## **Narrative Attachment**

Maxar License Inc. ("Maxar") requests special temporary authority ("STA") for 180 days to relocate and operate WorldView-4, authorized under Call Sign S2348, at orbital altitudes between 100 and 400 km. Maxar is in the process of end of mission procedures for WorldView-4, which due to previous anomalies to the spacecraft, must be performed in discrete stages. Through this application, Maxar requests permission to lower the satellite from its current operation arc of 350-450 km² to 100-400 km as it undertakes its end of life maneuvers. Maxar has filed an application for 30-day STA to relocate and operate WorldView-4 at 100-400 km concurrently with this request.

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 Maxar maintains control of the satellite. Pursuant to STA, Maxar has been operating the WorldView-4 in the 350-450 km range to conduct testing and training – enhancing the skills and experience of Maxar's network operators.<sup>3</sup>

Subject to FCC approval, Maxar will undertake the penultimate phase of its end of life maneuvers by lowering the satellite to a new temporary operating range of 100-400 km. Maxar will continue to operate only the satellite's telemetry, tracking, and command ("TT&C") frequencies during relocation and will do so on a non-interference basis. TT&C communications will continue to occur in the same frequencies as currently authorized, at 8386 MHz (120 KHz) for downlink and 2052 MHz (64 KHz) for uplink. Once at the 350-450 km orbital altitude, Maxar will conduct X-band data downlink at 8025-8400 MHz at the new altitude in addition to TT&C. Following the completion of this deorbit phase, Maxar will cease communications with the satellite as it begins to experience atmospheric drag and completes the final stage of deorbit.

As explained in its earlier applications to relocate WorldView-4, grant of this STA request will allow Maxar to maximize the utility of WorldView-4, while ensuring complete deorbit of the impaired satellite. Lowering WorldView-4 to 100-400 km will allow Maxar to undertake the next phase of its re-entry plan for the impaired spacecraft, mitigating the likelihood of further anomalies during deorbit. Additionally, the on-going phased deorbit will permit

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.120.

See Maxar License Inc., Stamp Grant, IBFS File No. SAT-STA-20201112-00134, Call Sign S2348 (granted Nov. 17, 2020); Maxar License Inc., Stamp Grant, IBFS File No. SAT-STA-20201112-00135, Call Sign S2348 (granted Ja. 15, 2021); Policy Branch Information; Actions Taken, Report No. SAT-01524, File No. SAT-STA-20201211-00143 (Jan. 22, 2021) (Public Notice).

See supra n. 2

Maxar to continue to use the space station for training purposes while operating at 100-400 km.

Maxar will 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 100 and 400 km.