Herman Otto ("H.O.") Lubbes, Jr.

H. O. Lubbes has been involved with computers for close to 50 years. During this time, he has seen many changes and the need for computer security grow and expand.

His experience has been with the Navy since 1968 when he worked for Naval Electronic Systems Command (NAVELEX) responsible for a number of Navy command and control systems including the Navy implementation of the World Wide Military Command and Control System, the Anti-Submarine Warfare Centers Command and Control System, the Ocean Surveillance Information System, and the Naval Warfare Gaming System.

In 1971, H.O. was approached by a representative of the Director of Naval Intelligence and asked to provide input to a Navy Instruction that would set Navy policy for ADP security and establish a program to support the policy. His work culminated in development of the instruction as well as ensuring that the new DOD Directive was implemented in all technical programs in the Navy. He developed a plan for responding to this task which included support necessary for research as well as on-site testing and technical evaluation.

Some of the other credits to his name include the management of the Secure Communications Processor (SCOMP) effort, the Advanced Command and Control Test Bed (ACCAT) Guard, the Message Flow Monitor, the LSI GUARD, the Military Message System, a Trusted Database Management System based on the ocean surveillance problem, and the certification effort for SACLANT and CINCIBERLANT CCIS.

He has been a member of various working groups such as the Electronic Information Security Panel and the Software Technology for Adaptable Reliable Systems (STARS) Joint Task Force. His involvement there led to recommending policy, procedures, and technical criteria that would ensure that the Navy Mission Critical Systems could be accredited. It also laid the foundations for the Computer Security Acquisition Management Guidebook (developed by Logicon under his direction and published in 1986) and the NRL Report: An Approach to Determining Computer Security Requirements for Navy Systems (co-authored with Carl Landwehr). Other contributions include his participation on the Computer Security/Software Integrity Panel of the Joint Logistics Commanders (JCL), and the Computer Resources Management Panel Software Workshop. This work led to provisions in DOD 2167A for high-assurance software.

Another of his accomplishments was the concept of and funding for the Certification and INFOSEC Engineering Laboratory (CIEL) - the purpose of CIEL was to understand how to construct and certify trusted multi-level application systems for the Navy through research and experimentation.

H.O. was a major founder of the Computer Assurance (COMPASS) Conference in the 80's and served on the Board of Directors until 1994. This international conference, held annually at NIST, focused on computer assurance bringing together experts in the computer security and safety assurance communities.

H.O. was an important technical reviewer for the first NSA Rainbow Book, the Orange Book – Trusted Computer System Evaluation Criteria. He reviewed and participated in many of the other Rainbow series books as well, and was involved in the evolution to the Common Criteria. He participated in the 1985 DOD Computer Security Center Invitational Workshop on Network Security (New Orleans). This workshop was key to developing the Trusted Network Interpretation (Network Evaluation Criteria) (Red Book) – the government's first attempt to take a more systems view of the evaluation criteria vs. an ADP "product" view. H.O. was on the Policy and Models Working Group for this workshop.

His overall influence in many of the early U.S. computer security guidance documents was significant. He worked within the Navy for 37 ½ years (until after "retirement" when he went to work for Trusted Information Systems (TIS)) and he was instrumental in defining Navy computer security guidance, especially for the Certification and Accreditation (C&A) of security systems and the broader concept of Mission Critical Computer Systems (MCCS). H.O. was a major player in the evolution of the DOD software development process standards, in particular, focusing on software engineering processes that supported the integrity and security of computer systems

Overall, H.O.'s foresight, management and guidance were instrumental in the development of security systems acquisition guidance for the Navy, also applicable to the broader security community.

He was also the Distinguished Lecturer at the 9th ACSAC in 1993 (and some of these biographical notes appeared in that year's conference proceedings).

[Text from 1993 ACSAC bio with updates from Bonnie Danner; photo - courtesy of the Lubbes family]