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Insertion Loss of the HGU-84/P Rotary-Wing Helmet System with Oregon Aero Earcup Replacement Products

by William A. Ahroon, Melinda E. Hill, Elmaree Gordon, and Martin B. Robinette

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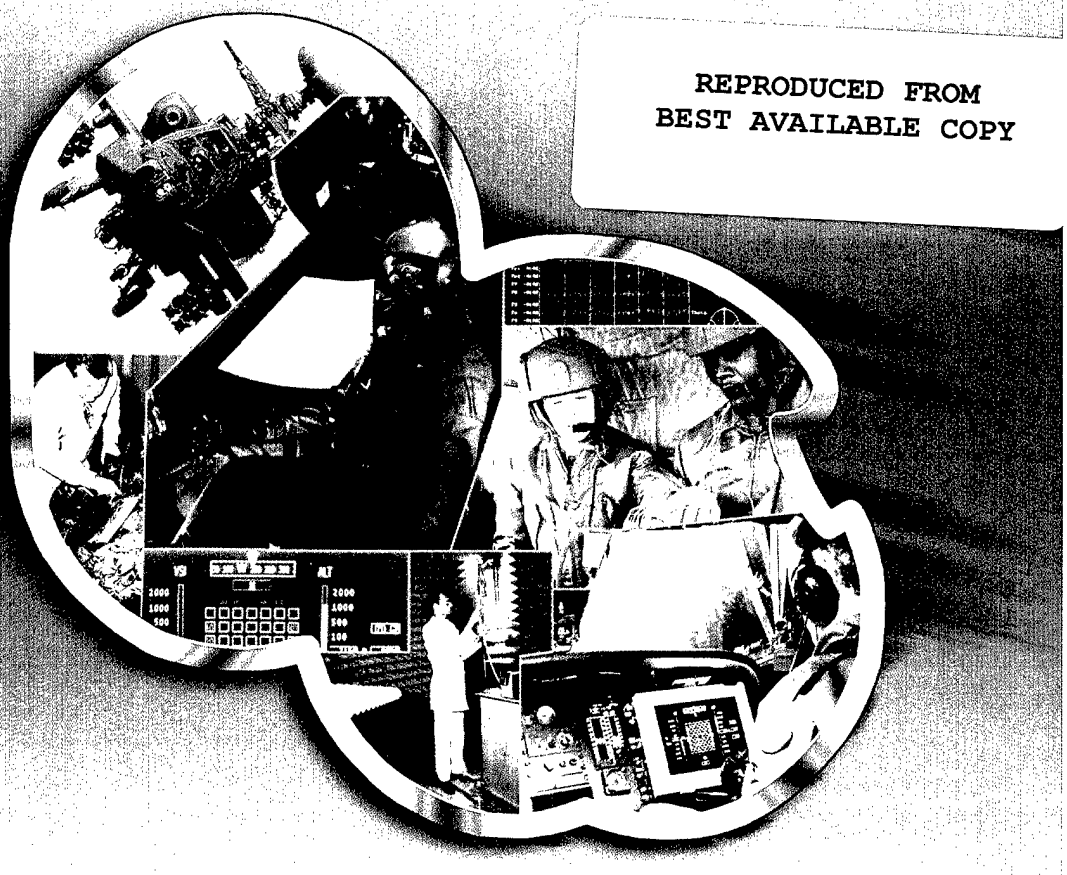

Aircrew Protection Division

February 2004

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13. ABSTRACT *(Maximum 200 words)*

The sound attenuation of the HGU-84/P Rotary-Wing Helmet System with Oregon Aero earcup replacement products was evaluated in accordance with ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear procedures. The differences in insertion losses between the various helmet modifications were generally quite small and unlikely to have an effect on operational considerations, especially if double hearing protection in the form of earplugs, the Communications Earplug (CEP), or Attenuating Custom Communications Earphone System for Aircrew (ACCES for Aircrew) is employed. The insertion loss of the helmet with the Oregon Aero HushKit earcup replacement foam was significantly poorer than the standard helmet system. Insertion losses with the SoftSeal (replacement earcup seal) with HushKit and the SoftSeal/HushKit Combo (soft replacement earcup) were statistically significantly greater than the standard helmet configuration at some frequencies, although the differences were marginal at the low frequencies at which rotary-wing noise hazards are the greatest. Caution is urged when considering the use of the SoftSeal or SoftSeal/HushKit Combo since, at the time of this writing, neither of these earcup replacement products has been evaluated for helmet retention or blunt impact protection in case of an aircraft mishap.

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Table of contents

Page

Introduction....1

Method....2

Results....6

Discussion....8

References....14

Appendices....15

A. Human subjects consent form....17

B. General health screening questionnaire....21

C. Microphone-in-Real-Ear raw data for all subjects....25

D. Microphone-in-Real-Ear summary tables....227

E. Analysis of variance and Duncan multiple range test summary tables (by ear)....259

F. Analysis of variance and Duncan multiple range test summary tables (averaged across ears)....269

G. Subject head and ear measurement demographics and fitting notes....279

List of figures

1. Gentex HGU-84/P Rotary Wing Helmet System....1

2. Earcup, earcup seal, insert foam, and speaker (earphone) found in the Gentex HGU-84/P Rotary Wing Helmet System....2

3. Gentex HGU-84/P Rotary Wing Helmet System earcup configuration displayed with the Oregon Aero earcup replacement products evaluated in this study....4-5

4. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero HushKit™ (open symbols)....9

Table of contents (continued)

List of figures (continued)

Page

5. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal™ and HushKit™ (open symbols) 10

6. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal/HushKit Combo™ (open symbols) 11

7. Mean insertion losses for the tight-fitting HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal™ with (top) or without (middle) HushKit™ (open symbols) 12

8. Mean insertion losses for the tight-fitting HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal/HushKit Combo™ (top, lower left) and custom SoftSeal/HushKit Combo™ (open symbols) 13

Introduction

The Gentex HGU-84/P Rotary Wing Helmet System (RWHS) (Figure 1) is designed to provide impact protection and noise attenuation to U.S. Navy rotary-wing aircraft crewmembers. It has replaced the 1980's-vintage SPH-3C flight helmet and is used by most U.S. Navy rotary-wing aircrew.

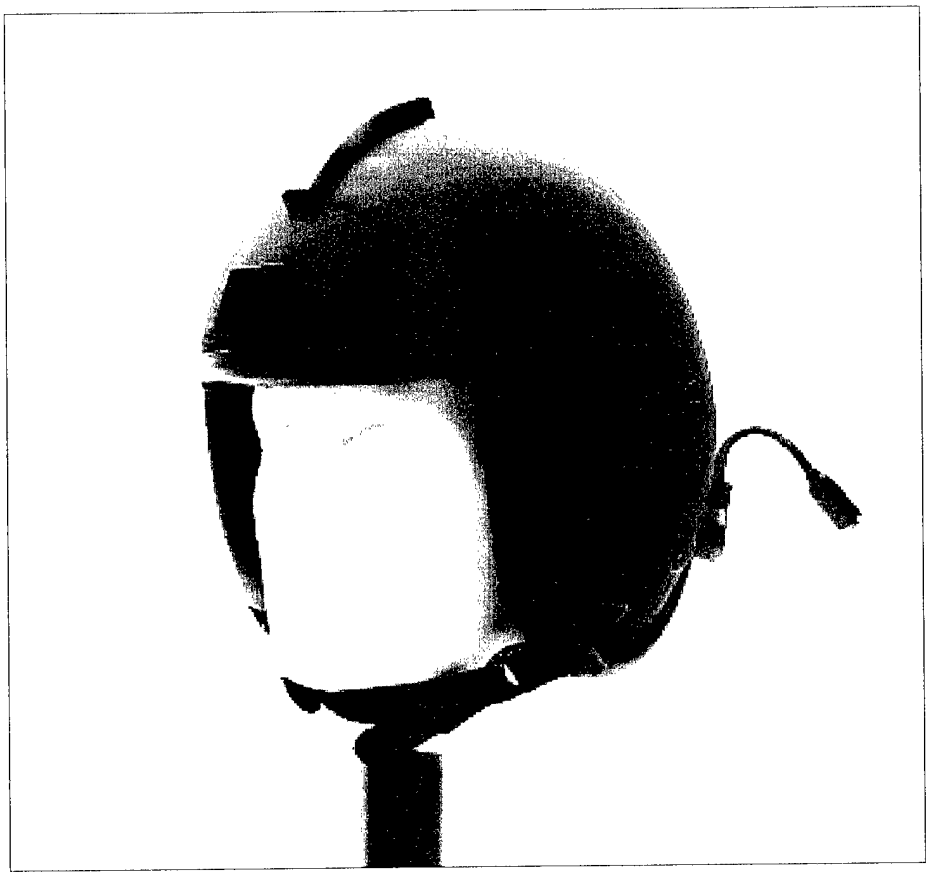

Figure 1. Gentex HGU-84/P Rotary Wing Helmet System.

Oregon Aero, a manufacturer of replacement components for civilian and military vehicles and personal items such as helmets and headsets, has developed and is marketing several earcup replacement products for use in the HGU-84/P RWHS. These products include replacement earcup foam (HushKit™), replacement earcup seals (SoftSeal™) and replacement earcups (SoftSeal/HushKit Combo™) designed for use in a number of different helmet systems (see Figure 3). This report describes the insertion loss (noise attenuation) provided by each of these earcup replacement products when used with the HGU-84/P RWHS.

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Method

Testing was performed in accordance with (IAW) the American National Standard Microphone-in-Real-Ear and Acoustic Test Fixture Methods for the Measurement of Insertion Loss of Circumaural Hearing Protection Devices (ANSI S12.42-1995 [R1999]), Microphone-in-Real-Ear (MIRE) method. Using miniature microphones positioned at the entrance to the ear canals, noise levels were measured with and without the HGU-84/P RWHS in place. The difference in the two measurements provided a physical measure of the performance (insertion loss) of the device. Evaluations were made with the HGU-84/P RWHS worn using normal-fitting procedures and with the helmet adjusted to a relatively tight fit; tighter, in fact, than could be worn comfortably under normal circumstances. Initial evaluations were made with the HGU-84/P RWHS as configured by the manufacturer with the HushKit™ replacement earcup foam, with the SoftSeal™ replacement earcup seal with HushKit™, and with the SoftSeal/HushKit Combo™ , a soft replacement earcup with Oregon Aero foam earcup liner. The second fitting procedure tested, in addition to the standard and three replacement configurations above, the SoftSeal™ replacement earcup seal without HushKit™ replacement earcup foam and a triangular soft replacement earcup similar to the SoftSeal/HushKit Combo™.

Subjects

The U.S. Army Aeromedical Research Laboratory recruited twenty volunteer subjects (18 male, 2 female) from tenant activities located at the U.S. Army Aviation Center, Fort Rucker, Alabama. The purpose of the study was explained to each subject. Each subject read and signed an informed consent form (Appendix A) and then completed a questionnaire regarding his/her hearing health (Appendix B). An otoscopic examination was performed and audiograms were collected on each subject before MIRE testing. At any time during this preliminary process, if a subject failed to qualify for ANSI S12.42-1995 (R1999) MIRE testing, he/she was released. No subjects failed to qualify for the study. Although subjects were permitted to withdraw from the study at any time, no subjects chose to withdraw from the study.

Devices tested

The earcup parts for the standard HGU-84/P RWHS are displayed in Figure 2. The earcup configurations with the HushKit™, SoftSeal™, and SoftSeal/HushKit™ Combo are displayed in Figure 3. To conserve test assets, four HGU-84/P RWHS units were acquired, sizes M, L, XL, and XL (wide). The earcups were removed and sets of replacement earcups were configured with HushKit™ and standard earcup seal or with the SoftSeal™ and HushKit™. A fourth configuration with the SoftSeal/HushKit Combo™ (Figure 3c) also was prepared. As noted above, the SoftSeal™ without HushKit™ and a custom SoftSeal/HushKit Combo™ with large triangular earcups also were tested using tight-fitting helmets. The standard speaker (earphone) used in the HGU-84/P RWHS was included in each configuration.

Upon completion of the informed-consent procedure and initial audiometric evaluation (see above), the subject selected the unmodified helmet that provided the best fit with regard to

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hearing protection and comfort. Following helmet selection, one of the four earcup configurations was installed into the HGU-84/P RWHS. The fitting of the helmet for all conditions was performed by personnel trained by USAARL Aviation Life Support Equipment (ALSE) specialists.

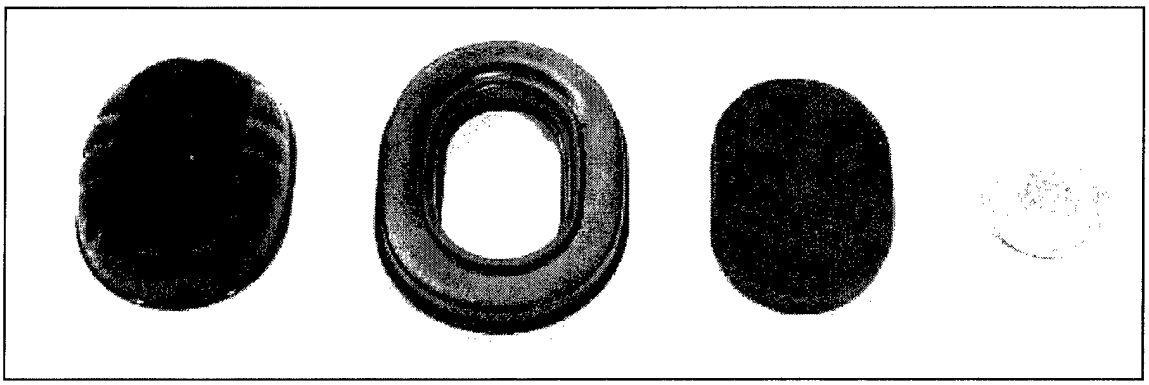

Figure 2. Earcup, earcup seal, insert foam, and speaker (earphone) found in the Gentex HGU-84/P Rotary Wing Helmet System.

Equipment

The MIRE test procedure utilized two Knowles Model 1832 electret microphones, two QSC Audio PLX 3402 power amplifiers, three Altec Model 612C speakers, and a personal computer running Microsoft Windows™ 2000 with National Instruments PCI-4451 Dynamic Signal Acquisition and Generation board (part number 777534-01) and National Instruments LabVIEW™ software package installed. The sound field created by the described system satisfied the stimulus conditions mandated by ANSI S12.42-1995 (R1999). Control of the test procedure was performed by the Windows™-based computer system running custom LabVIEW software developed at USAARL. The test system played broad-band white noise through one channel of the PCI-4451 Dynamic Signal Acquisition and Generation board. Ten seconds of sound were recorded from the two electret microphones through the two analog input channels of the PCI-4451 board. The LabVIEW software analyzed the input noise using the ANSI third-octave band tools available within the National Instruments Sound and Vibration Analysis Toolset and saved the results on disk for later analysis. The data acquisition system was calibrated daily with an acoustic reference signal produced by a Brüel & Kjær (B&K) Type 4228 pistonphone to provide sound pressure levels referenced to 20 micropascals (μPa), input through a B&K Type 4192 ½-inch microphone, coupled to a B&K Type 2669 preamplifier powered and conditioned by a B&K NEXUS Type 2690 conditioning amplifier.

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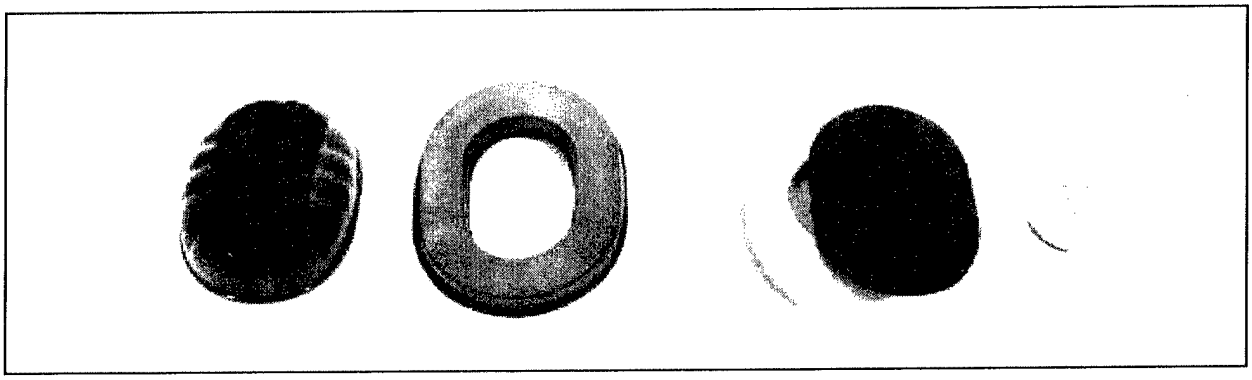
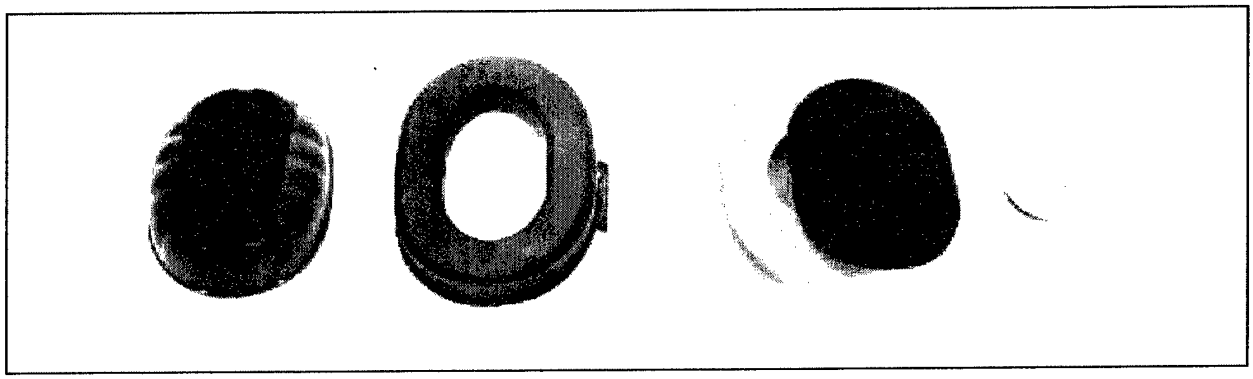
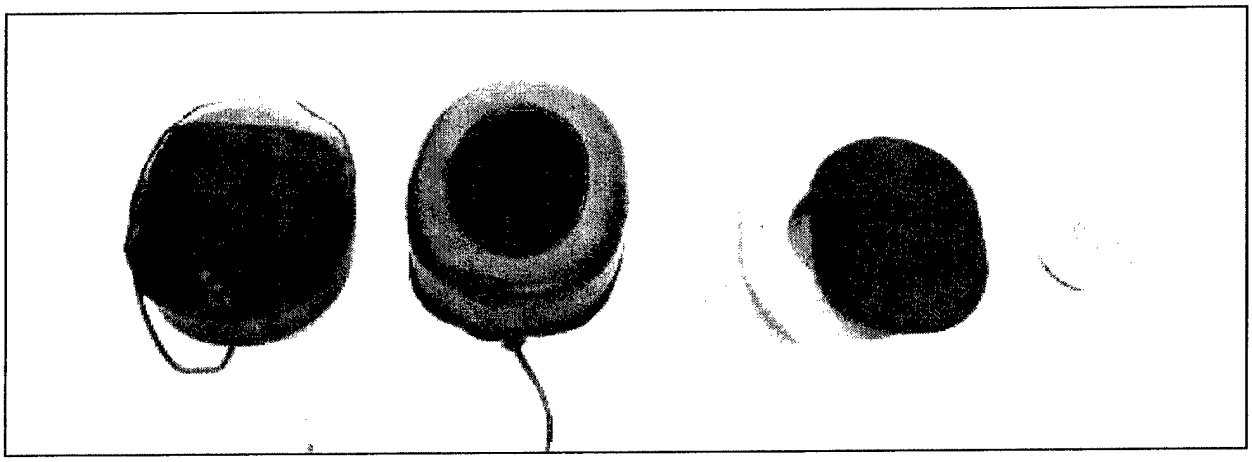
(a) Oregon Aero HushKit™ (replacement foam only).



(b) Oregon Aero SoftSeal™ (replacement earcup seal) with HushKit™.



(c) Oregon Aero SoftSeal/HushKit Combo™ (soft, non-energy absorbing, replacement earcup).



(d) Oregon Aero custom SoftSeal/HushKit Combo™. The replacement earcup fills the space in the HGU-84/P RWHS eardome.

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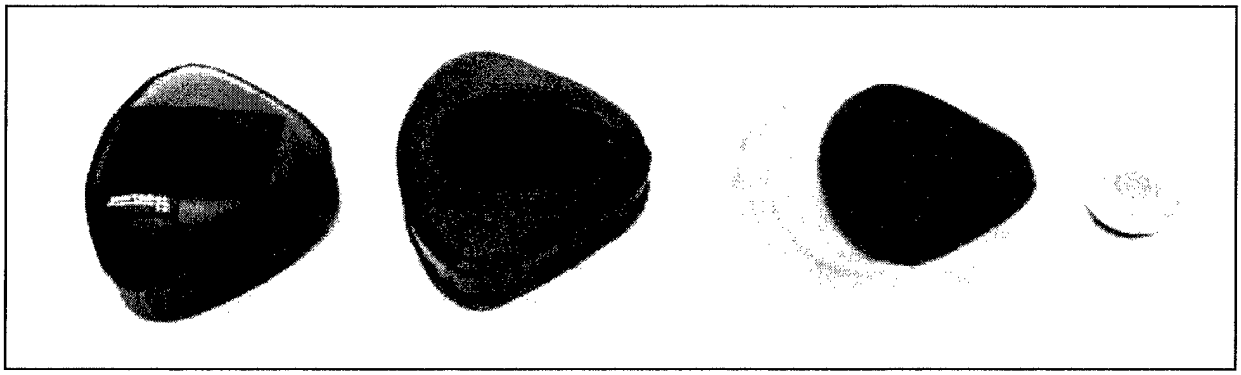

Figure 3. Gentex HGU-84/P Rotary Wing Helmet System earcup configuration displayed with the Oregon Aero earcup replacement products evaluated in this study. (a) Oregon Aero HushKit™, (b) Oregon Aero SoftSeal™ with Oregon Aero HushKit™, (c) normal (oval) version of the Oregon Aero SoftSeal/HushKit Combo™, (d) Oregon Aero custom SoftSeal/HushKit Combo™.

Procedure

At the start of a test session, each subject was fitted with silicone moldable earplugs (Flents Products, Silaflex™ No. 901) which served both as a hearing protector and a convenient medium for mounting the microphone. The subject was then seated in a hard-walled (reverberant) sound room. A non-directional sound field of wideband noise at approximately 105 dBA sound pressure level (SPL) was presented and unoccluded reference data were collected. To obtain these data, the noise signal was measured by the microphones in the subject's ears, the LabVIEW software performed the two-channel third-octave band analysis, and the results were stored by the computer for later analysis. Twenty-five third-octave bands with center frequencies from 63 Hz to 16,000 Hz were used. The sound field was then turned off and the subject donned the HGU-84/P RWHS with the Oregon Aero earcup replacement products installed. The sound field again was turned on and the noise signal was measured, analyzed, and stored in a like manner. The noise was measured, analyzed, and results stored after the subject doffed and donned the helmet two additional times, thus providing three measures of unoccluded and three measures of occluded noise levels for each subject. The algebraic difference between the mean of the three open and three occluded measurements for each one-third-octave band was defined as the insertion loss of the device IAW ANSI S12.42-1995 (R1999).

The total noise exposure for each subject was approximately 6 minutes for the entire experiment. For the unprotected ear, Department of Defense (DOD) Instruction 6055.12, "Hearing Conservation," limits allowable exposure time for a single 24-hour period for 105 dBA SPL (e.g., A-weighted SPL) to 32 minutes. The moldable earplug used in the measurement extended the maximum allowable exposure time to more than 16 hours. Thus, the subject's hearing was not considered at risk from the noise exposures encountered during this experiment.

A reference device (ANSI S12.42-1995, Paragraph 8.1.5) consisting of a string suspended from the test booth ceiling down to a level approximately equal to the elevation of a subject's nose was used to maintain the subject's head at the stimulus reference point, the point where stimulus calibration was performed. During testing, subjects were observed over a closed-circuit television system.

Statistical analyses were performed using STATISTICA® Release 6.1 from StatSoft®, Inc. Post-hoc analyses were performed using the Duncan multiple range test*. The probability of a Type I error was set at 0.05 for all analyses.

Results

The individual and summary results for all evaluations are reported in Appendices C and D. For each evaluation, three-way repeated-measures analyses of variance with repeated measures on all factors (Earcup Configuration × Ear × Frequency) were performed on the mean insertion losses for the standard HGU-84/P RWHS configuration and the HGU-84/P RWHS with Oregon Aero earcup replacement products installed. Analysis of variance summary tables are presented in Appendix E. Post-hoc analyses were performed using the Duncan multiple range test and results of the pair-wise multiple contrasts also are presented in Appendix E.

The insertion losses for normal fitting procedures (top two panels) , tight fitting procedures (center panels), and combined ears (lower two panels) of the HGU-84/P RWHS worn with the Oregon Aero HushKit™, SoftSeal™ and HushKit™, and SoftSeal/HushKit Combo™ are illustrated in Figures 4, 5, and 6, respectively. The top panels for each of these figures show the mean insertion losses for the left and right ears of a normal fitting helmet. Likewise, the middle panels show the mean insertion losses for the left and right ears using a tight-fitting helmet procedure. The bottom left figure shows the insertion loss for normal-fitting helmets, averaging the left and right ears, and the bottom right figure shows the two-ear average results for tight-fitting helmets. In each of these three figures (as well as the subsequent two figures), error bars represent one standard error of the mean. Likewise the small vertical bars in the lower portion of each panel represent statistically significant post-hoc comparisons. The tight-fitting procedure routinely left red welts on the side of the test subject's head and was judged uncomfortable by the subjects. We conclude that it is unlikely that any aviator would wear a helmet in this fashion. Therefore, the data from normal fitting procedures are emphasized in this report. That is, while the Oregon Aero earcup replacement products may provide greater insertion losses when worn under tight-fitting helmets, it is unlikely that aircrew will actually wear helmets in this way, and these results are provided for informational purposes only.

* The Duncan's multiple-range test was used for post-hoc comparisons because only a limited set of comparisons, those between real-ear attenuation at threshold at the same test frequencies, were of interest in these analyses (Keppel, 1973).

There were statistically significant main effects of frequency in all analyses, which is expected based on our knowledge of the frequency-specific noise attenuation of hearing protectors in general and the HGU-84/P RWHS in particular. Of particular interest were the results of the multiple contrasts which gave definition to the mean insertion-loss differences displayed in each of the figures.

Results of our analyses demonstrated that helmets equipped with the HushKit™ foam product had lower mean insertion loss values (i.e., less noise attenuation and hearing protection) than helmets equipped with the standard foam. The Oregon Aero SoftSeal™ replacement earcup seal with the HushKit™ replacement foam provides some improvement in insertion loss, but most of the improvement is in the third-octave bands centered at from 2.0 to 8.0 kHz. The Oregon Aero SoftSeal/HushKit Combo™ provided some improved insertion loss in the lower frequencies over that provided by the standard helmet, as well as some higher insertion loss in the mid-frequency region (from 1.0 to 8.0 kHz).

Figure 7 displays the mean insertion losses for the standard tight-fit HGU-84/P RWHS and the Oregon Aero SoftSeal™ and HushKit™ (top) and with the SoftSeal™ alone. The top two panels of Figure 7 duplicate the center two panels in Figure 5. The center two panels illustrate the mean insertion loss results for the HGU-84/P RWHS fitted with Oregon Aero SoftSeal™ replacement earcup cushions, using the standard earcup foam insert. The bottom two panels illustrate the results when both ears were averaged for the HGU-84/P RWHS with SoftSeal™ and HushKit™ (bottom left) and the HGU-84/P RWHS with SoftSeal™ with standard foam (bottom right). The deletion of the HushKit™ from the SoftSeal™ with HushKit™ configuration removed the small insertion loss improvement that the SoftSeal™ and HushKit™ combination had over the standard HGU-84/P RWHS. Note that these data were collected using tight-fitting helmet fitting procedures and may not be representative of the insertion losses using normal helmet fitting procedures.

Figure 8 displays the mean insertion losses for the standard tight-fit HGU-84/P RWHS and the RWHS fit with the Oregon Aero oval-shaped SoftSeal/HushKit Combo™ (top, lower left) and the RWHS fit with the Oregon Aero custom, triangular-shaped SoftSeal/HushKit Combo™ (middle, lower right). The custom SoftSeal/HushKit Combo™ did not differ appreciably from the oval-shaped SoftSeal/HushKit Combo™. Insertion losses were increased over the HGU-84/P RWHS standard configuration at the low test frequency bands (below 300 Hz) but both test configurations performed poorer (i.e., had lower mean insertion losses) in the mid and high frequencies (from 300 Hz up to 8000 Hz). The caveat regarding tight versus normal helmet fitting procedures made above applies to these data as well.

