

# National Environmental Satellite, Data, and Information Service (NESDIS) July 2015 Newsletter



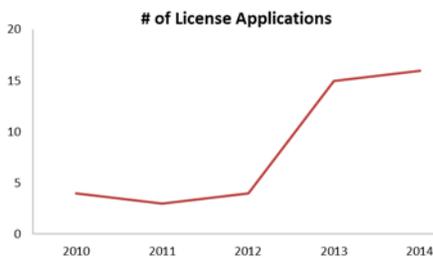
## Operations – Commercial Remote Sensing

### Licensing of Private Remote Sensing Space Systems

NOAA's [Commercial Remote Sensing Regulatory Affairs](#) aims to balance commercial viability of private Earth remote sensing space systems and sound regulatory practices and policies while protecting national security, foreign policy, and international obligations.

The authority to regulate the operation of private Earth remote sensing space systems is provided to the Secretary of Commerce, and delegated to NESDIS, by [the National and Commercial Space Programs Act](#).

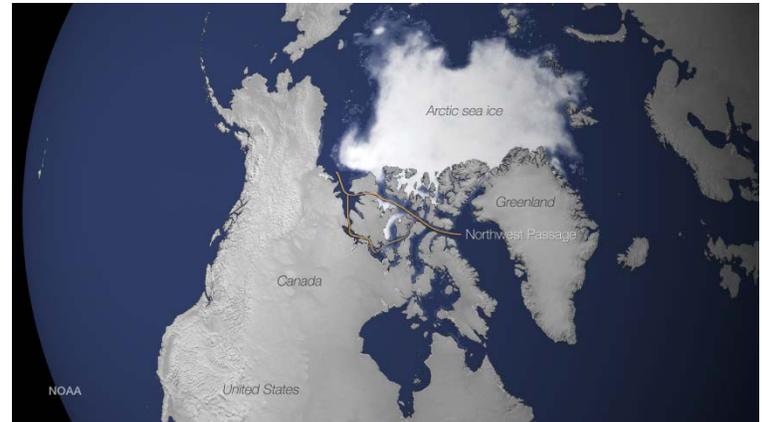
The function consists of a Commercial Remote Sensing Licensing activity as well as a Commercial Remote Sensing Compliance and Monitoring activity. It coordinates the review process within the U.S. Government, including the Department of Defense and Department of State, and issues the licenses. The Compliance and Monitoring activity assures compliance of the licensees through a variety of actions, including periodic on-site audits and appropriate enforcement when necessary.



As the commercial space industry has grown, the number of license applications received has dramatically increased. The total number of licenses issued from FY 2010-FY 2014 is 41.

## Spotlight – Diminishing Ice in the Arctic

### Symposium on Impacts to Naval and Maritime Operations



On July 14-16 the [U.S. National Ice Center](#) and the U.S. Arctic Research Commission co-hosted the [6<sup>th</sup> Symposium on the Impacts of an Ice-Diminishing Arctic on Naval and Maritime Operations](#). This biennial symposium began in 2001 and focuses on U.S. naval operations and national strategic issues, such as commercial transportation, oil and gas exploration and exploitation, fisheries, and oceanographic research, in an “ice-free Arctic.” Senator Lisa Murkowski and Representative Don Young both gave remarks at the symposium. The 2015 peak winter Arctic sea ice extent occurred on February 25. At 5.61 million square miles, this year’s maximum was the smallest on the satellite record and also one of the earliest. Watch this [video](#) for an overview of trends in Arctic ice for the past 30 years. Stay tuned for the 2015 Arctic sea ice minimum.

## Image of the Month

### Camera on DSCOVR Provides “EPIC” View of Earth



NOAA’s Deep Space Climate Observatory (DSCOVR) is host to NASA’s Earth Polychromatic Imaging Camera (EPIC). This image is the camera’s first view of the entire sunlit side of Earth from one million miles away. DSCOVR was launched in February and recently reached its planned orbit at the first Lagrange point. The primary mission of DSCOVR is to maintain the nation’s real-time solar wind monitoring capabilities, which are critical to the accuracy and lead time of space weather alerts and forecasts from NOAA.

## Message from Dr. Stephen Volz

### Assistant Administrator for NESDIS

With the coming of August, many of us look forward to summer vacations, outdoor activities, and Congressional Recess. Through it all, NOAA satellites and information services continue to provide critical information that support safe recreational activities. If you are heading outdoors for some fun in the sun, make sure to check the weather forecasts, courtesy of our friends at NOAA’s National Weather Service.

