



HUMAN EXPLORATION & OPERATIONS
MISSION DIRECTORATE



AAS-25-152

Cumulative Distribution Overlap Technique for Artemis Mission Public Entry Risk Assessment

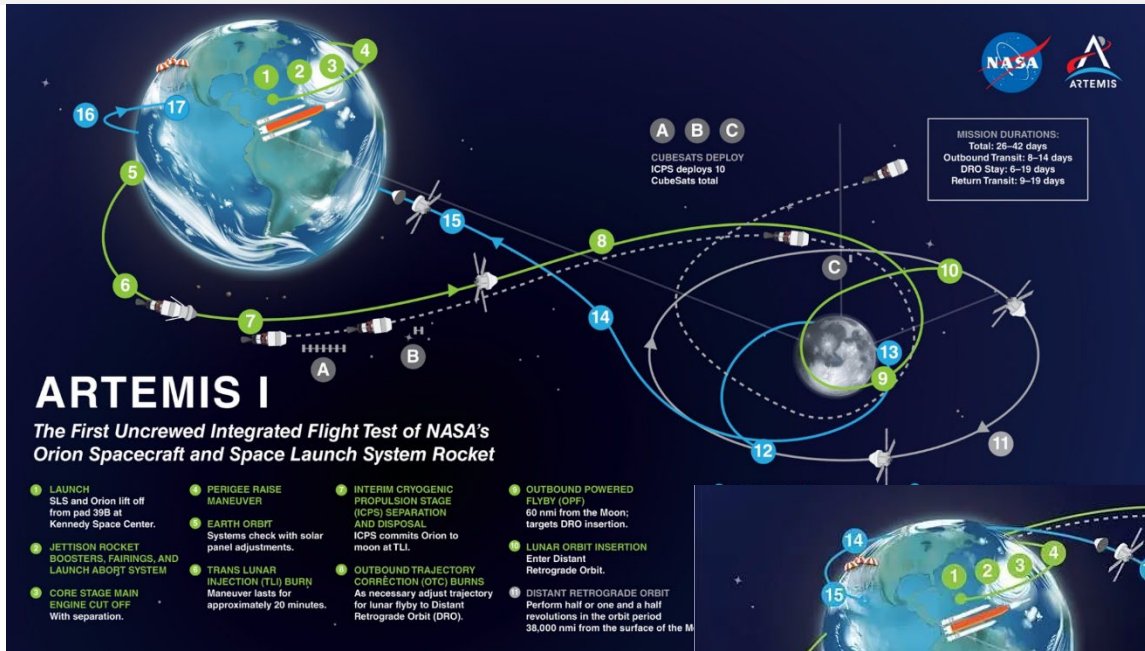