Discussion

The replacement of the standard HGU-84/P RWHS earcup foam with the Oregon Aero HushKit™ replacement foam does not improve the noise attenuation of the helmet system when measured by ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear procedures. In fact, the insertion loss of the helmet with the HushKit™ installed is lower (less attenuation) than that measured in the standard helmet system when worn using normal-fitting procedures (as used in the fleet). Helmets fitted with the Oregon Aero SoftSeal™ replacement earcup seal and HushKit™ replacement foam and the SoftSeal/HushKit Combo™ replacement earcup perform marginally better than the standard HGU-84/P RWHS. If double hearing protection in the form of earplugs, the Communication Earplug (CEP), or Attenuating Custom Communications Earphone System for Aircrew (ACCES for Aircrew) are used, it is very unlikely that any of the Oregon Aero earcup replacement products would improve the hearing protection of the helmet system.

Note that the ANSI S12.42-1995 (R1999) standard used in the conduct of this evaluation is designed for quick, inexpensive, and repeatable measurements of hearing protective devices and not for the measurement of sound attenuation. ANSI S12.42 indicates that "*Neither the MIRE or Acoustic Test Fixture (ATF) procedure ... is intended to estimate sound attenuation or the level of hearing protection achieved in the work place.* This Standard is intended primarily for use in design, quality control assurance, and compliance with specifications for hearing protection devices. At or below 250 Hz, the MIRE attenuation values are often lower than real-ear values at threshold. (Paragraph 3). Before any replacement earcups are approved for flight, it is important that the sound attenuation of the helmet system with replacement components be evaluated in accordance with the appropriate method, in this case the real-ear attenuation at threshold measure described by ANSI S12.6-1997 (R2002). For military hearing protective systems, ANSI S12.6-1997 Method A, Experimenter-supervised fit, is preferred.

An second important caveat is in order. While it is possible that any replacement earcup seal or earcup may improve sound attenuation, it is essential that these products not be used until evaluations of helmet retention and the blunt impact protection provided by the helmet when fitted with these earcup replacement products are performed. It is possible that the surface of replacement earcup seals may slip during an aircraft mishap, allowing the helmet to rotate on the head and exposing normally-protected areas of the skull to blunt impacts. Likewise, aviation helmet earcups are often designed with energy-absorbing characteristics which might not be part of a replacement earcup design. Reduced energy absorption to lateral impacts will place aircrew wearing a modified helmet at a higher, unacceptable risk of head injury. Complete helmet retention and blunt impact tests under different environmental conditions are necessary before fielding any earcup replacement components.

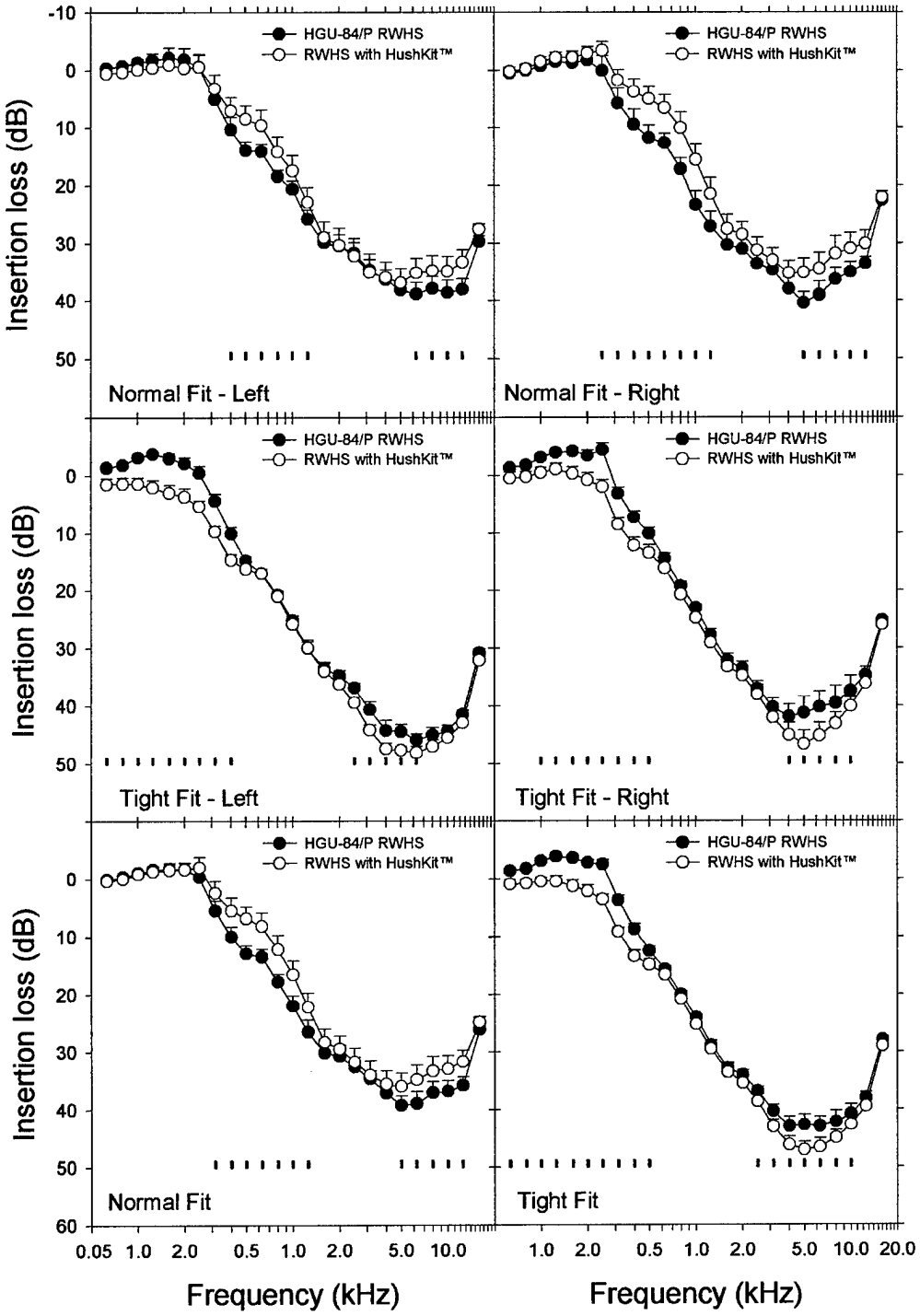

Figure 4. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero HushKit™ (open symbols). Error bars represent one standard error of the mean.

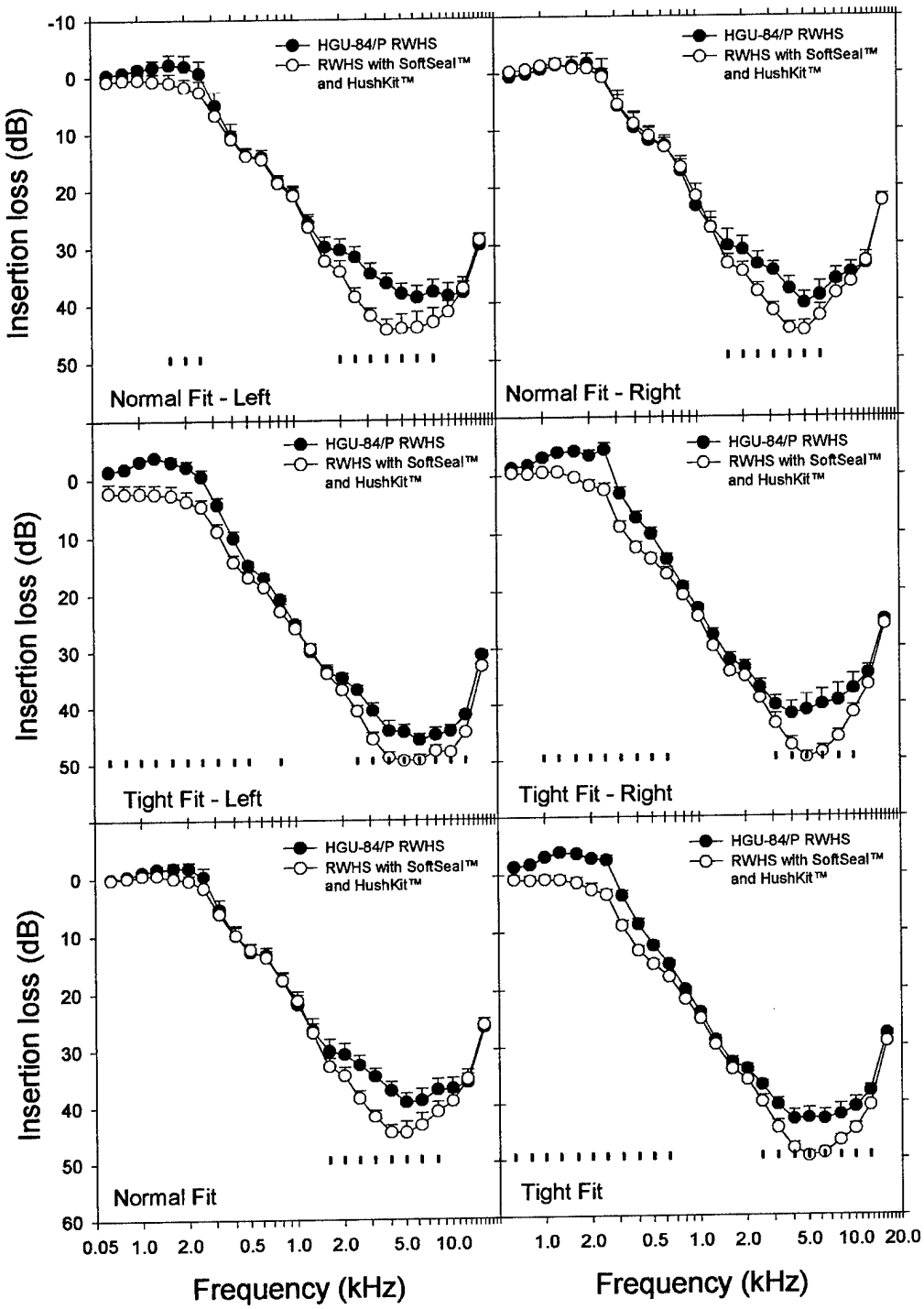

Figure 5. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal™ and HushKit™ (open symbols). Error bars represent one standard error of the mean.

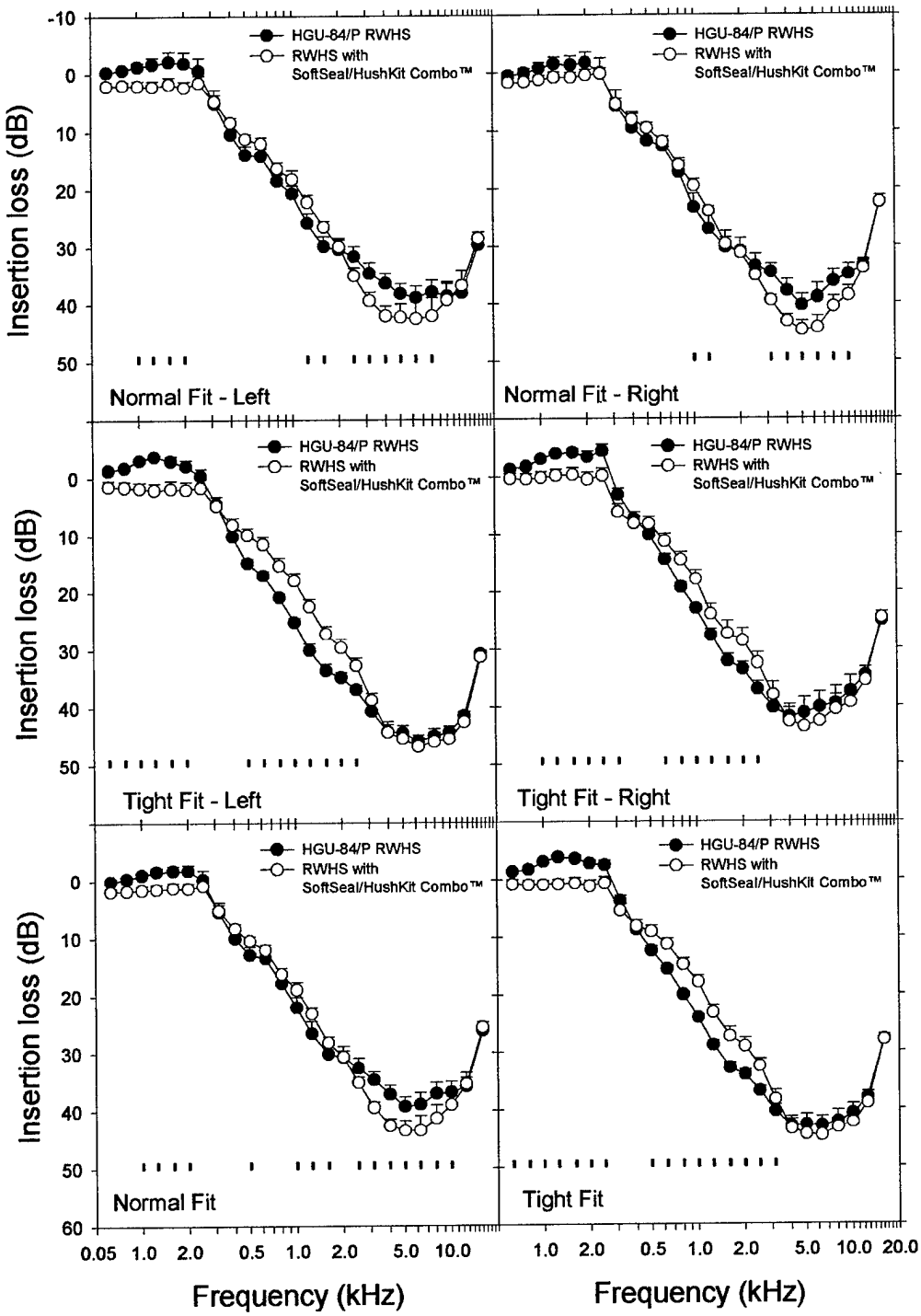

Figure 6. Mean insertion losses for each earcup of the HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal/HushKit Combo™ (open symbols). Error bars represent one standard error of the mean.

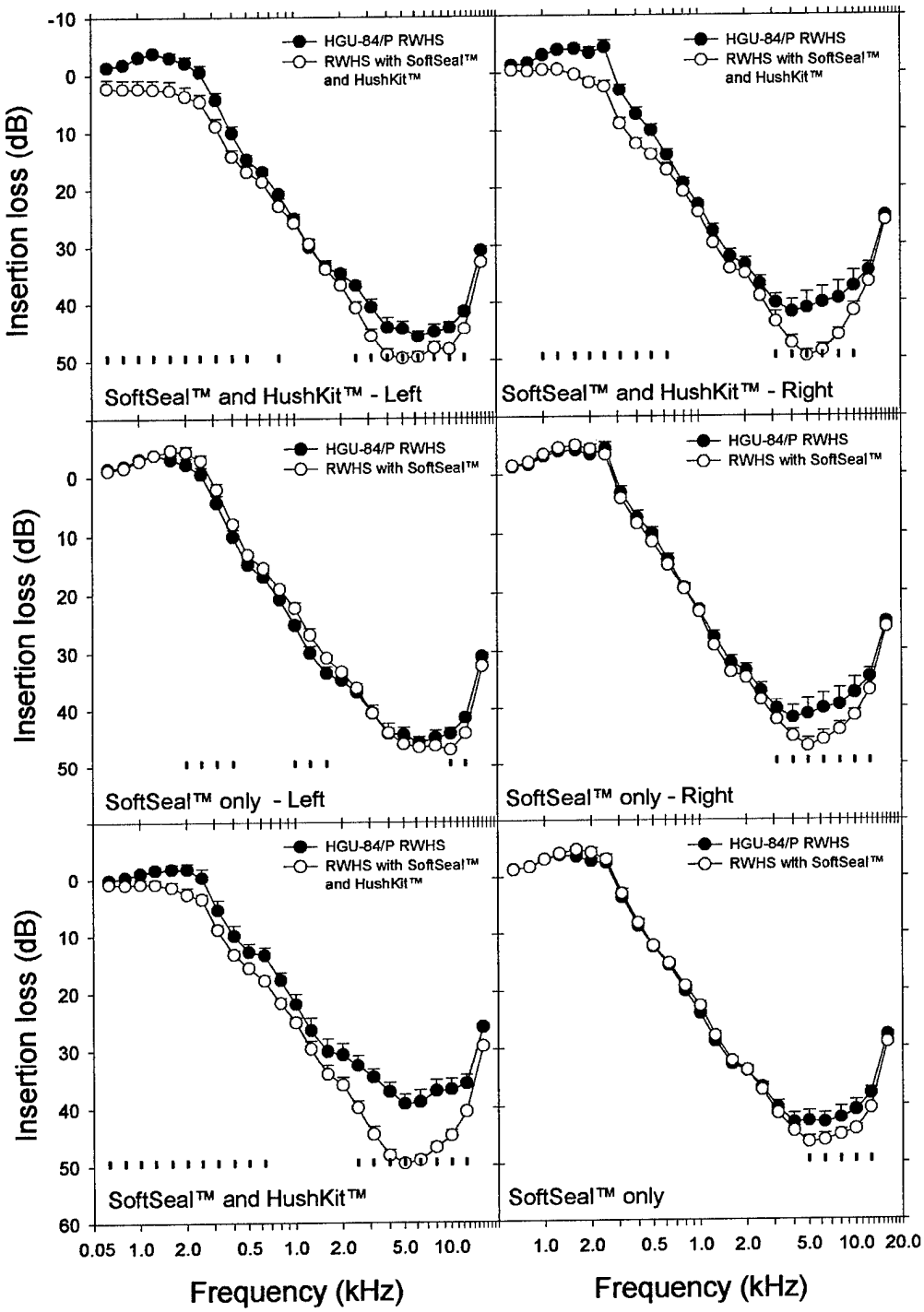

Figure 7. Mean insertion losses for the tight-fitting HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal™ with (top) or without (middle) HushKit™ (open symbols).

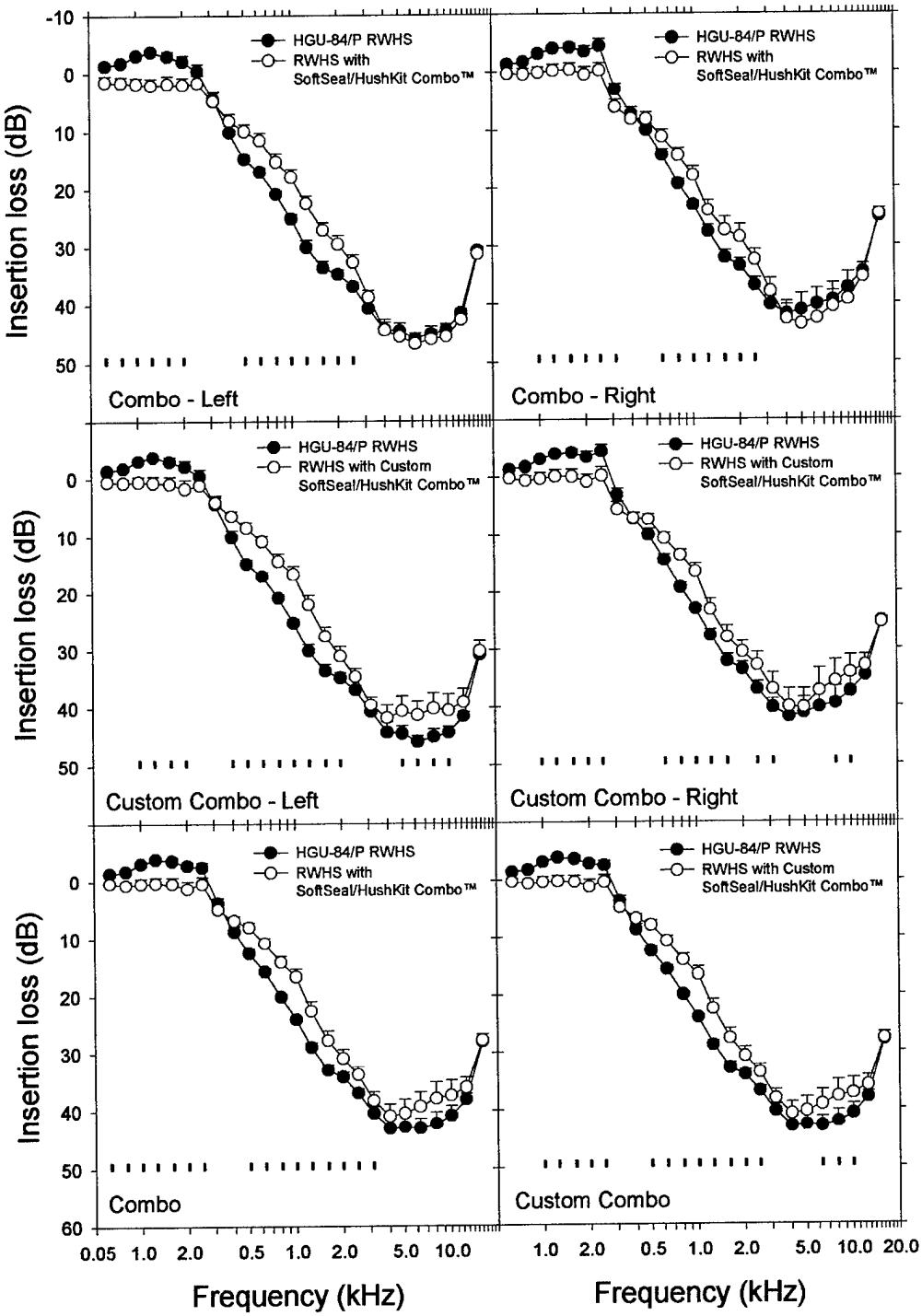

Figure 8. Mean insertion losses for the tight-fitting HGU-84/P Rotary Wing Helmet System in standard configuration (solid symbols) and with the Oregon Aero SoftSeal/HushKit Combo™ (top, lower left) and custom SoftSeal/HushKit Combo™ (open symbols).

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Appendices

Appendix A. Human subjects consent form

Appendix B. Health screening questionnaire

Appendix C. Microphone-in-Real-Ear raw data for all subjects

Appendix D. Microphone-in-Real-Ear summary tables

Appendix E. Analysis of Variance and Duncan Multiple Range Test summary tables

Appendix F. Analysis of variance and Duncan multiple range test summary tables (averaged across ears)

Appendix A.

Human subjects consent form.

VOLUNTEER AGREEMENT AFFIDAVIT

For use of this form, see AR 70-25 or AR 40-38; the proponent agency is OTSG.

PRIVACY ACT OF 1974

Authority: 10 USC 3013, 44 USC 3101, and 10 USC 1071-1087

Principal Purpose: To document voluntary participation in the Clinical Investigation and Research program. SSN and home address will be used for identification and locating purposes.

Routine Uses: The SSN and home address will be used for identification and locating purposes. Information derived from the study will be used to document the study; implementation of medical programs; adjudication of claims; and for the mandatory reporting of medical conditions as required by law. Information may be furnished to Federal, State, and local agencies.

Disclosure: The furnishing of your SSN and home address is mandatory and necessary to provide identification and to contact you if future information indicates that your health may be adversely affected. Failure to provide the information may preclude your voluntary participation in this investigational study.

PART A -- VOLUNTEER AFFIDAVIT

Volunteer Subjects in Approved Department of Army Research Studies

Volunteers under the provisions of AR 40-38 and AR 70-25 are authorized all necessary medical care for injury or diseases which is the proximate result of their participation in such studies.

I, _____ SSN_____,

having full capacity to consent and having attained my _____ birthday, do hereby

volunteer to participate in *the research protocol, Sound Attenuation of the HGU-56/P Aircrew Integrated Helmet System and HGU-84/P Rotary Wing Helmet System with the Oregon Aero HushKit™, SoftSeal™, and Combo™"*

under the direction of *William A. Ahroon, Ph.D.*

conducted by *the United States Army Aeromedical Research Laboratory, Fort Rucker, AL 36362-0577*

The implications of my voluntary participation: duration and purpose of the research study; the methods and means by which it is to be conducted; and the inconveniences and hazards that may reasonably be expected have been explained to me by

Dr. William Ahroon, CPT Martin Robinette, Ms. Melinda Hill or Ms. Elmaree Gordon

I have been given an opportunity to ask questions concerning this investigational study. Any such questions were answered to my full and complete satisfaction. Should any further questions arise concerning my rights or study-related injury, I may contact

Dr. Patricia A. LeDuc

at Human Subject Review Committee, U.S. Army Aeromedical Research Laboratory,

Building 6901, P.O. Box 620577, Fort Rucker, Alabama 36362-0577 (334) 255-6872

I understand that I may at any time during the course of the study revoke my consent and withdraw from the study without further penalty or loss of benefits; however I may be required (military volunteer) or requested (civilian volunteer) to undergo certain examinations if, in the opinion of the attending physician, such examinations are necessary for my health and well-being. My refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled.

PART B -- TO BE COMPLETED BY INVESTIGATOR

INSTRUCTIONS FOR ELEMENTS OF INFORMED CONSENT: *(Provide a detailed explanation in accordance with Appendix C, AR 40-38 or AR 70-25.)*

You will be participating in a study to measure the sound attenuation of the HGU-56/P Aircrew Integrated Helmet System and HGU-84/P Rotary Wing Helmet System with alternative earcup configurations. All testing is performed in accordance with standards promulgated by the American National Standards Institute (ANSI).

To participate in some aspects of this study, you must have normal hearing relative to the definitions set by ANSI You will be given a hearing test by a certified audiologist or hearing conservationist before your participation in the study. You also will complete a general health screening questionnaire which will include questions on your hearing. Following this introduction, you will be trained in the psychophysical procedure to be used in the evaluations of helmet.

The evaluation will be in two parts. The time required to complete all parts of the evaluation will be approximately 10 hours including training for the real-ear evaluation. (Approximately two hours for training and 90 minutes for each device tested.) Testing may be accomplished over several days.

Real-ear evaluation.—During the testing, you will be asked to adjust (using buttons on a control box) the loudness of a narrow band of noise (that sometimes may be like a "chirping" sound) so that the sound is just barely audible. When the sound is just barely audible, you will press the "SET" button and another trial will start. The number of trials for each stimulus type will depend on the stability of your responses. Seven different sounds will be used. At least five practice "audiograms" will be completed before actual data collection on any helmet configuration will begin. A total of four "audiograms" will be conducted for each device, alternating between devices in place and devices removed. For each condition, two measurements with the helmet on and two measurements with the helmet off will be made.

Microphone-in-Real-Ear evaluation.—You will be fitted with earplugs and a miniature microphone will be attached to the outer portion at the earplug. A brief, but loud, sound will be presented from which you will be protected by the earplugs. Next, you will don the helmet and the procedure will be repeated. You will don and doff the helmet three times.

No risk is anticipated for this study. Sounds presented in the real-ear evaluation (Part 1) are soft and present no risk. Noise exposures in the physical-ear evaluation (Part 2) are brief and are well within the allowable limits of 85 dBA L_{eq} for unprotected noise exposure set forth in DODI 6055.12 (1991). The earplugs worn during physical-ear evaluations provide an additional margin of protection from overexposure. Previous studies of this type have not resulted in any particular discomfort or ill effects to the subjects involved.

You will receive no personal benefit from participation in this study. Participation in this study is strictly voluntary, and you have the right to withdraw at any time without adverse consequences or loss of benefit.

The data from your participation in the study will be kept as confidential as possible. Representatives of the U.S. Army Medical Research and Materiel Command may inspect the records of this test and evaluation. Group data will be summarized in reports, but your name will never be identified with any specific data. None of the information obtained from this study which identifies you in any way will be released to a public forum without your express consent.

I have received a copy of this volunteer consent form and have read and fully understand its contents. I am signing this form voluntarily.

☐ I do ☐ do not (*check one and initial*) consent to the inclusion of this form in my outpatient medical treatment record.

SIGNATURE OF VOLUNTEER DATE

PERMANENT ADDRESS OF VOLUNTEER TYPED NAME OF WITNESS

Appendix B.

General health screening questionnaire.

Volunteer Screening Questionnaire

Name _____ SSN: _____

Age: _____ DOB: _____ Height _____ Weight _____

General Health

Do you feel that you are currently in good health?	NO	YES
Do you have any medical waivers or profiles?	NO	YES
Have you ever had any problems with hearing?	NO	YES
Have you ever had any problems with balance, dizziness, motion sickness, ear pain or ear discharge?	NO	YES
Do you have any allergies?	NO	YES
Are you currently suffering from any illnesses?	NO	YES
Have you taken any medication within the past three days?	NO	YES

Following to be completed by audiologist or audiometric technician only

Earcanal Size: _____ Bitragion width: _____ mm. Head height: _____ mm

Audiometric Screening

Frequency	125	250	500	1000	2000	4000	8000
Pre-test	_____	_____	_____	_____	_____	_____	_____

_____
Audiologist/CAOHC Tech Signature & Date

Following to be completed by aeromedical monitor only

Anatomical Features	GO	NO-GO
Otoscopic Inspection	GO	NO-GO
Pretest Audiogram	GO	NO-GO

Reason for disqualification:

_____
Principal Investigator's Signature & Date

_____
Medical Monitor's Signature & Date

Appendix C.

Microphone-in-Real-Ear raw data for all subjects.

