

# NASA refines satellite crash course, a bit

September 22 2011, by Kerry Sheridan

---

NASA on Thursday refined the crash course of a six-ton defunct satellite, saying it is likely to miss North America, though its exact landing spot remains unknown.

The careening space junk, which NASA insists poses little risk of hurting someone, is orbiting Earth every hour and a half, and is expected to fall sometime on Friday.

"Re-entry is expected sometime during the afternoon of September 23, Eastern Daylight Time. The satellite will not be passing over North America during that time period," NASA said its latest update issued Thursday at 7:44 am (1144 GMT).

"It is still too early to predict the time and location of re-entry with any more certainty, but predictions will become more refined in the next 24 to 36 hours."

More frequent updates are scheduled for 12, six and two hours before it lands.

All but 26 pieces of the Upper Atmosphere Research Satellite (UARS) are expected to burn up on re-entry into Earth's atmosphere.

The surviving chunks will include titanium fuel tanks, beryllium housing and stainless steel batteries and wheel rims. The parts may weigh as little as two pounds (one kilogram) or as much as 350 pounds (158 kilograms), NASA said.

Orbital debris scientists say the pieces will fall somewhere between 57 north latitude and 57 south latitude, which covers most of the populated world. The debris footprint is expected to span 500 miles (800 kilometers).

The risk to human life and property from UARS is "extremely small," NASA said, adding that in 50 years of space exploration no one has ever been confirmed hurt by falling space junk.

There is a one in 3,200 chance that someone, somewhere in the world will be hit, according to NASA.

The US Department of Defense is monitoring its path and keeping all relevant federal agencies informed, including the US space agency and the Federal Emergency Management Agency.

"No consideration ever was given to shooting it down," NASA spokeswoman Beth Dickey said.

The craft contains no fuel and so is not expected to explode on impact.

UARS is the biggest NASA spacecraft to come back in three decades, after Skylab fell in western Australia in 1979, but orbital debris experts say similar sized objects fall back to Earth about once per year.

NASA has warned anyone who comes across what they believe may be UARS debris not to touch it but to contact authorities for assistance.

Space law professor Frans von der Dunk from the University of Nebraska-Lincoln, College of Law told AFP that the United States will likely have to pay damages to any country where the debris falls.

"The damage to be compensated is essentially without limit," von der

Dunk said, referring to the 1972 Liability Convention to which the US is one of 80 state signatories.

"Damage here concerns 'loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons, natural or juridical, or property of international intergovernmental organizations.'"

However, the issue could get thornier if the debris causes damage in a country that is not part of the convention.

"The number of countries so far theoretically at risk is rather large, so there may be an issue if damage would be caused to a state not being party to the Liability Convention," he said.

(c) 2011 AFP

Citation: NASA refines satellite crash course, a bit (2011, September 22) retrieved 15 August 2024 from <https://phys.org/news/2011-09-nasa-north-america-satellite.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.