

Narrative Attachment

On October 2, 2019, the Commission granted DG Consents Sub, Inc. (“DigitalGlobe”) special temporary authority (“STA”) for 180 days to relocate and operate WorldView-4 (S2348) at orbital altitudes between 425 and 525 km.¹ DigitalGlobe had previously received STA to lower WorldView-4 to 450-550 km.² Per Commission Rule 1.62, DigitalGlobe herein requests renewal of the 180-day STA to continue operating WorldView-4 at 425-525 km.³

The Commission originally licensed WorldView-4, a non-geostationary-satellite orbit satellite providing Earth Observation Satellite Service (“EEOSS”), to operate at altitudes between 496 km and 770 km.⁴ On January 7, 2019, WorldView-4 experienced a failure in its control moment gyros, preventing the satellite from collecting usable imagery due to the loss of an axis of stability. However, WorldView-4’s authorized communication paths remain operational, and DigitalGlobe maintains control of the satellite.

As explained in its earlier applications, grant of this STA request will allow DigitalGlobe to maximize the utility of WorldView-4, while ensuring complete de-orbit of the impaired satellite. DigitalGlobe will use the space station for training purposes at 425-525 km – enhancing the skills and experience of DigitalGlobe’s network operators. Currently, the telemetry, tracking, and command (“TT&C”) functions on WorldView-4 are fully functional. DigitalGlobe will continue to conduct TT&C communications at 8386 MHz (120 KHz) for downlink and 2052 MHz (64 KHz) for uplink. DigitalGlobe will also continue to conduct X-band data downlink at 8025-8400 MHz.

Additionally:

- the spacecraft has sufficient fuel reserves to support testing at 425-525 km and the subsequent de-orbit maneuvers within 1-2 weeks of end-of-mission;
- DigitalGlobe previously notified the National Oceanic and Atmospheric Administration of its intent to relocate and operate WorldView-4 at 425-525 km, as required;

¹ See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190816-00077, Call Sign S2348 (granted Oct. 2, 2019).

² See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190503-00035, Call Sign S2348 (granted May 22, 2019); *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190612-00046, Call Sign S2348 (granted July 10, 2019); Application of DG Consents Sub, Inc. for 30-day STA Extension, IBFS File No. SAT-STA-20190717-00062, Call Sign S2348 (filed July 17, 2019).

³ See 47 C.F.R. § 1.62.

⁴ See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-MOD-20160408-00033, Call Sign S2348 (granted Aug. 5, 2016).

- DigitalGlobe will continue to coordinate with the Consolidated Space Operations Center at the Vandenberg Air Force Base, as well as with all potentially affected satellite operators authorized at orbital altitudes between 425-525 km.

For these reasons, grant of this 180-day STA extension serves the public interest.