Tables C-1 – C-10	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions.
Tables C-11 – C-20	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions.
Tables C-21 – C-30	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions.
Tables C-31 – C-40	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions.
Tables C-41 – C-50	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions.
Tables C-51 – C-60	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions.
Tables C-61 – C-70	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions.
Tables C-71 – C-80	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions.
Tables C-81 – C-90	Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions.

Tables C-91 – C-100 Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions.

Table C-1. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 1.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.4	92.0	88.0	91.0	91.3	94.2	89.6	93.2	93.6	93.7	96.4	96.2	95.9
Test 2	88.3	91.8	87.8	91.0	91.2	94.3	89.9	93.7	93.8	93.8	96.5	95.7	94.3
Test 3	88.1	91.8	87.9	90.9	91.0	94.2	89.8	93.8	93.5	93.9	96.5	95.8	95.0
Mean	88.3	91.9	87.9	91.0	91.2	94.2	89.8	93.6	93.6	93.8	96.5	95.9	95.1
Occluded													
Test 1	90.1	94.1	91.1	95.4	96.2	97.2	89.4	87.9	82.9	78.7	78.6	76.3	72.7
Test 2	91.8	94.7	89.3	89.5	85.5	85.6	79.2	79.9	75.6	73.9	75.4	72.8	67.1
Test 3	90.1	92.2	86.7	87.1	84.1	85.0	79.5	80.0	75.9	75.3	76.4	73.5	68.0
Mean	90.7	93.7	89.0	90.7	88.6	89.3	82.7	82.6	78.1	76.0	76.8	74.2	69.3
Left Insertion Loss	**-2.4**	**-1.8**	**-1.2**	**0.3**	**2.6**	**5.0**	**7.1**	**11.0**	**15.5**	**17.9**	**19.7**	**21.7**	**25.8**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.0	92.0	87.4	90.5	92.0	92.9	89.5	92.8	90.9	93.3	96.0	95.0	96.1
Test 2	89.2	92.1	87.1	90.1	92.0	92.7	89.7	92.7	90.9	93.7	96.6	94.4	95.6
Test 3	89.0	92.0	87.2	90.1	91.9	92.8	89.8	92.7	91.1	94.3	96.6	94.4	96.1
Mean	89.0	92.0	87.2	90.2	91.9	92.8	89.7	92.8	91.0	93.8	96.4	94.6	95.9
Occluded													
Test 1	88.1	91.2	86.3	88.5	88.3	89.5	82.3	79.6	72.7	75.2	74.9	66.8	61.9
Test 2	88.7	91.5	86.8	90.4	90.5	91.4	84.7	81.5	74.4	76.9	76.2	67.9	63.8
Test 3	86.5	88.7	83.5	86.9	87.0	87.6	82.0	79.2	72.5	76.5	76.3	67.6	64.8
Mean	87.7	90.5	85.5	88.6	88.6	89.5	83.0	80.1	73.2	76.2	75.8	67.5	63.5
Right Insertion Loss	**1.3**	**1.6**	**1.7**	**1.7**	**3.3**	**3.3**	**6.7**	**12.7**	**17.8**	**17.6**	**20.6**	**27.1**	**32.4**
Insertion Loss	**-0.5**	**-0.1**	**0.3**	**1.0**	**3.0**	**4.1**	**6.9**	**11.8**	**16.6**	**17.7**	**20.1**	**24.4**	**29.1**

Table C-1. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 1.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	95.1	95.7	98.0	98.7	99.9	101.9	98.6	94.8	89.9	90.1	89.4	80.0	109	109
Test 2	94.2	96.0	97.4	98.5	99.2	102.0	99.0	95.4	90.4	91.2	89.7	80.5	109	109
Test 3	94.2	96.1	97.5	98.2	99.6	102.0	98.4	94.3	90.2	92.4	90.2	79.8	109	109
Mean	94.5	95.9	97.6	98.5	99.5	101.9	98.7	94.8	90.2	91.2	89.8	80.1		
Occluded														
Test 1	63.2	56.5	57.3	61.6	58.5	58.0	60.5	51.7	50.4	45.1	46.9	49.2	103	90
Test 2	58.6	56.6	56.6	60.4	59.0	61.9	57.5	49.6	47.6	44.6	46.7	48.8	99	83
Test 3	58.9	56.6	56.3	61.8	59.7	59.5	59.0	50.6	48.0	44.8	47.1	49.3	97	83
Mean	60.2	56.6	56.7	61.3	59.1	59.8	59.0	50.7	48.7	44.8	46.9	49.1		
Left Insertion Loss	**34.3**	**39.3**	**40.9**	**37.2**	**40.5**	**42.1**	**39.7**	**44.2**	**41.5**	**46.4**	**42.9**	**31.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	96.6	96.7	98.0	98.2	99.5	97.7	96.9	93.3	89.8	88.4	81.1	109	109
Test 2	93.1	96.8	96.8	98.3	97.7	99.2	97.2	95.5	92.5	91.0	89.9	80.6	108	108
Test 3	92.9	96.9	96.9	98.7	98.0	99.5	97.7	96.2	93.2	90.7	90.3	80.8	109	108
Mean	93.2	96.8	96.8	98.3	97.9	99.4	97.5	96.2	93.0	90.5	89.5	80.8		
Occluded														
Test 1	56.6	54.4	56.7	55.4	56.6	55.8	53.6	51.7	48.4	50.7	53.8	56.7	97	83
Test 2	55.8	56.5	57.9	58.4	61.1	61.6	55.8	53.0	48.3	50.6	53.7	56.6	98	85
Test 3	57.3	54.7	55.0	54.8	56.6	55.8	52.4	49.7	48.5	50.7	53.9	56.8	95	83
Mean	56.6	55.2	56.5	56.2	58.1	57.7	53.9	51.5	48.4	50.7	53.8	56.7		
Right Insertion Loss	**36.6**	**41.6**	**40.3**	**42.1**	**39.8**	**41.7**	**43.6**	**44.7**	**44.6**	**39.8**	**35.7**	**24.2**		
Insertion Loss	**35.5**	**40.4**	**40.6**	**39.7**	**40.2**	**41.9**	**41.6**	**44.4**	**43.1**	**43.1**	**39.3**	**27.6**		

Table C-2. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 2.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	91.9	87.2	89.6	91.1	92.1	88.0	91.4	90.8	93.9	92.8	95.5	96.4
Test 2	88.4	91.7	87.3	89.7	90.9	92.4	87.9	91.9	91.3	93.9	93.3	95.7	96.7
Test 3	90.8	92.4	87.1	89.5	90.9	88.4	88.8	91.6	92.8	94.2	92.4	94.8	95.2
Mean	89.3	92.0	87.2	89.6	91.0	90.9	88.2	91.6	91.6	94.0	92.8	95.3	96.1
Occluded													
Test 1	89.4	92.4	88.0	91.6	95.2	96.2	99.7	101.4	94.7	89.1	87.7	84.9	81.1
Test 2	89.4	92.3	87.7	91.2	94.9	95.3	99.1	101.4	95.6	90.9	89.3	85.4	82.4
Test 3	91.8	92.7	87.5	90.6	95.1	93.7	100.2	101.4	96.2	90.7	88.2	84.4	81.6
Mean	90.2	92.5	87.7	91.1	95.0	95.1	99.7	101.4	95.5	90.3	88.4	84.9	81.7
Left Insertion Loss	**-0.9**	**-0.5**	**-0.6**	**-1.5**	**-4.1**	**-4.2**	**-11.5**	**-9.8**	**-3.9**	**3.7**	**4.4**	**10.4**	**14.4**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.6	91.2	87.1	90.5	91.2	94.1	87.3	95.0	94.2	94.0	96.4	96.4	96.3
Test 2	88.4	90.9	87.1	90.4	90.9	94.1	87.4	94.9	94.0	93.9	96.4	96.5	96.2
Test 3	90.7	91.5	86.7	90.0	91.1	93.2	88.3	95.6	95.0	94.5	96.2	96.0	94.6
Mean	89.2	91.2	87.0	90.3	91.0	93.8	87.6	95.2	94.4	94.1	96.3	96.3	95.7
Occluded													
Test 1	89.6	92.4	88.0	91.8	95.4	97.5	98.6	98.3	93.3	91.0	89.8	86.5	83.5
Test 2	89.6	92.4	87.8	91.6	95.3	97.1	98.7	98.9	93.4	91.0	90.1	86.5	84.4
Test 3	91.9	92.7	87.4	90.8	95.5	96.3	99.6	98.9	94.9	92.9	90.5	86.7	83.7
Mean	90.4	92.5	87.8	91.4	95.4	97.0	99.0	98.7	93.9	91.6	90.2	86.6	83.9
Right Insertion Loss	**-1.2**	**-1.3**	**-0.8**	**-1.1**	**-4.4**	**-3.2**	**-11.3**	**-3.5**	**0.5**	**2.5**	**6.2**	**9.7**	**11.8**
Insertion Loss	**-1.0**	**-0.9**	**-0.7**	**-1.3**	**-4.2**	**-3.7**	**-11.4**	**-6.6**	**-1.7**	**3.1**	**5.3**	**10.1**	**13.1**

Table C-2. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 2.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	95.2	97.5	98.5	99.5	101.4	99.1	98.3	96.4	88.9	89.0	78.3	109	110
Test 2	93.7	95.3	97.8	99.0	100.2	101.2	99.7	98.6	96.8	88.8	88.3	79.0	109	110
Test 3	93.7	96.2	98.1	99.4	100.1	101.4	99.5	98.9	96.8	88.8	88.3	79.0	110	110
Mean	93.7	95.6	97.8	99.0	99.9	101.3	99.4	98.6	96.7	88.8	88.5	78.7		
Occluded														
Test 1	74.0	69.1	72.7	74.1	72.8	69.5	64.0	67.4	69.5	60.5	57.6	53.9	106	99
Test 2	75.7	71.5	75.0	77.2	75.3	73.5	68.6	69.9	70.3	60.9	65.0	54.3	106	99
Test 3	74.2	71.0	73.7	75.7	73.7	73.1	66.1	67.0	67.5	60.7	63.4	55.2	106	99
Mean	74.6	70.5	73.8	75.7	73.9	72.1	66.2	68.1	69.1	60.7	62.0	54.5		
Left Insertion Loss	**19.1**	**25.0**	**24.0**	**23.3**	**26.0**	**29.3**	**33.2**	**30.5**	**27.6**	**28.1**	**26.6**	**24.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.0	96.5	98.0	98.5	99.8	101.4	99.4	96.5	92.8	94.9	90.9	77.1	110	109
Test 2	94.5	96.8	97.5	98.3	99.7	101.1	99.4	96.9	92.6	94.4	90.8	77.5	110	110
Test 3	94.5	97.3	97.1	98.3	99.7	101.4	99.1	97.2	93.0	94.7	91.1	78.0	110	110
Mean	94.3	96.9	97.5	98.4	99.7	101.3	99.3	96.9	92.8	94.7	90.9	77.5		
Occluded														
Test 1	74.2	73.8	76.6	73.2	71.5	72.5	65.2	63.9	66.0	70.0	65.5	58.0	105	98
Test 2	75.2	74.7	76.5	73.2	71.2	73.1	67.3	69.7	67.3	69.0	63.5	57.8	105	98
Test 3	75.4	74.6	76.7	73.4	71.5	72.1	64.8	64.3	64.8	70.1	65.8	58.2	106	98
Mean	74.9	74.4	76.6	73.3	71.4	72.6	65.8	66.0	66.0	69.7	64.9	58.0		
Right Insertion Loss	**19.4**	**22.5**	**20.9**	**25.1**	**28.3**	**28.7**	**33.5**	**30.9**	**26.8**	**25.0**	**26.0**	**19.5**		
Insertion Loss	**19.3**	**23.8**	**22.4**	**24.2**	**27.2**	**29.0**	**33.4**	**30.7**	**27.2**	**26.5**	**26.3**	**21.9**		

Table C-3. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 3.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.6	92.0	87.4	89.8	90.9	91.8	89.2	91.1	90.9	92.5	95.5	97.0	97.2
Test 2	88.7	92.1	87.5	89.9	90.8	92.1	89.1	91.1	91.0	92.5	96.4	97.1	97.7
Test 3	88.6	91.9	87.6	89.9	90.6	91.8	89.1	91.0	91.0	92.5	96.6	97.2	97.8
Mean	88.6	92.0	87.5	89.9	90.8	91.9	89.1	91.1	91.0	92.5	96.2	97.1	97.6
Occluded													
Test 1	92.4	94.1	89.8	93.4	98.1	93.3	89.6	86.8	80.8	79.9	84.3	80.0	78.1
Test 2	90.1	94.0	91.0	94.9	96.8	95.6	86.9	84.4	77.7	77.7	83.1	80.9	77.5
Test 3	92.7	94.8	91.2	94.0	94.3	88.7	85.0	82.7	78.0	77.5	82.8	77.8	75.7
Mean	91.7	94.3	90.7	94.1	96.4	92.6	87.2	84.6	78.8	78.4	83.4	79.6	77.1
Left Insertion Loss	**-3.1**	**-2.3**	**-3.2**	**-4.3**	**-5.6**	**-0.7**	**2.0**	**6.4**	**12.2**	**14.1**	**12.8**	**17.5**	**20.5**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	91.5	86.8	89.8	91.6	93.2	89.3	93.5	92.0	93.5	96.4	95.5	96.9
Test 2	88.8	91.5	86.7	89.7	91.3	92.7	89.6	93.2	92.2	93.9	96.6	95.0	96.7
Test 3	88.6	91.3	86.7	89.6	91.3	92.7	89.7	93.1	92.3	94.0	96.5	94.2	96.7
Mean	88.7	91.4	86.7	89.7	91.4	92.9	89.5	93.3	92.2	93.8	96.5	94.9	96.8
Occluded													
Test 1	92.0	93.4	89.2	93.0	95.9	93.6	90.6	86.8	82.3	82.2	82.0	73.4	68.6
Test 2	89.7	93.2	89.9	94.2	97.8	100.1	94.5	90.0	83.1	82.9	83.5	74.9	70.2
Test 3	92.2	93.7	89.6	93.5	98.0	97.5	96.2	90.8	84.7	85.0	84.5	75.8	70.5
Mean	91.3	93.4	89.6	93.6	97.3	97.1	93.8	89.2	83.4	83.4	83.3	74.7	69.8
Right Insertion Loss	**-2.6**	**-2.0**	**-2.8**	**-3.9**	**-5.9**	**-4.2**	**-4.2**	**4.1**	**8.8**	**10.4**	**13.1**	**20.2**	**27.0**
Insertion Loss	**-2.9**	**-2.2**	**-3.0**	**-4.1**	**-5.8**	**-2.4**	**-1.1**	**5.2**	**10.5**	**12.3**	**13.0**	**18.9**	**23.7**

Table C-3. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 3.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.4	96.7	96.9	99.6	99.9	102.4	100.1	94.7	92.8	90.3	90.0	80.6	110	110
Test 2	94.5	96.7	97.2	99.1	99.8	102.3	100.2	94.9	93.4	90.5	90.6	80.7	110	110
Test 3	94.4	96.8	96.3	99.1	99.6	102.6	99.8	95.5	93.4	90.5	90.2	81.4	110	110
Mean	94.4	96.7	96.8	99.3	99.7	102.4	100.1	95.1	93.2	90.5	90.3	80.9		
Occluded														
Test 1	71.1	72.4	72.6	72.1	67.9	65.9	63.5	53.4	54.7	51.9	56.8	51.0	103	92
Test 2	69.8	68.0	69.3	68.0	61.4	62.3	62.1	49.8	50.0	50.0	49.6	50.1	102	90
Test 3	68.7	64.9	67.2	66.8	59.3	61.1	58.8	51.0	49.2	48.5	48.8	50.1	101	88
Mean	69.9	68.4	69.7	69.0	62.9	63.1	61.4	51.4	51.3	50.1	51.7	50.4		
Left Insertion Loss	**24.6**	**28.3**	**27.1**	**30.3**	**36.9**	**39.3**	**38.6**	**43.6**	**41.9**	**40.3**	**38.5**	**30.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	96.3	98.1	98.6	99.6	101.5	99.9	96.3	93.7	92.4	88.9	78.1	109	109
Test 2	92.3	95.9	97.7	99.1	99.5	101.2	100.8	96.0	94.1	91.6	88.1	77.4	109	110
Test 3	92.6	95.9	98.1	98.7	99.2	101.3	99.9	96.9	94.4	92.1	87.5	77.5	109	109
Mean	92.4	96.0	98.0	98.8	99.5	101.3	100.2	96.4	94.1	92.0	88.2	77.7		
Occluded														
Test 1	61.3	63.7	66.1	66.1	67.2	64.5	60.0	54.7	59.7	57.3	57.7	57.6	102	90
Test 2	62.8	66.0	68.0	68.0	65.2	64.8	60.5	56.7	63.4	59.1	57.0	57.7	104	93
Test 3	63.4	68.1	70.1	68.9	65.7	64.9	59.7	56.8	64.7	60.4	57.5	57.6	104	94
Mean	62.5	65.9	68.1	67.6	66.0	64.8	60.0	56.0	62.6	58.9	57.4	57.7		
Right Insertion Loss	**29.9**	**30.1**	**29.9**	**31.2**	**33.5**	**36.6**	**40.2**	**40.4**	**31.5**	**33.1**	**30.8**	**20.0**		
Insertion Loss	**27.2**	**29.2**	**28.5**	**30.7**	**35.2**	**38.0**	**39.4**	**36.7**	**30.4**	**36.7**	**34.7**	**25.3**		

Table C-4. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 4.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.3	91.8	87.4	90.2	90.4	92.8	89.3	93.7	93.0	92.7	95.4	97.2	96.4
Test 2	88.3	91.7	87.6	90.3	90.3	92.6	89.3	92.9	93.2	93.0	95.8	96.0	96.1
Test 3	88.4	91.9	87.6	90.3	90.4	92.6	89.4	92.6	93.1	93.0	95.9	96.3	96.6
Mean	88.4	91.8	87.5	90.2	90.4	92.7	89.3	93.1	93.1	92.9	95.7	96.5	96.3
Occluded													
Test 1	85.7	88.9	83.4	83.1	81.2	83.9	79.4	79.1	73.9	71.7	78.5	77.8	76.2
Test 2	85.5	88.6	83.7	83.5	80.2	83.5	79.6	79.4	74.2	71.9	78.3	77.9	76.7
Test 3	89.1	90.3	83.9	83.3	80.5	80.1	80.8	79.8	75.8	74.1	80.6	77.5	76.0
Mean	86.8	89.3	83.7	83.3	80.6	82.5	79.9	79.5	74.7	72.6	79.1	77.7	76.3
Left Insertion Loss	**1.6**	**2.5**	**3.9**	**6.9**	**9.7**	**10.2**	**9.4**	**13.6**	**18.4**	**20.3**	**16.6**	**18.8**	**20.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.9	91.6	86.5	89.5	91.2	91.0	89.9	91.6	90.7	94.3	95.9	93.7	95.9
Test 2	88.9	91.5	86.4	89.3	91.3	90.9	90.3	92.4	91.5	94.5	96.1	94.4	96.1
Test 3	89.0	91.7	86.4	89.3	91.4	90.4	90.4	92.5	91.5	94.3	96.5	93.5	96.2
Mean	88.9	91.6	86.4	89.3	91.3	90.8	90.2	92.2	91.2	94.4	96.2	93.9	96.1
Occluded													
Test 1	89.9	93.2	89.5	94.0	97.3	99.2	95.7	94.0	87.9	86.2	85.4	79.1	74.3
Test 2	89.6	92.8	89.2	93.5	96.6	98.2	96.8	95.6	89.5	87.3	87.3	80.1	74.8
Test 3	92.0	93.1	88.7	92.4	96.3	93.9	96.4	94.3	89.3	87.9	87.6	77.9	73.4
Mean	90.5	93.1	89.2	93.3	96.7	97.1	96.3	94.6	88.9	87.2	86.8	79.1	74.2
Right Insertion Loss	**-1.6**	**-1.5**	**-2.7**	**-4.0**	**-5.4**	**-6.3**	**-6.1**	**-2.4**	**2.3**	**7.2**	**9.4**	**14.8**	**21.9**
Insertion Loss	**0.0**	**0.5**	**0.6**	**1.5**	**2.2**	**1.9**	**1.6**	**5.6**	**10.4**	**13.8**	**13.0**	**16.8**	**21.0**

Table C-4. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 4.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.9	96.1	97.4	98.9	99.5	100.9	99.2	96.8	92.7	89.2	88.6	81.2	109	109
Test 2	93.9	97.4	96.9	99.6	99.7	100.9	100.2	97.6	92.7	89.4	89.8	81.3	110	109
Test 3	94.3	97.6	96.7	99.3	99.9	101.5	99.1	97.1	92.5	89.7	90.0	81.6	109	110
Mean	94.0	97.1	97.0	99.3	99.7	101.1	99.5	97.2	92.6	89.4	89.5	81.4		
Occluded														
Test 1	67.2	61.7	60.8	60.5	57.7	57.6	51.9	47.7	46.8	45.8	47.4	49.5	94	83
Test 2	67.7	61.1	59.8	59.5	54.8	56.4	52.5	50.2	49.0	45.8	47.7	49.8	94	83
Test 3	68.6	63.8	60.6	59.0	55.4	57.2	54.4	51.8	50.2	46.9	48.1	50.0	95	84
Mean	67.8	62.2	60.4	59.6	56.0	57.1	52.9	49.9	48.7	46.2	47.7	49.7		
Left Insertion Loss	**26.2**	**34.8**	**36.6**	**39.6**	**43.8**	**44.0**	**46.5**	**47.3**	**44.0**	**43.2**	**41.7**	**31.6**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.2	95.8	99.0	100.1	98.9	101.4	100.0	97.5	92.1	91.1	90.8	80.7	109	110
Test 2	93.0	95.6	99.1	100.0	99.8	101.1	99.5	97.1	92.9	90.3	90.5	80.3	109	110
Test 3	93.6	95.9	99.1	99.1	99.0	101.5	99.5	97.6	93.3	90.0	89.5	80.5	109	110
Mean	93.3	95.8	99.1	99.7	99.2	101.4	99.7	97.4	92.8	90.5	90.3	80.5		
Occluded														
Test 1	67.0	66.2	67.3	66.1	67.9	64.3	58.5	53.6	56.5	55.7	56.6	57.1	104	94
Test 2	68.7	65.3	66.1	65.8	69.1	68.4	63.5	56.5	57.0	55.9	57.8	57.3	104	95
Test 3	66.7	65.2	65.2	65.5	69.2	68.1	63.5	55.5	56.5	57.7	58.3	57.4	103	94
Mean	67.5	65.6	66.2	65.8	68.7	66.9	61.8	55.2	56.7	56.4	57.6	57.3		
Right Insertion Loss	**25.8**	**30.2**	**32.9**	**33.9**	**30.5**	**34.4**	**37.9**	**42.2**	**36.1**	**34.0**	**32.7**	**23.2**		
Insertion Loss	**26.0**	**32.5**	**34.8**	**36.8**	**37.1**	**39.2**	**42.2**	**44.7**	**40.1**	**38.6**	**37.2**	**27.4**		

Table C-5. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 5.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.2	91.7	87.8	90.7	91.1	94.3	89.8	93.4	94.1	94.2	96.3	96.6	96.2
Test 2	87.8	91.3	87.7	90.8	90.9	94.5	90.3	93.7	94.6	94.5	95.8	96.5	95.9
Test 3	89.8	91.3	87.3	90.0	90.5	91.7	91.3	95.2	95.9	94.6	93.4	96.4	95.5
Mean	88.6	91.4	87.6	90.5	90.8	93.5	90.5	94.1	94.8	94.4	95.2	96.5	95.9
Occluded													
Test 1	89.2	92.8	89.3	92.2	90.9	92.5	85.6	82.8	79.4	76.1	80.1	78.0	76.6
Test 2	84.7	87.9	83.3	83.5	81.5	86.5	80.2	77.2	74.9	72.3	77.0	75.1	74.7
Test 3	88.9	92.9	90.6	94.8	95.6	98.4	89.8	85.6	82.4	79.5	81.4	80.1	78.9
Mean	87.6	91.2	87.7	90.2	89.3	92.5	85.2	81.8	78.9	75.9	79.5	77.7	76.7
Left Insertion Loss	**1.0**	**0.2**	**-0.1**	**0.3**	**1.5**	**1.0**	**5.3**	**12.2**	**15.9**	**18.5**	**15.7**	**18.8**	**19.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.1	92.0	87.5	90.6	92.0	92.4	89.9	91.9	91.0	92.8	94.3	93.9	97.0
Test 2	89.0	91.8	87.3	90.3	91.8	92.1	90.0	91.7	90.9	92.7	94.6	94.4	97.0
Test 3	91.2	92.1	87.1	89.9	91.8	89.1	90.5	92.8	92.7	92.5	91.6	94.7	95.6
Mean	89.7	91.9	87.3	90.3	91.8	91.2	90.1	92.2	91.5	92.7	93.5	94.3	96.5
Occluded													
Test 1	90.0	93.4	89.8	94.2	97.3	100.0	98.8	98.9	95.4	91.0	90.1	84.8	79.0
Test 2	89.7	93.2	90.3	94.7	97.6	101.1	98.3	97.6	95.8	90.9	89.1	85.2	79.1
Test 3	89.7	93.3	90.4	94.8	97.7	101.3	99.0	97.1	93.6	87.0	85.3	82.0	74.5
Mean	89.8	93.3	90.2	94.5	97.5	100.8	98.7	97.9	94.9	89.6	88.2	84.0	77.5
Right Insertion Loss	**-0.1**	**-1.3**	**-2.9**	**-4.2**	**-5.7**	**-9.6**	**-8.6**	**-5.7**	**-3.4**	**3.0**	**5.4**	**10.3**	**19.0**
Insertion Loss	**0.5**	**-0.6**	**-1.5**	**-2.0**	**-2.1**	**-4.3**	**-1.7**	**3.3**	**6.3**	**10.7**	**10.5**	**14.5**	**19.1**

Table C-5. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 5.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.2	94.6	98.2	99.4	100.3	102.8	100.3	96.7	95.3	94.4	92.6	80.0	110	110
Test 2	94.4	95.3	98.7	99.0	100.4	102.2	100.1	96.1	95.1	95.6	92.8	80.0	110	110
Test 3	94.6	96.1	97.2	99.0	99.6	101.0	98.8	96.3	95.0	95.3	93.0	80.5	110	110
Mean	94.4	95.3	98.0	99.2	100.1	102.0	99.7	96.4	95.2	95.1	92.8	80.2		
Occluded														
Test 1	70.8	72.7	74.8	77.2	74.3	72.4	66.6	60.0	60.3	57.1	54.5	47.3	100	88
Test 2	68.8	70.5	75.1	75.1	73.0	67.3	61.9	56.3	56.8	53.7	50.9	46.6	94	85
Test 3	71.5	71.4	75.3	74.5	72.8	73.0	66.5	58.9	57.2	56.9	52.6	49.0	103	91
Mean	70.4	71.5	75.1	75.6	73.4	70.9	65.0	58.4	58.1	55.9	52.7	47.7		
Left Insertion Loss	**24.0**	**23.8**	**23.0**	**23.6**	**26.7**	**31.1**	**34.7**	**38.0**	**37.1**	**39.2**	**40.1**	**32.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.0	95.7	97.4	99.2	100.4	102.3	99.6	99.2	97.0	93.9	92.4	77.2	110	110
Test 2	93.8	95.6	97.1	99.4	99.7	102.1	99.6	97.2	96.2	94.0	92.8	77.2	110	110
Test 3	93.3	95.4	96.8	98.7	100.5	101.7	99.8	96.7	96.2	94.4	91.2	77.1	109	110
Mean	93.7	95.6	97.1	99.1	100.2	102.0	99.7	97.7	96.5	94.1	92.1	77.2		
Occluded														
Test 1	72.8	73.8	73.2	70.7	67.4	68.3	65.0	59.7	63.1	59.5	60.4	55.7	106	98
Test 2	71.6	69.9	68.5	65.5	63.5	62.1	56.0	52.5	56.4	60.1	58.8	55.5	106	98
Test 3	67.1	69.1	69.3	68.6	67.9	61.4	56.2	58.2	62.1	58.3	56.8	56.0	106	97
Mean	70.5	70.9	70.3	68.3	66.3	63.9	59.1	56.8	60.5	59.3	58.6	55.7		
Right Insertion Loss	**23.2**	**24.6**	**26.8**	**30.8**	**33.9**	**38.1**	**40.6**	**40.9**	**36.0**	**34.8**	**33.5**	**21.5**		
Insertion Loss	**23.6**	**24.2**	**24.9**	**27.2**	**30.3**	**34.6**	**37.7**	**39.4**	**36.5**	**37.0**	**36.8**	**27.0**		

