



Memo: To All Bryston Distributors/Dealers
Subject: Bryston 6B SST NASA Bound

August 8, 2007

Bryston is pleased to announce that the Bryson 6B SST Amplifier has been selected as the amplifier to power the sound system for the new NASA Glenn Research Center (GRC) Hearing Protection Device (HPD) Evaluation Laboratory.



Bryton 6B SST

The HPD lab at GRC will be used to evaluate and develop hearing protection systems for all aspects of the NASA programs in general accordance with the ANSI S3.19 and S12.6 standards and internally developed protocols.

The amplifier will power three loudspeakers in a small reverberation chamber designed to create a uniform and diffuse sound field around human subjects. Because of the potentially high noise level exposure by NASA personnel, subjects may be evaluating the performance of double hearing protection systems (i.e. earplug+ earmuffs) or other custom designed hearing protection systems for flight applications. The sound system must be capable of creating distortion free sound pressure levels at the subject location that are at least 90 to 100 dB above the threshold of hearing when the subject is wearing the hearing protection, and then present the same stimulus at threshold of hearing (TOH) when unoccluded by the hearing protector. Any buzz, hiss or other non-stimulus related signal must be at least 10 dB below TOH when the subject is unoccluded and no out of bandwidth distortion when the subject is occluded by the hearing protector.

The system under development will utilize a 24 bit National Instruments digital signal generation and analyzer card to drive the Bryton amplifier. The Bryton will drive three EV T251+ loudspeakers in a 40 cubic meter reverberation chamber.

Beth Cooper at NASA GRC is the lead engineer for the HPD Laboratory project. ViAcoustics and Nelson Acoustics are the system developers for this project. Both Jeff Schmitt of ViAcoustics and David Nelson of Nelson Acoustics, have extensive experience working with NASA, having served as part of the engineering team that was responsible for noise control on the International Space Station.