

# Preface

This Report has been prepared at the request of the National Aeronautics and Space Administration (NASA). It is the second phase of a two-phase effort intended to provide guidance to NASA concerning the health effects and mission impacts of space radiation exposure on the central nervous system (CNS) of crew members. The first phase of effort resulted in the National Council on Radiation Protection and Measurements (NCRP) Commentary No. 25, *Potential for Central Nervous System Effects from Radiation Exposure During Space Activities. Phase I: Overview*, which described the critical issues surrounding the potential short- and long-term consequences of space radiation on the CNS and laid the groundwork for a more comprehensive investigation that is the basis of this Report. This Report summarizes the steps and approaches needed to more fully understand the risk of CNS effects following radiation exposures in space and provides guidance for radiation protection, including risk management. NCRP has identified knowledge gaps regarding the implementation of a comprehensive and effective radiation safety program to protect astronauts against the potential for early and late CNS effects from space radiation.

This Report was prepared by Scientific Committee 1-24P2 on Radiation Exposures in Space and the Potential for Central Nervous System Effects (Phase II). Serving on Scientific Committee 1-24P2 were:

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\*The NASA observer was involved only to provide relevant information when requested by the Committee and did not participate in development or review of the conclusions and recommendations.