## **The IGMASS Program**

Here is the script of a <u>video</u> produced by Russia's International Global Aerospace Monitoring Space System, and shown, courtesy of IGMASS, at the Schiller Institute conference March 23. It originally appeared on the Russian TV-Center program Popular Science, on Jan. 26, 2012.

Good morning, dear viewers! Yesterday I visited a place here in Moscow, where on the seventh floor of one building, Earth monitoring is done "from above" and online. If somebody asks for help, a red dot appears on the globe. Then the watchers zoom in on the image, contact some lower-ranking rescuers, and help is on the way to the victims.

Yuri Urlichich, Director of Russian Space Systems: "An airborne buoy belonging to the U.S.A. has been switched on. This is likely an actual distress signal, which we hope will be received by the relevant emergency agency, so it can launch a rescue operation and save lives."

That's how the GLONASS [Global Navigation] Satellite System works at present.

But our story today is not just about how global positioning satellites can help save individual ships or aircraft. We're going to talk about saving the world. The IGMASS project.

IGMASS stands for International Global Monitor-

ing Aerospace System. This means the whole planet coming together to deal with ever more frequent natural and technological disasters.

How can we prevent the inevitable? There's only one way: forecasting.

Alexander Perminov, director, IGMASS international implementation committee:

"Recently, more and more people have died around the world from disasters, like floods and tsunamis. This has happened mainly in natural disasters, and from some disasters caused by technology. In the past 40 years, you have not only the deaths of people, which of course is the most important thing, but also economic damage, totalling an estimated \$1.5 trillion."

Three levels of monitoring—ground-, air-, and space-based—provide comprehensive data on approaching problems.

If the Japanese had known on March 11, 2011, how accurate our Far East forecasting sensors were, they might have been able to avoid one of the most serious radiation accidents ever.

The forecasts of Russian scientists using IGMASS began to be taken more seriously after this event.

"Now Russian scientists have issued a forecast for the region of Turkey, the Caucasus, and the Black Sea, and into our own country along the same ridges, as far east as Lake Baikal. Most of these forecasts have been confirmed."

Of course the IGMASS system directs its dozens of satellite eyes not only at Earth. It is also our anti-asteroid shield in space.

The objective: to discover asteroid threats, calculate the time and place of impact, and neutralize the interloper.

IGMASS can also guard against space clutter. Already, crews on the International Space Station have to maneuver to stay out of the way of pieces of space trash.

The other important mission of IGMASS is to follow our main celestial body. Observing solar activity is an important part of making Earth forecasts. That's the IGMASS system in all its glory. It has been partially tested already.

Upcoming plans include finding customers; reporting to the APEC [Asia Pacific Economic Cooperation] summit in Vladivostok [September 2012]; and developing IGMASS's own satellites.

That's how to save the world, in three steps.

Translated by Rachel Douglas.