Amendment to Application

Blackwing Space, Inc. ("Blackwing Space") submits this request and description of its amendment to its application to operate the Babybird satellite in the 399.9-400.5 (Earth-to-space, center frequency of 399.975 MHz) ("UHF uplink") and 401-402 MHz bands (space-to-Earth, center frequency of 401.5 MHz) ("UHF downlink").

Blackwing Space submits this amendment to make changes to its operating characteristics and provide the necessary information to demonstrate that its operations can protect in-band federal and non-federal Mobile Satellite Service ("MSS") operators in the UHF uplink. These changes are to reduce uplink power and raise the minimum elevation angle of its earth station operations to ensure protection of these in-band systems.

Blackwing Space is not requesting any changes to its proposed operations in the UHF downlink.

Blackwing Space's amended proposed changes are within the envelope of the parameters being coordinated with the National Telecommunications Information Administration ("NTIA"). Blackwing Space requires the grant of license by **August 1, 2026** in order to integrate the Baby Bird satellite onto the launch vehicle and submits this amendment in the hopes of facilitating a timely grant.

Below, Blackwing Space demonstrates how its operations will protect in-band operators by abiding by the Commission's rules and policies related to earth stations operating in the UHF uplink.

Uplink Power Reduction to Comply with 47 CFR 2.106 and Footnote 5.260A

Blackwing Space amends its application to revise the maximum transmit power in the UHF uplink to 5 dBW EIRP, consistent with the ITU-R Radio Regulations and footnote 5.260A. Operating at this lower uplink power will ensure that earth station transmissions to the Baby Bird satellite will be operating at a power level that facilitates the protection of in-band MSS systems. Blackwing Space has revised its application form and NTIA Space Data Record to reflect the reduced power.

Operational and Technical Changes and Characteristics to Facilitate Protection of In-band Operators

Blackwing Space also seeks to amend the minimum elevation angle of its earth stations from 5 degrees to 20 degrees. This will decrease the transmit window of these uplink transmissions, further facilitating protection of other in-band users. Blackwing Space has

revised its NTIA Space Data Record and resubmitted it to reflect the higher elevation angles.

Blackwing Space also notes that its proposed use of the band is extremely limited. First, Blackwing Space is proposing to receive signals from only two earth stations, including one at a remote location in Alaska.

Additionally, under the revised minimum elevation angle, it is likely that each earth station would transmit to Blackwing Space no more than 10 minutes per day, a duty cycle of approximately .69% when averaged over a day. The limited, regular, predictable times of transmissions and its limited geographic and spectrum footprint will ensure that Blackwing Space can protect any in-band users.

If it would further help resolve the Commission's concerns, upon receiving its grant Blackwing Space can also notify the space station operators authorized to receive signals in the UHF uplink, including Orbcomm, Myriota, and Spire, of its proposed operations. This will ensure that Blackwing Space can deconflict its operations as needed with these primary spectrum users.

Compliance with Section 25.202(f)

Blackwing Space, after consulting with its ground station provider RBC Signals, certifies that the earth station transmissions in the UHF uplink band will comply with 25.202(f) of the Commission's rules, protecting adjacent band operators.

Compliance with Section 25.142

Blackwing Space certifies that it will not provide voice services during its operations in this band. It also initiated coordination with the NTIA and federal agencies in May when it filed its application and believes that it has provided "sufficient information to evaluate electromagnetic compatibility with the Federal government use of the spectrum."[1] If necessary, Blackwing Space commits to support further post-grant coordination as needed after August 1, 2026 to protect in-band and adjacent band federal systems.

[1] 47 CFR 25.142(b)(2)(ii).