Earlier this month we hosted a media event at NOAA’s Satellite Operations Facility in Suitland, Maryland. NOAA, NASA, and the U.S. Coast Guard held the event featuring Search and Rescue Satellite Aided Tracking (SARSAT), an international program that has helped save more than 39,000 lives since its inception in 1982. Representatives of the three agencies were joined by [Mr. Frank Rawley](#), who was saved off the coast of North Carolina in February, to tell his story and how his life and those of his companions were saved with the help of NOAA weather satellites and the SARSAT rescue system.

Have a safe and enjoyable August recess, and please let Sierra Jones ([sierra.jones@noaa.gov](mailto:sierra.jones@noaa.gov)) know if you have any questions.

# Update: Satellite and Acquisition Programs

## JPSS:

- Suomi NPP continues to provide operational support to the National Weather Service and the nation's weather enterprise.
- The JPSS Program continues to make progress on the development of the JPSS-1 spacecraft.
  - The Advanced Technology Microwave Sounder (ATMS) instrument's Engineering Development Unit has been integrated with the spacecraft to save integration and test time in advance of full instrument integration planned for later this year.
- On July 16, the Government Accountability Office denied a protest to challenge the contract award of the JPSS-2 spacecraft construction, enabling the vendor originally awarded the contract, Orbital Sciences Corporation, to initiate work.
  - This is a firm fixed-price, indefinite delivery/indefinite quantity delivery order for the purchase of the JPSS-2 spacecraft with options to purchase the JPSS-3 and JPSS-4 spacecraft for the Polar Follow On as proposed in the President's FY 2016 Budget request.

## COSMIC-2:

- At the Executive Steering Committee on June 24 in Taipei, Taiwan, Taiwan agreed to fund the second set of 6 spacecraft for a COSMIC 2B launch in the FY 2018/2019 timeframe.
- Impact to the COSMIC-2A launch vehicle schedule by the SpaceX Falcon 9v1.1 launch vehicle failure is undetermined at this time.
- The Ground Data Processing Center Segment Critical Design Review is scheduled for September 2015.
- NOAA signed an agreement with the Brazil Space Agency, INPE, for Brazil to provide a ground station that would support the COSMIC-2A equatorial constellation.

## SIDAR:

- NESDIS is establishing an interagency agreement with the U.S. Air Force to use its Hosted Payload Solution (HoPS) contract for commercial hosting of the Argos-Data Collection System and SARSAT instruments.
- Continue to plan the transition of the TSIS-1 instrument from NOAA to NASA at the beginning of FY 2016.
- The [SARSAT Program](#) facilitated the rescue of 37 persons during the month of July, the highest number of saves so far this year. Of these:
  - 17 were rescued at sea in 5 incidents,
  - 7 were rescued in aviation related distress in 3 incidents,
  - 13 were rescued on land in 10 incidents.

## GOES-R Series:

- The GOES-R satellite began thermal vacuum (TVAC) testing on July 1 at Lockheed Martin's facility in Littleton, Colorado. Testing will continue through late summer. During TVAC, the satellite is exposed to the extreme hot and cold temperatures it will experience in the vacuum of space with temperatures ranging from -15 to +50 degrees Celsius.
- After extensive review and consultation with Lockheed Martin and NASA, NOAA has concluded that it will release our original March 2016 launch date for the GOES-R satellite and will pursue a potential launch slot in fall 2016
- Work on GOES-S continues to make good progress.
  - GOES-S Geostationary Lightning Mapper (GLM) successfully completed TVAC testing on July 6 at Lockheed Martin Advanced Technology Center in Palo Alto, California.
  - All six reaction wheels were installed into the GOES-S spacecraft system module.
  - GOES-S Antenna Wing Assembly is completing environmental testing at Lockheed Martin's facility in Newtown, Pennsylvania.

## Jason-3:

- On June 28, a SpaceX Falcon 9v1.1 launch vehicle suffered a launch failure on a NASA International Space Station resupply mission. This is the same launch vehicle type that will launch Jason-3. A Failure Investigation Team is assessing the launch data.
- As of July 22, the Team has not found a definitive cause for the failure nor is ready to announce a new launch date for Jason-3.
- Jason-3 satellite observatory arrived at Vandenberg Air Force Base on June 18. Satellite completed all functional testing at the launch facility and has been placed in storage, pending resolution of the launch failure
- Impacts to Jason-3 budget due to launch delay are being assessed.

## DSCOVR:

- On June 7, DSCOVR successfully completed the orbit insertion maneuver into the Lagrange 1 (L1) orbit, one million miles from Earth.
- During transit to L1, all primary and secondary instruments were activated and checked out.
- Preparations are underway for handover of the satellite to NOAA operations from NASA.

For additional information, please contact Sierra Jones at (202) 482-6140, or at [Sierra.Jones@noaa.gov](mailto:Sierra.Jones@noaa.gov)