Table C-6. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 6.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.9	91.0	86.9	89.2	89.8	89.5	90.2	94.4	94.2	93.8	96.6	96.5	95.7
Test 2	87.9	91.3	87.2	90.0	90.4	93.2	90.0	93.4	93.0	93.1	95.6	97.0	97.9
Test 3	87.7	91.0	87.3	90.1	90.3	93.5	90.1	92.6	93.5	93.6	95.4	97.4	97.7
Mean	88.5	91.1	87.2	89.8	90.2	92.1	90.1	93.5	93.6	93.5	95.9	97.0	97.1
Occluded													
Test 1	88.8	92.5	90.2	94.5	97.2	99.5	93.9	89.8	83.7	80.7	81.4	75.6	70.9
Test 2	88.5	92.1	89.5	93.6	96.2	99.1	96.2	92.2	86.4	83.1	83.1	77.2	72.1
Test 3	88.6	92.2	89.7	93.9	96.7	99.6	96.1	91.6	85.7	82.3	82.5	76.8	72.3
Mean	88.6	92.3	89.8	94.0	96.7	99.4	95.4	91.2	85.2	82.0	82.4	76.6	71.8
Left Insertion Loss	**-0.2**	**-1.2**	**-2.6**	**-4.3**	**-6.5**	**-7.3**	**-5.3**	**2.2**	**8.4**	**11.4**	**13.5**	**20.4**	**25.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.7	91.2	86.1	88.7	91.2	89.8	89.9	92.6	92.5	94.2	93.4	93.5	95.7
Test 2	88.8	91.5	86.5	89.5	91.4	90.9	90.3	91.5	90.3	93.1	94.7	93.0	96.1
Test 3	88.6	91.3	86.5	89.5	91.3	90.6	90.2	91.3	90.4	93.0	94.6	93.6	95.7
Mean	89.4	91.3	86.4	89.2	91.3	90.4	90.1	91.8	91.1	93.4	94.2	93.3	95.8
Occluded													
Test 1	85.0	86.9	81.1	84.0	84.2	83.8	78.1	75.2	71.2	72.7	76.1	73.2	67.7
Test 2	87.2	89.3	83.7	86.8	86.6	84.8	80.3	77.4	72.7	73.9	77.9	73.9	67.9
Test 3	89.3	91.9	87.1	90.0	90.4	87.5	83.0	79.6	74.6	75.1	78.4	74.5	67.8
Mean	87.2	89.4	84.0	86.9	87.1	85.4	80.4	77.4	72.8	73.9	77.5	73.9	67.8
Right Insertion Loss	**2.2**	**2.0**	**2.4**	**2.3**	**4.2**	**5.0**	**9.7**	**14.4**	**18.3**	**19.5**	**16.8**	**19.5**	**28.1**
Insertion Loss	**1.0**	**0.4**	**-0.1**	**-1.0**	**-1.1**	**-1.1**	**2.2**	**8.3**	**13.3**	**15.5**	**15.1**	**19.9**	**26.7**

Table C-6. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 6.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.0	97.1	97.0	98.8	99.8	100.9	99.3	95.3	94.7	92.6	90.0	81.0	109	109
Test 2	94.1	95.8	96.8	98.8	99.2	100.5	99.3	93.2	93.9	93.6	91.1	82.1	109	109
Test 3	94.0	95.3	96.8	98.6	99.0	100.5	99.7	93.2	95.4	94.3	91.2	81.3	109	109
Mean	94.0	96.1	96.9	98.7	99.3	100.6	99.4	93.9	94.6	93.5	90.8	81.5		
Occluded														
Test 1	66.2	69.6	70.4	69.9	68.1	66.4	61.1	51.9	50.8	49.6	50.1	49.6	104	92
Test 2	69.3	74.1	73.9	70.8	70.2	70.3	64.5	59.1	56.8	55.7	52.9	49.8	104	93
Test 3	68.2	73.0	72.1	68.7	69.1	68.6	63.0	55.7	54.5	55.1	52.8	49.9	104	93
Mean	67.9	72.2	72.2	69.8	69.1	68.4	62.9	55.6	54.0	53.5	51.9	49.8		
Left Insertion Loss	**26.1**	**23.8**	**24.7**	**28.9**	**30.2**	**32.2**	**36.6**	**38.4**	**40.6**	**40.1**	**38.9**	**31.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	96.8	98.0	98.7	98.3	99.4	99.1	92.2	90.4	91.9	90.2	79.4	109	109
Test 2	93.7	96.1	97.9	98.0	97.7	99.3	98.2	89.7	91.7	92.5	89.7	79.0	108	108
Test 3	93.9	96.2	98.0	97.3	98.3	99.7	98.0	89.8	92.3	92.5	89.6	79.3	108	108
Mean	93.7	96.4	98.0	98.0	98.1	99.5	98.4	90.6	91.5	92.3	89.8	79.2		
Occluded														
Test 1	70.8	71.3	69.9	66.5	62.6	57.6	52.2	59.6	55.2	52.5	54.2	56.7	93	83
Test 2	70.9	71.7	71.3	69.3	65.3	57.4	52.6	58.0	54.0	52.6	54.0	56.7	95	84
Test 3	70.6	73.1	72.4	70.5	63.9	58.1	58.5	65.3	58.1	53.4	54.8	56.6	98	86
Mean	70.7	72.0	71.2	68.8	63.9	57.7	54.4	61.0	55.8	52.8	54.3	56.7		
Right Insertion Loss	**23.0**	**24.4**	**26.7**	**29.3**	**34.2**	**41.8**	**44.0**	**29.6**	**35.7**	**39.5**	**35.5**	**22.6**		
Insertion Loss	**24.5**	**24.1**	**25.7**	**29.1**	**32.2**	**37.0**	**40.3**	**34.0**	**38.2**	**39.8**	**37.2**	**27.2**		

Table C-7. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 7.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.0	91.4	87.4	90.1	90.3	92.7	88.1	92.8	91.8	92.7	95.3	96.9	97.3
Test 2	88.1	91.5	87.5	90.0	90.4	92.4	88.1	91.7	91.5	92.5	95.8	97.0	97.4
Test 3	90.5	91.8	87.3	89.5	90.1	88.9	89.4	92.9	93.5	93.7	96.4	96.3	96.0
Mean	88.9	91.6	87.4	89.9	90.3	91.3	88.6	92.5	92.3	92.9	95.9	96.7	96.9
Occluded													
Test 1	88.8	92.6	90.0	94.0	97.0	101.2	98.2	96.5	89.1	81.0	83.1	77.2	72.0
Test 2	91.4	93.4	90.4	94.2	98.1	98.0	97.7	93.7	86.4	78.5	82.0	74.3	68.3
Test 3	89.4	93.3	90.7	94.9	98.0	102.0	96.2	94.5	86.9	80.7	81.5	75.3	70.9
Mean	89.9	93.1	90.3	94.4	97.7	100.4	97.4	94.9	87.5	80.1	82.2	75.6	70.4
Left Insertion Loss	**-1.0**	**-1.5**	**-2.9**	**-4.5**	**-7.4**	**-9.1**	**-8.8**	**-2.4**	**4.8**	**12.9**	**13.6**	**21.2**	**26.5**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.6	91.3	86.9	89.7	91.4	92.7	89.0	92.4	91.7	94.1	95.9	94.2	96.8
Test 2	88.6	91.4	86.8	89.6	91.5	92.6	89.4	92.5	91.6	94.3	96.4	94.1	96.4
Test 3	91.1	91.8	86.3	88.6	91.7	90.6	90.5	93.0	92.5	95.0	95.8	92.5	95.2
Mean	89.4	91.5	86.7	89.3	91.5	92.0	89.6	92.6	91.9	94.5	96.0	93.6	96.1
Occluded													
Test 1	79.2	80.4	76.0	79.4	78.4	79.3	75.2	74.8	71.6	73.4	76.7	74.3	70.7
Test 2	82.6	82.1	77.0	79.3	78.9	77.7	76.2	74.9	72.4	74.1	77.2	74.0	68.8
Test 3	90.2	93.8	90.4	93.5	93.9	94.9	82.6	77.8	73.4	75.3	77.0	74.9	71.1
Mean	84.0	85.4	81.1	84.1	83.7	84.0	78.0	75.8	72.5	74.2	76.9	74.4	70.2
Right Insertion Loss	**5.4**	**6.0**	**5.5**	**5.3**	**7.8**	**8.0**	**11.7**	**16.8**	**19.5**	**20.2**	**19.1**	**19.2**	**25.9**
Insertion Loss	**2.2**	**2.3**	**1.3**	**0.4**	**0.2**	**-0.5**	**1.4**	**7.2**	**12.1**	**16.5**	**16.4**	**20.2**	**26.2**

Table C-7. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 7.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	94.1	96.6	98.3	98.2	98.8	101.1	99.9	94.4	89.7	92.3	90.0	79.5	109	109
Test 2	94.2	96.6	97.7	98.5	98.8	100.9	100.0	93.8	89.6	92.0	89.5	79.4	109	109
Test 3	94.1	96.2	97.5	98.9	99.3	100.8	100.1	94.6	90.8	93.0	89.7	79.3	109	109
Mean	94.1	96.5	97.8	98.5	99.0	100.9	100.0	94.3	90.0	92.4	89.8	79.4		
Occluded														
Test 1	63.9	64.1	66.3	66.9	67.2	60.7	58.0	56.2	52.0	50.7	48.6	49.5	106	95
Test 2	60.7	59.8	62.2	60.3	57.5	59.5	54.0	56.9	52.4	49.6	47.3	49.4	105	94
Test 3	63.5	63.5	65.5	63.5	62.6	65.0	55.7	56.8	55.5	48.7	47.2	49.6	106	94
Mean	62.7	62.4	64.6	63.6	62.4	61.7	55.9	56.6	53.3	49.6	47.7	49.5		
Left Insertion Loss	**31.4**	**34.1**	**33.2**	**34.9**	**36.5**	**39.2**	**44.1**	**37.6**	**36.8**	**42.8**	**42.1**	**29.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	96.8	98.7	98.8	98.1	100.7	99.7	93.3	89.9	93.8	91.2	80.2	109	109
Test 2	93.8	96.9	98.0	98.0	98.0	100.6	99.0	92.9	90.5	93.6	90.7	79.6	109	109
Test 3	93.6	96.3	98.1	97.3	98.0	99.3	98.1	92.7	90.9	93.1	91.1	80.1	108	108
Mean	93.6	96.7	98.3	98.0	98.0	100.2	98.9	93.0	90.4	93.5	91.0	80.0		
Occluded														
Test 1	57.1	56.5	61.2	59.0	57.7	53.3	53.2	47.6	47.5	50.8	53.9	56.7	88	80
Test 2	57.1	55.0	59.6	57.3	56.0	50.9	50.9	46.3	47.9	50.9	54.0	57.0	89	80
Test 3	60.2	57.5	59.2	56.2	55.0	50.2	50.2	45.7	48.2	51.0	54.0	56.9	101	87
Mean	58.1	56.4	60.0	57.5	56.3	51.5	51.4	46.5	47.9	50.9	54.0	56.9		
Right Insertion Loss	**35.5**	**40.3**	**38.2**	**40.5**	**41.8**	**48.7**	**47.5**	**46.4**	**42.6**	**42.6**	**37.0**	**23.1**		
Insertion Loss	**33.5**	**37.2**	**35.7**	**37.7**	**39.1**	**44.0**	**45.8**	**42.0**	**39.7**	**42.7**	**39.6**	**26.5**		

Table C-8. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 8.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.9	91.3	87.3	89.8	90.2	90.6	90.6	94.9	95.5	94.9	96.0	96.1	94.6
Test 2	88.0	91.4	87.6	90.5	91.0	94.3	89.9	93.7	94.0	94.0	96.1	96.8	96.4
Test 3	90.0	91.4	87.4	89.9	90.3	90.7	91.0	95.3	95.5	94.7	96.3	96.8	95.3
Mean	89.3	91.4	87.4	90.1	90.5	91.8	90.5	94.6	95.0	94.5	96.1	96.6	95.4
Occluded													
Test 1	90.0	94.0	91.1	95.3	95.9	97.1	88.5	85.0	80.8	79.0	80.6	81.7	82.5
Test 2	89.7	93.5	90.8	95.2	97.7	100.4	91.7	87.4	82.9	80.2	82.2	82.8	82.8
Test 3	87.1	89.1	83.7	83.9	81.2	81.8	80.8	78.3	75.5	74.1	77.2	77.2	76.9
Mean	89.0	92.2	88.6	91.5	91.6	93.1	87.0	83.6	79.7	77.8	80.0	80.6	80.7
Left Insertion Loss	**0.4**	**-0.8**	**-1.2**	**-1.4**	**-1.1**	**-1.2**	**3.5**	**11.0**	**15.2**	**16.8**	**16.2**	**16.0**	**14.7**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.0	91.8	86.6	89.2	91.6	90.5	89.8	93.0	92.3	94.3	93.3	94.2	95.9
Test 2	89.0	91.9	87.2	90.2	92.0	92.3	89.9	92.0	90.4	93.5	94.5	93.1	97.2
Test 3	91.2	92.1	86.7	89.2	91.8	90.1	90.4	92.6	91.9	94.4	93.6	94.0	96.2
Mean	90.4	91.9	86.9	89.6	91.8	91.0	90.0	92.5	91.5	94.1	93.8	93.8	96.4
Occluded													
Test 1	90.7	94.3	91.1	95.6	98.4	99.2	91.3	88.0	81.9	80.3	81.0	76.0	71.4
Test 2	90.8	94.3	91.5	96.0	98.6	99.8	91.6	87.9	81.7	79.7	81.1	76.3	71.6
Test 3	92.8	94.0	89.0	91.2	90.6	86.8	82.0	79.2	75.5	76.9	77.6	71.9	66.5
Mean	91.4	94.2	90.5	94.3	95.8	95.3	88.3	85.0	79.7	79.0	79.9	74.7	69.8
Right Insertion Loss	**-1.0**	**-2.3**	**-3.7**	**-4.7**	**-4.0**	**-4.3**	**1.7**	**7.5**	**11.8**	**15.1**	**13.9**	**19.0**	**26.6**
Insertion Loss	**-0.3**	**-1.5**	**-2.4**	**-3.0**	**-2.6**	**-2.8**	**2.6**	**9.3**	**13.5**	**15.9**	**15.0**	**17.5**	**20.6**

Table C-8. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 8.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.4	96.0	98.1	100.7	102.4	104.0	100.8	97.7	95.4	89.9	90.3	80.6	111	111
Test 2	95.1	95.4	98.5	100.8	102.4	104.7	101.5	96.8	95.5	88.8	89.8	80.0	111	111
Test 3	94.5	95.0	98.6	100.8	102.3	104.5	101.5	97.2	96.0	88.8	89.3	79.7	111	111
Mean	94.6	95.5	98.4	100.8	102.4	104.4	101.3	97.2	95.6	89.2	89.8	80.1		
Occluded														
Test 1	71.9	67.9	68.5	67.0	63.3	66.3	59.8	56.4	57.7	52.7	49.0	49.4	103	91
Test 2	72.7	71.6	73.0	72.0	66.3	69.2	63.3	60.5	61.4	53.0	49.5	49.4	104	93
Test 3	68.7	63.2	66.5	64.5	64.9	64.3	56.3	47.0	46.9	45.8	47.2	49.1	94	84
Mean	71.1	67.6	69.4	67.8	64.8	66.6	59.8	54.6	55.3	50.5	48.6	49.3		
Left Insertion Loss	**23.5**	**27.9**	**29.0**	**33.0**	**37.6**	**37.8**	**41.5**	**42.6**	**40.3**	**38.7**	**41.2**	**30.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	96.0	96.7	100.8	99.9	100.7	98.9	96.0	92.4	86.4	88.6	79.2	109	110
Test 2	93.8	96.9	97.5	100.2	100.3	100.4	99.2	95.8	93.5	87.0	89.1	78.9	109	110
Test 3	93.8	97.5	98.0	99.5	100.1	100.8	98.3	95.7	93.0	87.2	89.9	78.9	109	109
Mean	93.7	96.8	97.4	100.2	100.1	100.6	98.8	95.8	92.9	86.9	89.2	79.0		
Occluded														
Test 1	63.7	65.3	64.3	65.0	67.0	64.4	56.3	49.8	54.2	57.8	56.3	56.9	104	92
Test 2	64.2	64.0	62.9	63.5	65.7	64.7	56.1	51.4	56.7	56.3	54.6	56.9	105	92
Test 3	58.4	63.7	61.2	61.8	61.5	57.3	53.2	51.5	54.8	52.7	54.4	57.0	99	85
Mean	62.1	64.4	62.8	63.4	64.7	62.1	55.2	50.9	55.3	55.6	55.1	56.9		
Right Insertion Loss	**31.6**	**32.4**	**34.6**	**36.7**	**35.4**	**38.5**	**43.6**	**44.9**	**37.7**	**31.2**	**34.1**	**22.1**		
Insertion Loss	**27.6**	**30.2**	**31.8**	**34.9**	**36.5**	**38.2**	**42.5**	**43.8**	**39.0**	**35.0**	**37.7**	**26.4**		

Table C-9. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 9.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	91.5	88.0	91.1	91.3	95.0	90.4	93.6	93.5	94.2	94.3	96.2	95.6
Test 2	88.1	91.7	88.0	91.1	91.4	94.9	90.0	93.5	93.5	94.4	94.5	96.3	95.4
Test 3	90.2	91.9	87.8	90.7	91.0	91.5	90.4	94.5	95.5	95.8	94.7	95.7	94.9
Mean	88.7	91.7	87.9	90.9	91.2	93.8	90.3	93.9	94.2	94.8	94.5	96.1	95.3
Occluded													
Test 1	89.1	92.9	89.9	94.2	97.1	101.3	98.7	94.2	88.4	85.9	81.7	79.2	77.0
Test 2	89.5	93.8	91.9	96.9	97.0	98.3	89.1	84.1	80.0	78.2	74.1	72.9	70.4
Test 3	89.6	93.7	91.5	96.6	99.0	101.9	92.2	87.1	82.0	80.3	75.8	74.0	72.3
Mean	89.4	93.5	91.1	95.9	97.7	100.5	93.4	88.5	83.5	81.5	77.2	75.4	73.2
Left Insertion Loss	**-0.7**	**-1.8**	**-3.2**	**-5.0**	**-6.5**	**-6.7**	**-3.1**	**5.4**	**10.7**	**13.4**	**17.3**	**20.7**	**22.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.2	92.3	87.8	90.8	92.2	92.6	89.9	92.7	91.2	93.4	93.6	94.8	97.6
Test 2	89.3	92.3	87.8	90.8	92.2	92.7	89.8	92.7	91.3	93.3	93.3	94.1	97.0
Test 3	91.4	92.4	87.1	90.0	92.1	91.2	90.1	93.2	92.2	93.5	92.6	93.7	96.0
Mean	89.9	92.3	87.6	90.5	92.2	92.2	89.9	92.9	91.6	93.4	93.2	94.2	96.9
Occluded													
Test 1	90.1	93.5	89.8	93.2	93.0	93.8	85.7	81.0	74.9	77.4	79.7	73.7	67.8
Test 2	90.4	94.4	92.3	96.9	96.2	97.9	88.2	82.6	77.4	79.5	78.8	72.1	67.5
Test 3	86.3	88.4	83.6	86.6	86.7	87.3	79.0	77.8	72.8	76.5	76.8	69.3	62.5
Mean	88.9	92.1	88.6	92.2	92.0	93.0	84.3	80.5	75.1	77.8	78.4	71.7	65.9
Right Insertion Loss	**1.0**	**0.3**	**-1.0**	**-1.7**	**0.2**	**-0.8**	**5.6**	**12.4**	**16.5**	**15.6**	**14.7**	**22.5**	**30.9**
Insertion Loss	**0.2**	**-0.8**	**-2.1**	**-3.3**	**-3.1**	**-3.8**	**1.3**	**8.9**	**13.6**	**14.5**	**16.0**	**21.6**	**26.5**

Table C-9. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 9.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	95.7	96.6	98.6	100.0	101.1	103.6	100.8	97.3	96.3	90.4	89.0	81.1	111	111
Test 2	95.4	95.9	98.7	99.8	101.7	103.3	100.7	97.5	96.6	90.9	89.5	81.0	110	111
Test 3	94.7	96.4	98.3	100.1	101.8	103.2	100.2	97.5	96.0	90.3	89.5	80.8	110	111
Mean	95.3	96.3	98.5	100.0	101.5	103.4	100.6	97.4	96.3	90.5	89.3	81.0		
Occluded														
Test 1	68.3	65.3	68.0	69.5	69.2	69.6	68.1	64.9	58.0	51.3	50.4	50.1	106	95
Test 2	62.2	61.9	62.6	62.1	63.8	63.6	59.2	54.0	49.7	47.1	48.0	50.5	104	90
Test 3	63.2	60.2	61.0	61.4	62.7	63.8	62.1	55.7	49.5	46.6	48.0	50.5	105	92
Mean	64.6	62.5	63.9	64.3	65.2	65.7	63.2	58.2	52.4	48.3	48.8	50.4		
Left Insertion Loss	**30.7**	**33.8**	**34.7**	**35.7**	**36.3**	**37.7**	**37.4**	**39.2**	**43.9**	**42.2**	**40.5**	**30.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	96.3	97.1	99.4	101.1	102.3	100.1	96.5	94.8	91.9	93.1	80.8	110	110
Test 2	93.4	97.3	97.2	99.8	101.0	101.0	99.7	96.4	95.5	92.2	93.7	81.2	110	110
Test 3	92.8	96.4	97.6	99.6	100.9	101.0	99.2	96.9	95.4	92.0	93.5	80.6	110	110
Mean	93.1	96.7	97.3	99.6	101.0	101.4	99.7	96.6	95.2	92.0	93.4	80.9		
Occluded														
Test 1	61.1	59.5	60.5	59.4	62.5	60.6	54.7	51.4	51.2	52.2	54.5	56.5	101	87
Test 2	59.1	54.6	58.7	58.8	61.2	60.7	54.5	52.4	50.9	52.3	54.2	56.6	103	90
Test 3	56.5	53.1	56.3	58.0	59.7	57.9	54.2	49.8	49.6	51.0	53.8	56.5	95	82
Mean	58.9	55.7	58.5	58.7	61.1	59.7	54.5	51.2	50.6	51.8	54.2	56.5		
Right Insertion Loss	**34.2**	**40.9**	**38.8**	**40.9**	**39.8**	**41.7**	**45.2**	**45.4**	**44.7**	**40.2**	**39.3**	**24.3**		
Insertion Loss	**32.5**	**37.4**	**36.7**	**38.3**	**38.1**	**39.7**	**41.3**	**42.3**	**44.3**	**41.2**	**39.9**	**27.5**		

Table C-10. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 10.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.9	92.3	87.8	90.0	90.7	90.0	90.7	93.3	94.1	94.7	97.4	97.1	96.0
Test 2	91.0	92.4	87.8	89.9	90.8	89.8	90.7	93.4	94.0	94.7	97.0	96.8	95.5
Test 3	90.9	92.4	87.8	90.0	90.8	89.9	90.6	93.5	94.1	94.7	96.8	96.7	95.5
Mean	90.9	92.4	87.8	90.0	90.7	89.9	90.7	93.4	94.1	94.7	97.1	96.9	95.7
Occluded													
Test 1	89.4	93.0	90.0	94.1	95.7	96.1	95.2	92.6	87.3	83.7	84.6	77.5	79.5
Test 2	89.3	93.0	90.2	94.1	95.0	96.1	95.5	92.4	87.6	84.4	85.7	78.8	76.6
Test 3	89.4	93.1	90.0	94.1	95.3	96.3	95.4	92.9	88.5	85.5	86.8	80.2	79.4
Mean	89.3	93.0	90.1	94.1	95.3	96.2	95.4	92.6	87.8	84.5	85.7	78.8	78.5
Left Insertion Loss	**1.6**	**-0.7**	**-2.3**	**-4.2**	**-4.6**	**-6.2**	**-4.7**	**0.8**	**6.3**	**10.2**	**11.4**	**18.1**	**17.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.2	91.8	86.6	89.2	91.5	91.5	90.5	94.1	93.3	94.7	96.6	94.1	94.7
Test 2	91.3	91.9	86.5	89.0	91.7	91.7	90.6	94.3	93.3	95.1	97.0	93.8	95.1
Test 3	91.3	92.0	86.4	89.0	91.8	91.5	90.8	94.2	93.2	95.2	96.6	93.4	95.1
Mean	91.3	91.9	86.5	89.1	91.7	91.5	90.6	94.2	93.2	95.0	96.7	93.7	94.9
Occluded													
Test 1	89.6	92.9	89.8	94.1	95.5	96.6	95.4	93.1	91.0	89.3	89.6	85.1	86.0
Test 2	89.4	92.8	89.9	93.9	95.0	96.8	95.5	92.5	91.0	89.0	89.4	84.4	84.5
Test 3	89.6	92.9	89.8	94.1	95.4	97.1	95.4	92.7	89.8	87.4	87.6	84.1	84.9
Mean	89.6	92.9	89.9	94.0	95.3	96.8	95.4	92.8	90.6	88.6	88.8	84.5	85.2
Right Insertion Loss	**1.7**	**-1.0**	**-3.3**	**-5.0**	**-3.6**	**-5.3**	**-4.8**	**1.5**	**2.6**	**6.4**	**7.9**	**9.2**	**9.8**
Insertion Loss	**1.7**	**-0.8**	**-2.8**	**-4.6**	**-4.1**	**-5.8**	**-4.7**	**1.1**	**4.4**	**8.3**	**9.6**	**13.6**	**13.5**

Table C-10. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – Subject 10.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.2	97.1	98.9	98.9	100.5	102.1	101.3	98.4	93.9	89.3	90.2	80.2	110	111
Test 2	94.1	97.9	99.3	99.3	101.2	102.4	100.8	98.3	93.1	90.6	90.0	79.8	110	111
Test 3	93.9	97.5	99.1	99.6	101.1	101.9	101.0	98.1	94.1	89.9	89.7	79.4	110	111
Mean	94.1	97.5	99.1	99.2	100.9	102.2	101.1	98.3	93.7	89.9	90.0	79.8		
Occluded														
Test 1	78.7	71.4	70.1	71.9	71.2	72.2	77.1	75.9	72.5	71.8	70.3	62.1	103	94
Test 2	73.6	68.9	68.2	69.9	70.1	69.8	68.5	73.1	66.4	59.5	57.0	55.0	103	93
Test 3	76.3	70.3	68.1	67.7	68.1	75.1	72.2	66.7	67.9	65.2	59.9	51.1	103	94
Mean	76.2	70.2	68.8	69.8	69.8	72.4	72.6	71.9	68.9	65.5	62.4	56.1		
Left Insertion Loss	**17.9**	**27.3**	**30.3**	**29.4**	**31.1**	**29.8**	**28.5**	**26.4**	**24.8**	**24.4**	**27.6**	**23.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.6	96.9	98.3	99.9	101.1	101.4	97.7	93.6	94.8	95.7	93.8	81.9	110	110
Test 2	93.1	96.2	98.1	100.5	100.3	101.1	96.1	92.6	94.9	96.1	93.2	81.8	110	110
Test 3	93.8	96.4	98.1	100.8	100.3	101.5	96.6	93.1	95.2	95.9	93.1	82.0	110	110
Mean	93.8	96.5	98.2	100.4	100.6	101.3	96.8	93.1	94.9	95.9	93.3	81.9		
Occluded														
Test 1	82.1	81.0	78.1	75.2	72.4	74.0	71.3	71.0	63.5	64.6	61.0	57.4	104	96
Test 2	81.8	80.7	77.5	76.5	71.5	73.4	70.5	69.6	68.3	67.2	63.3	58.0	104	96
Test 3	82.7	80.8	76.8	75.3	70.0	70.6	65.0	64.0	71.2	65.9	62.6	58.1	104	96
Mean	82.2	80.8	77.5	75.7	71.3	72.7	68.9	68.2	67.7	65.9	62.3	57.8		
Right Insertion Loss	**11.6**	**15.7**	**20.7**	**24.7**	**29.2**	**28.7**	**27.9**	**24.9**	**27.3**	**30.0**	**31.1**	**24.1**		
Insertion Loss	**14.8**	**21.5**	**25.5**	**27.1**	**30.2**	**29.2**	**28.2**	**25.6**	**26.0**	**27.2**	**29.3**	**23.9**		

Table C-11. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 1.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.2	91.8	87.9	90.7	90.9	94.0	89.5	93.7	93.7	93.6	97.0	97.0	97.6
Test 2	90.6	92.1	87.6	90.0	90.7	90.3	90.3	94.5	95.4	94.7	97.5	97.0	96.7
Test 3	88.3	92.0	88.0	90.7	91.0	94.1	89.5	93.4	94.0	93.8	97.8	97.5	97.4
Mean	89.0	92.0	87.9	90.5	90.9	92.8	89.8	93.9	94.3	94.0	97.5	97.2	97.3
Occluded													
Test 1	84.9	88.5	83.3	83.8	82.2	85.0	78.4	82.0	79.2	78.7	78.9	75.8	73.4
Test 2	85.0	88.9	83.7	84.2	82.9	85.2	79.4	82.5	80.2	79.8	78.9	75.7	72.8
Test 3	89.3	91.2	87.8	89.2	89.0	87.3	84.2	85.4	83.7	82.7	81.0	74.2	70.5
Mean	86.4	89.5	84.9	85.7	84.7	85.8	80.6	83.3	81.0	80.4	79.6	75.2	72.2
Left Insertion Loss	**2.6**	**2.5**	**2.9**	**4.7**	**6.1**	**7.0**	**9.1**	**10.6**	**13.3**	**13.6**	**17.9**	**21.9**	**25.0**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.9	91.9	87.1	89.9	91.7	92.4	89.9	92.8	91.7	94.3	95.5	94.4	96.6
Test 2	91.3	92.1	86.6	89.1	91.8	91.4	90.4	94.0	93.1	94.9	95.3	94.9	95.4
Test 3	89.0	92.0	87.3	90.1	91.8	92.6	89.7	93.1	91.8	94.4	96.5	94.5	96.7
Mean	89.7	92.0	87.0	89.7	91.8	92.1	90.0	93.3	92.2	94.5	95.8	94.6	96.2
Occluded													
Test 1	89.9	93.3	89.7	93.2	94.6	95.6	89.6	85.9	80.4	81.4	80.5	73.7	70.4
Test 2	90.1	93.5	89.6	93.1	94.3	95.2	89.1	85.4	79.8	81.5	80.3	73.9	71.2
Test 3	91.9	93.5	90.1	93.0	94.5	93.4	88.9	84.4	80.6	81.0	76.6	71.6	67.7
Mean	90.6	93.5	89.8	93.1	94.5	94.7	89.2	85.2	80.2	81.3	79.1	73.1	69.7
Right Insertion Loss	**-0.9**	**-1.5**	**-2.8**	**-3.4**	**-2.7**	**-2.6**	**0.8**	**8.1**	**12.0**	**13.2**	**16.6**	**21.5**	**26.5**
Insertion Loss	**0.9**	**0.5**	**0.1**	**0.7**	**1.7**	**2.2**	**5.0**	**9.3**	**12.6**	**13.4**	**17.3**	**21.7**	**25.7**

