

## **FTA Safety Characteristics (U)**

- **Accidental Criticality Precluded By Design Basis**
- **High Reliability First Stage**
- **Operation Only After First Stage Burn**
- **Short Run Time: Low FP Inventory**
- **Flight Over Water**



## **PROBABILITY OF IMPACTING NZ**

- **DETERMINE THE NOMINAL IIP AVOIDING ALL LAND MASSES (NO WIND OR OTHER PERTURBATIONS).**
- **INCLUDE WINDS, THRUST AND ISP ERRORS TO DETERMINE MAXIMUM LATERAL IIP BOUNDS.**
- **SHOW THE NOMINAL IMPACT FOOTPRINT FOR A 75-SECOND RUN TIME.**
- **INTEGRATE THE FRACTIONAL LAND AREAS THAT LIE WITHIN THE IIP FOOTPRINT OVER ALL FLIGHT TIME IN ORDER TO OBTAIN THE APPROXIMATE PROBABILITY OF IMPACTING NZ. THIS VALUE IS NORMALIZED BY THE TOTAL FLIGHT TIME.**

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### **RESULTS**

**NZ IMPACT PROBABILITY, GIVEN A FAILURE, IS 4.3E-04**

