INSRB

The Interagency Nuclear Safety Review Board

What is the INSRB?

The INSRB is an interagency (DoD, DOE, DoS, DoT, EPA, NASA, NRC) Board that serves as part of the checks and balances of the Presidentially directed processes portfolio for launches of spacecraft containing space nuclear systems.

Where did INSRB come from?

The National Security Presidential Memorandum No. 20 (NSPM-20) signed in August 2019, created the INSRB. Along with the INSRB's creation, NSPM-20 also describes its membership, role, and key responsibilities.

What does the INSRB do?

The INSRB evaluates the quality of the nuclear safety analysis for missions that meet criteria specified in NSPM-20. In evaluating the quality of said analysis, the INSRB engages with missions early in the safety analysis process, after the conceptual design of the mission is generated, in order to promptly identify gaps for mission planners to address without creating unnecessary delays in the launch timeline. Before completion of the mission Safety Analysis Report (SAR), the INSRB advises the head of the sponsoring agency of any omissions or gaps that the INSRB has identified in analysis that is planned or underway, and the INSRB may provide recommendations for corrective action. The INSRB reports the culmination of its findings in a Safety Evaluation Report (SER). The INSRB does not approve the SAR, direct the Program, or make nuclear launch authorization decisions.

Was there something before the INSRB? 1961–2019

Yes, an interagency review of proposed launches of space nuclear systems always existed in some form since 1963. The early approaches to interagency review matured to a stable process and adopted the title of the Interagency Nuclear Safety Review Panel by 1975. In 1977, Presidential Directive/National Security Council Memo No. 25 (PD/NSC-25) codified the use of Interagency Nuclear Safety Review Panels in the Federal process.

For further information and/or questions:

contact: the INSRB Secretariat, Don Helton, *donald.m.helton@nasa.gov*
or see: *https://sma.nasa.gov/sma-disciplines/nuclear-flight-safety*

What are the INSRB's basic constructs?

While NSPM-20 assigns the INSRB's key responsibilities, it left specific matters of function and operation to the Board itself and its participating agencies. The INSRB created a Charter (available at: *https://sma.nasa.gov/sma-disciplines/nuclear-flight-safety*) which explains the Board's purpose, basic governance approach, organizational structure, approach to mission reviews, and so on.

What is the INSRB's approach?

The INSRB issued a "Playbook" (available at: *https://sma.nasa.gov/sma-disciplines/nuclear-flight-safety*) that outlines the Board's intent and functionality at a more detailed level, to promote openness and effectiveness in its activities. The Playbook provides detailed roles and responsibilities and addresses the INSRB's evaluation scope, evaluation process, and evaluation products. Amongst other things, it describes a 3-stage approach toward engagement with missions that acknowledges the changing needs as a mission moves from an early engagement setting to an active analysis and evaluation setting and culminates with a post-launch determination setting.

What's the difference between the Board and the INSRB Review Group?

When INSRB uses the term "Board" it refers to the standing (permanent) INSRB. In contrast, the term INSRB Review Group (IRG) refers to the set of INSRB members or alternates appointed to conduct a specific review (one from each agency, unless review group participation has been limited) once the Board's interactions with a potential mission sponsor progress to a point where standing Board interactions are no longer sufficient and Terms of Review agreement is necessary.

How does someone engage with the INSRB?

The INSRB encourages Government-sponsored missions to engage early via the INSRB member from their agency. Commercially-sponsored missions should engage with the Department of Transportation, via the Office of Commercial Space Transportation's preapplication process.