

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
)	
Public Safety And Homeland Security Bureau)	
Seeks Comment on Response Efforts)	
Undertaken During 2017 Hurricane Season)	PS Docket No. 17-344
)	

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association (“SIA”) submits these comments in response to the Public Safety and Homeland Security Bureau’s Public Notice (“PN”) of December 7, 2017, seeking comments on the resiliency of the communications infrastructure, the effectiveness of emergency communications, and government and industry responses to the 2017 hurricane season.¹ SIA is a U.S.-based trade association providing representation of the leading satellite operators, service providers, manufacturers, launch services providers, remote sensing operators, and ground equipment suppliers. SIA is the unified voice of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business.²

¹ See “Public Safety and Homeland Security Bureau Seeks Comment on Response Efforts Undertaken During 2017 Hurricane Season,” PS 17-344 (December 7, 2017) (“Public Notice”).

² SIA Executive Members include: AT&T Services, Inc.; The Boeing Company; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Maxar Technologies; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; Spire Global Inc.; and Viasat, Inc. SIA Associate Members include: ABS US Corp.; Analytical Graphics, Inc.; Artel, LLC; Blue Origin; DataPath Inc.; DRS Technologies, Inc.; Eutelsat America Corp.; Global Eagle Entertainment; Globecom; Glowlink Communications Technology, Inc.; HawkEye 360; Hughes; Inmarsat, Inc.; Kymeta Corporation; L3 Technologies; O3b Limited; Panasonic Avionics Corporation; Planet; Semper Fortis Solutions.; Telesat Canada; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC. SIA Affiliate Members include: The

I. SATELLITES PLAY A CRITICAL ROLE IN SAVING LIVES BEFORE AND AFTER A HURRICANE

As noted in the FCC's PN, the 2017 hurricane season included four hurricanes that made landfall in the United States and its territories.¹ Hurricanes Harvey, Irma, Maria and Nate led to Presidential emergency or major disaster declarations for seven states and two territories. In addition, since 2005, 19 Atlantic hurricanes have hit the United States, causing more than 2000 casualties and damage estimated in the hundreds of billions of dollars.

Satellite communications (SATCOM) networks are indispensable in the event of a hurricane disaster. SATCOM networks are best positioned to inform decision-makers about the path and strength of an impending storm so that appropriate evacuation orders can be issued in advance of a hurricane. Additionally, SATCOM networks are more resilient after a hurricane compared to terrestrial communications, which can be easily destroyed in the event of a natural or man-made disaster. In Florida, Puerto Rico, and Texas, SIA members helped restore communications for disaster relief and emergency response organizations at the local, state, and federal levels, through the provision of satellite internet and phone services, as well as support for television broadcasts. These services also allowed for the reopening of critical infrastructure, including pharmacies, banks, grocery stores, and retailers, as well as the restoration of cellular communication for the local populations.

The attached document, *When Hurricanes Strike: Satellites Play a Critical Role in Saving Lives Before and After a Hurricane*, provides a brief summary of the response and recovery initiatives carried out in Texas, Florida, and the Caribbean by members of SIA.

Aerospace Corporation; COMSAT; Phasor Solutions; and Wiley Rein LLP. Additional information about SIA can be found at <http://www.sia.org>.

In addition to communications services, as also noted in the attachment, collecting weather data is a crucial step in determining whether and where a hurricane will strike and for planning search and rescue activities after a strike. New GOES-R satellites and small satellites utilizing GPS Radio Occultation allow meteorologists and emergency responders to more quickly and accurately predict when and where hurricanes will strike.³

Accurate position, navigation, and timing data via Global Positioning System (GPS) satellites enable crucial precision location of disaster victims, relief team workers, and emergency responders and their equipment, while also supporting the continuity of communications networks, electrical grids, and financial networks. These satellites provide data for GPS terminals and mobile phones before, during, and after a disaster.⁴

As satellite imagery approaches hourly revisit rates around the globe, before and after imagery of disaster locations is becoming increasingly critical to disaster relief efforts. Data from earth observation satellites are provided during hurricane response for public use to disaster relief organizations, as well as crowdsourcing imagery analysis where participants visually identify damage to critical infrastructure, areas of intense flooding, and regions of prioritization for search and rescue efforts.⁵

II. FCC STAFF SUPPORT

SIA commends the staff of the FCC for their availability and responsiveness during the hurricane season. The Public Safety Bureau staff was readily available to answer questions and receive input from SIA and its members. Moreover, the International Bureau's Satellite Division staff worked tirelessly over weekends and holidays to respond rapidly to requests for Special

³ *Attachment* at 1.

⁴ *Id.*

⁵ *Id.* at 2.

Temporary Authority (“STA”) and other regulatory relief necessary to facilitate critical emergency communications delivered by satellite; rapid turnaround of STAs were particularly critical to SIA members supporting Hurricane Irma and Hurricane Maria recovery efforts.⁶

Respectfully submitted,

THE SATELLITE INDUSTRY ASSOCIATION

By: /s/ Tom Stroup
Tom Stroup President
Satellite Industry Association
1200 18th Street N.W., Suite 1001
Washington, D.C. 20036
(202) 503-1560

January 22, 2018

⁶ See IBFS File No. SES-STA-20170913-01012 (granted Sep. 15, 2017) (Hurricane Irma); IBFS File No. SES-STA-20170929-01073 (granted Sep. 29, 2017) (Hurricane Maria).