

SIMON P. WORDEN, PhD, Brig Gen, USAF (ret)

Brig. Gen. Simon P. Worden (retired) is currently serving as a Congressional Fellow with the Office of Senator Sam Brownback (R-KS). He is responsible for supporting the Senator on space and NASA issues. He was appointed as a Research Professor of Astronomy at the University of Arizona on 1 May 2004.

General Worden retired in 2004 after 29 years of active service in the United States Air Force. His final position was Director of Development and Transformation, Space and Missile Systems Center, Air Force Space Command, Los Angeles Air Force Base, Calif. In this position he was responsible for developing new directions for Air Force Space Command programs and was instrumental in initiating a major Responsive Space Program designed to produce space systems and launchers capable of tailored military effects on timescales of hours.

General Worden was commissioned in 1971 after receiving a bachelor of science degree from the University of Michigan. He entered the Air Force in 1975 after graduating from the University of Arizona with a doctorate in astronomy. Throughout the 1980s and early 1990s, General Worden served in every phase of development, international negotiations and implementation of the Strategic Defense Initiative, a primary component in ending the Cold War. He twice served in the Executive Office of the President. As the staff officer for initiatives in the George Bush administration's National Space Council, the general spearheaded efforts to revitalize U.S. civil space exploration and earth monitoring programs.

General Worden commanded the 50th Space Wing that is responsible for more than 60 Department of Defense satellites and more than 6,000 people at 23 worldwide locations. He then served as Deputy Director for Requirements at Headquarters Air Force Space Command, as well as the Deputy Director for Command and Control with the Office of the Deputy Chief of Staff for Air and Space Operations at Air Force headquarters. Prior to assuming his current position, General Worden was responsible for policy and direction of five mission areas: force enhancement, space support, space control, force application and computer network defense.

General Worden has written or co-written more than 150 scientific technical papers in astrophysics, space sciences and strategic studies. He was a scientific co-investigator for two NASA space science missions.

EDUCATION

1971 Bachelor of science degree in physics and astronomy, University of Michigan, Ann Arbor

1975 Doctor of philosophy degree in astronomy, University of Arizona, Tucson

1978 Squadron Officer School, Maxwell AFB, Ala.

1987 National War College, Washington, D.C.

1997 National Security Studies, Maxwell School of Citizenship and Public Affairs, Syracuse University, Syracuse, N.Y.

ASSIGNMENTS

1. May 1975 - October 1979, astrophysicist, Air Force Geophysics Laboratory, National Solar Observatory, Sunspot, N.M.
2. November 1979 - September 1983, Chief, Advanced Technology Division, Air Force Space Systems Division, Los Angeles AFB, Calif.
3. October 1983 - May 1986, Special Assistant to the director, Strategic Defense Initiative Organization, Department of Defense, and adviser, delegation to the negotiations on nuclear and space arms with the Soviet Union, Geneva, Switzerland
4. June 1986 - July 1987, senior policy analyst, Office of Science and Technology Policy, Executive Office of the President, and senior research fellow, National Defense University, Fort Lesley J. McNair, Washington, D.C.
5. August 1987 - August 1989, Crew Commander, Space Defense Operations Center, later, Chief, Special Operations Branch, U.S. Space Command, Cheyenne Mountain AFB, Colo.

6. September 1989 - September 1991, Director, Advanced Concepts, Science and Technology, National Space Council, Executive Office of the President, Washington, D.C.
7. October 1991 - November 1993, Deputy for Technology, Ballistic Missile Defense Organization, Washington, D.C.
8. December 1993 - July 1994, technical adviser to the special assistant for theater air defense, Headquarters U.S. Air Force, Washington, D.C.
9. August 1994 - November 1994, Director of Analysis and Engineering, Space Warfare Center, Air Force Space Command, Falcon AFB, Colo.
10. November 1994 - March 1996, Commander, 50th Space Wing, Air Force Space Command, Falcon AFB, Colo.
11. March 1996 - June 1997, Deputy Director of Requirements, Air Force Space Command, Peterson AFB, Colo.
12. July 1997 - September 1998, Deputy for Battlespace Dominance, Directorate of Operational Requirements, Deputy Chief of Staff for Air and Space Operations, Headquarters U.S. Air Force, Washington, D.C.
13. September 1998 - December 1999, Deputy Director for Operational Requirements, Deputy Chief of Staff for Air and Space Operations, Headquarters U.S. Air Force, Washington, D.C.
14. January 2000 - November 2000, Deputy Director for Command and Control, Deputy Chief of Staff for Air and Space Operations, Headquarters U.S. Air Force, Washington, D.C.
15. November 2000 - October 2002, Vice Director of Operations, Headquarters U.S. Space Command, Peterson AFB, Colo.
16. October 2002 - February 2004, Director of Development and Transformation, Space and Missile Systems Center, Air Force Space Command, Los Angeles AFB, Calif.
17. March 2004 - present, Congressional Fellow assigned to the office of Senator Sam Brownback (R-KS) on detail as a Research Professor of Astronomy from the University of Arizona

MAJOR AWARDS AND DECORATIONS

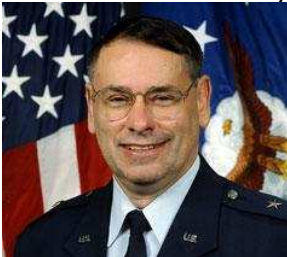
Defense Superior Service Medal with oak leaf cluster
 Legion of Merit with oak leaf cluster
 Defense Meritorious Service Medal with three oak leaf clusters
 Meritorious Service Medal

