

## Application to Extend STA for Cygnus NG-19 Spacecraft Docked at the ISS

Northrop Grumman Systems Corporation (NGSC) submits the attached application to request extension of WU9XHC, FCC File No. 0773-EX-ST-2023, with the advice of NASA JSC, due to unforeseen delay in departure of the spacecraft from the International Space Station (ISS). No substantive change to the current STA is requested beyond extending the expiration date to accommodate delay in the spacecraft's departure and uncertainty as to when departure may occur.

In support of this request, included below are emails between NASA JSC officials and NGSC that address the situation and conclude by recommending a six-month extension to take account of future changes to the departure schedule that may occur. All parties recognize that in any event, pursuant to Special Condition (1), this "STA will expire at Cygnus separation from the ISS + 21 days" or the new expiration date, whichever occurs first. It is expected that actual STA expiration under this special condition will be before the June expiration date of a new six-month STA period.

Contacts: NGSC: Daniel Rodgers: Daniel.Rodgers [at] ngc.com; 703-234-9063  
NASA: Cathy Sham: Catherine.C.Sham [at] nasa.gov  
NASA: Alan Chu: Alan.H.Chu [at] nasa.gov

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**From:** Chu, Alan H. (JSC-EV811)  
**Sent:** Tuesday, November 14, 2023 12:27 PM  
**To:** Hall, John F [US] (SP) <john.hall [at] ngc.com>; Edmonds, Christopher S. (JSC-EV811) <christopher.s.edmonds [at] nasa.gov>  
**Cc:** [ deleted ]  
**Subject:** RE: [EXTERNAL] RE: NG19 Departure (FCC License)

John,

For the license expiration date, I would recommend asking for the full six months. On the license, a special condition will say that license expire at either 6 months date or mission complete. Below is copied from 0773-EX-ST-2023 (the current NG-19 active license as an example of this special condition. Ask for 6 months doesn't hurt and give us flexibility in case there is future departure delay.

This STA is limited to Cygnus capsule telemetry, tracking, and command operations for the Northrop Grumman 19 (NG-19) mission to the International Space Station (ISS). This STA will expire at Cygnus separation from the ISS + 21 days or 28 December 2023, whichever occurs first. Any future missions or long-term on-orbit operations that do not directly support NASA contractual obligations shall submit new applications to the FCC to be re-coordinated with the NTIA.

Thank you,  
Alan

**From:** Hall, John F [US] (SP) <[john.hall \[at\] ngc.com](mailto:john.hall@ngc.com)>  
**Sent:** Tuesday, November 14, 2023 11:25 AM  
**To:** Edmonds, Christopher S. (JSC-EV811) <[christopher.s.edmonds \[at\] nasa.gov](mailto:christopher.s.edmonds@nasa.gov)>  
**Cc:** [ deleted ]  
**Subject:** [EXTERNAL] RE: NG19 Departure (FCC License)

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Chris,

Yes, the current NG-19 STA expires on 12/28/2023 and departure is indeed planned for 12/21/2023.

Our current estimate for reentry is 1/8/2024.

We will work with FCC to get the STA extended to 1/31/2024 to accommodate any departure/reentry delays.

I'll keep you posted on the progress.

Thanks,  
John

**From:** Edmonds, Christopher S. (JSC-EV811) <[christopher.s.edmonds \[at\] nasa.gov](mailto:christopher.s.edmonds@nasa.gov)>  
**Sent:** Tuesday, November 14, 2023 12:15 PM  
**To:** Hall, John F [US] (SP) <[john.hall \[at\] ngc.com](mailto:john.hall@ngc.com)>; Rodgers, Daniel M [US] (SP) <[Daniel.Rodgers \[at\] ngc.com](mailto:Daniel.Rodgers@ngc.com)>  
**Cc:** [ deleted ]  
**Subject:** EXT :NG19 Departure (FCC License)

John,

Word on my side is that NG19 departure from ISS is moving out to Dec 21. Last I heard, your team plans to fly NG19 for an additional 2 weeks before disposal – can you confirm this?

JSC Spectrum office is tracking that the NG19 STA expires on 12/28. With the departure moving, and if NG19 does indeed fly an addition 2 weeks, then those operations and use of TDRS will be beyond the current STA. We recommend a new STA application to ensure FCC compliance.

Let me know if you have any questions, or need any information from me!

Thanks,

**Christopher S. Edmonds**

Wireless & Communication Systems Branch  
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