Table C-11. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 1.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.2	96.2	99.2	99.8	100.7	103.3	99.7	96.3	90.5	90.0	90.7	80.9	110	110
Test 2	93.3	95.5	98.7	99.1	100.2	102.8	99.8	95.8	90.3	89.6	90.6	80.8	110	110
Test 3	94.1	95.9	99.0	99.5	100.5	102.9	99.4	94.9	90.0	89.8	89.9	80.6	110	110
Mean	93.9	95.9	99.0	99.5	100.4	103.0	99.6	95.7	90.3	89.8	90.4	80.8		
Occluded														
Test 1	63.8	58.4	55.0	52.8	53.5	50.9	47.5	42.8	43.2	45.2	48.0	50.8	94	84
Test 2	63.9	58.8	57.2	55.2	54.6	50.5	46.5	43.7	44.0	46.2	49.0	51.6	94	84
Test 3	63.5	57.9	56.2	54.5	51.7	52.2	49.2	47.0	44.3	45.7	48.6	51.3	98	87
Mean	63.7	58.4	56.1	54.1	53.3	51.2	47.7	44.5	43.8	45.7	48.5	51.2		
Left Insertion Loss	**30.2**	**37.5**	**42.9**	**45.3**	**47.1**	**51.8**	**51.9**	**51.1**	**46.5**	**44.1**	**41.9**	**29.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.6	98.0	99.5	100.8	100.2	101.9	99.1	97.3	89.8	92.0	93.3	81.7	110	110
Test 2	94.5	97.7	99.5	99.7	100.6	100.7	99.1	97.6	90.4	92.2	93.1	81.9	110	110
Test 3	94.4	97.6	99.7	100.9	100.8	101.6	99.1	97.6	90.6	92.1	92.7	82.0	110	110
Mean	94.5	97.8	99.6	100.5	100.5	101.4	99.1	97.5	90.3	92.1	93.1	81.9		
Occluded														
Test 1	60.1	56.9	59.4	58.7	57.2	56.8	54.9	50.4	50.5	52.5	55.2	57.9	102	89
Test 2	60.8	54.8	57.9	58.9	62.4	61.3	55.2	50.1	50.4	52.5	55.6	58.3	101	89
Test 3	56.3	55.6	57.9	57.8	56.1	56.6	53.6	49.9	49.9	52.2	55.3	58.1	101	89
Mean	59.1	55.7	58.4	58.5	58.6	58.2	54.6	50.1	50.2	52.4	55.4	58.1		
Right Insertion Loss	**35.4**	**42.0**	**41.2**	**42.0**	**41.9**	**43.2**	**44.5**	**47.4**	**40.0**	**39.7**	**37.7**	**23.7**		
Insertion Loss	**32.8**	**39.8**	**42.0**	**43.7**	**44.5**	**47.5**	**48.2**	**49.3**	**43.3**	**41.9**	**39.8**	**26.6**		

Table C-12. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 2.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.9	92.1	87.1	89.2	90.7	88.1	89.6	92.0	92.9	95.2	93.1	95.3	95.6
Test 2	88.9	92.1	87.2	89.7	91.1	91.9	88.5	92.0	91.1	93.9	93.5	96.0	96.3
Test 3	90.8	92.2	87.3	89.7	90.7	89.2	89.9	93.3	93.4	94.3	96.3	96.5	95.7
Mean	90.2	92.1	87.2	89.5	90.8	89.8	89.3	92.4	92.5	94.4	94.3	95.9	95.9
Occluded													
Test 1	89.4	92.4	87.7	91.0	94.2	94.8	97.5	99.2	94.1	94.3	93.9	91.2	87.8
Test 2	91.6	92.7	87.5	90.4	94.0	92.8	98.4	99.4	95.4	94.4	92.8	89.8	85.7
Test 3	89.4	92.4	87.8	91.2	94.1	95.1	97.8	99.5	94.2	94.3	93.6	90.4	86.2
Mean	90.1	92.5	87.7	90.9	94.1	94.2	97.9	99.3	94.6	94.4	93.4	90.4	86.6
Left Insertion Loss	**0.1**	**-0.4**	**-0.4**	**-1.4**	**-3.3**	**-4.5**	**-8.6**	**-6.9**	**-2.1**	**0.1**	**0.9**	**5.5**	**9.3**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.8	91.2	86.5	89.4	90.9	92.8	88.7	95.5	94.7	94.4	96.8	95.9	95.1
Test 2	88.7	91.2	87.1	90.6	91.1	94.0	87.3	95.1	94.3	94.2	96.7	96.7	95.9
Test 3	91.0	91.7	86.3	89.3	91.3	92.6	89.5	94.8	93.9	94.7	96.6	95.5	94.4
Mean	90.2	91.4	86.7	89.7	91.1	93.1	88.5	95.2	94.3	94.4	96.7	96.0	95.1
Occluded													
Test 1	89.3	92.2	88.2	92.0	94.5	96.8	97.2	98.0	94.5	92.6	92.0	88.0	85.9
Test 2	91.4	92.5	87.8	91.3	94.3	95.2	98.4	98.0	95.0	93.9	92.8	88.2	85.4
Test 3	89.2	92.2	88.1	92.0	94.2	96.7	97.4	97.7	94.2	92.6	92.7	89.0	86.3
Mean	90.0	92.3	88.1	91.8	94.3	96.2	97.7	97.9	94.6	93.0	92.5	88.4	85.9
Right Insertion Loss	**0.2**	**-0.9**	**-1.4**	**-2.0**	**-3.2**	**-3.1**	**-9.2**	**-2.7**	**-0.3**	**1.4**	**4.2**	**7.6**	**9.3**
Insertion Loss	**0.1**	**-0.6**	**-0.9**	**-1.7**	**-3.3**	**-3.8**	**-8.9**	**-4.8**	**-1.2**	**0.7**	**2.5**	**6.6**	**9.3**

Table C-12. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 2.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	96.4	98.7	99.3	99.8	101.6	99.5	97.9	96.7	89.0	87.8	78.7	110	110
Test 2	93.6	95.4	98.2	99.2	100.4	101.4	99.1	97.8	96.2	90.6	87.4	79.2	109	110
Test 3	93.4	96.7	97.6	98.9	100.8	101.8	98.5	97.7	96.3	89.3	87.5	78.5	110	110
Mean	93.5	96.2	98.1	99.1	100.4	101.6	99.1	97.8	96.4	89.6	87.6	78.8		
Occluded														
Test 1	79.6	73.4	76.2	77.5	78.7	76.5	71.3	70.2	69.9	64.1	65.0	55.4	105	99
Test 2	78.4	73.0	74.7	76.2	77.1	73.7	67.4	70.5	68.7	58.4	60.4	53.7	105	99
Test 3	78.0	72.7	75.1	76.5	75.6	71.8	65.6	71.5	69.8	61.0	57.7	54.1	105	99
Mean	78.7	73.0	75.3	76.7	77.1	74.0	68.1	70.7	69.4	61.2	61.1	54.4		
Left Insertion Loss	**14.8**	**23.2**	**22.8**	**22.4**	**23.2**	**27.6**	**31.0**	**27.1**	**27.0**	**28.5**	**26.5**	**24.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	97.6	98.0	98.9	100.4	100.7	99.8	96.3	92.7	93.8	90.2	77.2	110	110
Test 2	94.0	97.0	97.8	98.7	100.0	100.9	99.6	95.1	93.3	94.3	91.2	77.5	110	109
Test 3	92.9	95.9	98.0	99.4	99.3	100.3	99.6	95.7	92.3	94.5	90.5	77.7	109	109
Mean	93.5	96.8	98.0	99.0	99.9	100.6	99.7	95.7	92.8	94.2	90.7	77.5		
Occluded														
Test 1	78.4	76.5	75.3	77.8	73.3	70.2	71.9	72.1	68.1	71.5	67.0	58.1	105	98
Test 2	79.1	76.2	74.7	77.4	73.9	68.9	70.6	71.9	66.5	71.1	64.7	58.1	105	98
Test 3	78.3	75.3	74.7	77.2	73.5	69.4	70.6	71.2	68.3	71.8	64.3	58.4	105	98
Mean	78.6	76.0	74.9	77.5	73.6	69.5	71.0	71.7	67.6	71.5	65.4	58.2		
Right Insertion Loss	**14.9**	**20.9**	**23.0**	**21.5**	**26.3**	**31.1**	**28.7**	**23.9**	**25.2**	**22.7**	**25.3**	**19.3**		
Insertion Loss	**14.9**	**22.0**	**22.9**	**22.0**	**24.8**	**29.4**	**29.8**	**25.5**	**26.1**	**25.6**	**25.9**	**21.9**		

Table C-13. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 3.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	92.0	87.8	90.2	90.8	92.2	89.4	92.2	91.5	92.5	96.6	97.2	96.4
Test 2	91.1	92.4	87.5	89.5	90.7	88.4	90.2	91.7	92.4	93.6	97.5	96.3	95.8
Test 3	91.2	92.4	87.5	89.4	90.7	88.2	89.9	91.9	92.3	93.5	97.3	96.3	95.8
Mean	90.4	92.3	87.6	89.7	90.7	89.6	89.8	91.9	92.1	93.2	97.1	96.6	96.0
Occluded													
Test 1	89.4	92.6	88.4	91.5	93.6	94.3	93.8	95.2	91.5	91.9	96.3	91.8	87.1
Test 2	89.1	92.4	88.4	91.4	93.4	94.3	93.9	95.7	92.0	92.4	97.0	92.1	87.3
Test 3	91.6	93.0	88.5	91.1	93.6	90.8	94.0	95.3	92.6	92.2	96.8	90.2	86.7
Mean	90.0	92.6	88.4	91.3	93.5	93.1	93.9	95.4	92.0	92.2	96.7	91.4	87.0
Left Insertion Loss	**0.3**	**-0.4**	**-0.9**	**-1.6**	**-2.8**	**-3.5**	**-4.1**	**-3.5**	**0.0**	**1.0**	**0.4**	**5.2**	**9.0**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.0	91.6	86.8	89.6	91.6	92.7	90.0	93.3	92.0	93.9	97.7	94.8	96.5
Test 2	91.4	91.9	86.2	88.6	91.8	91.7	91.0	94.4	93.0	95.0	97.2	93.3	94.8
Test 3	91.4	92.0	86.2	88.5	91.9	91.7	91.2	94.1	92.9	95.1	97.3	93.3	94.7
Mean	90.6	91.8	86.4	88.9	91.7	92.0	90.7	93.9	92.6	94.7	97.4	93.8	95.3
Occluded													
Test 1	89.3	92.3	88.5	92.4	94.5	96.7	95.0	94.9	92.8	93.9	94.9	88.9	86.8
Test 2	89.0	92.0	88.3	92.1	94.0	96.4	94.7	95.2	93.8	94.8	95.9	89.7	87.5
Test 3	91.4	92.4	88.0	91.4	94.0	93.9	95.4	95.2	94.9	96.6	96.6	90.4	87.5
Mean	89.9	92.2	88.3	91.9	94.2	95.7	95.0	95.1	93.8	95.1	95.8	89.7	87.3
Right Insertion Loss	**0.7**	**-0.4**	**-1.8**	**-3.0**	**-2.4**	**-3.6**	**-4.2**	**-1.2**	**-1.2**	**-0.4**	**1.6**	**4.1**	**8.1**
Insertion Loss	**0.5**	**-0.4**	**-1.3**	**-2.3**	**-2.6**	**-3.6**	**-4.2**	**-2.3**	**-0.6**	**0.3**	**1.0**	**4.7**	**8.5**

Table C-13. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 3.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.6	96.8	97.7	99.1	98.4	101.3	99.8	95.7	95.0	91.0	87.9	80.1	109	109
Test 2	93.8	96.2	97.2	98.7	98.5	101.0	99.4	96.6	94.2	91.2	88.9	80.3	109	109
Test 3	94.1	96.5	97.2	99.0	99.1	100.8	99.7	96.4	93.8	91.7	88.0	79.6	109	109
Mean	93.9	96.5	97.3	98.9	98.7	101.0	99.6	96.2	94.4	91.3	88.2	80.0		
Occluded														
Test 1	80.1	76.8	78.7	78.7	77.1	77.7	72.2	67.2	68.7	64.7	65.3	55.2	104	99
Test 2	80.0	76.2	78.8	79.9	78.8	78.4	72.7	68.4	68.8	65.3	66.5	56.5	104	99
Test 3	80.2	76.5	77.2	78.2	75.7	75.5	70.5	66.3	66.1	63.8	62.4	53.7	104	98
Mean	80.1	76.5	78.2	79.0	77.2	77.2	71.8	67.3	67.9	64.6	64.7	55.1		
Left Insertion Loss	**13.7**	**20.0**	**19.1**	**20.0**	**21.4**	**23.8**	**27.8**	**28.9**	**26.5**	**26.7**	**23.5**	**24.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.5	95.8	97.0	98.6	99.2	101.6	100.4	97.5	95.4	93.1	88.5	77.3	110	110
Test 2	94.3	95.1	96.9	98.6	99.2	102.1	99.8	97.3	95.5	92.9	88.4	77.0	110	110
Test 3	94.4	95.2	96.7	98.7	99.5	101.5	99.5	97.4	95.4	93.1	87.8	76.8	109	109
Mean	94.4	95.3	96.8	98.6	99.3	101.7	99.9	97.4	95.4	93.0	88.2	77.0		
Occluded														
Test 1	76.7	68.9	68.7	68.8	71.9	71.6	67.6	70.2	73.5	68.9	70.7	63.1	104	98
Test 2	78.2	70.7	70.3	71.0	74.4	73.3	68.3	71.7	76.2	69.4	67.8	61.8	105	99
Test 3	79.2	72.4	70.7	71.6	75.8	74.5	69.3	72.1	74.9	71.1	70.5	63.1	105	99
Mean	78.0	70.7	69.9	70.5	74.0	73.2	68.4	71.3	74.8	69.8	69.7	62.7		
Right Insertion Loss	**16.4**	**24.7**	**27.0**	**28.2**	**25.3**	**28.6**	**31.5**	**26.1**	**20.6**	**23.2**	**18.5**	**14.4**		
Insertion Loss	**15.1**	**22.3**	**23.0**	**24.1**	**23.4**	**26.2**	**29.7**	**27.5**	**23.5**	**24.9**	**21.0**	**19.6**		

Table C-14. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 4.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.3	91.8	87.6	90.3	90.5	93.0	89.3	92.1	93.1	93.3	95.8	96.1	96.5
Test 2	90.6	92.1	87.5	90.0	90.3	90.2	90.1	93.3	94.2	94.3	95.6	96.0	95.5
Test 3	88.4	91.9	87.7	90.4	90.5	93.2	89.7	92.5	93.1	93.2	95.8	96.1	97.5
Mean	89.1	92.0	87.6	90.2	90.4	92.1	89.7	92.6	93.5	93.6	95.7	96.1	96.5
Occluded													
Test 1	88.9	92.2	88.6	91.7	93.0	94.9	92.9	94.7	90.9	90.1	92.8	89.4	86.0
Test 2	89.3	92.8	89.0	92.1	93.5	95.2	92.6	93.8	89.4	88.0	90.8	87.7	84.3
Test 3	91.6	92.9	88.8	91.3	93.3	91.7	93.6	95.3	91.3	89.1	92.3	86.8	83.5
Mean	89.9	92.6	88.8	91.7	93.3	93.9	93.0	94.6	90.5	89.1	92.0	88.0	84.6
Left Insertion Loss	**-0.8**	**-0.7**	**-1.2**	**-1.5**	**-2.8**	**-1.8**	**-3.3**	**-2.0**	**2.9**	**4.5**	**3.8**	**8.1**	**12.0**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.8	91.6	86.4	89.3	91.3	90.8	90.2	92.5	91.2	93.9	96.0	93.9	96.2
Test 2	91.2	92.0	85.9	88.5	91.5	89.6	91.1	92.8	92.3	94.6	95.4	93.2	95.0
Test 3	88.9	91.8	86.5	89.4	91.4	90.2	90.3	92.3	91.3	93.6	96.1	93.1	96.5
Mean	89.6	91.8	86.3	89.1	91.4	90.2	90.5	92.5	91.6	94.0	95.8	93.4	95.9
Occluded													
Test 1	89.2	92.2	88.4	92.0	93.9	95.3	94.2	94.5	90.8	91.3	92.8	86.5	80.9
Test 2	89.4	92.5	88.4	92.0	94.0	95.1	94.2	94.7	90.9	91.6	93.4	86.7	81.7
Test 3	91.6	92.6	88.0	91.1	93.9	91.4	94.9	94.1	92.2	94.1	94.8	86.8	80.5
Mean	90.0	92.4	88.2	91.7	93.9	94.0	94.4	94.4	91.3	92.3	93.7	86.7	81.0
Right Insertion Loss	**-0.4**	**-0.6**	**-2.0**	**-2.6**	**-2.5**	**-3.8**	**-3.9**	**-1.9**	**0.3**	**1.7**	**2.2**	**6.7**	**14.9**
Insertion Loss	**-0.6**	**-0.7**	**-1.6**	**-2.1**	**-2.7**	**-2.8**	**-3.6**	**-1.9**	**1.6**	**3.1**	**3.0**	**7.4**	**13.4**

Table C-14. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 4.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	97.9	97.7	99.0	100.3	101.2	100.2	96.9	91.8	90.6	90.1	81.1	110	109
Test 2	94.1	98.6	97.8	99.3	100.0	101.0	99.2	97.5	92.7	91.4	90.9	81.7	110	110
Test 3	94.3	98.2	97.5	99.3	99.3	101.2	100.0	97.6	93.0	90.5	90.4	80.4	110	110
Mean	94.0	98.2	97.7	99.2	99.8	101.1	99.8	97.3	92.5	90.8	90.5	81.1		
Occluded														
Test 1	77.4	73.9	73.7	73.8	71.6	72.7	68.0	61.0	57.0	55.0	56.3	51.8	103	96
Test 2	75.1	71.2	71.6	71.4	69.4	69.2	63.4	58.1	56.0	56.3	60.0	53.3	103	95
Test 3	75.8	72.4	72.9	73.1	69.8	69.1	65.4	60.6	55.9	58.0	58.7	52.4	103	96
Mean	76.1	72.5	72.7	72.8	70.3	70.3	65.6	59.9	56.3	56.5	58.4	52.5		
Left Insertion Loss	**17.9**	**25.7**	**24.9**	**26.4**	**29.5**	**30.8**	**34.2**	**37.4**	**36.2**	**34.4**	**32.1**	**28.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	94.8	97.4	99.3	99.2	101.5	99.5	97.5	92.5	90.5	90.6	80.4	109	109
Test 2	93.6	95.5	98.1	99.2	99.5	100.8	99.0	98.0	92.5	90.3	90.4	80.3	109	109
Test 3	93.9	95.7	98.7	99.3	99.4	101.3	99.7	96.8	92.9	91.1	89.6	80.6	109	110
Mean	93.4	95.4	98.1	99.3	99.4	101.2	99.4	97.4	92.7	90.6	90.2	80.4		
Occluded														
Test 1	70.9	68.1	67.9	65.4	65.0	67.9	68.8	60.4	66.1	65.4	60.4	57.8	103	96
Test 2	70.8	65.8	66.7	64.0	66.4	67.0	61.3	59.3	61.6	61.2	58.5	57.5	103	96
Test 3	71.6	68.2	69.0	67.4	68.0	67.8	68.7	66.4	69.6	68.3	61.1	58.5	104	97
Mean	71.1	67.4	67.8	65.6	66.5	67.6	66.3	62.0	65.8	65.0	60.0	58.0		
Right Insertion Loss	**22.3**	**28.0**	**30.3**	**33.6**	**32.9**	**33.6**	**33.1**	**35.4**	**26.9**	**25.7**	**30.2**	**22.5**		
Insertion Loss	**20.1**	**26.8**	**27.6**	**30.0**	**31.2**	**32.2**	**33.7**	**36.4**	**31.5**	**30.0**	**31.1**	**25.5**		

Table C-15. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 5.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	91.7	87.6	90.5	90.7	93.6	89.6	93.0	93.4	93.7	96.7	96.5	96.2
Test 2	88.3	91.8	87.7	90.5	90.8	93.8	89.7	93.2	93.6	93.6	96.3	96.4	96.7
Test 3	88.1	91.7	87.7	90.6	90.9	94.1	89.9	92.8	93.9	93.9	95.7	96.6	96.7
Mean	88.2	91.7	87.7	90.5	90.8	93.8	89.7	93.0	93.6	93.8	96.2	96.5	96.6
Occluded													
Test 1	88.6	92.0	88.6	91.9	93.3	96.0	93.5	93.8	91.2	92.3	96.8	91.7	89.5
Test 2	91.0	92.4	88.5	91.3	93.2	92.2	93.6	93.6	92.2	92.6	97.6	91.2	90.0
Test 3	88.6	92.2	88.6	91.9	93.4	96.3	94.2	94.3	92.4	92.6	96.1	91.2	91.5
Mean	89.4	92.2	88.5	91.7	93.3	94.8	93.7	93.9	91.9	92.5	96.8	91.4	90.3
Left Insertion Loss	**-1.2**	**-0.5**	**-0.9**	**-1.2**	**-2.5**	**-1.0**	**-4.0**	**-0.9**	**1.7**	**1.3**	**-0.6**	**5.1**	**6.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.8	91.7	86.9	90.0	91.5	92.3	90.0	92.3	91.2	93.9	95.8	92.9	96.1
Test 2	88.9	91.7	86.9	90.0	91.7	91.9	90.2	92.0	90.7	93.5	95.2	92.7	96.4
Test 3	88.9	91.8	87.1	90.2	91.8	91.8	90.2	91.9	90.6	92.8	94.4	93.3	97.0
Mean	88.9	91.8	87.0	90.1	91.6	92.0	90.1	92.1	90.8	93.4	95.1	93.0	96.5
Occluded													
Test 1	89.4	92.6	89.0	92.7	95.0	97.5	95.9	95.1	92.8	94.5	98.2	94.0	88.4
Test 2	91.9	93.2	89.2	92.5	95.4	94.1	96.7	93.7	93.3	95.3	98.1	93.2	88.8
Test 3	89.4	92.7	88.9	92.6	94.9	97.0	96.2	95.0	93.3	94.3	97.0	92.4	87.1
Mean	90.2	92.8	89.1	92.6	95.1	96.2	96.3	94.6	93.2	94.7	97.8	93.2	88.1
Right Insertion Loss	**-1.4**	**-1.1**	**-2.1**	**-2.5**	**-3.4**	**-4.2**	**-6.1**	**-2.6**	**-2.3**	**-1.3**	**-2.7**	**-0.3**	**8.4**
Insertion Loss	**-1.3**	**-0.8**	**-1.5**	**-1.9**	**-3.0**	**-2.6**	**-5.1**	**-1.7**	**-0.3**	**0.0**	**-1.6**	**2.4**	**7.3**

Table C-15. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 5.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.0	95.3	96.9	98.6	99.5	101.7	100.0	98.5	97.8	93.2	91.3	79.8	110	110
Test 2	94.3	95.5	96.7	99.5	101.0	103.1	100.8	99.0	97.7	93.2	91.6	79.6	110	111
Test 3	94.8	95.1	96.9	99.4	100.5	102.9	101.0	98.7	97.1	93.5	91.6	79.3	110	110
Mean	94.3	95.3	96.8	99.2	100.3	102.5	100.6	98.7	97.6	93.3	91.5	79.6		
Occluded														
Test 1	81.8	80.8	80.9	81.0	78.1	73.9	69.3	71.0	70.6	69.2	64.2	56.5	104	99
Test 2	82.3	80.2	79.9	79.1	77.1	73.9	68.7	69.7	71.2	69.6	63.3	54.4	104	99
Test 3	83.2	79.4	78.9	77.8	76.5	75.7	70.3	70.9	69.8	69.4	65.0	55.2	104	99
Mean	82.4	80.2	79.9	79.3	77.2	74.5	69.4	70.5	70.5	69.4	64.2	55.4		
Left Insertion Loss	**11.9**	**15.2**	**16.9**	**19.9**	**23.1**	**28.0**	**31.1**	**28.2**	**27.0**	**23.9**	**27.3**	**24.2**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	96.2	97.3	99.4	99.1	101.5	99.6	97.3	98.2	97.3	90.4	76.2	110	110
Test 2	93.2	95.8	97.1	99.2	99.0	101.7	100.1	97.1	98.5	97.8	91.3	76.8	110	110
Test 3	93.8	95.3	96.6	98.6	99.3	101.7	100.1	97.2	98.8	98.2	91.1	76.6	110	110
Mean	93.3	95.8	97.0	99.1	99.1	101.7	99.9	97.2	98.5	97.7	90.9	76.5		
Occluded														
Test 1	82.5	76.5	75.5	73.2	73.1	74.9	74.5	66.4	63.5	61.5	60.6	56.4	106	100
Test 2	83.6	77.5	74.1	69.6	69.1	69.4	68.5	61.0	57.4	56.9	57.6	56.1	105	100
Test 3	80.8	75.5	75.3	74.9	71.7	73.3	72.7	65.2	58.2	57.9	57.9	56.6	105	100
Mean	82.3	76.5	75.0	72.6	71.3	72.5	71.9	64.2	59.7	58.8	58.7	56.3		
Right Insertion Loss	**11.0**	**19.2**	**22.0**	**26.5**	**27.8**	**29.1**	**28.0**	**33.0**	**38.8**	**39.0**	**32.2**	**20.2**		
Insertion Loss	**11.4**	**17.2**	**19.5**	**23.2**	**25.5**	**28.6**	**29.6**	**30.6**	**32.9**	**31.5**	**29.7**	**22.2**		

Table C-16. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 6.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.0	91.2	87.1	89.4	90.1	89.9	90.8	94.9	94.8	93.9	97.0	96.7	95.9
Test 2	88.1	91.5	87.4	90.0	90.7	93.5	90.0	93.1	93.4	93.0	95.9	96.9	97.9
Test 3	90.1	91.6	87.4	89.7	90.3	90.7	90.7	94.7	95.0	94.1	96.2	97.5	96.4
Mean	89.4	91.4	87.3	89.7	90.3	91.4	90.5	94.3	94.4	93.7	96.4	97.0	96.7
Occluded													
Test 1	87.8	89.6	84.7	86.7	86.8	84.5	83.1	81.9	77.7	75.2	78.2	72.1	69.1
Test 2	90.8	92.7	89.5	92.1	92.5	90.5	89.1	87.2	82.9	79.1	81.4	77.3	73.5
Test 3	90.8	92.6	89.7	93.0	94.7	93.7	94.1	92.0	88.3	84.2	84.0	79.6	75.0
Mean	89.8	91.6	88.0	90.6	91.3	89.6	88.8	87.0	82.9	79.5	81.2	76.3	72.5
Left Insertion Loss	**-0.4**	**-0.2**	**-0.7**	**-0.9**	**-1.0**	**1.8**	**1.7**	**7.3**	**11.5**	**14.2**	**15.2**	**20.7**	**24.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.8	91.4	86.2	88.8	91.2	89.5	90.3	92.4	92.4	93.7	93.2	94.0	96.8
Test 2	88.8	91.6	86.7	89.7	91.5	90.6	90.3	91.2	90.4	92.8	95.5	94.0	96.6
Test 3	90.9	91.8	86.3	89.1	91.4	89.2	90.9	91.6	92.2	93.0	94.1	93.8	96.0
Mean	90.2	91.6	86.4	89.2	91.4	89.7	90.5	91.8	91.7	93.2	94.2	94.0	96.4
Occluded													
Test 1	92.2	93.5	89.9	93.8	96.8	94.1	91.2	85.8	81.6	80.8	81.1	74.5	69.8
Test 2	92.1	93.3	89.9	93.6	95.3	91.3	88.9	84.0	79.8	78.9	79.2	73.7	69.2
Test 3	92.2	93.6	90.0	93.5	95.4	91.5	90.1	85.0	80.6	78.6	79.6	74.4	70.2
Mean	92.2	93.5	89.9	93.6	95.9	92.3	90.1	84.9	80.7	79.4	80.0	74.2	69.7
Right Insertion Loss	**-2.0**	**-1.9**	**-3.5**	**-4.4**	**-4.5**	**-2.6**	**0.4**	**6.8**	**11.0**	**13.7**	**14.3**	**19.7**	**26.7**
Insertion Loss	**-1.2**	**-1.0**	**-2.1**	**-2.7**	**-2.7**	**-0.4**	**1.1**	**7.1**	**11.2**	**13.9**	**14.7**	**20.2**	**25.4**