OTHER ACHIEVEMENTS

NASA Outstanding Leadership Medal
 Air Force Outstanding Research and Development Medal (2)

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 1, 1971
 First Lieutenant May 1, 1974
 Captain May 1, 1977
 Major Nov. 1, 1982
 Lieutenant Colonel April 1, 1986
 Colonel Oct. 1, 1989
 Brigadier General Sept. 1, 2000
 Retired from Active Duty, May 1, 2004



SIMON P. WORDEN – RECENT PUBLICATIONS

1. Tagliaferri, E., Spalding, R., Jacobs, C., Worden, S.P., and Erlich, A., 1994, Hazards due to Comets and Asteroids, Space Science Series, Tucson, AZ: Edited by Tom Gehrels, M.S. Matthews, and A. Schumann, Published by University of Arizona Press, p.199, "Detection of Meteoroid Impacts by Optical Sensors in Earth Orbit."
2. Treu, Marvin H., Worden, Simon P., Bedard, Michael G., Bartlett, Randall, K., 1998, Earth, Moon and Planets, 82/83, 27, "USAF Perspectives on Leonid Threat and Data Gathering Campaigns."
3. Worden, S.P., 1998, Proceedings of the Marshall Institute (Washington, DC: Marshall Institute), "Why We Need the Airborne Laser."
4. Brown, P., Campbell, M.D., Ellis, K.J., Hawkes, R.L., Jones, J., Gural, P., Babcock, D., Barnbaum, C., Bartlett, R.K., Bedard, M., Bedient, J., Beech, M., Brosch, N., Clifton, S., Connors, M., Cooke, B., Goetz, P., Gaines, J.K., Gramer, L., Gray, J., Hildebrand, A.R., Jewell, D., Jones, A., Leake, M., LeBlanc, A.G., Looper, J.K., McIntosh, B.A., Montague, T., Morrow, M.J., Murray, I.S., Nikolova, S., Robichaud, J., Sponder, R., Talarico, J., Theismeyer, C., Tilton, B., Treu, M., Vachon, C., Webster, A.R., Weryk, R., Worden, S.P., 1998, Earth, Moon and Planets, 82/83, 167, "Global Ground-Based Electro-Optical and Radar Observations of the 1999 Leonid Shower: First Results."
5. LeBlanc, A.G., Murray, I.S., Hawkes, R.L., Worden, P., Campbell, M.D., Brown, P., Jenniskens, P., Correll, R.R., Montague, T., and Babcock, D.D., 2000, Mon. Not. Roy. Ast. Soc., "Evidence for Transverse Spread in Leonid Meteors"
6. Hildebrand, A.R., Carroll, K.A., Balam, D.D., Cardinal, R.D., Matthews, J.M., Kuschnig, R., Walker, G.A.H., Brown, P.G., Tedesco, E.F., Worden, S.P., Burrell, D.A., Chodas, P.W., Larson, S.M., Spahr, T.B., and Wallace, B.J., 2001, 32nd Annual Lunar and Planetary Science Conference, Houston, TX, #1790, "The Near-Earth Space Surveillance (NESS) Mission: Discovery, Tracking, and Characterization of Asteroids, Comets, and Artificial Satellites with a Microsatellite."
7. Worden, S.P., and France, Martin, E.B., Comparative Strategy, 20, No 1, (Oct-Dec 2001), 32, "Towards an Evolving Deterrence Strategy: Space and Information Dominance."
8. Worden, S.P., 2001, Aerospace Power Journal, Vol XV, No. 1 (Spring 2001): 50-57, "The Air Force and Future Space Directions: Are We Good Stewards?"
9. Worden, S.P., 2002, United States Space Command Press Release, July 15, 2002, "Military Perspectives on the Near-Earth Object (NEO) Threat."
10. Worden, Simon P., and Shaw, John E., September 2002, Whither Space Power? Forging a Strategy for the New Century (Maxwell AFB, AL: Fairchild Paper)
11. Hawkes, R.I., Campbell, M.D., LeBlanc, A.G., Parker, L., Brown, P., Jones, J., Worden, S.P., Correll, R.R., Woodworth, S.C., Fisher, A.A., Gural, P., Murray, I.S., Connors, M., Montague, T., Jewell, D., and Babcock, D.D., 2002, Dust in the Solar System and Other Planetary Systems, Proceedings of the IAU Colloquium 181, Edited by

S.F. Green, I.P. Williams, J.A.M. McDonnell and N. McBride (Oxford: Pergamum), COSPAR Colloguia series, Vol 15., "The Size of Meteoroid Constituent Grains: Implications for Interstellar Meteoroids."

12. Brown, P., Spaulding, R.E., ReVelle, D.O., Tagliaferri, E., and Worden, S.P., 2002, Nature, 420, 294, "The Flux of Small Near-Earth Objects Colliding with the Earth."

13. Worden, S.P., 2002, Statement Before the House Science Committee, Space and Aeronautics SubCommittee, U.S. House of Representatives, Oct 3, 2002, "Near Earth Object Threat."

14. Worden, Simon .P. and Correll, Randall R., 2004, Defense Horizons, #40, "Responsive Space and Strategic Information," (Washington, DC: National Defense University)

15. Worden, Simon.P. and Johnson-Freese, Joan, 2004, Joint Forces Quarterly, Number 33, "Globalizing Space Security."