of cost-effective, commercial spaceflight capabilities?

Answer. Yes. As the Assistant Secretary for Transportation Policy, I will support the Secretary of Transportation and FAA in overseeing commercial space transportation operations, in the interest of protecting public health and safety, safety of property, and national security and foreign policy interests of the United States; and, to facilitate the strengthening and expansion of the United States space transportation infrastructure. The President's National Space Policy of 2010 and the National Space Transportation Policy of 2013 emphasizes the importance of DOT (FAA) and NASA coordination, and I will ensure that DOT supports these policies and is committed to encouraging and facilitating the growth of the U.S. commercial space sector.

Question 5. In July 2013, several changes to the truck driver hours of service (HOS) regulations promulgated by the Federal Motor Carrier Safety Administration (FMCSA) went into effect, including revisions to the "restart" provisions. Under the prior restart rule, a driver could reset his/her weekly on-duty clock to zero following completion of 34-consecutive hours off-duty. Under the new regulations, however, the restart period must be at least 34-consecutive hours off-duty, must include two consecutive nights (1-5 a.m.), and may only be used once per week.

Do you support the current hours of service regulations as the appropriate policy at DOT? How have DOT's policies under the hours of service regulations considered concerns from the short haul trucking industry that often moves perishable goods in the morning hours?

Answer. The Department strongly supports the new restart regulation that went into effect in 2013. For a vast majority of drivers, a restart is not mandatory; it is simply an option for drivers who reach their 60- or 70-hour limit in a short time. The Federal Motor Carrier Safety Administration believes that short-haul (local delivery) drivers rarely need to restart their 60- or 70-hour limit because they are on duty fewer hours per day and per week than long-haul (over-the-road) drivers, operate on a daily schedule governed by the needs of their customers, and return to their home terminal every day. As a result, they do not accumulate on-duty hours so rapidly that a restart would be needed. Under these circumstances, short-haul drivers can drive every night without a restart and without going off-duty between 1:00 and 5:00 a.m.

## Response to Written Question Submitted by Hon. John Thune to Dr. Tho Bella Dinh-Zarr

*Question.* One of the challenges we see in crash investigations is that witnesses are sometimes unwilling to provide complete information to investigators for fear of civil or criminal litigation. How can the NTSB protect the integrity of investigations and ensure it has the best information in light of the criminalization of accidents?

Answer. The foundation for any effective investigation is the ability to gather all factual material available to conduct thorough analysis, determine probable cause, and identify ways to prevent similar occurrences in the future. When involved parties fear civil or criminal litigation, it can hamper investigators' ability to gather essential information and can affect the integrity of a safety investigation. The NTSB's status as an independent agency ensures the integrity of its inves-

The NTSB's status as an independent agency ensures the integrity of its investigations. Its statutory authority precludes it from investigating alleged criminal activity, and it does not have regulatory or enforcement authority in any transportation mode. A hallmark of NTSB investigations is the sharing of factual information in each accident investigation between NTSB investigators and designated parties with technical expertise. This standard practice helps ensure that critical information is provided to those who require it during the course of an investigation.

Also, the NTSB strives to ensure the highest level of transparency in all its investigations. By providing a single voice and sharing real time factual information, outside parties can be assured that the agency's focus is purely on safety.

While the threat of criminal penalty may always be present, the NTSB's safety focus, transparency, and investigative process are effective in countering most negative impacts associated with criminalization, and if confirmed, I will work to ensure that this continues.

#### Response to Written Question Submitted by Hon. Marco Rubio to Dr. Tho Bella Dinh-Zarr

*Question.* One of the responsibilities you would have under the position which you have been nominated for would be to advocate for improvements in transportation safety. What are your priorities specifically for improvements to transportation safety on our highways and in our air space?

Answer. If confirmed, one of my top priorities would be to use data to determine more ways to prevent crashes and accidents. For example, the NTSB has investigated several accidents in which impairment played a role—impairment not only from substances but also from fatigue, distraction and other causes. Enhancing the NTSB's ability to collect and thoroughly analyze data on impairment-related transportation accidents can point to innovative ways to prevent deaths and injuries.

Next, after analyzing the data and gathering the information, it must be communicated in a clear manner to the American public. Using effective and creative ways to communicate can draw attention to these topics for the ultimate goal of saving more lives and preventing more injuries.

Substance impairment and distraction are highlighted on the NTSB's Most Wanted List (MWL) for 2014, which is a tool to draw attention to these issues and effect change. Also on the MWL and another one of my priorities is the goal of strengthening occupant protection, which can be vital after a crash has occurred, no matter what the mode. The NTSB's investigation of the Asiana flight 214 accident demonstrated that some passengers, who survived the plane crash, were badly injured because of accident forces, and one of the agency's safety recommendations called for more research to be conducted on ways to prevent these injuries.