WRITTEN STATEMENT OF
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TO THE
FEDERAL COMMUNICATIONS COMMISSION'S
INDEPENDENT PANEL REVIEWING THE IMPACT OF
HURRICANE KATRINA ON COMMUNICATIONS NETWORKS

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INTRODUCTION

Good morning, Madam Chairman and esteemed colleagues.

My name is Carson Agnew and I am Executive Vice President of Mobile Satellite Ventures ("MSV"), a mobile satellite network operator that participated directly in the relief efforts after Hurricane Katrina.

Before I begin, I would like to say that it is an honor to participate on this panel and I applaud FCC Chairman Martin and the Commission for convening this group. I hope our output helps move forward the public policy debate on how to improve communications in the times of national emergencies.

I have been asked to talk briefly about two topics:

- Katrina's impact on my company's or industry's infrastructure, and
- Issues for this panel to focus on deriving from this experience.

IMPACT OF HURRICANE KATRINA ON OUR INDUSTRY'S COMMUNICATIONS INFRASTRUCTURE

To understand the impact of Hurricane Katrina on the mobile satellite industry, you need to understand that most of our infrastructure is invisible to the user. The satellites are thousands of kilometers in space. The gateway earth stations that connect to the public or private networks

are located at various places in the country. Usually, a satellite can communicate with more than one gateway and a gateway communicates with more than one satellite.

Network Issues

As a result, if you ask what happened to our infrastructure as a result of Hurricane Katrina the short answer would be: "nothing." The satellites kept right on communicating with gateways outside the affected area. All communications, including voice, data and two-way radio were carried without disruption.

Of course, traffic volumes were far above normal. In MSV's case daily call attempts, call volume and packet data usage were up about four-fold on a daily basis compared with the previous year, which was also a busy one for hurricanes. Other operators, such as Globalstar, Inmarsat and Iridium also reported big jumps in traffic but all of our networks had nominal performance.

User Segment Issues

The picture was not as rosy where the users were located. Land mobile satellite terminals are by nature portable. Some are handheld phones, others are briefcase sized units that can also carry voice or can send data. Sometimes the antenna is mounted on a vehicle and the unit draws its power from the vehicle's electrical system. At other times terminals operate from batteries.

However, satellite terminals are not as easy to use as a telephone. Thus, some users had trouble using the equipment, especially at first. Some people were out of practice and others unfamiliar with their equipment's use. MSV's saw help desk calls peak as the storm made landfall. Much of this volume was people re-activating and testing units and we handled this by increasing our help desk staff a few days before the storm hit land.

Also, many land mobile satellite terminals today are used only when other networks fail and are stored until needed. Sometimes, this equipment meant for backup was improperly stored. For example, batteries were not fully charged and additional batteries or a means of re-charging were not available.

In spite of all this, the usage data I mentioned earlier shows that satellites were heavily used during and after Katrina's landfall. A review of our records shows that use extended beyond emergency services as usually defined. Although first responders were the largest users we also had high usage from others, such as the local utilities, the local governments, the media, and the oil and gas industry.

Equipment

Unlike some other hurricanes, terrestrial communications infrastructure was down for an extended period. Therefore, many agencies ordered terminals after the emergency started. Reports are incomplete, but it is clear that collectively, the mobile satellite industry supplied tens of thousands of terminals to users in the areas affected by Katrina and, two weeks later, Hurricane Rita.

Our biggest problem was moving equipment when the modes of transportation we normally use are unavailable. As businesses, we use commercial carriers. Quite apart from being unable to operate in the area affected by the hurricane, they were shut down during the Labor Day holiday. Several companies had to clear equipment through customs; also not an easy thing to do during a holiday. It took ingenuity and perseverance to make sure that equipment got to those who needed it in spite of this. As we did after 9/11, when state, federal and local government officials called asking for satellite phones, MSV shipped them immediately without waiting for the paperwork and provided free service to critical state and local first responders.

I think I speak for everyone in my industry when I say how proud I am of the people who worked long hours and found creative solutions to ensure that all of our customers are able to receive reliable communications services.

ISSUES FOR THE PANEL TO FOCUS ON

Hurricane Katrina revealed problems that remain masked in other less dire emergencies. We can and must learn from this unintended experiment.

The following are a couple of suggestions but I look forward to hearing all the others that my colleagues on this panel will bring forward.

Exploit commercial opportunities to drive cost down and functionality up

All the mobile satellite systems mentioned above are commercial systems. None were specifically developed for public safety or homeland security. Yet, they filled an important role in the aftermath of Hurricane Katrina.

There is not anything unique about satellites in this. Public safety agencies often use networks provided by commercial operators to meet part of their needs. However, I do not think enough attention has been paid to the opportunity of integrating commercial and dedicated networks to satisfy the relevant requirements in a cost-effective fashion.

Today's commercial wireless networks are far larger and more extensive than in the past. They are so much larger that they can drive innovation and exploit economies of mass production far more than dedicated public safety networks. Although these capabilities and features are originally developed to generate revenue, we should look hard at ways to promote integration and adoption of these into something available to first responders at dramatically lower costs.

Increased integration of commercial networks into emergency planning

Only two weeks after Katrina, Hurricane Rita was headed toward the Texas-Louisiana coast. Once again, our help desk calls picked up as police, fire and rescue agencies got ready. But, there was nothing like the surge in traffic seen after Katrina. Why? We learned later that emergency managers in Texas never fully lost their other means of communication.

What does this tell us about mobile satellite communications?

As I have said, mobile satellites were a bright spot because they did keep working in the days and weeks after Katrina hit New Orleans.

However, as good as satellite terminals were, they were obviously not good enough. The current generation of satellite terminals provides very reliable means of communications in disasters, but they are too big and expensive to be carried by everyone in the first responder community. They are an effective backup, but as the Rita experience shows they are not used much unless nothing else is available.

It is not enough to have a limited number of satellite terminals in place before the disaster strikes and then add more – even thousands more – in the following days. Too many thousands of first responders, medical and disaster management personnel, and hundreds of thousands of ordinary citizens were left with no workable communications during the critical hours and days after the hurricane hit. Better communications would have helped save lives, maintain law and order, and keep families together.

MSV believes that satellite technology can be integrated into millions of wireless phones, making them instantly "satellite phones" during a disaster. Satellite services such as voice, data and two-way radio will no longer be viewed as "backup" communications. The use of satellite technology will be no different from the use of the standard wireless communication technology that we all use today. These phones will not depend solely on terrestrial towers and back-up generators that are subject to the whims of Mother Nature or the evil designs of a terrorist – they will have access to secure satellite facilities.

MSV's view is possible only because of the foresight of the Commission to create a regulatory framework that allows the most efficient use of spectrum, such as authorizing what are known as "Ancillary Terrestrial Components" to satellite systems. The FCC should continue to work to enable the development and deployment of such innovative technology. In addition, it is imperative that the FCC continue to actively engage in spectrum management to ensure that this resource is not wasted

I look forward to discussing these and other issues further with you over the course of the panel.

Thank you for your time and attention.