Table C-16. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 6.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.1	95.8	97.7	99.1	99.3	99.6	98.7	94.4	95.0	93.8	89.8	82.3	109	109
Test 2	93.6	95.4	96.8	98.9	98.3	100.1	99.1	93.3	94.3	93.2	90.5	82.1	109	109
Test 3	93.2	95.7	97.4	98.8	98.6	99.9	97.4	93.2	95.0	93.9	90.3	81.8	109	109
Mean	93.3	95.6	97.3	98.9	98.7	99.9	98.4	93.6	94.8	93.6	90.2	82.1		
Occluded														
Test 1	62.6	65.6	64.5	60.5	52.4	56.4	57.4	54.2	48.0	46.9	49.7	51.0	96	84
Test 2	64.9	65.1	62.8	61.7	54.0	61.6	61.9	57.0	53.1	50.8	52.5	51.4	100	89
Test 3	66.9	66.9	67.3	67.5	61.0	66.9	68.9	68.6	61.8	62.1	64.3	52.7	102	92
Mean	64.8	65.9	64.8	63.3	55.8	61.6	62.7	59.9	54.3	53.3	55.5	51.7		
Left Insertion Loss	**28.5**	**29.7**	**32.4**	**35.7**	**42.9**	**38.3**	**35.7**	**33.7**	**40.5**	**40.4**	**34.7**	**30.4**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.8	96.0	97.5	99.3	99.6	101.4	100.6	95.6	92.5	93.7	89.9	81.1	109	110
Test 2	94.2	97.0	98.5	98.5	99.0	101.2	99.4	93.1	93.4	94.7	90.6	81.2	109	109
Test 3	94.1	96.5	97.9	98.8	99.5	100.6	99.1	93.0	93.7	93.9	90.3	81.3	109	109
Mean	94.0	96.5	98.0	98.9	99.3	101.1	99.7	93.9	93.2	94.1	90.3	81.2		
Occluded														
Test 1	64.5	63.5	66.9	65.5	59.7	59.8	56.8	54.7	53.9	56.9	56.7	57.6	102	90
Test 2	62.2	60.2	64.4	64.1	57.5	56.8	55.0	50.7	51.4	55.6	55.9	57.4	101	89
Test 3	62.1	59.6	64.9	61.5	57.5	55.9	52.0	49.4	49.6	54.2	55.1	57.3	101	89
Mean	62.9	61.1	65.4	63.7	58.2	57.5	54.6	51.6	51.6	55.6	55.9	57.4		
Right Insertion Loss	**31.1**	**35.3**	**32.6**	**35.2**	**41.1**	**43.6**	**45.1**	**42.3**	**41.6**	**38.5**	**34.4**	**23.8**		
Insertion Loss	**29.8**	**32.5**	**32.5**	**35.4**	**42.0**	**40.9**	**40.4**	**38.0**	**41.0**	**39.5**	**34.5**	**27.1**		

Table C-17. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 7.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.7	91.2	87.1	89.4	89.7	90.7	90.3	93.8	93.5	94.0	94.3	97.1	97.6
Test 2	87.6	91.2	87.3	90.0	90.4	93.8	89.4	91.8	92.0	93.5	95.1	97.0	97.7
Test 3	87.3	90.9	87.3	90.1	90.1	94.1	89.9	93.2	92.4	93.3	94.7	96.7	97.2
Mean	88.2	91.1	87.2	89.8	90.0	92.9	89.9	92.9	92.6	93.6	94.7	96.9	97.5
Occluded													
Test 1	91.1	93.3	90.2	94.1	97.2	96.7	91.5	88.5	84.7	80.2	77.5	75.5	69.9
Test 2	88.6	92.8	90.1	94.3	97.2	101.1	94.7	91.1	86.6	82.9	80.8	78.1	73.8
Test 3	90.9	92.9	89.8	93.4	96.5	96.4	94.2	91.4	87.6	83.4	81.2	78.2	73.1
Mean	90.2	93.0	90.0	94.0	97.0	98.0	93.5	90.4	86.3	82.2	79.8	77.3	72.3
Left Insertion Loss	**-2.0**	**-1.9**	**-2.8**	**-4.1**	**-6.9**	**-5.2**	**-3.6**	**2.6**	**6.4**	**11.4**	**14.9**	**19.7**	**25.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.9	91.8	86.3	88.5	91.5	87.2	90.1	91.7	92.0	93.1	96.3	94.2	95.5
Test 2	88.8	91.8	86.8	89.6	91.6	89.8	89.5	91.0	90.1	92.0	96.3	94.8	97.1
Test 3	88.6	91.7	86.8	89.4	91.3	89.3	89.0	91.1	89.9	91.7	96.2	94.6	97.8
Mean	89.4	91.8	86.6	89.2	91.5	88.8	89.5	91.2	90.7	92.3	96.3	94.5	96.8
Occluded													
Test 1	91.7	93.5	89.7	93.4	96.1	95.3	93.1	92.6	91.5	91.8	91.4	88.6	86.4
Test 2	89.3	93.1	89.7	93.6	96.0	98.9	93.4	92.1	89.3	90.3	92.7	90.3	88.3
Test 3	91.8	93.4	89.6	93.0	95.9	94.7	94.3	93.1	91.3	91.9	93.2	89.3	87.2
Mean	90.9	93.4	89.7	93.3	96.0	96.3	93.6	92.6	90.7	91.3	92.4	89.4	87.3
Right Insertion Loss	**-1.5**	**-1.6**	**-3.0**	**-4.2**	**-4.5**	**-7.5**	**-4.1**	**-1.3**	**0.0**	**1.0**	**3.9**	**5.1**	**9.5**
Insertion Loss	**-1.7**	**-1.8**	**-2.9**	**-4.2**	**-5.7**	**-6.4**	**-3.9**	**0.6**	**3.2**	**6.2**	**9.4**	**12.4**	**17.4**

Table C-17. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 7.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	95.9	97.5	98.7	99.5	101.3	98.9	94.3	93.4	93.5	92.0	83.0	109	109
Test 2	93.5	96.3	98.2	99.0	98.8	100.9	98.9	94.0	93.9	93.7	92.5	83.2	109	109
Test 3	94.7	96.5	97.5	98.3	98.9	101.6	99.5	94.2	94.1	94.2	92.4	84.1	109	109
Mean	93.9	96.2	97.8	98.7	99.0	101.3	99.1	94.2	93.8	93.8	92.3	83.4		
Occluded														
Test 1	57.7	55.0	57.5	57.8	55.5	59.7	59.4	55.1	51.8	48.1	51.6	52.2	103	91
Test 2	62.0	58.6	59.4	59.6	57.7	58.1	59.6	56.8	56.6	54.6	55.8	52.3	105	93
Test 3	60.5	57.9	59.4	60.3	60.6	65.8	63.5	59.7	59.1	54.0	58.0	54.8	103	92
Mean	60.1	57.2	58.8	59.2	57.9	61.2	60.8	57.2	55.8	52.2	55.1	53.1		
Left Insertion Loss	**33.8**	**39.0**	**39.0**	**39.5**	**41.1**	**40.1**	**38.3**	**37.0**	**38.0**	**41.6**	**37.2**	**30.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.7	96.3	97.5	99.0	98.7	100.2	99.0	94.1	94.5	94.9	92.8	83.0	109	109
Test 2	94.1	96.3	97.8	98.5	98.8	100.8	99.1	94.1	94.3	95.2	93.1	83.0	109	109
Test 3	93.2	96.5	97.4	98.3	97.9	100.4	99.0	92.7	94.5	94.6	92.2	82.2	109	109
Mean	93.6	96.4	97.6	98.6	98.4	100.5	99.0	93.6	94.4	94.9	92.7	82.7		
Occluded														
Test 1	76.5	70.2	70.6	67.8	64.2	60.5	58.8	55.8	55.6	56.3	55.3	57.5	104	96
Test 2	76.4	70.0	71.3	67.0	64.6	62.9	59.9	58.0	62.9	62.2	58.0	58.3	104	96
Test 3	76.5	70.2	70.7	66.7	63.1	60.4	58.8	54.5	56.1	55.7	55.5	57.7	104	96
Mean	76.5	70.1	70.9	67.2	64.0	61.3	59.1	56.1	58.2	58.1	56.3	57.9		
Right Insertion Loss	**17.2**	**26.2**	**26.7**	**31.4**	**34.5**	**39.2**	**39.9**	**37.5**	**36.3**	**36.8**	**36.4**	**24.9**		
Insertion Loss	**25.5**	**32.6**	**32.8**	**35.5**	**37.8**	**39.7**	**39.1**	**37.2**	**37.1**	**39.2**	**36.8**	**27.6**		

Table C-18. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 8.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.3	91.6	87.4	89.8	90.7	92.3	88.6	92.1	92.5	92.4	96.7	96.5	96.3
Test 2	90.5	91.9	87.2	89.3	90.5	88.4	88.9	92.5	93.8	93.5	97.1	96.2	95.7
Test 3	88.4	91.9	87.7	90.2	90.9	92.7	88.6	91.4	93.0	92.8	96.9	96.1	96.4
Mean	89.1	91.8	87.4	89.8	90.7	91.1	88.7	92.0	93.1	92.9	96.9	96.3	96.1
Occluded													
Test 1	88.9	92.2	88.5	90.6	89.4	89.4	84.6	81.2	76.2	76.4	79.4	75.9	71.3
Test 2	89.2	92.5	88.4	90.3	90.0	89.9	84.5	81.6	75.9	75.9	78.4	75.4	71.0
Test 3	89.4	93.0	89.6	92.5	93.9	94.6	90.6	87.7	80.9	77.7	81.5	78.7	74.1
Mean	89.2	92.6	88.8	91.2	91.1	91.3	86.6	83.5	77.7	76.6	79.8	76.6	72.1
Left Insertion Loss	**-0.1**	**-0.8**	**-1.4**	**-1.4**	**-0.4**	**-0.2**	**2.1**	**8.5**	**15.4**	**16.2**	**17.1**	**19.6**	**24.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	91.4	86.9	89.8	91.4	92.8	88.6	92.5	91.6	92.9	95.9	95.6	96.3
Test 2	90.8	91.7	86.5	89.3	91.3	92.4	89.4	93.5	93.1	93.3	95.7	94.5	94.6
Test 3	88.9	91.8	87.3	90.3	91.7	93.1	89.0	92.5	91.4	92.4	95.6	95.6	97.5
Mean	89.5	91.6	86.9	89.8	91.4	92.8	89.0	92.8	92.0	92.9	95.7	95.2	96.1
Occluded													
Test 1	88.7	91.8	88.9	92.7	93.7	96.6	95.4	93.9	91.8	91.1	91.9	89.1	83.5
Test 2	88.8	92.1	88.8	92.3	93.7	96.6	95.8	95.3	91.8	91.2	93.2	90.5	85.4
Test 3	89.2	92.3	88.8	92.3	94.2	96.3	95.6	95.1	92.0	91.6	93.7	90.7	85.8
Mean	88.9	92.1	88.8	92.4	93.9	96.5	95.6	94.8	91.8	91.3	92.9	90.1	84.9
Right Insertion Loss	**0.6**	**-0.5**	**-1.9**	**-2.6**	**-2.5**	**-3.7**	**-6.6**	**-1.9**	**0.2**	**1.6**	**2.8**	**5.1**	**11.2**
Insertion Loss	**0.2**	**-0.6**	**-1.7**	**-2.0**	**-1.4**	**-1.9**	**-2.2**	**3.3**	**7.8**	**8.9**	**10.0**	**12.4**	**17.6**

Table C-18. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 8.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.0	96.4	97.6	98.1	99.1	100.7	98.0	96.4	93.6	93.7	91.0	81.0	109	109
Test 2	93.1	96.6	96.7	97.6	99.2	100.3	97.6	95.3	93.3	93.8	90.8	80.5	109	109
Test 3	94.0	95.7	97.8	97.8	98.2	101.3	97.8	95.0	94.2	93.7	90.5	79.7	109	109
Mean	93.7	96.2	97.4	97.8	98.9	100.8	97.8	95.6	93.7	93.7	90.8	80.4		
Occluded														
Test 1	64.2	58.7	60.4	61.0	57.1	59.9	56.0	55.9	59.7	56.2	53.9	51.2	98	85
Test 2	67.7	63.6	63.1	60.3	60.0	64.9	60.6	62.0	62.0	56.8	55.3	51.9	98	86
Test 3	66.6	61.5	61.6	61.6	57.1	60.3	58.4	57.5	58.6	55.5	51.6	51.1	101	90
Mean	66.2	61.3	61.7	61.0	58.0	61.7	58.3	58.4	60.1	56.2	53.6	51.4		
Left Insertion Loss	**27.5**	**34.9**	**35.7**	**36.9**	**40.8**	**39.1**	**39.5**	**37.1**	**33.6**	**37.5**	**37.2**	**29.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	97.6	98.0	98.8	99.9	101.2	99.9	97.0	93.3	96.1	94.4	85.2	110	110
Test 2	93.7	96.9	98.0	98.6	99.8	101.2	99.9	97.1	93.4	95.7	94.4	85.1	110	110
Test 3	94.2	96.7	98.2	99.1	99.3	102.4	100.8	96.9	94.1	94.7	94.1	84.1	110	110
Mean	93.9	97.1	98.1	98.8	99.7	101.6	100.2	97.0	93.6	95.5	94.3	84.8		
Occluded														
Test 1	76.2	76.9	76.7	73.8	71.2	71.4	71.9	69.0	79.0	78.9	74.3	61.7	104	97
Test 2	80.9	79.1	80.5	75.1	71.4	72.1	70.4	70.3	76.2	78.1	73.6	61.0	104	98
Test 3	78.1	76.9	78.9	74.8	72.0	72.0	68.8	65.8	76.6	79.3	73.9	60.4	104	98
Mean	78.4	77.6	78.7	74.6	71.5	71.8	70.4	68.4	77.3	78.8	73.9	61.0		
Right Insertion Loss	**15.5**	**19.4**	**19.4**	**24.3**	**28.1**	**29.8**	**29.8**	**28.7**	**16.3**	**16.7**	**20.4**	**23.8**		
Insertion Loss	**21.5**	**27.2**	**27.5**	**30.6**	**34.5**	**34.4**	**34.6**	**32.9**	**25.0**	**27.1**	**28.8**	**26.4**		

Table C-19. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 9.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.2	91.9	87.8	90.7	91.1	91.5	90.4	94.9	95.6	96.0	95.4	95.7	94.8
Test 2	88.0	91.8	88.2	91.1	91.3	95.1	90.3	93.3	93.7	94.8	95.8	96.8	95.3
Test 3	90.5	92.3	88.0	90.8	91.1	91.6	90.2	94.7	95.2	95.9	95.7	96.4	94.0
Mean	89.6	92.0	88.0	90.9	91.1	92.7	90.3	94.3	94.8	95.6	95.6	96.3	94.7
Occluded													
Test 1	81.7	85.9	82.7	85.4	83.4	85.0	78.9	77.6	75.4	76.8	74.7	69.5	67.9
Test 2	82.1	85.5	82.1	85.2	84.0	85.5	77.8	75.5	73.9	75.5	73.8	68.8	68.8
Test 3	83.4	87.2	83.9	86.2	83.1	84.8	79.3	77.3	75.1	76.7	74.0	69.0	70.3
Mean	82.4	86.2	82.9	85.6	83.5	85.1	78.7	76.8	74.8	76.4	74.1	69.1	69.0
Left Insertion Loss	**7.2**	**5.8**	**5.1**	**5.2**	**7.6**	**7.6**	**11.6**	**17.5**	**20.0**	**19.2**	**21.5**	**27.2**	**25.7**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.4	92.4	87.1	90.0	92.1	91.8	89.9	93.2	92.4	93.8	93.6	93.8	95.6
Test 2	89.0	92.1	87.8	90.7	92.0	93.6	89.5	92.9	91.7	93.8	94.9	94.7	97.0
Test 3	91.4	92.5	87.2	90.0	92.2	92.0	89.8	93.5	92.7	94.4	94.7	94.5	95.3
Mean	90.6	92.4	87.4	90.2	92.1	92.5	89.7	93.2	92.3	94.0	94.4	94.3	96.0
Occluded													
Test 1	86.5	88.8	84.1	86.2	86.9	87.8	84.0	79.6	74.7	78.9	76.9	70.6	65.7
Test 2	82.2	84.4	80.0	83.3	83.9	85.2	82.0	78.9	74.0	78.0	75.8	70.2	65.7
Test 3	83.2	85.5	80.9	83.3	84.5	85.7	82.7	78.8	74.1	78.2	75.9	70.9	67.5
Mean	84.0	86.2	81.7	84.3	85.1	86.2	82.9	79.1	74.3	78.4	76.2	70.5	66.3
Right Insertion Loss	**6.6**	**6.1**	**5.7**	**5.9**	**7.0**	**6.2**	**6.8**	**14.1**	**18.0**	**15.6**	**18.2**	**23.8**	**29.6**
Insertion Loss	**6.9**	**6.0**	**5.4**	**5.6**	**7.3**	**6.9**	**9.2**	**15.8**	**19.0**	**17.4**	**19.8**	**25.5**	**27.7**

Table C-19. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 9.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.7	96.4	98.1	99.6	101.0	102.4	99.0	96.4	96.4	92.6	91.9	81.2	110	110
Test 2	94.7	95.9	98.4	99.1	101.6	102.6	99.5	97.5	97.0	92.8	90.8	79.8	110	110
Test 3	94.4	95.9	98.7	99.9	101.8	102.3	99.6	97.2	96.5	93.4	91.2	80.2	110	110
Mean	94.6	96.1	98.4	99.5	101.4	102.5	99.4	97.1	96.6	92.9	91.3	80.4		
Occluded														
Test 1	63.0	56.2	59.1	58.0	55.9	57.6	51.9	55.8	49.7	46.5	47.4	49.5	93	81
Test 2	65.1	56.2	57.4	56.1	53.2	56.4	51.8	49.2	46.2	45.8	47.5	49.5	93	81
Test 3	64.1	56.1	57.4	57.1	56.7	57.8	52.3	54.1	53.9	48.6	48.8	49.5	93	81
Mean	64.1	56.2	58.0	57.1	55.3	57.3	52.0	53.0	49.9	47.0	47.9	49.5		
Left Insertion Loss	**30.5**	**39.9**	**40.4**	**42.5**	**46.2**	**45.2**	**47.4**	**44.0**	**46.7**	**46.0**	**43.4**	**30.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.9	95.1	96.7	99.1	99.4	100.1	97.0	94.0	92.5	90.1	91.3	79.8	109	108
Test 2	92.7	95.8	97.4	99.2	99.9	100.2	98.8	94.6	92.5	90.6	92.1	80.6	109	109
Test 3	92.8	96.3	98.1	98.8	100.3	100.9	98.5	95.3	93.2	90.8	92.6	81.2	109	109
Mean	92.8	95.7	97.4	99.0	99.8	100.4	98.1	94.6	92.8	90.5	92.0	80.6		
Occluded														
Test 1	58.5	59.2	62.3	57.4	57.3	55.0	52.7	48.5	48.4	51.5	54.3	57.0	95	84
Test 2	58.1	58.1	60.1	56.0	58.0	55.5	52.8	47.7	48.2	51.4	54.5	57.2	92	82
Test 3	60.4	60.2	61.8	56.1	57.9	54.8	52.6	48.2	50.4	51.6	55.1	56.9	93	83
Mean	59.0	59.2	61.4	56.5	57.7	55.1	52.7	48.1	49.0	51.5	54.6	57.0		
Right Insertion Loss	**33.8**	**36.6**	**36.0**	**42.6**	**42.1**	**45.3**	**45.4**	**46.5**	**43.8**	**39.0**	**37.4**	**23.5**		
Insertion Loss	**32.2**	**38.2**	**38.2**	**42.5**	**44.1**	**45.2**	**46.4**	**45.3**	**45.2**	**42.5**	**40.4**	**27.2**		

Table C-20. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 10.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.0	92.4	87.8	90.3	91.3	92.8	89.4	92.1	91.9	92.9	97.0	97.3	97.9
Test 2	89.0	92.6	87.9	90.3	91.4	92.5	89.2	92.1	91.7	92.5	97.2	97.4	97.7
Test 3	91.1	92.5	87.7	89.7	90.9	89.3	89.7	93.0	93.7	93.7	97.5	96.7	96.6
Mean	89.7	92.5	87.8	90.1	91.2	91.5	89.4	92.4	92.4	93.0	97.3	97.1	97.4
Occluded													
Test 1	89.3	92.8	89.1	92.6	95.3	97.0	96.9	94.3	90.6	89.6	91.8	88.1	82.9
Test 2	91.6	93.0	89.1	92.1	95.2	93.3	96.6	94.3	91.6	89.7	93.6	87.8	83.6
Test 3	89.2	92.7	89.2	92.5	95.0	96.8	95.9	93.0	90.4	89.9	92.5	88.3	85.3
Mean	90.0	92.8	89.1	92.4	95.2	95.7	96.5	93.9	90.9	89.7	92.6	88.1	83.9
Left Insertion Loss	**-0.3**	**-0.4**	**-1.3**	**-2.3**	**-4.0**	**-4.2**	**-7.0**	**-1.5**	**1.5**	**3.3**	**4.6**	**9.1**	**13.5**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.2	91.9	86.9	90.0	92.0	92.8	89.7	93.5	92.1	94.0	96.8	94.8	96.7
Test 2	89.2	92.1	87.0	90.0	92.2	92.5	89.9	93.2	91.9	94.1	96.9	94.4	96.4
Test 3	91.3	91.9	86.4	89.0	92.0	91.8	90.6	94.1	93.5	94.7	96.3	94.4	95.5
Mean	89.9	92.0	86.8	89.6	92.1	92.4	90.1	93.6	92.5	94.2	96.7	94.5	96.2
Occluded													
Test 1	89.3	92.5	89.0	92.8	95.5	97.9	98.0	94.5	92.4	90.6	91.5	88.2	85.0
Test 2	91.7	92.9	88.9	92.3	95.7	95.3	98.5	93.6	93.1	91.2	92.2	87.1	84.1
Test 3	89.4	92.6	89.1	93.0	95.7	98.0	98.0	93.9	92.1	90.1	91.4	87.8	84.5
Mean	90.1	92.7	89.0	92.7	95.7	97.1	98.2	94.0	92.5	90.6	91.7	87.7	84.5
Right Insertion Loss	**-0.2**	**-0.7**	**-2.2**	**-3.0**	**-3.6**	**-4.7**	**-8.1**	**-0.4**	**0.0**	**3.6**	**5.0**	**6.8**	**11.7**
Insertion Loss	**-0.3**	**-0.5**	**-1.8**	**-2.7**	**-3.8**	**-4.5**	**-7.6**	**-0.9**	**0.8**	**3.4**	**4.8**	**7.9**	**12.6**

Table C-20. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using normal-fitting instructions – Subject 10.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	95.6	97.1	98.3	99.2	101.6	102.5	101.1	98.6	93.5	89.2	89.1	79.0	110	111
Test 2	95.9	97.2	98.0	100.0	101.1	103.5	102.5	99.0	93.7	88.8	89.4	78.2	111	111
Test 3	95.3	98.1	98.5	100.3	101.9	102.5	101.1	99.1	94.5	89.2	88.1	78.7	111	111
Mean	95.6	97.5	98.3	99.9	101.5	102.8	101.6	98.9	93.9	89.1	88.9	78.7		
Occluded														
Test 1	75.8	71.7	68.0	64.9	63.1	65.2	69.9	68.7	63.5	65.7	62.9	56.8	104	96
Test 2	73.8	71.9	70.7	67.3	69.0	69.9	64.0	69.7	67.4	59.9	53.5	51.8	104	96
Test 3	78.3	75.1	70.7	69.1	69.0	70.8	77.8	78.8	74.7	65.8	64.0	57.3	104	97
Mean	76.0	72.9	69.8	67.1	67.0	68.6	70.6	72.4	68.5	63.8	60.1	55.3		
Left Insertion Loss	**19.6**	**24.6**	**28.4**	**32.7**	**34.5**	**34.2**	**31.0**	**26.5**	**25.4**	**25.3**	**28.7**	**23.4**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	95.0	96.9	99.3	99.9	101.2	103.0	98.9	92.6	94.7	96.0	93.5	82.4	110	110
Test 2	95.0	97.0	99.2	100.1	100.9	102.6	97.0	91.5	96.1	96.6	93.0	82.5	110	110
Test 3	94.7	96.8	98.7	100.1	100.9	101.4	97.0	92.2	95.8	96.0	93.2	82.5	110	110
Mean	94.9	96.9	99.1	100.0	101.0	102.3	97.6	92.1	95.5	96.2	93.3	82.5		
Occluded														
Test 1	79.0	74.3	72.8	73.6	72.8	74.6	72.3	66.5	66.8	69.2	67.6	59.2	105	97
Test 2	77.1	73.3	71.1	71.8	70.2	73.2	72.5	70.6	66.8	66.4	62.7	57.8	105	97
Test 3	78.7	74.0	72.8	73.2	71.4	73.7	72.7	68.6	66.9	70.1	66.2	57.7	105	97
Mean	78.3	73.9	72.3	72.9	71.5	73.8	72.5	68.5	66.8	68.6	65.5	58.3		
Right Insertion Loss	**16.6**	**23.0**	**26.8**	**27.2**	**29.5**	**28.5**	**25.1**	**23.6**	**28.7**	**27.6**	**27.7**	**24.2**		
Insertion Loss	**18.1**	**23.8**	**27.6**	**29.9**	**32.0**	**31.4**	**28.1**	**25.0**	**27.0**	**26.5**	**28.2**	**23.8**		

Table C-21. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 1.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	91.7	87.6	90.4	90.9	93.8	88.6	93.7	93.1	93.0	96.3	97.0	97.4
Test 2	88.3	91.8	87.6	90.3	90.7	93.5	89.0	93.6	93.0	93.1	96.7	97.6	97.5
Test 3	90.3	91.8	87.4	89.7	90.3	90.1	90.1	95.1	94.9	94.5	97.6	97.0	96.6
Mean	88.9	91.8	87.5	90.1	90.6	92.5	89.2	94.1	93.7	93.5	96.9	97.2	97.2
Occluded													
Test 1	83.2	86.4	81.8	82.4	80.9	83.7	76.9	81.8	78.6	78.0	78.6	74.2	70.2
Test 2	83.2	86.6	81.5	82.0	81.5	84.5	76.3	81.3	78.3	76.8	77.3	73.1	69.7
Test 3	83.5	87.1	82.2	82.9	81.8	84.4	77.4	80.7	77.8	78.4	78.6	73.6	70.0
Mean	83.3	86.7	81.9	82.4	81.4	84.2	76.9	81.3	78.2	77.8	78.2	73.6	70.0
Left Insertion Loss	**5.6**	**5.1**	**5.7**	**7.7**	**9.2**	**8.3**	**12.3**	**12.9**	**15.4**	**15.8**	**18.7**	**23.6**	**27.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.9	91.8	87.2	90.2	91.7	92.8	88.9	93.1	91.9	94.0	94.6	95.2	97.1
Test 2	89.0	91.9	87.1	90.0	91.7	92.8	89.4	92.8	92.1	94.7	96.6	94.3	96.7
Test 3	91.1	91.9	86.6	89.2	91.6	91.5	89.8	93.5	93.3	95.0	96.7	94.0	95.4
Mean	89.7	91.9	87.0	89.8	91.6	92.3	89.4	93.1	92.4	94.6	96.0	94.5	96.4
Occluded													
Test 1	90.1	93.8	89.7	92.2	92.5	92.9	85.6	81.7	76.7	78.6	76.0	69.6	67.9
Test 2	90.0	93.5	89.3	92.2	92.5	93.0	86.2	81.9	77.3	79.2	76.8	71.0	69.5
Test 3	89.9	93.5	89.5	92.3	92.4	93.2	85.7	81.2	76.8	78.9	76.3	70.8	69.1
Mean	90.0	93.6	89.5	92.3	92.5	93.1	85.8	81.6	76.9	78.9	76.4	70.5	68.8
Right Insertion Loss	**-0.3**	**-1.7**	**-2.5**	**-2.5**	**-0.8**	**-0.7**	**3.5**	**11.5**	**15.5**	**15.6**	**19.6**	**24.0**	**27.6**
Insertion Loss	**2.6**	**1.7**	**1.6**	**2.6**	**4.2**	**3.8**	**7.9**	**12.2**	**15.5**	**15.7**	**19.1**	**23.8**	**27.4**

