

Drifting satellite threatens US cable programming

May 11 2010, By MICHAEL WEISSENSTEIN, Associated Press Writer

(AP) -- A TV communications satellite is drifting out of control thousands of miles above the Earth, threatening to wander into another satellite's orbit and interfere with cable programming across the United States, the satellites' owners said Tuesday.

Communications company Intelsat said it lost control of the Galaxy 15 satellite on April 8, possibly because the satellite's systems were knocked out by a <u>solar storm</u>. Intelsat cannot remotely steer the satellite to remain in its orbit, so Galaxy 15 is creeping toward the adjacent path of another TV communications satellite that serves U.S. cable companies.

Galaxy 15 continues to receive and transmit satellite signals, and they will probably overlap and interfere with signals from the second satellite, known as AMC 11, if Galaxy 15 drifts into its orbit as expected around May 23, according to the two satellite companies.

AMC 11 receives digital programming from <u>cable television</u> channels and transmits it to all U.S. <u>cable networks</u> from its orbit 22,000 miles (36,000 kilometers) above the equator, SES World Skies said. It operates on the same frequencies as Galaxy 15.

"That fact means that there is likely to be some kind of interference," Yves Feltes, a spokesman for AMC 11 owner SES World Skies, told The Associated Press. "Our aim is to bring any interference down to zero."

He would not name any of the cable television channels or providers that



could be affected or say how long the interference could last.

Galaxy 15 is floating over the Pacific Ocean slightly to the east of Hawaii, said Emmet Fletcher, space surveillance and tracking manager for the Space Situational Awareness Programme at the <u>European Space Agency</u>, an 18-nation consortium.

He said Galaxy 15 was highly unusual because it continued to send out television signals, unlike other malfunctioning satellites that automatically went into complete shutdown when their navigational systems malfunctioned. A spokesman for the satellite's manufacturer, Orbital Sciences Corp., did not return a phone call seeking comment.

The dead satellites still are a threat to other satellites, but less of one than Galaxy 15 poses, Fletcher said.

"They'll just cruise around the geobelt, drifting wherever they go, potentially causing havoc, when you lose control of them," he said.

The geobelt is the relatively narrow band of space where satellites can move in orbits that allow them to appear stationary in the sky in relation to specific points on earth.

Feltes, the SES spokesman, said one option to prevent interference with U.S. television would be using AMC 11's propulsion system to shift that satellite about 60 miles (100 kilometers) away to an orbit that's still within its carefully prescribed "orbital box" but as far away as possible from Galaxy 15.

He said SES had other strategies under consideration but declined to provide details.

"We have all of our technicians, all of our specialists on this case," he



said.

Both companies said there was no risk of an actual collision between the two satellites in space.

Intelsat said it was analyzing signals from Galaxy 15 daily in order to predict its trajectory and was trying to figure out if it can shut down the satellite's transmission so it would not interfere with AMC 11.

Dianne VanBeber, a spokeswoman for Intelsat, said cable companies could also adjust their equipment in order to minimize any interference.

She said satellites like Galaxy 15 today cost \$250 million to build, launch and insure but it probably cost less when it was launched in 2005.

Feltes said the two companies, both based in Luxembourg, were cooperating closely.

"They have tried numerous things to regain control of the <u>satellite</u> or to have it finally shut down," he said. "It needs some collaboration to bring the impact of this failure to an absolute minimum."

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