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**Satellite Interference on Increase,
Exacting Greater Financial Toll on Operators and Users
According to Major Industry Group**

Radio frequency interference (RFI) is a global problem that exacts an ever-increasing financial toll on satellite operators and users; it has become a quality of service issue that relates directly to the satisfaction of satellite service customers. Frequency interference coordination and resolution requires about 5% of a satellite operator's manpower, which is typical for most satellite companies. In addition to the expended manpower, satellite transponder resources are compromised during RFI investigations, and can even be permanently disabled when the origin of an interference source cannot be located.

Satellite News Gathering (SNG) trucks, DBS and Internet broadband services and VSAT networks are the types of thin route services most typically associated with signal interference. For example, SNG truck operators are typically responding to a breaking news story and have orders to get the signal back to the station as soon as possible. In the haste of meeting tight deadlines important steps may be overlooked, such as verifying that the transmission is on the correct frequency, polarization or satellite. An additional problem related to SNG operators is that they only require a license to drive the truck and may be inexperienced when it comes to radio transmissions.

In addition to minimally trained operators, other factors contributing to interference are the increasing number of uplinks, 2⁰ satellite spacing, cross-polarization misalignment, less robust equipment design, and deliberate interference. Regrettably too, there are a certain percentage of RFI incidents that go unidentified.

The Satellite Users Interference Reduction Group (SUIRG) is an international assembly of parties with representation from both the private and public sectors organized to combat the increasing and costly problem of satellite RF interference. Members disseminate information and actively pursue programs to reduce radio frequency interference incidents. Formed over ten years ago as an informal group working to reduce radio interference, SUIRG incorporated as a 501(c) (6) trade association in September 2003. The Group's membership is comprised of satellite operators, users, up linkers, service providers, equipment vendors and other organizations with a stake in combating radio frequency interference.

Supporting the global nature of interference problems, SUIRG's statistics show a majority of interference incidents occurred in the Atlantic Ocean Region (AOR) because that is the highest utilized region although the other ocean regions, Indian Ocean Region (IOR) and Pacific Ocean Region (POR) have their share of interference incidents.

Within the Pacific Ocean Region (POR) there is a lack of unity among satellite operators, which is perhaps to be expected in a region comprising 63 governments. This translates to 63 regimes, each with their own regulations, experience and skill requirements for satellite operations, whether on the ground or in the sky. By comparison, North America only has three regimes. In the POR, satellite engineering skills range from excellent to apprentice; installation crews are not always properly equipped or trained, and language barriers are common, despite the widespread use of English. Asia is also saturated with satellite operators, which means intense competition and frequently uncooperative inter-operator relationships at the operational level.

Interference costs each major satellite operator millions of dollars a year. SUIRG's objective is to stop interference before it starts, utilizing a number of remedies, among them: signal Identification, which involves working with uplink equipment vendors to modify their equipment to provide a unique ID for cross-reference in a database when interference occurs; uplink training, procedures and certification; improved detection and identification tools, and continuous sharing of information and solutions among the SUIRG membership.

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For additional information about SUIRG and its activities visit the web site at www.suirg.org or call in the USA +1-941-575-1277.