FCC Form 312 **Exhibit 1**

LEGAL NARRATIVE

Pursuant to Section 25.117 of the Federal Communications Commission's rules,[1] O3b Networks ("O3b") requests modification of its earth station license, call sign E150018, File No. SES-LIC-20150310-00138.[2] O3b submits this application in order to move the Manassas 1.2m earth station authorized by this license to a new location in Manassas, VA. O3b also seeks to:

- Modify the antenna height above the ground;
- Modify the elevation angle used at this new location;
- Modify the Input Power; and
- Modify the Maximum EIRP per carrier, Maximum EIRP Density per Carrier and Maximum EIRP Density towards the Horizon

These changes are noted in the attached Schedule B in Boxes E35-39, E47-49, E57, and E59-60. All other licensed parameters will remain the same.

The 27.6-28.35 GHz uplink band is allocated to the local multipoint distribution service ("LMDS") on a primary basis. Comsearch has notified all existing and proposed LMDS licensees that are within the coordination contours of the new proposed site of the Manassas 1.2m Earth Station and that potentially could be affected by O3b's transmissions in the 27.6-28.35 GHz portion of the Ka-band. As stated in the attached coordination report prepared by Comsearch, no objections were received from any of these parties.

The attached interference analysis report prepared by Comsearch demonstrates that at the new location the Manassas 1.2m earth station will continue to operate satisfactorily within the 18 GHz microwave environment, and there will continue to be no restrictions of its operation due to interference considerations.

O3b also includes a radiation hazard study for the new site. O3b will follow procedures described in the study to mitigate potential radiation hazards to personnel in controlled and uncontrolled environments.

Additionally, O3b submits a certification that this modification will not require a FAA notification.

O3b notes the ongoing Spectrum Frontiers proceeding,[3] which contemplates revising the status of FSS and terrestrial mobile services in the 27.5-28.35 GHz band. The earth station that is the subject of this modification will be located at O3b's Network Operations Center ("NOC") also known as its "Randolph Ridge" facility in Manassas, Virginia. O3b has invested millions of dollars to construct the

[1] 47 C.F.R. 25.117

[2] Granted September 30, 2015.

[3] *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, GN Docket No. 14-177, *et al.*, Notice of Proposed Rulemaking, FCC 15-138 (rel. Oct. 23, 2015).

Randolph Ridge facility, including the construction of a private fiber line, in order to enable the NOC to effectively manage the global O3b ground station network.

O3b currently operates the Manassas 1.2m earth station at the Bristow Integration site, which is less than one mile away from the Randolph Ridge facility. O3b is moving this earth station license to the Randolph Ridge site in order to streamline the testing and integration of its current and future customer earth station models. By co-locating all its earth station testing and integration at the Randolph Ridge facility, O3b is furthering Commission policy by limiting the geographic impact of its earth station deployments in the 27.6-28.35 GHz band and avoiding constraints on terrestrial deployment.