## NATURE OF EXPERIMENTAL PROGRAM

TerreStar License Inc., Debtor-in-Possession ("TerreStar"), pursuant to Section 5.61 of the Commission's rules, hereby seeks experimental Special Temporary Authority ("STA") to operate a prototype antenna and transceiver being designed for application to automobiles in the manner described below.

TerreStar anticipates that testing of and experimentation related to its device will take no longer than six (6) months. Accordingly, its proposed operations fall within both the scope and time duration contemplated by the experimental STA rules.

TerreStar seeks STA under the Commission's experimental rules to permit it to test and demonstrate the functionality of its mobile automobile kit. TerreStar will collect valuable performance feedback during this experimental stage of its operations, permitting it to make important improvements to the device before bringing it to market.

TerreStar holds a Letter of Intent authorization to operate a 2 GHz satellite known as TerreStar-1. In connection with providing communications services over the TerreStar-1 satellite, TerreStar is working with Interlibs Inc. to develop and bring to market a mobile kit, composed of a transceiver unit and a cradle for Terrestar's GENUS<sup>™ 1</sup> satellite smartphone, both mounted within an automobile, and a roof-mounted antenna.

Both the transceiver and the antenna will communicate in the transmit band of 2005-2010 MHz, using linear polarization, and the receive band of 2195-2200 MHz, using lefthand circular polarization. These frequency bands have been allocated for use by TerreStar-1 to provide mobile satellite service ("MSS"). TerreStar intends to center its frequency emissions related to this proposed experimental program so that there is no interference outside either the bands authorized for MSS operations.

The nature of the proposed operations includes testing in a single vehicle in various locations throughout the continental United States ("CONUS"). With CONUS authority, TerreStar will be able to conduct numerous drive tests in order to determine the effectiveness of the device along various roadways and changing landscapes, terrains, and elevations, including both urban and rural settings. Initial measurements using a spectrum analyzer indicate that operation of the device will, as indicated above, pose no out-of-band interference and no harmful interference to other satellite or terrestrial communications licensees.

<sup>&</sup>lt;sup>1</sup> TerreStar developed the GENUS<sup>TM</sup> mobile earth terminal which offers terrestrial and satellite functionality in a standard smartphone form factor. The device is currently marketed as Satellite Augmented Mobility ("SAM") by AT&T through its enterprise, government and small business sales channels.