A. BIOGRAPHICAL INFORMATION AND QUALIFICATIONS

1. Name (Include any former names or nicknames used):

Neil Andrew Jacobs Jr.

2. Position to which nominated:

Assistant Secretary of Commerce for Environmental Observation and Prediction

3. Date of Nomination:

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

[redacted]

5. Date and Place of Birth:

December 12, 1973. Colorado Springs, CO

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).

Jennifer Modliszewski, Research Associate, Duke University

[redacted]

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

B.S. Physics, 1996, University of South Carolina
B.S. Math, 1996, University of South Carolina
M.S. Atmospheric Science (Air-sea interaction), 2000, North Carolina State University
Ph.D. Atmospheric Science (Numerical modeling), 2005, North Carolina State University

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.

2013-Present, Chief Atmospheric Scientist, Panasonic Avionics Corporation (5000 employees).
2004-13, Director of Research and Business Development, AirDat, LLC (80 employees).

9. Attach a copy of your resume.

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 ten years.

I have never had a position in Federal, State, or local government.

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 ten years.

American Meteorological Society (AMS) Forecast Improvement Group (Chair 2015-Present; Lead, NWP 2012-14)
Federal Aviation Administration (FAA) Continuous Lower Emissions, Energy, and Noise (CLEEN)
World Meteorological Organization (WMO) Expert Team on Aircraft-Based Observing Systems (ET-ABO)

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.

American Meteorological Society; Forecast Improvement Group (Chair 2015-Present; Lead, NWP 2012-14)
World Meteorological Organization; Expert Team on Aircraft-Based Observing Systems
American Geophysical Union
American Meteorological Society
Gamma Beta Phi, National Honor Society
Geological Society of America
National Forensics League
Phi Beta Kappa, Honor Society
Pi Mu Epsilon, National Math Honor Society
Sigma Pi Sigma, National Physics Honor Society (President: 1993-1996, USC Chapter)
Sigma Xi, Honor Society
Durham YMCA
Greensboro Velo Club (Pro Cycling Team)
Rotary International
Trout Unlimited
*None of these restrict membership on the basis of sex, race, color, religion, national origin, age, or handicap.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, 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.

Pi Mu Epsilon, National Math Honor Society
Sigma Pi Sigma, National Physics Honor Society (President: 1993-1996, USC Chapter)
Gamma Beta Phi, National Honor Society
National Forensics League Scholarship
Phi Beta Kappa, Honor Society
Sigma Xi, Honor Society

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.

Invited lectures at government meteorological centers:

NCEP, Camp Springs, MD, *PWS global ensemble system*, 21 July 2016
UK Met Office, Exeter, UK, *PWS global model and data assimilation*, 13 July 2016
ECMWF, Reading, UK, *Assimilation of ABOs into a global modeling system*, 12 July 2016
UK Met Office, Exeter, UK, *Estimation of TAMDAR Error and Assimilation Experiments*, 27 Apr 2012
ECMWF, Reading, UK, *Utility of TAMDAR aircraft observations for NWP*, 26 Apr 2012
NCEP EMC, Camp Springs, MD, *Optimization of TAMDAR for NWP*, 23 Aug 2011
SMN, Mexico City, Mexico, *Operational forecasting with TAMDAR*, 23 Jun 2011
ECMWF, Reading, UK, *Unique aspects of aircraft data assimilation*, 10 Nov 2010

Publications:

Gao, F., X.-Y. Huang, N. Jacobs, H. Wang, 2017: Assimilation of Wind Speed and Direction Observations: Results from real observation experiments. *Tellus A*, in press.

Zhang, X., H. Wang, X.-Y. Huang, F. Gao, and N. Jacobs, 2015: Using Adjoint-Based Forecast Sensitivity Method to Evaluate TAMDAR Data Impacts on Regional Forecasts, *Advances in Meteorology*, Vol. 2015, Article ID 427616, 13 pg, 2015.

Gao, F., P. P. Childs, X.-Y. Huang, N. A. Jacobs, and J. Z. Min, 2014: A Relocation-based Initialization Scheme to Improve Track-forecasting of Tropical Cyclones. *Adv. Atmos. Sci.*, 31(1), 27-36.