Table C-21. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 1.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.5	96.5	98.6	100.0	100.7	102.9	100.3	96.8	91.1	89.5	90.1	79.9	110	110
Test 2	94.5	96.8	98.6	100.1	101.0	102.5	99.7	96.2	91.1	89.6	90.2	80.8	110	110
Test 3	93.8	96.0	98.2	100.0	100.6	102.5	99.9	95.7	89.9	89.5	90.7	81.1	110	110
Mean	94.3	96.4	98.5	100.0	100.7	102.7	99.9	96.2	90.7	89.5	90.3	80.6		
Occluded														
Test 1	57.9	54.2	53.0	53.3	53.6	52.2	48.5	43.2	43.4	45.4	48.3	51.0	92	83
Test 2	57.8	51.8	53.7	54.0	54.7	53.8	49.8	43.8	44.7	46.9	49.7	52.4	92	82
Test 3	58.4	53.5	53.9	53.7	54.5	52.2	48.4	43.4	43.4	45.4	48.3	51.1	93	83
Mean	58.1	53.2	53.5	53.7	54.2	52.7	48.9	43.5	43.8	45.9	48.8	51.5		
Left Insertion Loss	**36.2**	**43.2**	**45.0**	**46.4**	**46.5**	**49.9**	**51.0**	**52.8**	**46.9**	**43.6**	**41.6**	**29.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.8	97.2	98.9	99.7	100.8	101.6	99.4	98.0	90.2	90.8	92.5	81.3	110	110
Test 2	94.4	97.8	99.9	100.6	100.9	102.0	99.4	98.3	90.4	91.3	92.1	80.9	110	110
Test 3	93.0	97.8	99.3	100.2	100.8	101.5	99.4	98.4	90.5	91.5	92.9	81.4	110	110
Mean	94.1	97.6	99.4	100.2	100.8	101.7	99.4	98.2	90.4	91.2	92.5	81.2		
Occluded														
Test 1	60.6	55.8	57.8	56.0	57.5	57.9	51.1	47.0	49.0	51.9	55.1	57.9	100	87
Test 2	62.0	59.0	61.4	58.7	60.0	59.7	54.1	49.2	50.3	53.0	56.0	58.7	100	87
Test 3	61.9	58.6	58.9	56.4	59.4	58.6	52.9	47.5	49.2	52.3	55.6	58.0	100	87
Mean	61.5	57.8	59.4	57.0	59.0	58.7	52.7	47.9	49.5	52.4	55.6	58.2		
Right Insertion Loss	**32.6**	**39.8**	**40.0**	**43.1**	**41.9**	**43.0**	**46.7**	**50.3**	**40.9**	**38.8**	**36.9**	**23.0**		
Insertion Loss	**34.4**	**41.5**	**42.5**	**44.8**	**44.2**	**46.5**	**48.9**	**51.5**	**43.9**	**41.2**	**39.2**	**26.0**		

Table C-22. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 2.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.8	91.1	87.5	90.2	90.5	93.6	90.2	94.4	93.1	93.2	96.9	96.1	97.0
Test 2	87.7	91.0	87.5	90.2	90.5	93.6	90.6	93.4	93.7	94.0	97.0	96.5	96.5
Test 3	88.0	91.3	87.5	90.1	90.8	93.5	90.5	93.1	93.7	93.8	96.8	96.2	96.6
Mean	87.8	91.2	87.5	90.2	90.6	93.5	90.5	93.6	93.5	93.7	96.9	96.3	96.7
Occluded													
Test 1	88.9	92.3	88.5	91.6	92.9	95.4	88.6	87.3	83.8	82.8	83.8	77.4	73.6
Test 2	89.3	90.2	85.3	87.6	89.2	87.5	86.2	84.7	81.1	79.6	79.6	73.6	69.4
Test 3	85.8	88.2	83.5	85.8	87.6	90.6	85.3	81.9	77.4	75.7	77.2	70.2	68.4
Mean	88.0	90.2	85.8	88.3	89.9	91.2	86.7	84.6	80.8	79.4	80.2	73.7	70.5
Left Insertion Loss	**-0.2**	**0.9**	**1.7**	**1.9**	**0.7**	**2.4**	**3.7**	**9.0**	**12.7**	**14.3**	**16.7**	**22.5**	**26.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.6	91.2	87.0	90.1	91.0	92.2	89.4	93.0	92.6	93.2	94.1	95.7	96.9
Test 2	88.6	91.1	86.8	89.9	90.9	91.9	90.0	92.4	91.8	93.0	95.2	95.8	96.7
Test 3	88.7	91.3	86.9	90.2	91.2	91.8	90.1	92.7	91.7	93.1	95.2	95.8	96.8
Mean	88.6	91.2	86.9	90.0	91.0	92.0	89.9	92.7	92.0	93.1	94.8	95.8	96.8
Occluded													
Test 1	90.2	93.2	88.7	90.9	91.0	91.8	83.2	79.5	76.3	76.5	76.2	73.9	70.7
Test 2	92.1	92.9	87.8	90.4	90.8	88.9	86.6	82.4	80.3	79.4	78.9	73.9	71.2
Test 3	89.9	92.7	88.1	90.8	90.6	91.1	85.9	81.9	78.4	77.5	76.8	73.8	70.1
Mean	90.7	92.9	88.2	90.7	90.8	90.6	85.2	81.2	78.4	77.8	77.3	73.9	70.7
Right Insertion Loss	**-2.1**	**-1.7**	**-1.3**	**-0.6**	**0.2**	**1.4**	**4.6**	**11.4**	**13.7**	**15.3**	**17.5**	**21.9**	**26.2**
Insertion Loss	**-1.1**	**-0.4**	**0.2**	**0.6**	**0.5**	**1.9**	**4.2**	**10.2**	**13.2**	**14.8**	**17.1**	**22.2**	**26.2**

Table C-22. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 2.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	95.1	96.6	98.2	99.0	98.6	99.9	97.4	94.8	94.3	94.8	91.5	82.7	109	109
Test 2	95.5	97.4	97.2	98.9	98.9	99.6	97.3	95.1	94.9	95.0	90.9	82.9	109	109
Test 3	95.5	96.9	97.9	99.3	99.0	99.5	95.6	94.4	94.9	94.8	91.0	81.7	109	109
Mean	95.4	97.0	97.7	99.1	98.8	99.7	96.8	94.8	94.7	94.8	91.1	82.4		
Occluded														
Test 1	68.3	69.2	66.8	61.3	58.3	60.5	58.3	53.1	54.1	53.1	50.7	50.4	101	90
Test 2	63.3	64.1	60.7	57.6	56.2	52.0	50.0	49.1	47.6	47.2	48.4	50.1	97	86
Test 3	60.8	61.6	57.8	56.3	54.1	51.6	47.5	46.9	48.0	47.6	48.8	51.2	96	84
Mean	64.1	65.0	61.8	58.4	56.2	54.7	51.9	49.7	49.9	49.3	49.3	50.6		
Left Insertion Loss	**31.2**	**32.0**	**36.0**	**40.7**	**42.6**	**45.0**	**44.8**	**45.1**	**44.8**	**45.5**	**41.8**	**31.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	96.2	97.9	98.6	98.8	99.7	97.9	95.9	93.6	95.4	92.6	82.6	109	109
Test 2	93.4	96.0	97.5	97.5	98.5	99.9	97.7	96.2	93.6	94.6	92.7	82.6	109	109
Test 3	93.5	96.5	97.6	98.3	98.6	99.8	97.0	95.4	92.7	95.3	93.0	83.7	109	109
Mean	93.4	96.2	97.7	98.1	98.6	99.8	97.5	95.8	93.3	95.1	92.8	83.0		
Occluded														
Test 1	66.8	63.1	62.1	61.7	57.4	52.9	51.6	52.6	52.5	51.4	54.0	56.4	99	86
Test 2	61.5	58.0	57.0	57.3	53.8	52.6	48.1	47.2	47.5	50.2	53.5	56.2	99	87
Test 3	63.5	59.8	58.6	60.0	55.8	52.6	49.1	48.9	49.2	51.5	54.4	57.1	99	86
Mean	63.9	60.3	59.2	59.7	55.7	52.7	49.6	49.6	49.7	51.0	54.0	56.6		
Right Insertion Loss	**29.5**	**35.9**	**38.4**	**38.5**	**43.0**	**47.1**	**47.9**	**46.2**	**43.6**	**44.0**	**38.8**	**26.4**		
Insertion Loss	**30.4**	**34.0**	**37.2**	**39.6**	**42.8**	**46.0**	**46.4**	**45.7**	**44.2**	**44.8**	**40.3**	**29.1**		

Table C-23. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 3.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.9	92.4	87.8	90.0	90.6	90.1	90.4	92.8	93.2	94.1	97.4	96.6	95.5
Test 2	88.5	92.1	88.1	90.6	90.9	93.7	89.7	92.5	92.5	93.1	97.2	96.7	95.9
Test 3	91.0	92.5	87.9	90.0	90.6	89.8	90.4	92.7	93.0	94.0	97.7	96.6	95.2
Mean	90.2	92.3	87.9	90.2	90.7	91.2	90.2	92.7	92.9	93.7	97.4	96.6	95.5
Occluded													
Test 1	84.6	88.5	83.7	84.3	82.2	83.5	79.2	80.2	77.1	77.2	82.5	78.0	76.3
Test 2	85.0	88.9	84.1	84.6	82.6	84.1	79.7	80.2	77.4	77.6	82.5	77.7	75.6
Test 3	87.5	89.5	83.8	84.2	82.1	80.0	80.0	80.3	78.5	78.4	82.5	76.4	74.3
Mean	85.7	88.9	83.9	84.4	82.3	82.5	79.6	80.3	77.7	77.7	82.5	77.3	75.4
Left Insertion Loss	**4.4**	**3.4**	**4.1**	**5.8**	**8.4**	**8.6**	**10.6**	**12.4**	**15.2**	**16.0**	**14.9**	**19.3**	**20.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.4	92.2	86.5	88.7	91.9	90.8	91.2	94.0	92.2	94.4	96.9	93.2	95.2
Test 2	89.1	92.0	87.1	89.7	91.8	91.9	90.5	93.1	91.0	93.4	98.2	94.4	96.8
Test 3	91.5	92.3	86.4	88.5	92.0	90.8	91.5	94.0	92.0	94.5	97.3	93.0	95.3
Mean	90.7	92.1	86.7	89.0	91.9	91.2	91.0	93.7	91.7	94.1	97.5	93.5	95.8
Occluded													
Test 1	89.6	92.7	88.7	92.0	93.9	94.3	92.3	93.5	89.1	89.4	90.2	84.7	85.2
Test 2	89.7	92.8	88.6	91.9	93.6	93.4	91.2	93.0	88.3	88.7	89.1	83.3	84.0
Test 3	91.8	92.7	87.4	90.3	92.1	90.2	89.7	91.2	87.6	87.6	86.9	80.9	81.2
Mean	90.4	92.7	88.2	91.4	93.2	92.6	91.1	92.5	88.3	88.5	88.7	82.9	83.5
Right Insertion Loss	**0.3**	**-0.6**	**-1.5**	**-2.4**	**-1.3**	**-1.5**	**0.0**	**1.1**	**3.4**	**5.6**	**8.7**	**10.6**	**12.3**
Insertion Loss	**2.4**	**1.4**	**1.3**	**1.7**	**3.6**	**3.6**	**5.3**	**6.8**	**9.3**	**10.8**	**11.8**	**14.9**	**16.2**

Table C-23. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 3.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	96.8	97.5	98.9	99.7	101.2	99.9	95.3	93.8	92.7	90.8	79.8	110	110
Test 2	94.4	96.9	97.4	98.5	99.3	102.1	100.3	95.3	93.9	93.2	90.9	80.3	110	110
Test 3	93.9	96.8	97.3	98.9	99.3	101.5	100.1	95.4	93.4	92.6	90.9	81.3	110	110
Mean	94.0	96.8	97.4	98.8	99.4	101.6	100.1	95.3	93.7	92.8	90.9	80.5		
Occluded														
Test 1	69.3	64.9	62.8	61.0	58.3	56.1	52.7	45.7	45.1	51.1	56.4	52.1	94	85
Test 2	68.5	63.9	62.6	61.1	58.4	56.2	52.5	45.1	46.6	52.5	56.1	51.6	94	85
Test 3	67.7	65.9	63.6	61.3	57.5	55.5	52.5	45.2	46.3	51.5	57.2	51.9	95	85
Mean	68.5	64.9	63.0	61.1	58.1	56.0	52.6	45.3	46.0	51.7	56.6	51.9		
Left Insertion Loss	**25.5**	**31.9**	**34.4**	**37.6**	**41.4**	**45.6**	**47.6**	**50.0**	**47.7**	**41.1**	**34.3**	**28.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.9	95.8	97.0	97.8	99.1	101.5	99.7	97.7	94.4	93.4	88.7	76.0	109	109
Test 2	94.7	95.9	97.3	98.0	99.3	102.0	100.6	97.5	94.8	93.2	88.6	75.9	110	110
Test 3	95.0	96.4	97.3	98.7	99.2	101.5	100.2	98.1	94.7	94.2	88.5	76.1	110	110
Mean	94.9	96.0	97.2	98.1	99.2	101.7	100.2	97.8	94.6	93.6	88.6	76.0		
Occluded														
Test 1	76.6	72.0	69.7	65.2	62.1	60.0	51.9	55.2	57.5	60.8	60.2	58.5	102	95
Test 2	75.3	71.0	69.5	66.0	62.8	59.6	55.1	58.1	62.3	64.9	61.9	58.6	102	94
Test 3	74.0	67.9	65.5	63.1	59.5	55.2	52.0	57.9	61.4	64.4	62.7	58.9	101	92
Mean	75.3	70.3	68.2	64.8	61.5	58.2	53.0	57.1	60.4	63.4	61.6	58.7		
Right Insertion Loss	**19.6**	**25.7**	**29.0**	**33.4**	**37.7**	**43.4**	**47.2**	**40.7**	**34.2**	**30.2**	**27.0**	**17.3**		
Insertion Loss	**22.5**	**28.8**	**31.7**	**35.5**	**39.5**	**44.5**	**47.4**	**45.3**	**40.9**	**35.7**	**30.7**	**23.0**		

Table C-24. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 4.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.5	91.9	87.4	89.9	90.1	92.4	88.8	93.5	91.6	92.8	95.0	96.8	96.4
Test 2	88.5	92.0	87.4	89.9	90.1	92.3	88.9	93.4	91.7	92.9	95.1	96.8	96.4
Test 3	88.5	92.1	87.5	90.0	90.1	92.2	88.8	93.5	91.5	92.8	95.2	96.8	96.4
Mean	88.5	92.0	87.5	89.9	90.1	92.3	88.8	93.5	91.6	92.8	95.1	96.8	96.4
Occluded													
Test 1	87.0	90.8	85.7	86.3	84.7	85.7	80.3	82.4	77.3	74.9	78.9	77.2	74.1
Test 2	87.2	91.0	86.2	86.8	84.7	86.1	80.2	82.3	76.9	75.2	78.8	77.4	74.6
Test 3	87.1	90.7	86.0	87.2	84.8	85.7	79.8	82.0	76.3	75.0	79.4	77.4	74.3
Mean	87.1	90.8	86.0	86.8	84.7	85.8	80.1	82.2	76.8	75.0	79.0	77.3	74.3
Left Insertion Loss	**1.4**	**1.1**	**1.5**	**3.2**	**5.4**	**6.5**	**8.8**	**11.2**	**14.8**	**17.8**	**16.1**	**19.4**	**22.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.9	91.7	86.1	88.8	91.3	88.9	90.4	91.3	89.8	94.1	96.4	94.2	95.4
Test 2	89.0	91.7	86.2	88.8	91.3	89.1	90.5	91.3	89.8	94.1	96.5	94.3	95.6
Test 3	89.0	91.8	86.1	88.8	91.4	88.6	90.5	91.3	89.8	94.1	96.5	94.6	95.4
Mean	89.0	91.7	86.1	88.8	91.3	88.9	90.5	91.3	89.8	94.1	96.4	94.4	95.5
Occluded													
Test 1	88.9	91.9	86.8	89.4	90.2	88.8	86.4	84.5	78.3	80.0	82.5	76.3	73.3
Test 2	88.8	91.7	87.1	89.9	90.7	89.9	86.8	84.7	78.7	80.0	81.4	76.1	72.5
Test 3	88.8	91.7	86.9	89.6	90.6	89.3	86.7	84.4	78.1	79.9	82.3	76.0	72.6
Mean	88.8	91.8	86.9	89.7	90.5	89.3	86.6	84.5	78.4	79.9	82.0	76.1	72.8
Right Insertion Loss	**0.1**	**0.0**	**-0.8**	**-0.9**	**0.8**	**-0.5**	**3.8**	**6.8**	**11.4**	**14.2**	**14.4**	**18.3**	**22.7**
Insertion Loss	**0.7**	**0.5**	**0.4**	**1.1**	**3.1**	**3.0**	**6.3**	**9.0**	**13.1**	**16.0**	**15.2**	**18.8**	**22.4**

Table C-24. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 4.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	96.2	97.3	98.3	99.7	101.3	101.7	99.0	94.9	88.6	86.9	79.5	110	110
Test 2	93.2	96.2	97.0	98.4	99.4	101.2	101.5	99.4	95.0	88.5	87.3	79.2	110	110
Test 3	93.1	95.9	97.2	97.5	99.1	101.0	101.1	99.1	95.4	88.6	87.2	79.8	109	110
Mean	93.2	96.1	97.2	98.1	99.4	101.1	101.4	99.2	95.1	88.6	87.1	79.5		
Occluded														
Test 1	67.5	60.3	58.6	56.3	54.1	53.3	50.0	46.1	44.0	45.4	47.8	50.6	96	84
Test 2	68.6	60.3	58.9	59.3	55.6	54.8	50.6	47.7	44.3	45.4	47.6	50.1	96	84
Test 3	66.8	60.9	59.5	61.7	58.1	53.6	50.7	46.8	44.0	45.4	47.8	50.4	96	84
Mean	67.6	60.5	59.0	59.1	56.0	53.9	50.4	46.9	44.1	45.4	47.8	50.4		
Left Insertion Loss	**25.5**	**35.6**	**38.2**	**39.0**	**43.5**	**47.2**	**51.0**	**52.3**	**51.0**	**43.2**	**39.4**	**29.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	95.6	98.3	98.9	99.3	101.6	100.6	99.3	94.2	90.3	88.7	81.3	110	110
Test 2	93.6	95.4	98.3	99.0	99.4	101.6	100.4	99.1	94.5	90.2	88.5	81.2	110	110
Test 3	93.8	95.9	97.8	99.2	99.7	101.5	100.7	99.1	94.4	90.0	88.5	81.4	110	110
Mean	93.7	95.6	98.1	99.0	99.5	101.6	100.6	99.2	94.4	90.2	88.6	81.3		
Occluded														
Test 1	65.4	61.8	64.8	64.2	60.3	60.1	54.9	49.9	50.6	52.7	55.6	58.3	98	87
Test 2	64.4	61.0	64.1	62.5	59.4	58.6	52.9	49.6	50.6	52.8	55.6	58.0	98	87
Test 3	65.1	61.5	64.6	63.7	60.8	59.4	53.8	49.0	50.9	52.9	55.6	58.2	98	87
Mean	65.0	61.4	64.5	63.5	60.1	59.4	53.8	49.5	50.7	52.8	55.6	58.2		
Right Insertion Loss	**28.7**	**34.2**	**33.6**	**35.5**	**39.3**	**42.2**	**46.7**	**49.7**	**43.7**	**37.4**	**32.9**	**23.1**		
Insertion Loss	**27.1**	**34.9**	**35.9**	**37.3**	**41.4**	**44.7**	**48.9**	**51.0**	**47.3**	**40.3**	**36.2**	**26.1**		

Table C-25. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 5.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.5	90.9	86.8	89.9	90.7	90.7	90.6	94.5	95.6	94.6	93.6	95.8	96.0
Test 2	87.2	90.7	87.2	90.4	90.7	94.9	90.7	93.0	94.1	93.2	93.4	97.8	97.1
Test 3	87.2	90.7	87.1	90.4	90.8	94.7	90.6	92.6	93.8	93.4	93.2	97.3	96.8
Mean	88.0	90.7	87.0	90.2	90.7	93.4	90.6	93.4	94.5	93.7	93.4	97.0	96.6
Occluded													
Test 1	88.3	92.0	89.0	92.9	94.2	97.6	93.4	92.5	89.7	87.8	87.7	84.2	83.6
Test 2	88.1	91.5	88.8	92.6	93.9	97.7	94.4	94.3	91.6	89.1	89.2	86.4	84.2
Test 3	88.3	91.9	89.0	92.8	93.6	96.7	91.9	90.8	88.0	86.2	86.5	83.7	82.1
Mean	88.2	91.8	88.9	92.8	93.9	97.3	93.2	92.5	89.8	87.7	87.8	84.8	83.3
Left Insertion Loss	**-0.3**	**-1.1**	**-1.9**	**-2.5**	**-3.1**	**-3.9**	**-2.6**	**0.8**	**4.7**	**6.0**	**5.6**	**12.2**	**13.3**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.0	92.0	86.5	89.4	91.6	88.3	89.7	91.9	91.2	91.3	94.0	94.3	95.0
Test 2	88.6	91.6	87.1	90.1	91.4	91.3	90.0	90.6	89.9	91.4	94.4	93.8	95.0
Test 3	88.7	91.8	87.0	90.1	91.6	91.4	89.8	90.9	89.9	91.6	94.4	93.6	94.7
Mean	89.4	91.8	86.9	89.9	91.5	90.3	89.8	91.1	90.3	91.4	94.2	93.9	94.9
Occluded													
Test 1	89.4	92.8	89.0	93.0	94.6	95.6	92.0	89.7	84.7	80.7	82.3	78.9	74.5
Test 2	89.7	93.0	89.1	92.4	92.9	92.6	88.1	87.3	82.1	77.2	79.9	76.4	73.1
Test 3	89.9	93.2	89.1	92.6	93.5	92.8	89.0	87.5	82.3	78.3	81.4	77.9	74.2
Mean	89.7	93.0	89.1	92.6	93.7	93.7	89.7	88.1	83.0	78.7	81.2	77.7	73.9
Right Insertion Loss	**-0.2**	**-1.2**	**-2.2**	**-2.8**	**-2.2**	**-3.4**	**0.1**	**3.0**	**7.3**	**12.7**	**13.0**	**16.2**	**21.0**
Insertion Loss	**-0.2**	**-1.1**	**-2.1**	**-2.7**	**-2.7**	**-3.6**	**-1.2**	**1.9**	**6.0**	**9.4**	**9.3**	**14.2**	**17.2**

Table C-25. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 5.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.3	96.4	98.6	99.3	100.9	103.8	102.1	98.3	97.9	97.7	89.4	75.6	111	111
Test 2	93.3	95.8	98.4	99.0	100.4	103.2	101.1	97.8	99.0	97.9	89.1	75.7	111	111
Test 3	93.2	96.5	98.7	99.2	100.9	103.3	101.7	98.3	98.2	98.0	90.0	76.6	111	111
Mean	93.3	96.2	98.5	99.2	100.8	103.4	101.7	98.1	98.4	97.9	89.5	76.0		
Occluded														
Test 1	76.5	71.3	70.3	67.3	68.2	65.5	64.9	63.0	69.0	66.8	65.8	56.0	103	94
Test 2	76.7	74.7	74.3	69.3	64.9	66.4	67.1	67.0	70.4	70.0	68.2	59.5	104	95
Test 3	75.2	70.7	69.1	64.1	63.9	62.3	60.8	60.6	65.8	62.6	61.7	53.7	102	93
Mean	76.1	72.2	71.3	66.9	65.7	64.7	64.3	63.5	68.4	66.4	65.2	56.4		
Left Insertion Loss	**17.2**	**24.0**	**27.3**	**32.3**	**35.1**	**38.7**	**37.4**	**34.6**	**30.0**	**31.5**	**24.3**	**19.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.7	96.5	97.3	99.0	100.6	103.1	100.8	99.4	95.5	91.8	86.3	73.7	110	110
Test 2	93.2	96.3	96.9	99.3	100.3	103.2	101.1	99.1	95.5	92.5	84.9	73.7	110	110
Test 3	92.9	96.0	97.0	99.1	101.0	103.2	101.3	98.8	96.2	93.4	84.7	73.8	110	110
Mean	93.3	96.3	97.1	99.1	100.6	103.2	101.0	99.1	95.8	92.6	85.3	73.7		
Occluded														
Test 1	67.4	65.8	67.9	66.5	64.4	66.9	68.4	61.1	64.2	65.9	63.9	58.7	102	91
Test 2	66.7	65.6	66.0	64.8	62.5	62.3	66.1	63.7	64.5	60.1	63.3	58.5	100	88
Test 3	65.4	61.8	63.9	63.1	59.2	55.9	57.2	57.5	62.5	63.5	58.8	58.1	101	89
Mean	66.5	64.4	65.9	64.8	62.0	61.7	63.9	60.8	63.7	63.1	62.0	58.4		
Right Insertion Loss	**26.8**	**31.9**	**31.2**	**34.3**	**38.6**	**41.5**	**37.2**	**38.3**	**32.0**	**29.4**	**23.3**	**15.3**		
Insertion Loss	**22.0**	**27.9**	**29.2**	**33.3**	**36.8**	**40.1**	**37.3**	**36.5**	**31.0**	**30.4**	**23.8**	**17.4**		

Table C-26. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 6.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.5	91.9	87.5	89.7	90.4	90.3	90.7	94.9	94.0	93.3	97.0	96.8	96.4
Test 2	88.2	91.6	87.5	90.2	90.8	93.9	90.1	94.1	93.2	93.1	96.3	97.3	97.7
Test 3	87.9	91.5	87.6	90.2	90.6	94.2	90.3	93.1	93.6	93.7	95.8	97.4	97.6
Mean	88.8	91.7	87.5	90.0	90.6	92.8	90.4	94.0	93.6	93.4	96.4	97.1	97.2
Occluded													
Test 1	89.0	92.9	89.7	93.0	93.0	94.8	88.6	86.0	80.8	77.5	79.8	76.7	74.3
Test 2	91.1	93.1	90.1	93.2	93.8	92.1	90.6	89.0	83.7	78.4	80.7	76.5	72.4
Test 3	88.9	92.8	90.2	93.5	93.1	94.8	88.4	85.4	80.3	77.3	79.1	74.6	72.1
Mean	89.7	93.0	90.0	93.2	93.3	93.9	89.2	86.8	81.6	77.7	79.8	75.9	72.9
Left Insertion Loss	**-0.8**	**-1.3**	**-2.5**	**-3.2**	**-2.7**	**-1.1**	**1.1**	**7.2**	**12.0**	**15.6**	**16.5**	**21.2**	**24.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.1	92.0	86.3	89.0	91.6	89.9	90.8	92.0	92.2	94.0	95.2	92.8	96.0
Test 2	88.9	91.7	86.9	89.9	91.6	91.0	90.4	91.6	90.4	92.9	95.2	94.7	96.9
Test 3	88.8	91.7	87.0	89.9	91.4	91.1	90.2	91.5	90.7	92.7	94.8	94.7	96.6
Mean	89.6	91.8	86.7	89.6	91.5	90.7	90.5	91.7	91.1	93.2	95.0	94.0	96.5
Occluded													
Test 1	85.9	88.5	83.1	86.0	85.9	84.4	81.0	77.8	74.0	75.7	77.9	73.1	67.1
Test 2	91.3	92.7	87.8	90.1	90.5	86.5	85.7	83.1	80.3	79.3	80.2	74.0	67.0
Test 3	88.9	91.8	87.1	90.0	89.9	89.2	84.7	81.6	77.7	77.8	80.4	75.5	67.5
Mean	88.7	91.0	86.0	88.7	88.8	86.7	83.8	80.8	77.3	77.6	79.5	74.2	67.2
Right Insertion Loss	**0.9**	**0.8**	**0.7**	**0.9**	**2.8**	**3.9**	**6.7**	**10.8**	**13.8**	**15.6**	**15.6**	**19.8**	**29.3**
Insertion Loss	**0.0**	**-0.2**	**-0.9**	**-1.2**	**0.1**	**1.4**	**3.9**	**9.0**	**12.9**	**15.6**	**16.1**	**20.5**	**26.8**