Greg Holt
Mark McPherson
Brandon Wood

NASA Johnson Space Center

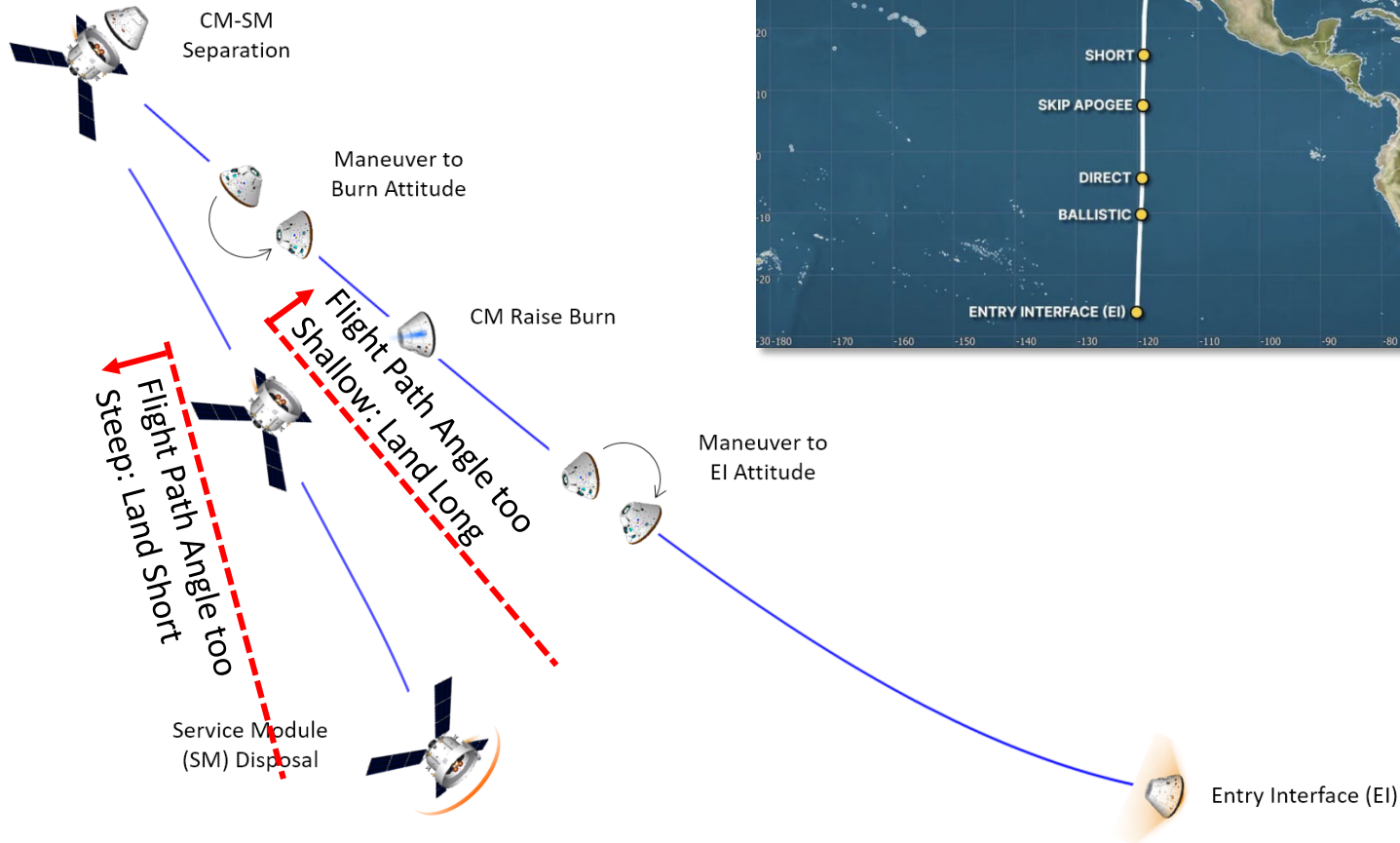
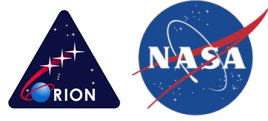
47th Annual AAS Guidance, Navigation and Control Conference

