

September 13, 2000

Professor Harold Lewis
Professor Emeritus, Physics
University of California, Santa Barbara
Santa Barbara, California 93106

Dear Professor Lewis:

In my letter to you of June 1, 2000, I summarized the results of an initial meeting between Nuclear Regulatory Commission (NRC) staff and National Aeronautics and Space Administration (NASA) staff on the subject of probabilistic risk analysis (PRA). This meeting came about as a result of your suggestions regarding NRC and NASA collaboration on these interactions. This letter provides an additional update on the collaboration.

On June 27, 2000, NRC staff members responsible for risk assessment research, applications, and training participated in a small workshop with members of the NASA staff at NASA Headquarters. The workshop objectives were to (a) identify risk assessment and risk management areas in which collaboration between NASA and NRC is of mutual interest and (b) initiate collaborative activities in a selected number of these areas. The NRC and NASA presentations covered the risk assessment and risk management activities being performed in each agency, and areas of potential need. Although the NASA staff view NRC as being much further along in the performance and use of risk assessment, the NASA presentations reflected that they have conducted a significant amount of work in risk assessment over the last few years. Moreover, NASA's current administrator is a strong advocate of the use of risk assessment in decisionmaking.

The workshop was successful in identifying a number of technical areas of mutual interest to both NASA and NRC, including human reliability analysis (e.g., the treatment of errors of commission and work processes), digital instrumentation and control (I&C) system reliability, risk-informed decisionmaking, and the risk significance of cables (e.g., the effect of aging, fire response). The workshop was also successful in defining areas in which NASA could benefit from NRC work to support its developing risk assessment and risk management capabilities, such as PRA training and PRA software. NASA expressed specific interest in the SAPHIRE code developed under NRC sponsorship. NASA also expressed willingness to facilitate communications between NRC staff and the various NASA centers performing work in some of the technical areas indicated above, including digital I&C system reliability (NASA Goddard) and human reliability analysis (NASA Ames).

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I appreciate your interest in this important area. Please feel free to contact me if you have any questions. I look forward to seeing you at the Water Reactor Safety Information Meeting.

Sincerely,

/RA/

Richard A. Meserve