

ITT Passes Review for GOES-R Advanced Baseline Imager

ITT Corporation (NY, USA) has announced that its Space Systems Division has successfully passed the critical design review for the Advanced Baseline Imager (ABI) it is preparing for NASA's next generation Geostationary Operational Environmental Satellite (GOES) program.

The review was conducted 15th-16th February in Fort Wayne, Indiana (USA), where ITT has facilities, along with contributing key subcontractors, BAE Systems, Babcock Incorporated, BEI Technologies, DRS Technologies, L-3 Communications SSG-Tinsley and Northrop Grumman Space Technology. NASA carefully examined all attributes of the ITT instrument, including its design, architecture, assembly, and electronics. After the two days, NASA declared its satisfaction with the ABI design and approved the next phase of the program a manufacturing readiness review, which begins the integration of the flight qualification module and after which production of flight instruments will commence.

The GOES program is a key element of the National Oceanic and Atmospheric Administration's (NOAA) operations. The GOES-R series of satellites will be comprised of improved spacecraft and instrument technologies, which will result in more timely and accurate weather forecasts and improved support for the detection and observations of meteorological phenomena that directly affect public safety, protection of property, and ultimately, economic health and development.

ITT's ABI represents a significant advancement in the performance over the current generation of geostationary imagers. Compared to the current GOES imager, ITT's ABI advanced design will provide users with twice the spatial resolution, three times the number of spectral channels, improved signal to noise ratio and image navigation pointing system. It also provides a six times faster scan rate allowing for a full earth scan every 5 minutes vs. the 15 minutes it currently takes. ABI's two-mirror scanner will provide a 100% scan efficiency and a fully programmable scanner to yield maximum flexibility on orbit – a first for GOES satellites. These improved features will allow meteorologists and climatologists to significantly improve the accuracy of their products both in forecasting and nowcasting.

The ABI is a multispectral channel, two-axis scanning radiometer designed to provide variable area imagery and radiometric information of the Earth's surface, atmosphere and cloud cover. ABI data will provide the core information that the National Weather Service uses for routine weather and severe storm forecasting.

Source: [ITT Corporation](#)