Feb 1-5, 2025

Artemis Mission Overviews

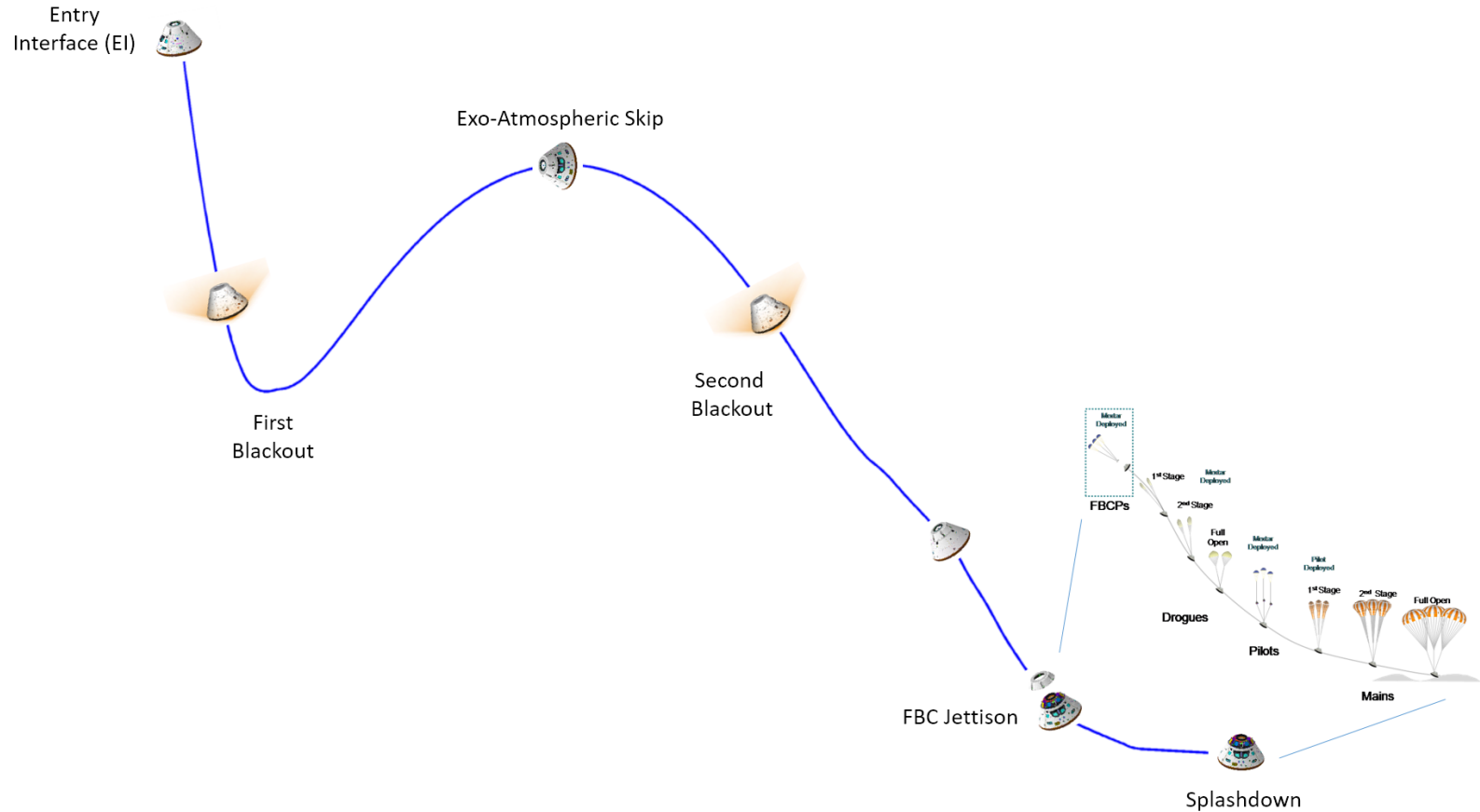


Artemis Entry Corridor – where does the Service Module go? Don't overshoot!

