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Harris Corporation Presentation to the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks

Mississippi e-Center
Jackson State University
1230 Raymond Road
Jackson, MS 39204

Harris Point of Contact:

John Pearce
Director, Business Development and Advanced Programs
Homeland Security Programs
Government Communications Systems Division
321-726-1448
John.Pearce@harris.com

Good morning…my name is John Pearce, and I am the Director of Homeland Security Business Development and Advanced Programs within Harris Corporation. On behalf of Harris Corporation and our CEO, Howard Lance, I would like to thank the Chairman for his leadership on the difficult issue of analyzing the impact of Hurricane Katrina on the communications infrastructure. We'd also like to thank Commissioner Copps, Commissioner Adelstein, and Commissioner Tate for their support of the work of this panel. Someone once said that tragedy is a result of indifference and inaction. Clearly, this Commission refuses to remain indifferent or inactive. It has demonstrated its commitment to identifying the problems that hampered the creation of viable and efficient communications networks before and directly after Katrina hit Louisiana and Mississippi. We thank you for your commitment to seeking broad public and private sector input to resolve those challenges that fall within your jurisdiction. We are honored to have this opportunity to share our recommendations with you.

Briefly, I'd like to take a moment to introduce you to Harris Corporation. Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. We employ over 13,000 people and have over 5500 engineers and scientists.

As a supplier to the U.S. Government, the broadcast industry, the public safety industry, and the telecommunications and cellular industries, Harris is in a unique position to understand the impact of Hurricane Katrina on communications networks. We are actively engaged in the work being done by the Commission's Media Security and Reliability Council (MSRC) as well as the Network Reliability and Interoperability Council (NRIC).

With headquarters in Melbourne, Florida, the company has direct experience with natural disasters. When Hurricanes Charley, Frances, Jeanne and Tropical Storm Ivan hit in 2004, Harris established a strong relationship with the Florida Emergency Management Agency, providing critical communications support in the recovery efforts. In the aftermath of Hurricane Katrina, we coordinated with the Florida Emergency Management Agency to deploy critical communications infrastructure as directed and as needed. We worked primarily in the Mississippi region serving Hancock, Harrison and Jackson counties.

Within hours of Katrina hitting the Gulf Coast, Harris Corporation personnel contacted the State of Florida EOC in an effort to provide communications equipment and support to the impacted region. To our surprise, we found that the Florida EOC was in fact coordinating the majority of the relief efforts in cooperation with Governor Barbour's Office in Mississippi. Per the Florida EOC request, Harris had initial disaster recovery teams organized, equipped and in place 24 hours after the storm cleared.

Upon arrival in Mississippi we observed total devastation. A senior State of Florida Communications' Officer on site in Mississippi noted accurately that "the Pilgrims had more communications when they landed at Plymouth Rock than we have

here today." We spent the next five months reestablishing voice, data and broadcast communications for a population that was unable to communicate with their neighbors or local emergency personnel, much less the outside world.

We share the panel's sense of urgency on future preparedness. The 2006 hurricane season will be upon us in a matter of months, yet certain recommendations will require several years to be considered and implemented. Recognizing the need to improve our nation's disaster preparedness in the most expeditious manner possible, we have separated our recommendations into short-term recommendations and long-term recommendations.

Short Term Recommendations

- **Acquire and maintain transportable communications suite**s. Harris recommends that the government acquire deployable, transportable communications suites. During the post-Katrina period, surviving public and private facilities were repurposed for disaster recovery use, but these facilities were not equipped with the necessary communications infrastructure to support the mission. We recommend using transportable communications suites to facilitate rapid implementation of a communications infrastructure between the repurposed facilities and the existing emergency operations centers.
- **Create a strategic communications equipment inventory**. Harris recommends that the private and public sector work collaboratively to establish a strategic inventory of critical communications equipment that could be rapidly configured and deployed to disaster areas. For example, a suite of rapidly deployable line of sight (e.g., microwave), beyond line of sight (e.g., satellite communications), and broadcast systems would be put into this strategic inventory. These systems would be designed for rapid reconfiguration to meet specific requirements. When needed, these systems would be configured for the mission and deployed by the most efficient means – either by air or road -- to support the exchange and broadcast of critical disaster recovery information.
- **Provide planning and training for situations in which no on-site communications survive the disaster**. We observed that many organizations' plans presupposed the existence of a working communications infrastructure. Without this infrastructure, the plans were not executable. We recommend development of local community emergency response plans that include provisions for rapid establishment of interoperable communications between federal, state and local agencies. In addition, training and practice exercises should be in accordance with these plans, including creating communications links where none exist.
- **Require seamless collaboration with service providers, network operators and equipment suppliers.** Support and implement recommendations of the Media Security and Reliability Council (MSRC) and the Network Reliability and Interoperability Council (NRIC) to facilitate development of best practice recommendations of emergency communications networks across the media and telecommunications industry.

Long Term Recommendations

- **Make interoperability a priority**. Harris recommends that the government implement interoperable communications networks using frequencies and protocols available to first responders at federal, state, and local levels.
- **Implement an enhanced emergency alert system**. Harris recommends that the FCC implement an enhanced, digital emergency alert system to ensure that large portions of the American public are able to receive national and/or regional public alerts and warnings. Hurricane Katrina made it clear that a redundant, viable emergency communications system to address the public is critical in times of disaster. The Commission, in concert with other interested government agencies, including FEMA, should charter a federal advisory committee whose goal would be to create a redundant, comprehensive, state-of-the-art emergency alert system. In this regard, Harris commends the Commission's leadership in soliciting comments in its FNPRM on EAS and supports the Commission's efforts to create a viable EAS.
- **Establish regional planning commissions**. Establish regional planning commissions to ensure seamless coordination between federal, state, and local agencies. Ensure the provision of interoperable communications to enable coordination between agencies.
- **Develop hardened communications networks**. Develop blueprints for hardened, survivable, interoperable communications networks. These blueprints should be tailored for the specific challenges and threats of a given area, including factors such as flooding, high winds, and earthquakes. For example, much of the nation's communications infrastructure was created in right-of-ways along our coastal U.S. highways, making the infrastructure highly vulnerable to natural disasters. Plans should be developed and implemented to harden this infrastructure and/or relocate it to less vulnerable areas.

Harris appreciates the opportunity to submit these comments to support the Panel's work in reviewing the impact of Hurricane Katrina on communications networks. Harris is proud of the contributions we were able to make in the recovery of communities devastated by Katrina. The experience provided us with insight and ground-level understanding of what is needed for short and long-term recovery of the infrastructure. We look forward to working with the Panel as it crafts recommendations to the Commission regarding ways to improve not only disaster preparedness, network reliability and communications among first responders but also to also address how to ensure the impacted communities have access to critical information.