Jacobs, N., D. Mulally, A. Anderson, J. Braid, P. Childs, A. Huffman, E. Wilson, and F. Gao, 2015: Recent Advancements in the TAMDAR Sensor Network Expansion, (IOAS-AOLS), AMS, Phoenix, AZ.

Jacobs, N.., F. Gao, P. Childs, X. Y. Huang, and H. Wang, 2015: Optimization of In-situ Aircraft Observations for Various Assimilation Techniques, (IOAS-AOLS), AMS, Phoenix, AZ.

Liu, Y., M. Xu, L. Pan, Y. Liu, N. Jacobs, and P. Childs, 2015: Implementation of a CONUS RTFDDA system with radar data assimilation for convection-resolvable analysis and prediction, (IOAS-AOLS), AMS, Phoenix, AZ.

Jacobs, N. A., D. J. Mulally, and A. K. Anderson, 2014: Correction of Flux Valve–Based Heading for Improvement of Aircraft Wind Observations. *J. Atmos. Oceanic Technol.*, 31, 1733–1747.

Jacobs, N. A., and J. E. Rex, 2013: Benefits and Utility of Tropospheric Airborne Meteorological Data Reporting, *Air Traffic Control Quarterly*, January, First Quarter, 2013.

Huang, X.-Y., F. Gao, N. A. Jacobs, and H. Wang, 2013: Assimilation of wind speed and direction observations: a new formulation and results from idealized experiments. *Tellus A*, 65, 19936.

Wyszogrodzki, A. A., Y. Liu, N. A. Jacobs, P. Childs, Y. Zhang, G. Roux, and T. T. Warner, 2013: Analysis of the surface temperature and wind forecast bias of the NCAR-AirDat operational CONUS 4km RTFDDA forecasting system, *Meteorol. Atmos. Phys.* , 121, 3-4.

Jacobs, N. A., P. Childs, M. Croke, A. Huffman, J. Nelson, J. T. Braid, Y. L. Liu, and X. Y. Huang, 2013: An update on the TAMDAR global network expansion, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, Austin, TX.

Nelson, J., J. T. Braid, A. K. Anderson, N. A. Jacobs, P. Childs, M. Croke, and A. Huffman, 2013: Alaska TAMDAR and the RTFDDA WRF QC System, ARAM, AMS, Austin, TX.

Huffman, A., P. Childs, M. Croke, N. A. Jacobs, and Y. L. Liu, 2013: Verification of the NCAR-AirDat operational RT-FDDA-WRF for the 2011 and 2012 spring convective seasons, IOAS, AMS, Austin, TX.

Gao, F., N. A. Jacobs, X. Y. Huang, and P. Childs, 2013: Direct assimilation of wind speed and direction for the WRF model, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, AMS, Austin, TX.

Richardson, H., N. A. Jacobs, P. Childs, P. Marinello, and X. Y. Huang, 2013: UAS observations and their impact on NWP during TUFT, ARAM, AMS, Austin, TX.

Gao, F., P. Childs, X. Y. Huang, and N. A. Jacobs, 2013: A new method for vortex relocation within a balanced flow field, NWP, AMS, Austin, TX.

Gao, F., X. Zhang, N. Jacobs, X.-Y. Huang, Xin Zhang, P. Childs, 2012. Estimation of TAMDAR Observational Error and Assimilation Experiments. *Wea. Forecasting*, 27, 4, 856-877.

Gao, F., X.-Y. Huang, N. Jacobs, 2012: The Assimilation of Wind Speed and Direction Based on WRFDA 3D-Var System, New Orleans, LA.

Zhang, Xiaoyan, X.-Y. Huang, T. Auligne, Xin Zhang, F. Gao, N. Jacobs, P. Childs. 2012. Evaluation of TAMDAR Data Impact on Forecast Error with WRFDA-FSO System, AMS, New Orleans, LA.