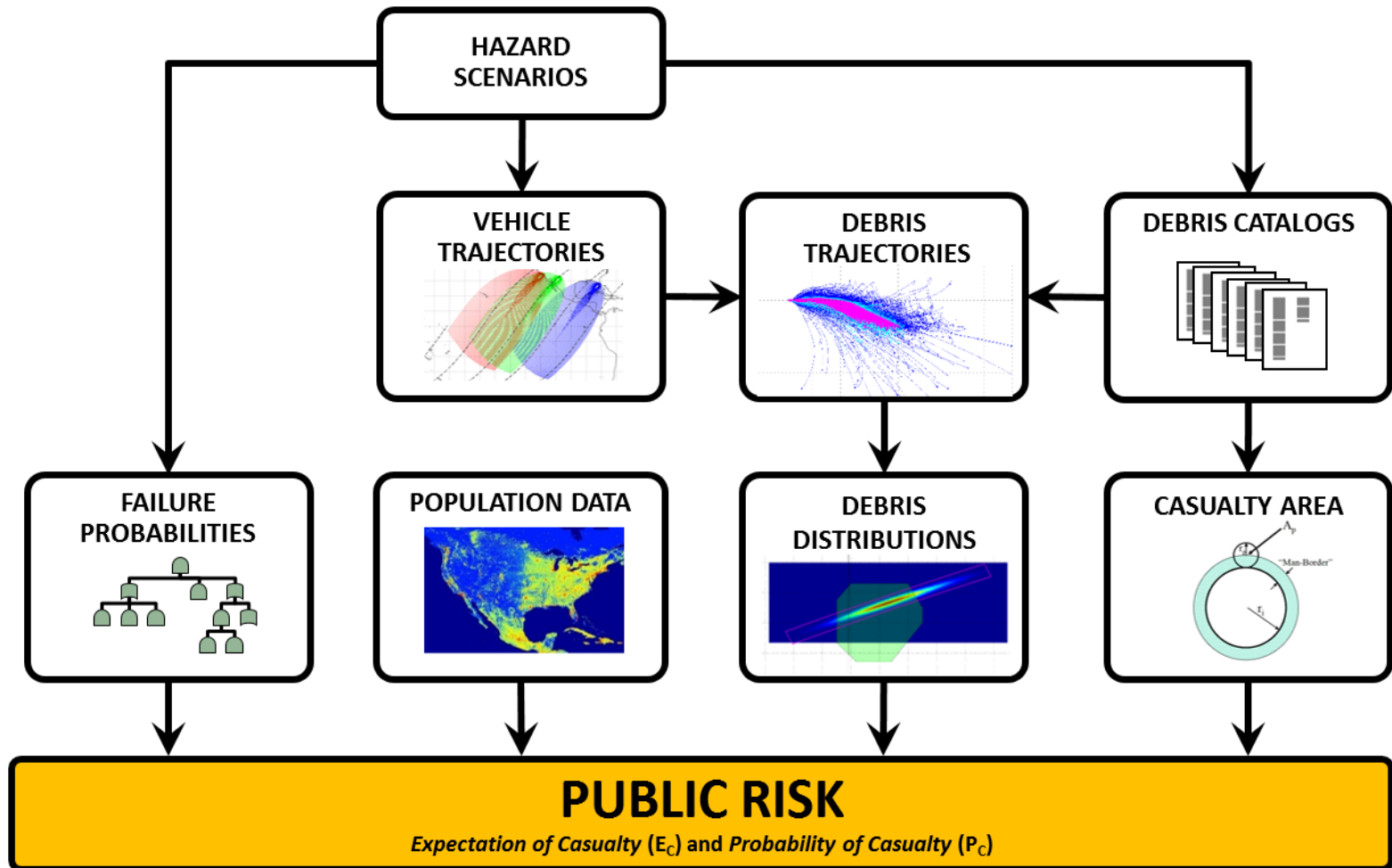


Courtesy: NASA TV

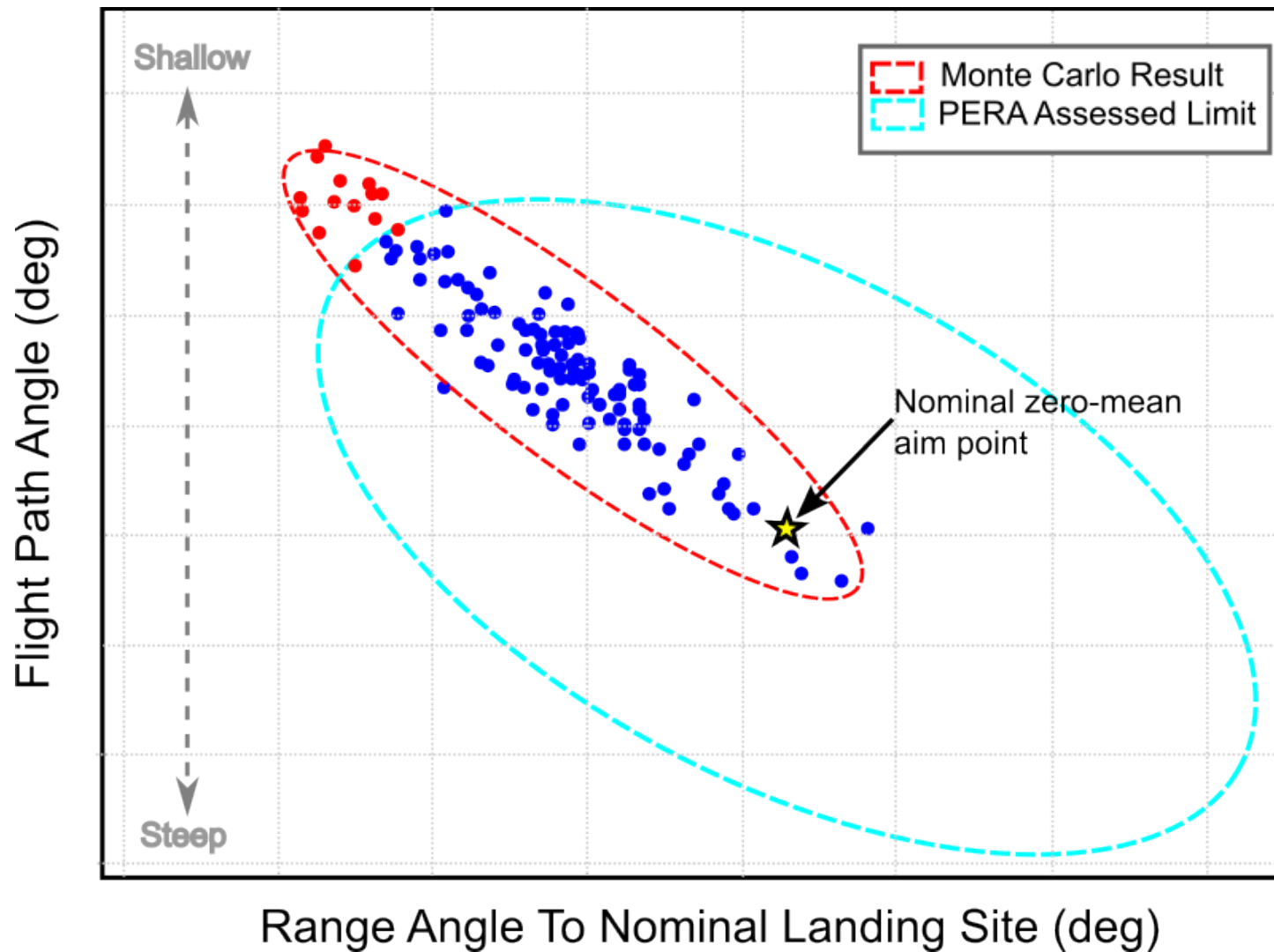
