

EXHIBIT A - NARRATIVE STATEMENT

Planet Labs PBC (Planet), pursuant to Section 25.120 of the Federal Communications Commission's (FCC's or Commission's) Rules, 47 C.F.R. § 25.120(b)(3), hereby requests Special Temporary Authority (STA) for a period of 60 days starting March 27th to operate:¹

(1) SkySat satellites² 16-18 in orbits with mean, semi-major axis altitudes from 420 to 450³ km. The target orbit altitude is 450 km circular. When including orbital fluctuations (+/- 5 km) and station-keeping maneuvers (+/- an additional 5 km), a nominal satellite orbit (at a target 450 km orbit) could have a perigee as low as 440 km and an apogee as high as 460 km (as discussed below);

(2) SkySat satellite 19 in an orbit with a mean, semi-major axis altitude from 420 to 425 km. The target orbit altitude for this satellite is 425 km circular. When including orbital fluctuations (+/- 5 km) and station-keeping maneuvers (+/- an additional 5 km), the nominal satellite orbit (at a target 425 km orbit) could have a perigee as low as 415 km and an apogee as high as 435 km (as discussed below); and

(3) SkySat satellites 20 and 21 down to a perigee of no less than 345 km as the satellites naturally approach the end of their life.⁴

Planet expects that under nominal operating conditions the orbit would have a perigee of no more than 5 km below the target orbital altitude and an apogee of no more than 5 km above the target orbital altitude. Thus, for example, Planet expects that under nominal operating conditions the SkySat satellites 16-18 would have a perigee of

¹ Planet is contemporaneously filing a modification application for regular authority regarding the same matters identified in this application. See SAT-MOD-20230224-00040 (filed February 24, 2023).

² Planet currently operates the SkySat fleet of 21 commercial remote sensing satellites, under FCC Call Sign S2912, as part of a non-geostationary orbit (NGSO) Earth Exploration Satellite Service (EESS) high-resolution imagery satellite system. See Stamp Grant, Application, File No. SAT-MOD-20200615-00076 (granted March 18, 2021) ("Planet Authorization").

³ The SkySat satellites are already authorized by the Commission to operate at altitudes between 400 km to 420 km. See File No. SAT-MOD-20191217-00148, at Exhibit 43 (granted March 16, 2020).

⁴ To be clear, as the satellite demises, Planet would maintain communications with the satellite for orbit determination and debris mitigation purposes, as long as possible. However, Planet would not operate the satellite for imaging purposes, if the satellite perigee is below 345 km.

at least 445 km and an apogee of at most 455 km. Similarly, Planet expects that under nominal operating conditions SkySat satellite 19 would have a perigee of at least 420 km and an apogee of at most 430 km.

Further, once a satellite reaches its target nominal altitude, as part of this orbit-raising campaign,⁵ Planet anticipates maintaining that nominal altitude until a certain budget of the propellant is depleted. Such station-keeping maneuvers would potentially change the apogee or perigee of the satellite by at most 5 km. Accordingly, for SkySat satellites 16-18, a nominal satellite orbit (at a target 450 km orbit) could have a perigee as low as 440 km and an apogee as high as 460 km. Similarly, for SkySat satellite 19, the nominal satellite orbit (at a target 425 km orbit) could have a perigee as low as 415 km and an apogee as high as 435 km (as discussed below).⁶

After depletion of the budgeted propellant for SkySat satellites 16-19, Planet would permit the satellite to demise naturally. Sufficient propellant will be reserved to engage in collision avoidance activities during the demise period.

With respect to SkySat satellites 20 and 21, as a result of unique, operational circumstances, we expect the mean altitude of those satellites will likely begin to decrease.⁷ Accordingly, authority to operate SkySat satellites 20 and 21 at altitudes down to 345 km will be necessary to enable Planet to continue to make use of these on-orbit assets.

The STA and modification requests, taken as a whole, seek to extend the operational lifetime of the SkySat satellites, increasing the value of the on-orbit assets and their ability to provide imagery to customers. At the higher operational altitudes proposed, Planet will be able to extend the lifetime of the satellites by up to 50 percent. Moreover, authorizing SkySat satellites 20 and 21 to operate down to a perigee of 345 km will enable continued use of these on-orbit assets as they begin to demise prolonging their lifetime and utility to Planet and its customers. As explained in more

⁵ Operational limitations may prevent the satellites from achieving the target nominal orbits.

⁶ The target nominal orbits will not be perfectly circular, which is why Planet has specified the apogee and perigee of the target nominal altitude. In addition, Planet requires station-keeping flexibility above and below the target nominal altitude as it executes propellant burns to maintain altitude while addressing challenges such as space weather, collision avoidance, and appropriate phasing among Planet's satellite assets.