Gao, F., Xiaoyan Zhang, X.-Y. Huang, Xin Zhang, N. Jacobs, P. Childs, 2011: Preliminary Results of Directly Assimilating Wind Speed and Direction Based on WRFDA 3D-Var System. 12th WRF Users' Workshop, Boulder, Colorado, 20-24 June 2011.

Zhang, Y. Y. Liu, N. A. Jacobs, P. Childs, T. Nipen, T. T. Warner, L. D. Monache, G. Roux, A. Wyszogrodzki, W. Y. Y. Cheng, W. Yu, and R.- S. Sheu, 2012: Evaluation of the impact of assimilating the TAMDAR data on WRF-based RTFDDA simulations and the RTFDDA performance on predicting warm-season precipitation over the CONUS, *Wea. Forecasting*, under revision.

Liu, Y., T. Warner, S. Swerdlin, T. Betancourt, J. Knievel, B. Mahoney, J. Pace, D. Rostkier-Edelstein, N. A. Jacobs, P. Childs, and K. Parks, 2011: NCAR ensemble RTFDDA: real-time operational forecasting applications and new data assimilation developments. 24th Conference on Weather and Forecasting (WAF-NWP), AMS, Seattle, WA.

Huffman, A., N. A. Jacobs, M. Croke, P. Childs, X. Y. Huang, and Y. Liu, 2011: Verification and Sensitivity of the NCAR-AirDat Operational Forecasting Systems to TAMDAR Observations. 15th Symposium (IOAS-AOLS), AMS, Seattle, WA.

Jacobs, N. A., F. Gao, P. Childs, X. Zhang, X. Y. Huang, X. Zhang, M. Croke, and Y. Liu, 2011: Optimization of In-situ Aircraft Observations for Various Assimilation Techniques. 15th Symposium (IOAS-AOLS), AMS, Seattle, WA.

Jacobs, N. A., M. Croke, P. Childs, Y. Liu, X. Y. Huang, and R. DeJong, 2011: The Utility of TAMDAR in the NextGen-Oriented CLEEN Program. Second Aviation, Range and Aerospace Meteorology Special Symposium on Weather-Air Traffic Management Integration (ARAM), AMS, Seattle, WA.

Croke, M., N. A. Jacobs, D. J. Mulally, A. K. Anderson, J. T. Braid, P. Childs, A. Huffman, Y. Liu, and X. Y. Huang, 2011: Recent Advancements in the TAMDAR Sensor Network Expansion. 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS-AOLS), AMS, Seattle, WA.

Jacobs, N. A., P. Childs, M. Croke, Y. Liu, and X. Y. Huang, 2010: An Update on the TAMDAR Sensor Network Deployment, (IOAS¬AOLS), AMS, Atlanta, GA.

Jacobs, N. A., M. Croke, P. Childs, and Y. Liu, 2010: The Potential Utility of TAMDAR Data in Air Quality Forecasting, (IOAS-AOLS), AMS, Atlanta, GA.

Childs, P., N. A. Jacobs, M. Croke, Y. Liu, W. Wu, G. Roux, and M. Ge, 2010: An Introduction to the NCAR-AirDat Operational TAMDAR- Enhanced RTFDDA-WRF, (IOAS-AOLS), AMS, Atlanta, GA.

Croke, M., N. A. Jacobs, P. Childs, Y. Liu, Y. Liu, and R. S. Sheu, 2010: Preliminary Verification of the NCAR-AirDat Operational RTFDDA- WRF System, (IOAS-AOLS), AMS, Atlanta, GA.

Croke, M., N. Jacobs, P. Childs, and Y. Liu, 2009: The Utility of TAMDAR on Short-Range Forecasts over Alaska, (IOAS-AOLS), AMS, Phoenix, AZ.

Jacobs, N., P. Childs, M. Croke, Y. Liu, and X. Y. Huang, 2009: The Optimization Between TAMDAR Data Assimilation Methods and Model Configuration in WRF-ARW, (IOAS-AOLS), AMS, Phoenix, AZ.