Entry, Descent, and Landing



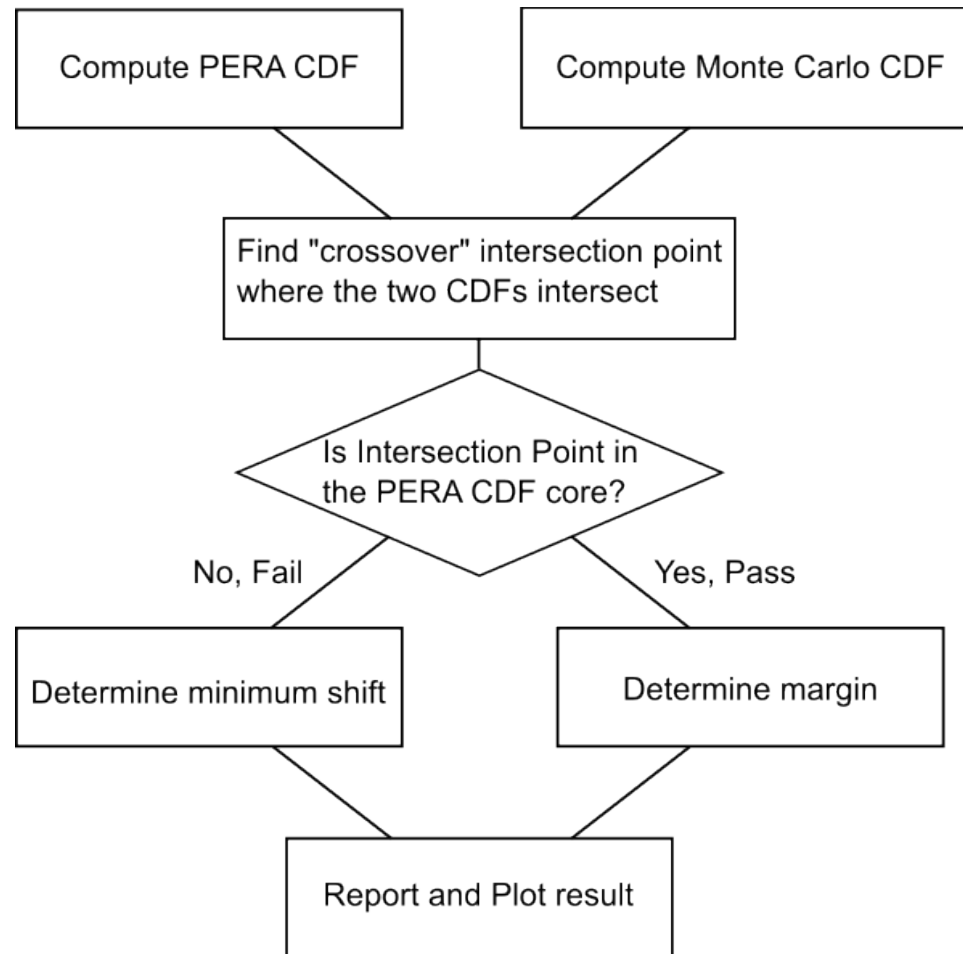
Public Entry Risk Assessment (PERA) Process



