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**Karl F. Van Orden, Ph.D.**



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Dr. Karl F. Van Orden is the Senior Technologist for Decision Optimization at the Space and Naval Warfare Systems Center Pacific in San Diego, California. He is responsible for leading research and development in human factors, cognition and decision processes to improve the performance of warfighters working with complex Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems. Current areas of focus include defining and prototyping top level user interface requirements for the Future Surface Combatant class of ships, applying user-centered design principles to the Enterprise Space Battle Management Command and Control system, modeling Combat Information Center processes to understand where best to apply new designs and automation, and developing a contextualized operational picture for cyber defense protection teams. Dr. Van Orden was appointed to the scientific and professional cadre of senior executives in 2015.

Dr. Van Orden joined the Navy as a Medical Service Corps Research Psychologist in 1986 and held a variety of research and leadership positions while assigned to the Naval Medical Research Institute in Bethesda, MD; the Naval Submarine Medical Research Laboratory in Groton, CT; and two tours at the Naval Health Research Center in San Diego. From 1998 to 2001, he was assigned to the Space and Naval Warfare Systems Center Pacific conducting prototype command and control console development studies for improving operator interfaces and information management within the AEGIS shipboard air defense warfare system. He developed novel real-time workload measures and developed and patented a system to detect fatigue in operators. After retiring from active duty at the rank of Commander, Dr. Van Orden served as the Director of Research and Development at the Naval Health Research Center from 2006 to 2015. From 2007 through 2012, he worked to develop a strong portfolio in psychological resilience studies while serving as a Technical Development Agent for the Office of Naval Research's Human Performance, Training, and Education Program within the Expeditionary Maneuver Warfare Department.

Dr. Van Orden has received numerous military and civilian performance awards, including the Navy Superior Civilian Service Award in 2015. He is a member of the Association for Psychological Science, and the Human Factors and Ergonomics Society.

Dr. Van Orden received his Bachelor of Arts degree in Psychology from Syracuse University in 1982. He received his Master's degree in 1986 and his Ph.D. in Biological Psychology (visual perception and psychophysics) from Syracuse University in 1988.