Childs, P., N. Jacobs, M. Croke, Y. Liu, and X. Y. Huang, 2009: TAMDAR- Related Impacts on the AirDat Operational WRF-ARW as a Function of Data Assimilation Techniques, (IOAS-AOLS), AMS, Phoenix, AZ.

Jacobs, N., P. Childs, M. Croke, and Y. Liu, 2008: The Effects of Horizontal Grid Spacing and Vertical Resolution on TAMDAR Data assimilation in Short-Range Mesoscale Forecasts, AMS Annual Meeting, 12th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS).

Childs, P., N. Jacobs, M. Croke, and Y. Liu, 2008: TAMDAR-Related Impacts on the AirDat Operational WRF-ARW, AMS Annual Meeting, 12th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS).

Croke, M., N. Jacobs, P. Childs, and Y. Liu, 2008: PenAir-Based TAMDAR-Related Impacts on Short-Range Mesoscale Forecasts over Alaska, AMS Annual Meeting, 12th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface.

Jacobs, N. A., S. Raman, G. M. Lackmann, and P. P. Childs, Jr, 2007: The influence of the Gulf Stream induced SST gradients on the US East Coast winter storm of 24-25 January 2000. *International Journal of Remote Sensing*, 29, 6145-6174.

Jacobs, N. A., 2007: Potential benefits of tropospheric airborne meteorological data reporting (TAMDAR). *Managing the Skies*, 5, 3, 20-23.

Liu, Y., T. Warner, S. Swerdlin, W. Yu, N. Jacobs, and M. Anderson, 2007: Assimilation data from diverse sources for mesoscale NWP: TAMDAR-data impact. *Geophysical Research Abstracts*, 9, EGU2007-A-03109.

Jacobs, N. A., Y. Liu, and C.-M. Druse, 2007: The effects of vertical resolution on the optimization of TAMDAR data in short-range mesoscale forecasts, AMS Annual Meeting, 11th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS) 9.3.

Druse, C.-M., and N. A. Jacobs, 2007: Evaluating the benefits of TAMDAR data in aviation forecasting, AMS Annual Meeting, 11th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS) 9.5.

Liu, Y., N. A. Jacobs, W. Yu, T. T. Warner, S. P. Swerdlin, and M. Anderson, 2007: An OSSE study of TAMDAR data impact on mesoscale data assimilation and prediction, AMS Annual Meeting, 11th Symposium on (IOAS-AOLS) 5.20.

Jacobs, N. A., 2006: The effects of lower-tropospheric data resolution on short-range mesoscale model forecasts of surface temperatures during the summer season, Doc. and Tech. Note AirDat, LLC, 53 pp.

Jacobs, N. A., and Y. Liu, 2006: A comprehensive quantitative precipitation forecast statistical verification study, Doc. and Tech. Note AirDat, LLC, 25 pp.

Jacobs, N. A., Y. Liu, and C.-M. Druse, 2006: Evaluation of temporal and spatial distribution of TAMDAR data in short-range mesoscale forecasts, AMS Annual Meeting, 10th Symp. IOAS-AOLS.

Jacobs, N. A., S. Raman, and G. M. Lackmann, 2006: Sensitivity of East Coast winter storms to sea surface temperature gradients, AMS Annual Meeting, 14th Conf. Sea-Atmos.

Jacobs, N. A., G. M. Lackmann and S. Raman 2005: The combined effects of Gulf Stream–induced baroclinicity and upper-level vorticity on U.S. East Coast extratropical cyclogenesis. *Mon. Wea. Rev.*, 133, 2494–2501.

Jacobs, N. A., 2004: Porting MM5 to OS X: A guide to mesoscale modeling on a G5, *Mac OSX Hints*, 15, 97.

Jacobs, N., 2004: The Role of the Gulf Stream on Extratropical Cyclogenesis, Ph.D. Dissertation, Department of Marine, Earth, and Atmospheric Science, North Carolina State University, Raleigh, NC. 307pp.

Jacobs, N. A., S. Raman, G. M. Lackmann, and P. P. Childs, Jr, 2004: Role of the Gulf Stream on extratropical cyclogenesis, AMS Annual Meeting, 20th Conf. WAF/NWP pp. 318-322.