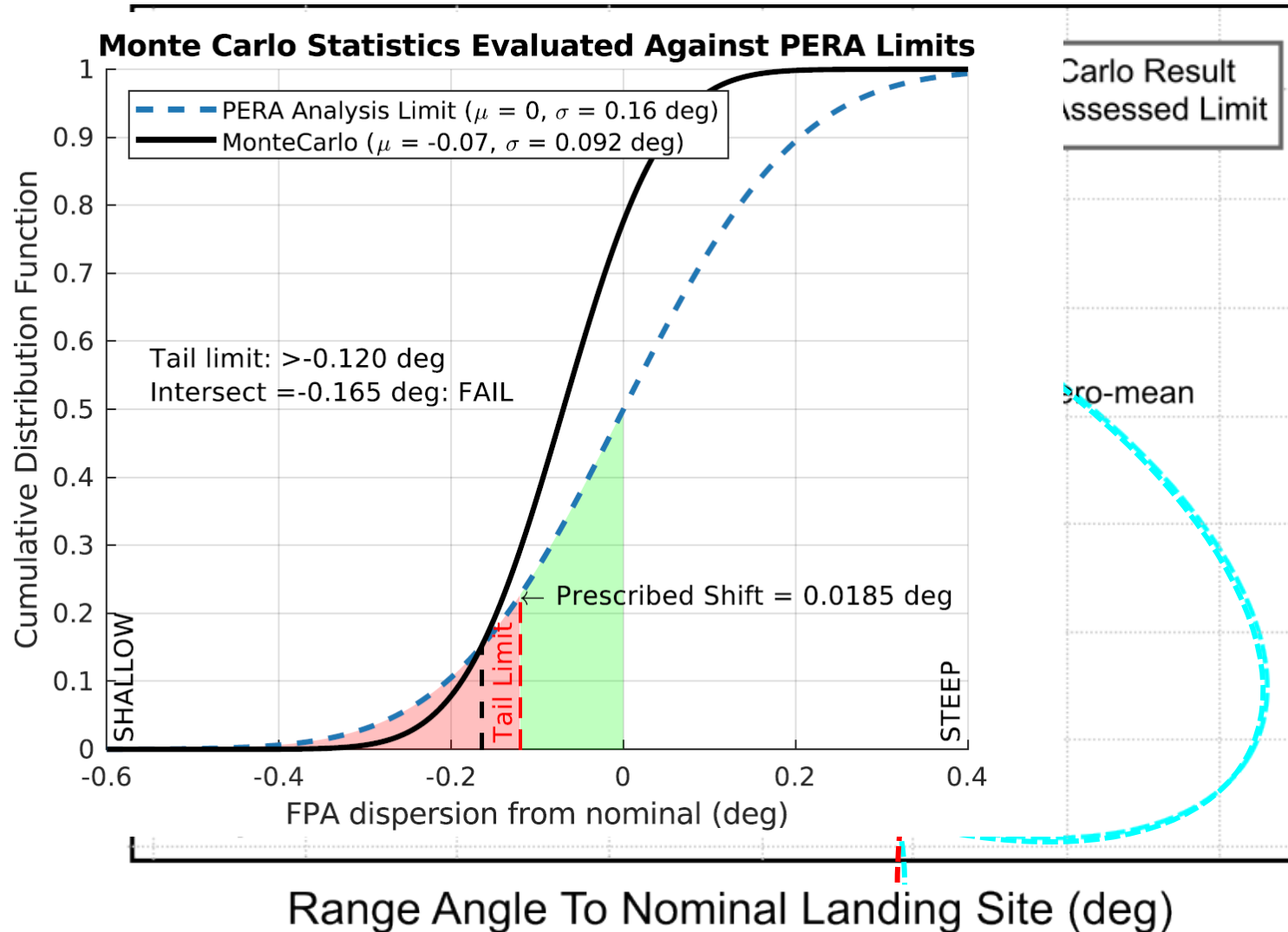
Entry Corridor Ellipses



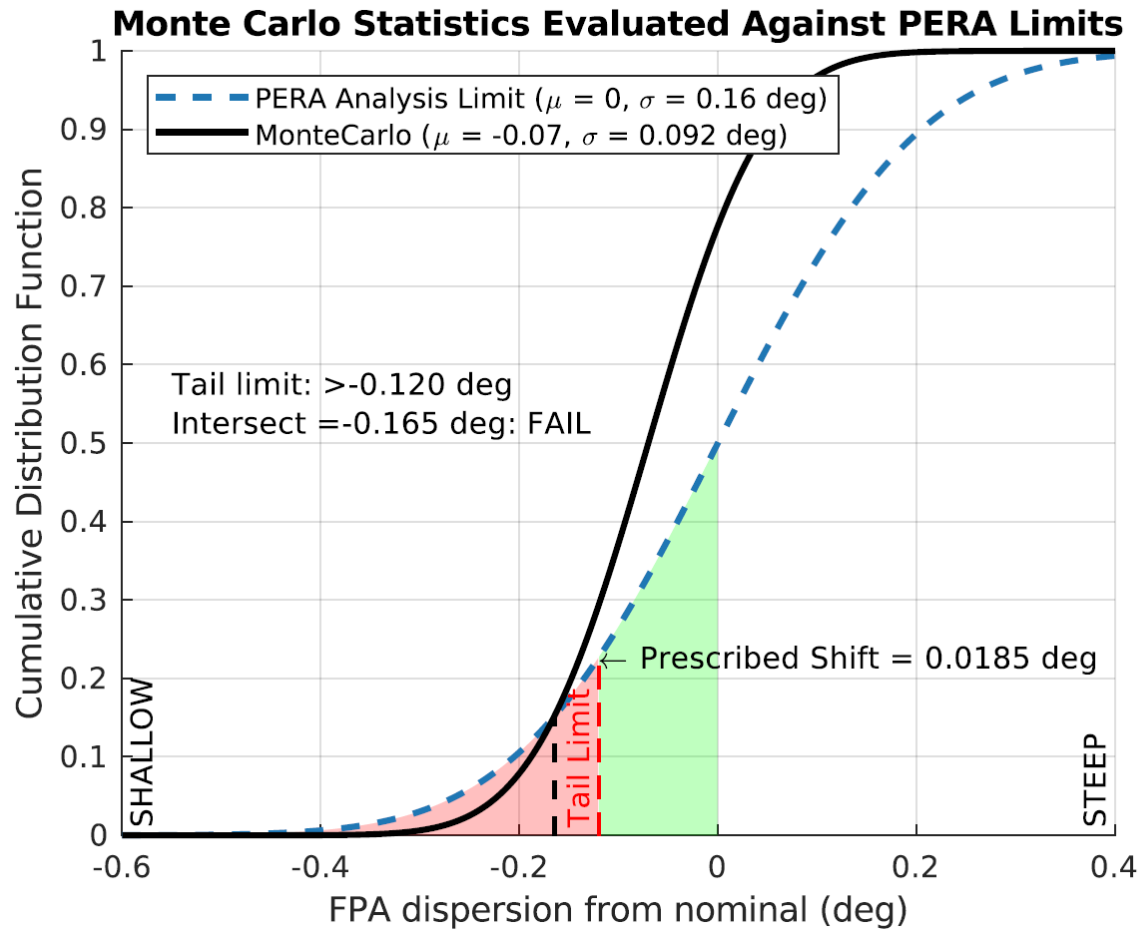
