

SAFETY

Commercial Space Launch Accidents



Federal Aviation
Administration

FY 2009 Performance Target

"No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities."

Flight Plan Objective and Performance Target

Objective 4: Ensure the safety of commercial space launches.

Performance Target: No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.

	FY 2005	FY 2006	FY 2007 ¹	FY 2008	FY 2009
Target	0	0	0	0	0
Actual	0	0	0	0	

¹ This measure was redefined in FY 2007 to include permitted experimental launches as well as licensed commercial launches. The targets and results for prior years are for the original measure.

Definition of Measure

Unit of Measure: Number of accidents resulting in fatalities, injuries, or significant property damage.

Computation: The number of accident occurrences is calculated.

Formula: Count of the number of occurrences.

Scope of Measure: This measure focuses only on commercial space launch or reentry activities licensed or permitted and monitored by the FAA. "Significant" property damage is defined as any damage estimated to exceed \$25,000 to property not associated with flight. On board crew members and space flight participants are NOT considered "uninvolved" members of the public.

Why the FAA Chooses this Measure

Protecting the uninvolved public during launch operations is an FAA safety mission objective. Commercial space transportation is the means by which payloads such as satellites and remote sensing devices are carried to orbit; these payloads have tremendous benefit to our society. Commercial space launch or reentry accidents can potentially have major catastrophic consequences, involving large losses of life and property. The uninvolved public expects to be protected from the potential dangers and hazards associated with commercial space launch and reentry activities. There has not been a single commercial space launch accident since the first DOT licensed launch took place in 1989, and DOT is working to keep this safety record perfect.

Source of the Data

The source of the data is the Office of the Associate Administrator for Commercial Space Transportation (AST). Specifically, AST monitors all licensed launch operations and maintains documented reports of each licensed event. These reports are generated by AST's assigned field inspectors and duty officers for each launch event. They include all relevant details pertaining to the outcome of the licensed launch or reentry operation, including the occurrence of any public fatalities, injuries, or property damage. AST will utilize other sources of data such as the launch vehicle operator, and federal, local and State government officials.

Statistical Issues

None.

Completeness

AST's Licensing and Safety Division maintains and verifies reports that an accident resulting from a licensed or permitted launch operation has occurred. The Division supports coordination with other federal agencies,

including the National Transportation Safety Board (NTSB) and the military, on any subsequent investigations.

Reliability

If an accident occurs, the FAA and the NTSB will complete official reports fully documenting circumstances associated with the event.