

MEMORANDUM TO: America's First Responder Community

FROM: FEMA Disaster Operations Directorate

SUBJECT: Satellite Re-entry

A U.S. satellite has malfunctioned and is expected to re-enter the Earth's atmosphere sometime between the last week of February and the first week of March. Right now it is in an uncontrolled descent and as a result, the exact date, time and place of impact cannot yet be determined. It is our plan to pass on more specific information with as much advance notice as possible. Please keep in mind that the probability that it will fall upon the United States is low, yet we must be ready.

The satellite weighs approximately 5,000 pounds and about 50 percent of it will probably survive re-entry. Of that amount, what is most concerning is the fuel tank. This tank contains approximately 1,000 pounds of hydrazine as the fuel source and will likely survive re-entry and be intact when it strikes the Earth. It may then rupture and release the hydrazine. There is also a fuel tank liner of beryllium compound. There is no radiation on board.

As our nation's first responders, some of you may find yourself dealing with this issue within your community and response area. This will essentially be a hazardous material (HAZMAT) event that you will need to deal with, the same as if there was a chlorine or ammonia leak or spill you had to respond to. Hydrazine is a very dangerous chemical but no more so than many of the other substances that travel on the rails and

highways of America every day for which you train and prepare to respond.

The Department of Homeland Security, led by the Federal Emergency Management Agency (FEMA), has developed an operations plan to support you in this response. It has been built collaboratively with the Department of Defense and other members of our federal interagency community. We have had the support of the Department of Transportation, the Environmental Protection Agency, the Department of Health and Human Services, the National Guard Bureau, Customs and Border Protection, and a host of other federal agencies.

We will have six Federal Joint Interagency Task Forces located around the country ready to deploy the moment we know the impact area, responding to assist you in your role of immediate consequence management. As you know, we follow the National Incident Management System (NIMS) / Incident Command System (ICS) as our incident management framework.

Therefore, we want to make it clear that our response will be in support of the local incident commander as part of the local Unified Incident Command structure (more at <http://www.fema.gov/nrf>).

To help you prepare for a response to this highly unlikely situation, we have developed a First Responder Guide seen at the link below. It contains information to help you prepare for a possible deployment should elements of this satellite come down in your area. More information will become available as this situation develops; however, we wanted to give you what details we can so you can begin to plan for the "what ifs" as they relate to your community. This is the time to work with your other

local first response agencies to develop a plan of immediate action. We will be there to support you, in great numbers if necessary, but as with all emergency response situations, the first few hours will require your readiness until state and federal help arrives. The First Responder Guide can be seen at:

[http://www.usfa.dhs.gov/downloads/pdf/FEMA\(underscore\)ERG\(underscore\)Responder\(underscore\)Guide\(underscore\)Space\(underscore\)Object.pdf](http://www.usfa.dhs.gov/downloads/pdf/FEMA(underscore)ERG(underscore)Responder(underscore)Guide(underscore)Space(underscore)Object.pdf).

You will be receiving additional information through your state emergency management and homeland security agencies.

Working with the FEMA regions, they will help you prepare. On behalf of our nation, I thank you in advance for your service to your country.

NOTE: Considering that the satellite contains large amounts of toxic hydrazine (anhydrous), the following links may be useful for preparation purposes:

<http://physchem.ox.ac.uk/MSDS/HY/hydrazine.html>

<http://cameochemicals.noaa.gov/chemical/5019>.

Reporting Notice

DHS and the FBI encourage recipients of this document to report information concerning suspicious or criminal activity to DHS and/or the FBI. The DHS National Operation Center (NOC) can be reached by telephone at 202-282-9685 or by e-mail at NOC.Fusion@dhs.gov.

The FBI regional phone numbers can be found online at

<http://www.fbi.gov/contact/fo/fo.htm>.

For information affecting the private sector and critical infrastructure, contact the National Infrastructure Coordinating Center (NICC), a sub-element of the NOC. The NICC can be reached by telephone at 202-282-9201 or by e-mail at [NICC\(at\)dhs.gov](mailto:NICC(at)dhs.gov).

When available, each report submitted should include the date, time, location, type of activity, number of people and type of equipment used for the activity, the name of the submitting company or organization, and a designated point of contact.