



NOAA's Commercial Remote Sensing Regulatory Affairs

Alan Robinson
Sr Licensing Officer
NOAA's Commercial Remote Sensing Regulatory Affairs Office



Action Reviews

By Law:

- Secretary of Commerce: License and regulatory authorities
- Secretary of Defense: "...determining those conditions...to meet national security concerns..."
- Secretary of State: "...determining those conditions... to meet international obligation and policies..."
- Secretary of Interior: "...determining those conditions...to meet national archive concerns"
 - All delegated to well below the secretary level

By MOU:

- Intelligence Community: Determine conditions to meet national security concerns
- No License has been denied or revoked
- Under MOU- license condition disputes can be elevated to Secretary level
 - 1999 First .25 m PAN license
 - 2014 Resolution sales lowered to .25 m PAN
 - 2015 Special Collects



Current Trends

As of September 8, 2016

- Explosion of new licensees & licenses
 - 26 issued FY 96 to FY10
 - 63 issued FY10 to present
 - 10 applications in process
 - 29 other entities told they must apply
- Explosion of foreign and domestic Ground Station inspection sites
 - 26 sites at end of FY10
 - 91 current sites--71 locations
 - 11 sites pending approval
 - 110+ sites anticipated by FY17
- 115 on-orbit satellites...6 on Oct 1, 2010
- Increase in Quarterly and Annual Audits
- Potential corresponding increase in foreign agreements



Current Trends

- Small Sats will dominate market and workload
 - Lower cost for build (COTS) & launch (secondary payload)
 - Rapid refresh
 - Significant increase in foreign Small Sats
- Larger Cubesats...6U becoming common
 - Future missions: limited propulsion, telescoping optics
- Constellation licenses
 - Foreign constellations...Satellogic “300”
- Licenses for ISS platform operations and Cubesats deployment
- Different sensors: Hyper, SWIR, LWIR, Radiometric, Video
- Operations requiring Non-Earth Imaging (NEI) to support primary mission--proximity operations to natural and man-made objects
 - Satellite refueling, asteroid mining



Issues

- Additional Licensing position needed...1 deep since Feb 2014
- Special Collects
- Non-Earth Imaging (NEI) & Reviews
- Expanding oversight requirements
 - TBD manpower, training, software and hardware requirements
- Inspections completed falls behind with each added location



Ground Station Inspections

- FY 2015 Inspection Sites: 80
- FY 2015 Inspections completed: 34 (43%)
- FY 2016 Inspection Sites: 91
- FY 2016 Inspections completed: 25 to date (27%)



Issues

- Need to streamline reviews/license processing Cubesat, prior licensed technologies, etc.
- New technologies and business models
- Increased foreign capability
- Part domestic – Part foreign owner/operators



Questions?