

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

BlackSky Global LLC (“BlackSky”), pursuant to Section 25.120 of the Commission’s rules,¹ hereby requests Special Temporary Authority (“STA”) for permission for an initial period of thirty (30) days to operate its Global-11 and Global-14 satellites (identified by order that Gen-2 satellites were placed into service, in each case concurrently with another Gen-2 satellite launched at the same time)² at altitudes between 340 and 385 kilometers. The requested altitude range is below the minimum orbital altitude of 385 kilometers as authorized in BlackSky’s current constellation license.³

The thirty- (30) day period is requested to commence from the point in time that the first of the two satellites cannot be maintained at or above 385 kilometers.

As set forth below:

- The matter is urgent.
- There would be no interference to third parties.
- There would be no increase in the risk of orbital debris, including to the International Space Station.
- Allowing continued operation of the satellites will serve the public interest by maintaining services from these satellites in areas of crucial significance to BlackSky’s customers, including the U.S. government.

I. Emergency

Timing is urgent. [REDACTED]

[REDACTED] The satellites are approaching an altitude of 400 kilometers and BlackSky estimates they will drop below 385 kilometers as soon as mid-August 2026. The exact date by which this will occur is unknown due to uncertainty in atmospheric drag and the effects of solar activity.

BlackSky originally did not seek authority to operate at altitudes down to 340 kilometers because initial pre-operational analysis pointed to altitudes of 385 to 400

¹ 47 C.F.R. §25.120.

² Global-11 and Global-14 were respectively the eleventh and fourteenth satellites launched into the constellation; their launch dates were December 2, 2021 (Global-11) and December 9, 2021 (Global-14). The internal tail numbers of these satellites are Global-12 and Global-17, respectively.

³ *Public Notice*, Satellite Licensing Division and Satellite Programs and Policy Division Information RE: Actions Taken, Report No. SAT-01948, DA No. 25-842, BlackSky Global LLC, FCC Call Sign S3032, ICFS File Nos. SAT-MOD-20211230-00205 and SAT-AMD-20220805-00078 (rel. Sep. 12, 2025).

kilometers as the limit of satellite operational stability due to atmospheric drag, disturbance torques, gravity gradient, and other factors. However, BlackSky's experience under prior STA grants in operating multiple other Gen-2 satellites down to 340 kilometers has demonstrated its ability to maintain momentum management and attitude control of the spacecraft at lower altitudes. Taking into account this operational experience and BlackSky's engineering analysis based upon this experience, BlackSky is confident that it can operate Global-11 and Global-14 as they descend below 385 kilometers while maintaining necessary stability at least until they reach the new requested minimum altitude of 340 kilometers.

In addition, BlackSky's Gen-2 satellites have proven to have longer operational lifetimes than initially anticipated. [REDACTED], these satellites continue to provide high-quality imagery that is highly valuable to the United States government and other BlackSky customers.

II. Frequency Considerations

As demonstrated below, BlackSky's proposed operations below 385 km should not raise interference concerns. If needed, however, BlackSky also notes below further steps it could take to avoid any possibility of concern.

For X-band downlink, though BlackSky's current license would permit it to operate at an Effective Isotropic Radiated Power (EIRP) of up to 23.2 dBW, its Gen 2 satellites can control their transmit power in 1dB increments down to 16.2dBm and nominally downlink at a power of 19.2dBW or lower, depending on the Earth Station and in accordance with BlackSky's pre-existing frequency coordination with NASA. This coordination includes a schedule of power reductions at each site, which is referenced in our current grant in condition 19:

Therefore, BlackSky shall continue to implement these techniques on the Gen-2 constellation and shall decrease power further for the Gen-2 satellites commensurate with the altitude decrease.

As BlackSky's satellites decrease in altitude, they will correspondingly increase their distance from the geostationary satellite belt, so their PFD in that direction will be reduced and, therefore, will be well within the compliance showing demonstrated by BlackSky in its original license application.

As to BlackSky's UHF downlink, while it does not have the ability to adjust power as the satellites descend, the increase in PFD to the earth (from 385 km) will not exceed 1.1 dB at the lowest altitude (340 km) for which operation is requested. Furthermore, the use of these frequencies will be exceedingly limited because the satellites are far beyond the LEOP stage. The PFD at other satellites in higher altitude orbits will naturally

decrease as separation increases. BlackSky will transmit on UHF frequencies only when over the limited number of mid-inclination earth stations for which transmissions are intended and at a 5% average duty cycle. These factors make the chances of any increase in potential interference exceedingly remote. The availability of multiple UHF channels in the band that could be switched with other satellites in the constellation that operate at higher altitudes gives BlackSky additional flexibility to avoid any potential interference.

As BlackSky's satellites descend, simply as a matter of geometry, the geographic scope of their transmit beams also narrow and, therefore, fall within the broader scope of the beams presented in the application underlying BlackSky's current grant.

Altitude (km)	EIRP (dBW)
385+	19.2
344 - 384	18.2
340 - 343	17.2

III. Orbital Debris

Similarly, continued operation of Global-11 and Global-14 will have no detrimental effect on the mitigation of orbital debris considerations that were presented in BlackSky's license application. BlackSky's orbital debris mitigation plan is, and has always been, that its satellites will descend to the earth by force of gravity after exhaustion of propulsion capability. This request maintains the propulsion and orbital demise concept of operations for Global-11 and Global-14.

BlackSky's ability to perform necessary end-of-life activities, as required under Section 25.283(c) of the Commission's rules, does not require remaining propellant aboard the satellite. BlackSky retains the ability to fully comply with the requirements for de-energizing the satellites at all altitudes down to 340 kilometers. [REDACTED]

BlackSky maintains a conjunction deconfliction agreement with NASA for coordination of operations in and around the International Space Station (ISS). During these overlaps, coordination between BlackSky and NASA has operated effectively for conjunction avoidance. Upon altitude reduction below 385km as requested, the

satellites will leave the altitude of overlap with the ISS and decrease any chance of conflict or orbital debris impacting the ISS mission.

III. Coordination with other Federal Agencies

BlackSky has attempted to pre-coordinate this STA request with federal agencies but was told that such pre-coordination is no longer being conducted.

Notably, BlackSky's NOAA license currently allows operation of all Gen-2 "Global" satellites down to an altitude of 300 km.

IV. Public Interest Considerations

The premature loss of coverage from Global-11 and Global-14 would constrain BlackSky's ability to provide service at a time when extensive and timely imaging is most essential to its customers' programs, including programs of the US Government. Allowing BlackSky to continue operating Global-11 and Global-14 [REDACTED] [REDACTED] will extend the company's ability to support the US government and other customers, and will therefore strongly serve the public interest.

The public interest will be further served by shortening the period between the decommissioning of Global-11 and Global-14 and their demise into the atmosphere. That is, since the operational mission of these satellites will be extended as they descend below their originally authorized lowest operating point, the post-mission orbital lifetime of the satellites will be commensurately shortened.

V. Conclusion

Accordingly, for good cause as shown herein, BlackSky requests that the Commission grant BlackSky's STA request.