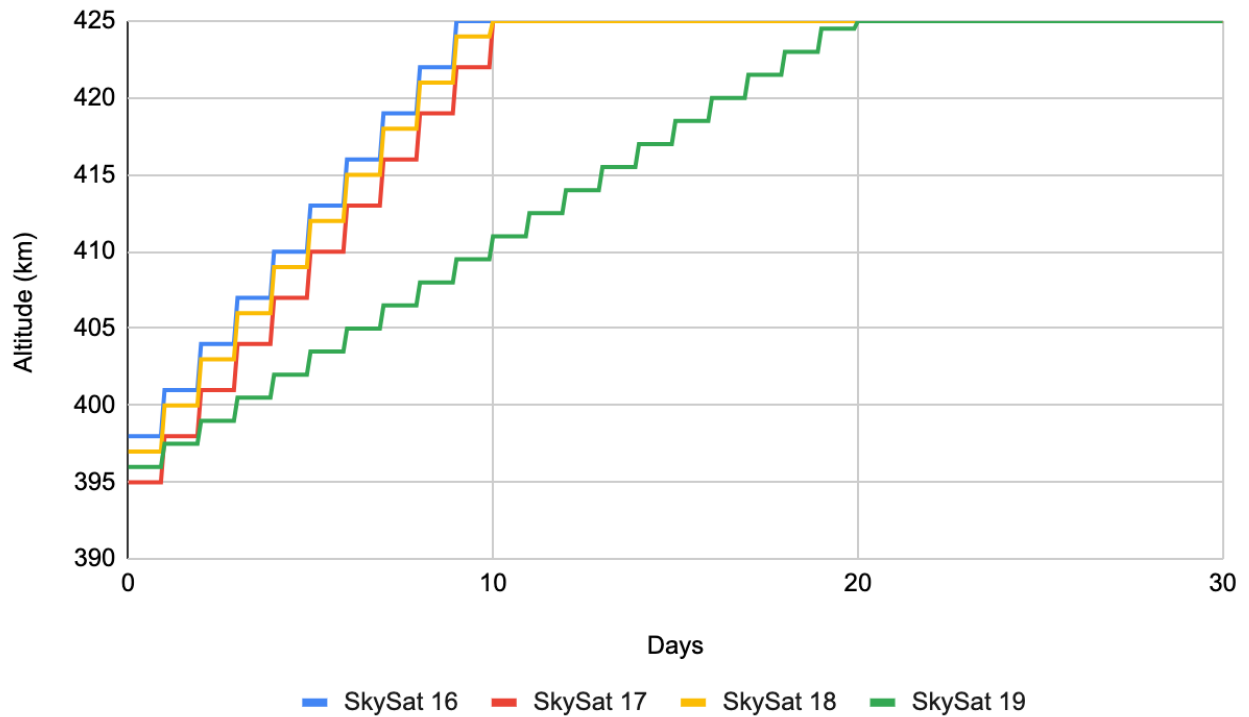
⁷ Pursuant to prior grants, the SkySat satellites were authorized to operate during in-orbit raising. See Stamp Grant, Application of Terra Bella Technologies Inc., File No. SAT-MOD-20170317-00053 (granted June 28, 2017).

detail in the associated modification application, there are no countervailing harms with respect to radio frequency interference or orbital debris mitigation.

Planet requests expeditious grant of this request. The potential benefit of raising these satellites diminishes exponentially if the orbit-raising plan is delayed beyond March 27th. At lower orbital altitudes, atmospheric drag creates a greater strain on satellite resources, requiring Planet to execute additional maneuvers that deplete propulsion reserves. Exposure to space weather in the current solar weather cycle also poses additional challenges. The planned raising campaign is designed to maximize available resources while minimizing the effect of solar weather; delay could affect the efficacy of the raising campaign by exposing the satellites to higher atmospheric drag due to a lower operating altitude and increasing solar activity. It also takes significant staff resources to plan and execute a raising campaign of multiple satellites, taking into account weather patterns, possible conjunctions, and appropriate phasing of Planet's on-orbit resources. Delay would require the team to execute a new plan, requiring additional staff resources, causing further delay, and compounding the effect of the atmospheric drag and solar weather factors described above.

Furthermore, as shown in the chart below, now that Planet has begun to initiate orbit raising on these satellites (within its current authorization) Planet will quickly pass above the currently authorized operating range for SkySat satellites 16 through 19. If Planet were required to modify the multi-satellite, orbit-raising plan and hold at an orbit mid-way through the raising maneuvers pending further FCC authorization to complete the plan, then, as noted above, there would likely be significant delay because of the need to recalculate and execute a plan for raising multiple satellites while addressing the effects of solar weather, possible conjunctions, and appropriate phasing.

Theoretical Mean Altitude Gain over Time



Accordingly, for the reasons specified above, Planet requests expedited approval of this application.