Raman, S., N. Jacobs, and M. Simpson, 2003: Numerical simulation of land-air-sea interactions during the northeasterly monsoon over Indian Ocean. INDOEX conf. Bangalore, India.

Jacobs, N. A., 2001: Latent and sensible heat fluxes over the Gulf Stream region during OMP. AGU, Boston, MA. Preprint pp 412-417.

Jacobs, N., 2000: Physical Oceanographic Processes and Air-Sea Interactions of extratropical cyclogenesis during the Oceans Margins

Program, Thesis, Department of Marine, Earth, and Atmospheric Science, North Carolina State University, Raleigh, NC. 178pp.

Jacobs, N., C. Petrusak, V. Connors, D. DeMaster, T. Hopkins, 1998: Earth System Science: Integration of Computer Modeling and Laboratory Studies. 25 conf GSA/ESSE, pp. 127-131.

Jacobs, N., V. Connors, T. Hopkins, D. DeMaster, B. Sweet, 1998: The Evolution of Earth System Science at North Carolina State University. 25 conf GSA/ESSE, pp. 417-421.

Jacobs, N., 1997: Modeling e-folding time decay of super-cooled semiconductor clocks, Thesis, Department of Physics, University of South Carolina, Columbia, SC. 234pp.

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.

Hearing: Leading the Way: Examining Advances in Environmental Technology (21 June 2017) House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Environment: Tropospheric airborne meteorological data reporting, conventional weather observations, and their impact in numerical models.

Hearing: Private Sector Weather Forecasting: Assessing Products and Technologies (8 June 2016) House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Environment: The advancing capabilities of numerical weather prediction in the weather enterprise. Public-private-academic partnerships, which for sustainable business models.

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?

At Panasonic, I lead a group of private-sector scientists and software engineers that have developed a global weather model that has skill on par/and better than the European Centre for Medium-Range Weather Forecasts (ECMWF) that produces the "*Euro*" model. This was accomplished on a meager budget that industry analysts claimed was impossible to even get the program off the ground. Our U.S.-based team at Panasonic Weather Solutions (PWS), mostly in North Carolina, proved the critics wrong. I have extensive experience with public-private-academic partnerships for weather model and observing system development. As a founding member of the PWS predecessor company AirDat, I directed the private side of the National Weather Service's very first atmospheric observational data acquisition as a subscription service. This is a great example of a successful public-private partnership that is still in existence today. I have past experience in satellite data and imagery from GOES to Radio Occultation (GPSRO), and understand the advantages of commercial weather data to augment our current data. This includes processing, quality control, and assimilating into forecast models. Having worked alongside NOAA and NWS employees and scientists as a scientific collaborator, I have earned their trust and respect. Additionally, I have great working relationships with key World Meteorological Organization member countries and their respective National Meteorological Service Directors. For the last three years, I have served as the Chair of the Forecast Improvement Group (FIG) for the American Meteorological Society. FIG members are NOAA, university, and private sector atmospheric scientists and meteorologists, who share the common interest of improving weather forecasting, modeling and prediction for the United States. Lastly, I want to serve my country. Growing up, I wanted to follow my father's career by serving in the US Air Force as a fighter pilot, but a medical condition prevented me from flying jets. When this opportunity presented itself, I thought that working for NOAA is another way to serve my country. The best way I can do that is by using my skills and expertise to return NOAA's National Weather Service to the world's most advanced weather forecasting and modeling agency.

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?

My responsibility, as the Assistant Secretary of Commerce for Environmental Observation and Prediction, will be to work closely with NESDIS, NOS, NWS and OAR, and provide leadership for these line offices to better manage their assets in their service to the American people. As duly confirmed by the Senate, and as political appointees, we have an obligation to comply with the direction and oversight provided by Congress to manage our agency to the best of our abilities and within the letter of the law. Panasonic Avionics Corporation, a division of Panasonic North America, provides avionics, engineering services, meteorological data and other technical services to numerous leading air carriers operating in dozens of countries and National Meteorological Service agencies across the world. As their Chief Atmospheric Scientist, the team I managed had business relationships across the world that handled complex transactions and weather-related industry challenges. Being an executive for a large entity requires the proper balancing and management of multiple agendas and budgets, working with many teams with different and sometimes opposing strategies, and always working closely with corporate counsel when their expert guidance would be required. The private sector works towards the bottom line; in government, the bottom line is serving the American people.