Flowchart



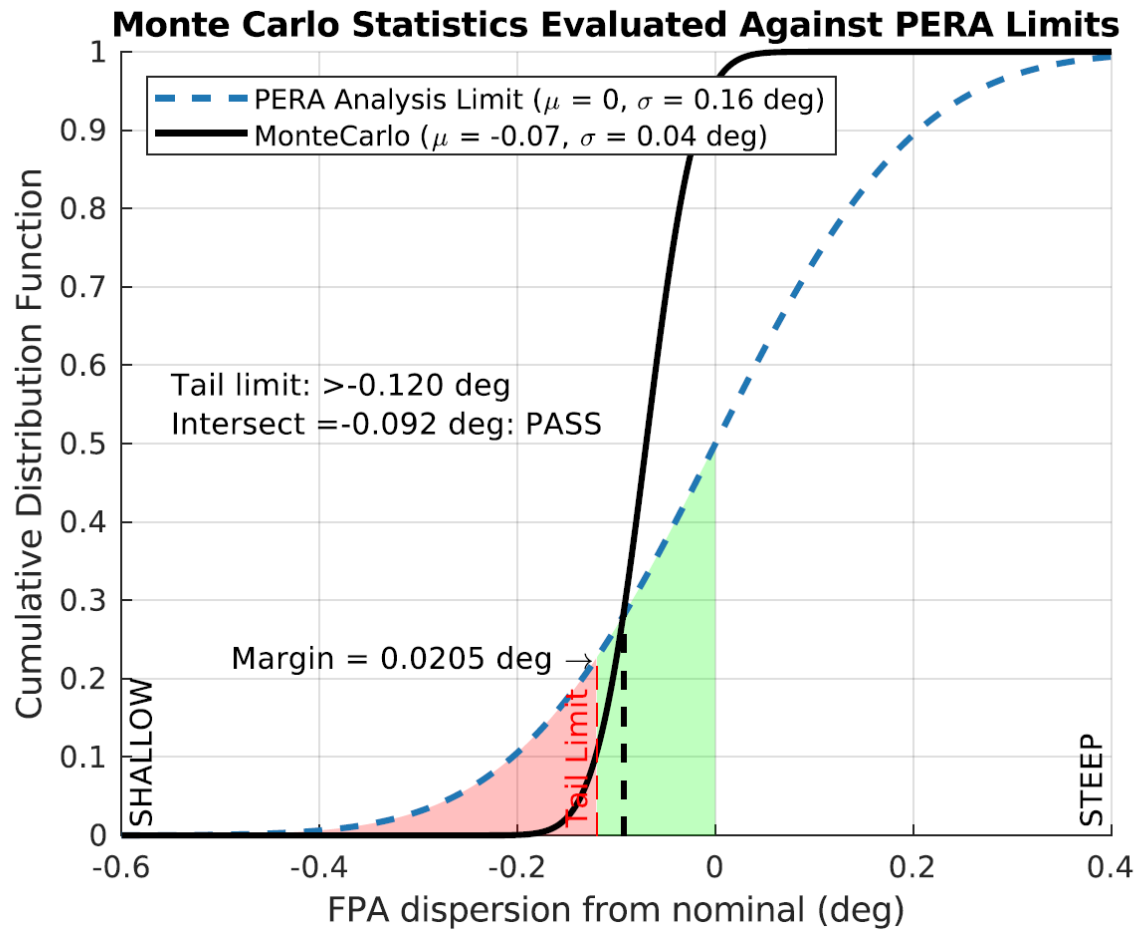
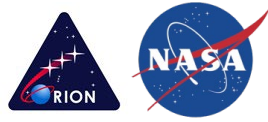
