

Leonardo: Major support of Hurricane Harvey disaster relief efforts through products and technology

- **COSMO-SkyMed satellites providing critical details, data analysis and unique imaging of flooding conditions**
- **U.S. Coast Guard C-27J aircraft deployed for transportation of crews, equipment and medical supplies**
- **Gulf coast AW139 helicopters flying in support of disaster recovery**

Rome, 1 September 2017 – As the communities along the Gulf Coast of Texas and Louisiana begin to recover from the devastating effects of Hurricane Harvey, a number of Leonardo products and technologies have been activated in support of disaster relief and recovery, including satellites, aircraft, and helicopters.

Images from the Italian COSMO-SkyMed satellites constellation were used in Texas to monitor the effects of rains and, specifically, to control the flooding along the coast. Leonardo - through the e-GEOS joint venture (Telespazio/ASI - Italian Space Agency) - is providing images, maps and value-added services based on satellite data from the radar constellation COSMO-SkyMed. The radar technology is particularly useful for this type of application, since it allows visibility at night and through clouds. This is not possible for optical satellites as they are unable to pass through the thick hurricane clouds. The use of COSMO-SkyMed for this purpose is a further demonstration of the excellence of this Italian-made system, which already proved to be a unique help in the management of this kind of emergencies.

The e-GEOS joint activity with local innovative startups like URSA and Orbital Insight (focused on the Data Analytics), highlights the multipurpose use of the information extracted from COSMO-SkyMed. e-GEOS is using FLOOD processor merged with the analysis capability of the local specialized companies contributing to the management of Hurricane Harvey's emergency. COSMO-SkyMed programme is the result of the collaboration between the Italian Space Agency and the Italian Ministry of Defence, and is built by Leonardo through its joint ventures Thales Alenia Space and Telespazio. The System operations are based in the Italian Space Centres of Fucino and Matera and managed by Telespazio and e-GEOS.

The U.S. Coast Guard has communicated the deployment of the Leonardo-built C-27J in support of aid efforts. The C-27J is guaranteeing the transport of crews, equipment and medical supplies. The U.S. Coast Guard is integrating 14 aircraft into its fleet and several units are already operational in patrol missions against illegal activities and for quick reaction in case of catastrophes and natural disasters. An ideal solution for search and rescue duties thanks to its autonomy, robust capabilities in operational scenarios, speed and cargo capacity the C-27J has been used for support operations during Hurricane Sandy.

Flying for disaster relief efforts in Texas and Louisiana are AW139 operators based along the Gulf Coast, and they will continue to support in the days and weeks ahead. AW139's large and versatile cabin can be configured in a variety of layouts, with accommodation for FLIR station operation, medical treatment and casualty evacuation requirements for search and rescue and patient/passenger transport. Maximized capabilities in adverse weather and long range endurance allow AW139s to perform missions in the demanding conditions post-Hurricane when other aircraft operations may be limited.