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

1) ***Weather Forecasting and Modeling*** -- Return NOAA NWS to the world's leader in global weather forecast modeling capability. The United States led the world in weather forecasting and modeling for decades, but has not kept pace with overseas competition, and is struggling to maintain the status of third most accurate global weather model among National Meteorological Services. As a matter of national pride, we will restore American technical superiority for this vital service for the country and our military serving around the world.

2) ***Increase Observational and Predictive Resource Capabilities*** – For example, in Hurricane Harvey, NWS did a great job, but data gaps still exist. One area for improvement is to increase our knowledge to better manage QPE, which stands for Quantitative Precipitation Estimation. It is a method of approximating the amount of precipitation that has fallen at a location or across a region, and is critical for everything ranging from water resource

management to flash flood prediction. QPE maps are compiled using several different data sources including radar estimates, manual and automatic field observations, and satellite data. Scientists at NWS-NCEP and OAR would agree that this process must be improved. A second area for improvement has already been addressed by Congress in HR 353. Specifically, the bill section introduced by Senator Richard Burr asked NOAA to identify the existing radar data gaps in the United States. That report, I understand, is being developed for Congress. Ending radar gaps is critical. We cannot have whole population areas underserved by geographical gaps in this basic observational coverage. The challenge that I will face will be to come back to Congress to discuss how much it will cost to provide this vital coverage to better protect our citizens. There are additional ways that we must improve our Observational and Predictive Capabilities, but we need to examine where costs savings might be realized within existing budgets, and to discuss with Congress tradeoffs that can improve operational efficiencies thereby enabling NOAA to better serve the American people.

3) ***Manage Satellite Costs*** -- The FY 2017 President's Budget Request for NESDIS was $2,303.7 million. This sum represents the largest portion of NOAA's annual budget. It is my understanding that NESDIS is due to release its new satellite architecture study that discusses where NESDIS plans to go in the decades ahead. It would be premature for me to second guess what NESDIS is planning; however, keeping in line with my second answer, NOAA needs to increase and improve both the data volume and data utility of its earth observation satellites, as well as ground stations, data storage, and dissemination capabilities. As the volume of data increases exponentially, the United States must invest in the proper infrastructure to manage the data, and develop cutting-edge software to extract maximum value from the data.

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 financial arrangements, deferred compensation agreements, or other continuing dealings with business associates, clients, or customers. I do have an IRA and 401k.

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 Department of Commerce agency ethics officials to identify any potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of my ethics agreement. I understand that my ethics agreement has been provided to the Committee. I am not aware of any potential conflict of interest other than those that are the subject of my ethics agreement.

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.

Four years ago, Panasonic Avionics Corporation contracted with a DC-based lobbyist to represent their interest in the successful passage of HR 2413, 1561 and finally 353, The Weather Research and Forecast Innovation Act of 2017. Congress passed HR 353 earlier this year and President Trump signed the bill in April creating Public Law 115-25.

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 my ethics agreement. I understand that my ethics agreement has been provided to the Committee.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group?

No.

If yes:
a. Provide the name of agency, association, committee, or group;
b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
c. Describe the citation, disciplinary action, complaint, or personnel action;
d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

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 or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation?

No.

If so, please explain.

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.

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.

(Nominee is to include this signed affidavit along with answers to the above questions.)

F. Affidavit

NEIL JACOBS being duly sworn, hereby states that he/she has read and signed the foregoing Statement on Biographical and Financial Information and that the information provided therein is, to the best of his/her knowledge, current, accurate, and complete.

Signature of Nominee

Subscribed and sworn before me this 10th day of October 2017.

Barbara Ann Murnane

Notary Public

BARBARA A. MURNANE
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires April 30, 2018