Cumulative Distribution Function



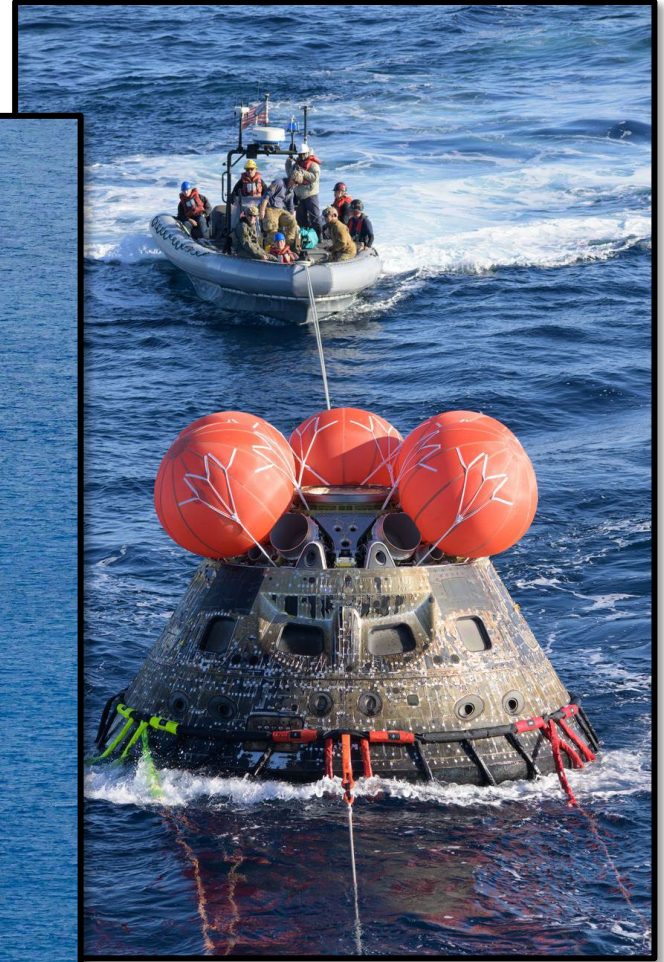
Failing



Passing



Splashdown



Questions