Table C-26. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 6.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	96.0	97.3	98.7	99.3	100.3	98.5	94.8	94.1	93.7	89.7	81.4	109	109
Test 2	94.3	95.2	96.7	99.1	98.6	100.1	99.6	93.8	94.9	94.0	89.2	81.9	109	109
Test 3	94.1	95.8	97.2	98.9	98.4	99.9	98.7	92.4	94.6	94.1	89.9	81.2	109	109
Mean	93.8	95.7	97.1	98.9	98.8	100.1	99.0	93.6	94.6	94.0	89.6	81.5		
Occluded														
Test 1	62.9	55.9	58.3	59.4	52.8	50.4	49.6	47.7	46.1	46.7	49.2	51.8	101	88
Test 2	61.1	56.4	59.6	58.0	55.6	53.5	51.1	47.7	44.9	45.0	47.4	49.9	101	89
Test 3	61.0	57.6	59.6	57.7	55.0	50.8	47.3	44.8	44.1	45.5	48.2	50.6	101	88
Mean	61.6	56.6	59.2	58.4	54.5	51.6	49.4	46.7	45.0	45.7	48.3	50.8		
Left Insertion Loss	**32.1**	**39.0**	**37.9**	**40.5**	**44.3**	**48.5**	**49.6**	**46.9**	**49.5**	**48.2**	**41.3**	**30.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.9	96.7	98.4	98.5	98.8	100.4	99.3	92.5	92.0	94.6	91.2	81.4	109	109
Test 2	94.5	97.1	98.0	99.2	99.2	101.1	99.5	92.2	93.4	95.0	90.0	81.3	109	109
Test 3	93.8	96.7	97.8	98.9	98.7	100.6	99.2	92.0	93.9	94.4	90.1	81.4	109	109
Mean	94.4	96.8	98.1	98.9	98.9	100.7	99.3	92.2	93.1	94.7	90.4	81.4		
Occluded														
Test 1	60.5	57.9	60.0	52.7	49.0	47.9	44.2	45.5	48.5	51.8	54.9	57.7	94	82
Test 2	60.1	58.4	60.9	55.0	54.2	51.5	51.5	50.4	53.1	55.2	55.2	56.9	99	86
Test 3	61.7	61.0	62.2	56.5	55.3	52.2	49.3	51.5	55.0	55.5	56.1	57.4	98	86
Mean	60.7	59.1	61.1	54.7	52.9	50.5	48.3	49.1	52.2	54.1	55.4	57.3		
Right Insertion Loss	**33.7**	**37.8**	**37.0**	**44.1**	**46.0**	**50.2**	**51.0**	**43.1**	**40.9**	**40.5**	**35.0**	**24.1**		
Insertion Loss	**32.9**	**38.4**	**37.5**	**42.3**	**45.2**	**49.4**	**50.3**	**45.0**	**45.2**	**44.4**	**38.2**	**27.4**		

Table C-27. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 7.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.7	91.2	87.6	90.2	90.1	93.9	90.2	92.7	91.8	93.1	96.1	96.5	97.8
Test 2	87.9	91.5	87.5	90.2	90.5	94.0	90.1	92.9	92.4	93.0	96.3	97.4	97.6
Test 3	88.0	91.6	87.6	90.2	90.4	94.0	90.1	93.0	91.6	92.7	96.7	97.0	98.0
Mean	87.9	91.4	87.6	90.2	90.3	93.9	90.1	92.9	91.9	92.9	96.4	96.9	97.8
Occluded													
Test 1	87.5	91.6	88.1	91.1	91.9	94.3	90.5	89.1	84.6	82.4	81.6	80.0	76.5
Test 2	91.2	92.8	89.4	92.4	94.8	94.4	96.7	96.6	92.5	86.8	87.7	84.8	79.2
Test 3	87.8	89.7	85.1	86.9	87.8	86.4	87.5	85.6	81.1	78.0	77.6	75.5	72.7
Mean	88.8	91.4	87.5	90.2	91.5	91.7	91.6	90.4	86.1	82.4	82.3	80.1	76.1
Left Insertion Loss	**-1.0**	**0.1**	**0.0**	**0.0**	**-1.1**	**2.2**	**-1.4**	**2.4**	**5.8**	**10.5**	**14.1**	**16.8**	**21.7**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.8	91.7	86.7	89.2	91.4	88.9	89.4	91.3	90.6	91.2	98.0	95.0	97.2
Test 2	89.0	92.1	86.9	89.4	91.6	88.4	89.3	91.1	90.5	90.9	96.5	95.3	97.2
Test 3	89.1	92.1	86.9	89.5	91.6	88.3	89.1	91.2	90.3	90.8	96.7	95.7	97.0
Mean	89.0	92.0	86.8	89.4	91.6	88.5	89.3	91.2	90.5	91.0	97.1	95.4	97.1
Occluded													
Test 1	89.4	92.6	87.9	90.8	91.6	89.4	86.1	82.8	76.6	76.3	78.4	73.3	72.8
Test 2	91.9	92.7	87.9	90.2	91.3	86.0	86.4	82.2	78.4	77.3	78.4	73.3	72.6
Test 3	91.8	92.9	87.8	90.0	91.1	85.1	86.6	82.3	76.9	76.5	78.4	73.0	71.6
Mean	91.0	92.7	87.8	90.3	91.4	86.8	86.4	82.4	77.3	76.7	78.4	73.2	72.3
Right Insertion Loss	**-2.1**	**-0.8**	**-1.0**	**-1.0**	**0.2**	**1.7**	**2.9**	**8.8**	**13.1**	**14.3**	**18.6**	**22.1**	**24.8**
Insertion Loss	**-1.5**	**-0.4**	**-0.5**	**-0.5**	**-0.5**	**2.0**	**0.7**	**5.6**	**9.5**	**12.4**	**16.4**	**19.5**	**23.3**

Table C-27. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 7.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	96.6	97.4	98.8	98.3	100.0	96.6	93.1	94.6	94.5	92.4	83.9	109	109
Test 2	93.9	96.3	97.5	98.9	99.3	100.5	100.0	94.1	93.7	94.1	92.1	83.6	109	110
Test 3	93.9	96.2	97.4	98.7	98.0	99.1	94.9	93.7	94.4	93.7	92.2	83.7	109	109
Mean	93.9	96.4	97.4	98.8	98.5	99.9	97.2	93.6	94.2	94.1	92.2	83.7		
Occluded														
Test 1	67.2	62.9	64.1	54.9	53.0	56.0	53.6	48.9	54.5	51.2	55.5	52.1	100	90
Test 2	68.0	66.0	66.3	59.8	56.9	57.1	55.9	49.1	48.1	49.1	50.4	51.9	104	95
Test 3	64.4	63.2	60.9	52.1	51.4	49.3	47.2	43.6	44.6	46.8	49.4	51.6	97	86
Mean	66.5	64.0	63.8	55.6	53.8	54.1	52.3	47.2	49.1	49.0	51.8	51.9		
Left Insertion Loss	**27.3**	**32.4**	**33.6**	**43.2**	**44.8**	**45.7**	**44.9**	**46.4**	**45.1**	**45.1**	**40.4**	**31.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	95.5	97.6	98.6	98.4	99.7	96.5	91.9	94.6	95.0	92.3	82.9	109	108
Test 2	93.3	96.6	97.8	98.2	97.6	99.8	96.4	92.4	94.5	94.5	92.8	83.1	109	108
Test 3	93.0	96.2	97.5	98.4	97.5	99.3	96.2	92.5	94.8	95.0	92.5	83.3	108	108
Mean	93.0	96.1	97.6	98.4	97.9	99.6	96.4	92.3	94.7	94.8	92.5	83.1		
Occluded														
Test 1	63.8	57.0	54.9	53.6	48.7	46.5	45.8	46.2	48.9	51.4	54.5	57.3	99	86
Test 2	64.3	58.0	55.6	53.8	50.1	49.1	46.3	46.0	48.6	51.2	54.3	57.2	99	86
Test 3	64.2	58.1	55.9	55.0	50.8	50.3	47.0	46.8	49.2	51.5	54.6	57.4	99	86
Mean	64.1	57.7	55.4	54.1	49.8	48.7	46.4	46.3	48.9	51.4	54.4	57.3		
Right Insertion Loss	**28.9**	**38.4**	**42.2**	**44.3**	**48.0**	**51.0**	**50.0**	**45.9**	**45.8**	**43.5**	**38.1**	**25.8**		
Insertion Loss	**28.1**	**35.4**	**37.9**	**43.7**	**46.4**	**48.3**	**47.5**	**46.2**	**45.5**	**44.3**	**39.3**	**28.8**		

Table C-28. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 8.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.0	92.2	86.8	88.9	90.9	87.5	87.7	91.2	91.8	94.5	95.4	93.8	96.5
Test 2	88.7	92.0	87.4	89.6	90.8	91.0	87.2	91.3	90.7	93.1	95.9	96.0	96.4
Test 3	91.0	92.3	87.3	89.3	90.7	87.8	88.5	92.0	92.6	94.5	97.1	95.2	96.2
Mean	90.2	92.2	87.2	89.3	90.8	88.8	87.8	91.5	91.7	94.0	96.2	95.0	96.4
Occluded													
Test 1	89.5	93.3	89.6	92.5	93.8	94.8	89.9	88.7	80.9	78.1	80.8	78.6	75.8
Test 2	92.0	93.6	88.6	90.4	92.0	88.7	88.8	87.7	81.4	78.0	81.3	77.4	75.1
Test 3	89.8	93.1	88.8	90.7	91.0	90.4	86.4	86.0	78.6	76.1	79.9	78.0	75.4
Mean	90.4	93.4	89.0	91.2	92.3	91.3	88.4	87.5	80.3	77.4	80.7	78.0	75.4
Left Insertion Loss	**-0.2**	**-1.2**	**-1.9**	**-1.9**	**-1.5**	**-2.5**	**-0.6**	**4.0**	**11.4**	**16.6**	**15.5**	**17.0**	**21.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.8	91.5	87.0	90.0	90.9	93.9	87.3	95.0	94.1	94.2	95.4	95.6	94.9
Test 2	88.6	91.5	87.2	90.1	91.1	94.2	87.7	93.3	92.9	94.0	95.4	96.1	97.1
Test 3	91.0	91.8	86.6	89.4	91.3	93.3	89.0	93.7	93.3	94.0	96.3	95.4	95.0
Mean	90.1	91.6	86.9	89.8	91.1	93.8	88.0	94.0	93.4	94.1	95.7	95.7	95.7
Occluded													
Test 1	87.8	90.7	86.7	90.1	90.9	92.6	87.3	86.4	80.8	81.3	83.1	78.6	72.5
Test 2	91.3	92.4	88.0	91.2	93.1	93.5	92.4	91.2	85.4	85.9	85.9	80.6	74.3
Test 3	88.9	91.8	88.2	91.3	92.6	94.8	91.0	91.2	85.4	85.0	85.5	81.2	77.1
Mean	89.3	91.6	87.6	90.9	92.2	93.6	90.2	89.6	83.9	84.1	84.8	80.1	74.6
Right Insertion Loss	**0.8**	**0.0**	**-0.7**	**-1.0**	**-1.1**	**0.1**	**-2.2**	**4.4**	**9.5**	**10.0**	**10.9**	**15.6**	**21.0**
Insertion Loss	**0.3**	**-0.6**	**-1.3**	**-1.5**	**-1.3**	**-1.2**	**-1.4**	**4.2**	**10.5**	**13.3**	**13.2**	**16.3**	**21.0**

Table C-28. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 8.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.8	96.1	96.6	97.9	98.6	99.7	97.6	95.4	93.5	92.4	90.0	80.6	109	109
Test 2	92.9	95.8	96.9	99.2	99.1	100.3	98.1	94.4	93.9	93.6	90.2	80.4	109	109
Test 3	92.9	95.8	96.6	98.8	98.8	100.0	97.8	94.6	93.5	93.8	89.7	81.0	109	109
Mean	93.5	95.9	96.7	98.6	98.8	100.0	97.9	94.8	93.6	93.3	90.0	80.7		
Occluded														
Test 1	68.0	63.4	60.6	57.9	52.3	52.2	49.5	45.2	43.2	44.7	47.0	49.6	101	90
Test 2	67.6	62.4	60.3	57.9	53.3	54.0	50.2	45.9	45.7	45.8	47.6	50.1	100	88
Test 3	68.3	63.4	62.2	58.7	53.4	55.4	49.0	46.1	47.1	46.0	47.7	50.2	99	87
Mean	68.0	63.1	61.0	58.2	53.0	53.9	49.6	45.7	45.4	45.5	47.4	50.0		
Left Insertion Loss	**25.6**	**32.9**	**35.7**	**40.5**	**45.8**	**46.1**	**48.3**	**49.0**	**48.3**	**47.8**	**42.5**	**30.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.9	97.2	98.0	98.3	100.0	101.1	99.2	95.0	92.3	93.8	91.9	81.9	109	110
Test 2	94.3	97.4	98.2	98.7	100.3	101.5	100.6	96.1	93.0	93.1	92.2	81.8	110	110
Test 3	94.1	97.4	98.0	98.7	100.2	101.8	99.5	95.6	93.5	94.0	92.3	82.5	110	110
Mean	94.1	97.3	98.1	98.6	100.2	101.5	99.8	95.6	92.9	93.6	92.1	82.1		
Occluded														
Test 1	65.7	63.1	62.8	58.6	55.8	55.5	54.6	52.7	57.7	61.3	57.5	57.8	99	89
Test 2	70.2	69.9	67.7	60.3	56.4	56.3	57.2	59.3	64.5	65.8	62.4	58.3	101	92
Test 3	70.0	67.8	65.0	60.1	57.4	57.9	54.6	55.6	60.6	63.5	62.3	58.3	101	92
Mean	68.6	67.0	65.1	59.7	56.5	56.6	55.5	55.9	60.9	63.5	60.7	58.1		
Right Insertion Loss	**25.5**	**30.4**	**32.9**	**39.0**	**43.6**	**44.9**	**44.3**	**39.7**	**32.0**	**30.1**	**31.4**	**23.9**		
Insertion Loss	**25.5**	**31.6**	**34.3**	**39.7**	**44.7**	**45.5**	**46.3**	**44.4**	**40.1**	**38.9**	**37.0**	**27.3**		

Table C-29. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 9.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.8	90.5	86.6	89.3	89.7	91.0	90.4	94.0	94.0	94.8	93.1	95.6	94.9
Test 2	89.0	90.9	86.8	89.7	90.0	91.0	89.6	94.0	94.1	95.2	93.3	95.3	94.3
Test 3	86.9	90.7	87.1	90.1	90.6	94.5	89.7	92.6	92.2	93.7	93.6	96.6	94.5
Mean	88.3	90.7	86.8	89.7	90.1	92.2	89.9	93.5	93.4	94.6	93.3	95.8	94.6
Occluded													
Test 1	89.6	91.6	87.6	90.4	90.3	89.4	85.8	83.0	79.6	76.6	75.0	73.6	75.6
Test 2	87.5	91.6	88.5	91.9	91.8	94.6	87.4	83.5	79.5	77.2	75.5	73.8	76.0
Test 3	87.2	91.2	87.9	91.0	90.7	93.5	86.9	83.1	79.1	77.0	75.3	74.1	75.7
Mean	88.1	91.4	88.0	91.1	91.0	92.5	86.7	83.2	79.4	76.9	75.3	73.8	75.8
Left Insertion Loss	**0.2**	**-0.7**	**-1.2**	**-1.4**	**-0.8**	**-0.3**	**3.2**	**10.3**	**14.1**	**17.6**	**18.0**	**22.0**	**18.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.2	91.4	86.4	89.0	91.3	90.0	89.4	93.2	91.9	92.5	92.3	93.6	95.8
Test 2	90.3	91.6	86.3	89.0	91.4	90.5	89.6	92.6	91.7	92.6	92.6	93.5	95.4
Test 3	88.3	91.4	87.0	89.8	91.6	92.1	89.5	92.2	90.2	92.4	93.8	94.1	96.9
Mean	89.6	91.5	86.5	89.3	91.4	90.9	89.5	92.7	91.3	92.5	92.9	93.7	96.0
Occluded													
Test 1	90.8	92.5	88.6	92.8	95.3	94.8	94.2	90.7	86.5	87.4	83.6	78.0	74.0
Test 2	88.3	92.3	89.2	93.4	95.7	99.0	96.8	94.5	90.1	91.1	88.5	84.6	79.6
Test 3	88.7	92.3	89.1	93.5	95.3	97.9	94.1	90.8	85.3	85.4	81.8	77.9	73.8
Mean	89.3	92.4	89.0	93.2	95.4	97.2	95.0	92.0	87.3	88.0	84.7	80.2	75.8
Right Insertion Loss	**0.3**	**-0.9**	**-2.4**	**-4.0**	**-4.0**	**-6.4**	**-5.6**	**0.7**	**3.9**	**4.5**	**8.2**	**13.6**	**20.2**
Insertion Loss	**0.2**	**-0.8**	**-1.8**	**-2.7**	**-2.4**	**-3.4**	**-1.2**	**5.5**	**9.0**	**11.1**	**13.1**	**17.8**	**19.5**

Table C-29. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 9.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	95.8	97.3	98.8	100.7	102.2	99.9	96.3	95.3	92.2	90.5	81.3	110	110
Test 2	94.0	95.8	97.1	99.2	100.8	102.4	99.6	96.7	95.6	92.0	89.9	80.0	110	110
Test 3	94.2	95.7	97.5	99.2	101.3	102.9	99.9	96.8	96.1	91.7	90.0	80.4	110	110
Mean	94.0	95.8	97.3	99.1	101.0	102.5	99.8	96.6	95.7	92.0	90.1	80.6		
Occluded														
Test 1	70.5	67.7	69.7	65.2	60.9	57.0	57.2	56.5	56.5	53.5	52.1	51.5	98	86
Test 2	69.5	67.6	69.8	63.6	59.0	56.3	62.2	63.0	62.4	57.8	55.9	51.1	100	87
Test 3	70.0	66.5	68.8	64.0	59.2	55.9	58.5	60.8	62.0	57.6	54.1	50.8	99	87
Mean	70.0	67.3	69.4	64.3	59.7	56.4	59.3	60.1	60.3	56.3	54.0	51.1		
Left Insertion Loss	**24.0**	**28.5**	**27.9**	**34.8**	**41.2**	**46.1**	**40.5**	**36.5**	**35.4**	**35.7**	**36.1**	**29.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.6	96.7	97.0	98.2	100.0	101.5	99.9	98.2	97.6	92.8	90.4	80.8	109	110
Test 2	93.5	97.2	96.8	99.0	100.2	101.5	100.1	98.2	97.4	93.2	90.4	80.4	110	110
Test 3	93.6	96.7	97.0	99.4	100.4	101.7	100.9	98.6	97.3	92.3	90.0	80.6	110	110
Mean	93.6	96.9	96.9	98.9	100.2	101.6	100.3	98.3	97.4	92.8	90.3	80.6		
Occluded														
Test 1	62.9	63.6	60.8	57.8	55.6	54.2	51.6	53.5	56.0	52.6	55.2	57.6	102	92
Test 2	67.9	66.5	64.2	62.9	58.7	59.8	61.7	59.8	59.0	53.8	56.0	57.8	104	96
Test 3	64.6	64.7	61.3	58.9	55.6	53.6	54.9	54.1	57.5	52.8	55.2	57.7	103	92
Mean	65.1	64.9	62.1	59.9	56.6	55.9	56.1	55.8	57.5	53.1	55.4	57.7		
Right Insertion Loss	**28.5**	**32.0**	**34.8**	**39.0**	**43.6**	**45.7**	**44.2**	**42.5**	**39.9**	**39.7**	**34.8**	**22.9**		
Insertion Loss	**26.2**	**30.2**	**31.4**	**36.9**	**42.4**	**45.9**	**42.4**	**39.5**	**37.6**	**37.7**	**35.4**	**26.2**		

Table C-30. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 10.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.3	91.9	87.8	90.5	90.9	94.2	89.1	93.5	93.2	94.3	95.3	95.6	96.7
Test 2	88.3	92.0	87.7	90.4	90.7	94.1	89.1	93.3	93.2	94.1	95.7	95.9	96.8
Test 3	88.3	92.0	87.8	90.6	90.9	94.2	89.2	93.4	93.4	94.4	95.4	95.9	96.7
Mean	88.3	92.0	87.8	90.5	90.8	94.2	89.2	93.4	93.2	94.2	95.4	95.8	96.7
Occluded													
Test 1	89.1	92.8	89.3	93.3	95.4	97.3	96.8	95.0	88.8	84.6	85.2	82.5	83.1
Test 2	91.5	93.4	89.6	93.5	96.4	94.7	97.4	96.4	91.6	86.2	87.2	83.2	80.5
Test 3	89.1	92.8	89.3	93.3	95.3	97.4	98.0	96.9	91.1	85.2	85.4	83.4	84.0
Mean	89.9	93.0	89.4	93.3	95.7	96.4	97.4	96.1	90.5	85.4	85.9	83.0	82.5
Left Insertion Loss	**-1.6**	**-1.0**	**-1.6**	**-2.8**	**-4.9**	**-2.3**	**-8.3**	**-2.7**	**2.7**	**8.9**	**9.5**	**12.8**	**14.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.0	92.0	87.2	90.2	91.8	91.1	89.7	92.7	90.5	93.8	96.6	94.3	96.8
Test 2	88.9	91.9	87.0	90.2	91.6	91.7	89.8	93.0	90.9	94.0	95.7	95.2	96.2
Test 3	89.0	91.9	87.0	90.1	91.6	91.5	89.9	92.7	90.6	94.0	96.7	94.2	96.2
Mean	88.9	91.9	87.0	90.2	91.7	91.5	89.8	92.8	90.7	93.9	96.3	94.5	96.4
Occluded													
Test 1	89.4	92.7	89.0	93.2	95.2	96.3	97.2	96.3	93.7	91.7	93.1	91.7	87.5
Test 2	91.7	93.4	89.5	93.4	96.1	94.1	96.9	94.7	93.1	91.3	91.3	88.4	84.3
Test 3	89.4	92.7	89.1	93.1	95.0	96.1	97.5	96.5	93.8	91.8	93.3	90.6	86.1
Mean	90.2	93.0	89.2	93.2	95.4	95.5	97.2	95.8	93.5	91.6	92.5	90.2	85.9
Right Insertion Loss	**-1.2**	**-1.1**	**-2.1**	**-3.1**	**-3.7**	**-4.0**	**-7.4**	**-3.0**	**-2.8**	**2.3**	**3.8**	**4.3**	**10.5**
Insertion Loss	**-1.4**	**-1.0**	**-1.9**	**-2.9**	**-4.3**	**-3.2**	**-7.8**	**-2.8**	**0.0**	**5.6**	**6.7**	**8.5**	**12.3**

Table C-30. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using normal-fitting instructions – Subject 10.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.3	96.6	97.1	98.8	100.6	101.7	98.1	92.9	93.2	93.4	91.0	81.1	109	109
Test 2	94.3	95.9	96.2	98.8	100.2	101.5	97.8	92.7	93.3	93.5	91.2	80.9	109	109
Test 3	94.1	96.2	97.0	99.3	100.1	101.9	97.6	93.0	93.6	93.6	91.4	80.9	109	109
Mean	94.2	96.3	96.8	98.9	100.3	101.7	97.8	92.9	93.4	93.5	91.2	80.9		
Occluded														
Test 1	77.5	74.4	72.0	72.1	75.7	78.9	75.1	64.6	59.5	64.3	67.5	55.2	104	95
Test 2	69.5	66.2	66.5	65.6	61.8	59.7	60.0	60.3	57.3	51.0	49.3	50.7	104	95
Test 3	78.5	77.6	74.9	65.2	61.7	75.1	79.8	74.2	66.4	69.5	64.2	54.6	105	96
Mean	75.2	72.7	71.2	67.6	66.4	71.2	71.6	66.4	61.1	61.6	60.3	53.5		
Left Insertion Loss	**19.1**	**23.5**	**25.6**	**31.3**	**33.9**	**30.5**	**26.2**	**26.5**	**32.3**	**31.9**	**30.8**	**27.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.4	97.7	98.3	100.4	100.8	103.4	99.5	94.1	93.2	94.1	91.7	81.0	110	111
Test 2	93.6	97.4	97.9	100.9	101.6	104.5	99.5	93.8	93.5	93.9	91.8	80.7	110	111
Test 3	93.6	97.5	98.0	100.9	100.5	103.8	99.5	93.8	94.0	94.0	92.1	80.9	110	111
Mean	93.9	97.6	98.1	100.8	101.0	103.9	99.5	93.9	93.6	94.0	91.9	80.9		
Occluded														
Test 1	77.1	70.3	68.9	69.2	67.4	68.1	70.2	67.9	63.3	60.8	60.0	57.3	105	98
Test 2	74.8	69.7	70.3	66.7	64.1	60.2	57.8	63.0	58.1	60.3	58.6	57.3	104	97
Test 3	75.2	69.8	69.5	70.4	66.2	64.5	63.5	62.4	57.7	59.1	58.3	57.4	105	98
Mean	75.7	69.9	69.6	68.7	65.9	64.2	63.8	64.5	59.7	60.1	59.0	57.3		
Right Insertion Loss	**18.2**	**27.6**	**28.5**	**32.0**	**35.1**	**39.6**	**35.7**	**29.5**	**33.9**	**33.9**	**32.9**	**23.6**		
Insertion Loss	**18.6**	**25.6**	**27.1**	**31.7**	**34.5**	**35.1**	**30.9**	**28.0**	**33.1**	**32.9**	**31.9**	**25.5**		

Table C-31. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 1.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	91.5	87.3	90.2	90.5	93.4	87.3	94.3	93.3	92.8	96.1	96.7	97.3
Test 2	89.9	91.5	87.1	89.5	90.0	90.3	89.8	95.2	94.9	94.3	97.2	96.2	95.7
Test 3	90.0	91.5	87.1	89.5	90.0	90.3	90.0	95.2	94.8	94.3	97.3	96.4	95.7
Mean	89.3	91.5	87.2	89.7	90.2	91.4	89.0	94.9	94.3	93.8	96.9	96.4	96.2
Occluded													
Test 1	85.4	89.1	84.7	87.1	88.2	90.6	85.0	85.6	82.8	81.8	81.7	76.8	75.0
Test 2	86.8	88.4	83.7	85.6	86.6	85.1	84.9	85.7	84.1	83.3	84.1	77.4	74.5
Test 3	83.6	87.5	83.2	85.4	86.5	89.5	83.3	84.5	82.3	81.3	81.0	75.2	73.5
Mean	85.3	88.3	83.9	86.1	87.1	88.4	84.4	85.3	83.1	82.2	82.3	76.5	74.3
Left Insertion Loss	**4.0**	**3.2**	**3.3**	**3.7**	**3.0**	**3.0**	**4.6**	**9.6**	**11.3**	**11.6**	**14.6**	**19.9**	**21.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	91.6	86.8	89.7	91.4	92.0	89.0	92.8	91.0	93.5	96.3	94.5	96.3
Test 2	90.9	91.8	86.4	88.9	91.5	90.4	89.9	92.9	92.7	94.5	96.1	94.2	95.8
Test 3	90.9	91.8	86.4	89.0	91.5	90.6	89.8	92.9	92.7	94.6	96.1	94.1	95.6
Mean	90.2	91.7	86.5	89.2	91.5	91.0	89.6	92.9	92.1	94.2	96.2	94.3	95.9
Occluded													
Test 1	87.8	90.8	86.1	89.5	91.4	92.7	87.6	85.1	81.7	84.6	82.3	75.3	71.6
Test 2	89.7	90.5	85.6	88.6	91.0	89.1	88.6	84.8	83.5	85.7	83.0	75.1	71.9
Test 3	87.6	90.8	86.4	89.5	91.1	92.6	87.1	85.2	81.6	84.3	82.5	75.8	72.8
Mean	88.4	90.7	86.0	89.2	91.2	91.5	87.8	85.0	82.3	84.9	82.6	75.4	72.1
Right Insertion Loss	**1.8**	**1.0**	**0.5**	**0.0**	**0.3**	**-0.5**	**1.8**	**7.8**	**9.9**	**9.3**	**13.6**	**18.9**	**23.8**
Insertion Loss	**2.9**	**2.1**	**1.9**	**1.8**	**1.7**	**1.3**	**3.2**	**8.7**	**10.6**	**10.5**	**14.1**	**19.4**	**22.9**

Table C-31. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 1.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.8	95.7	98.7	99.7	100.8	103.1	100.6	97.9	93.1	87.7	88.7	80.0	110	110
Test 2	93.8	95.8	98.3	100.3	100.5	103.1	100.2	97.7	91.7	87.8	89.1	79.8	110	111
Test 3	93.7	95.6	98.3	99.7	100.3	103.1	100.3	97.3	91.5	88.5	90.0	80.4	110	110
Mean	94.1	95.7	98.4	99.9	100.5	103.1	100.4	97.6	92.1	88.0	89.3	80.1		
Occluded														
Test 1	68.6	66.1	63.7	61.4	57.4	54.6	53.4	48.9	44.5	45.5	48.5	50.7	97	87
Test 2	68.5	67.0	65.8	63.4	58.4	55.7	54.2	50.5	46.3	46.7	48.6	51.2	96	87
Test 3	67.2	66.8	63.2	62.2	57.1	54.6	55.0	49.0	44.6	46.1	48.7	51.4	96	86
Mean	68.1	66.6	64.2	62.3	57.6	55.0	54.2	49.5	45.1	46.1	48.6	51.1		
Left Insertion Loss	**26.0**	**29.1**	**34.2**	**37.6**	**42.9**	**48.1**	**46.2**	**48.2**	**47.0**	**41.9**	**40.7**	**29.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.8	97.9	98.7	100.7	100.6	102.1	100.2	99.5	91.9	90.1	91.4	81.2	110	110
Test 2	94.4	97.5	98.3	100.3	101.1	101.6	100.1	99.5	91.5	89.5	91.9	81.0	110	111
Test 3	93.6	97.4	98.3	100.3	100.8	101.3	99.9	99.0	91.3	90.3	92.1	81.7	110	110
Mean	94.3	97.6	98.4	100.4	100.8	101.7	100.1	99.3	91.6	90.0	91.8	81.3		
Occluded														
Test 1	67.9	63.4	65.0	65.7	59.2	57.7	55.5	48.7	49.5	52.3	55.8	58.0	99	88
Test 2	66.3	64.4	65.5	65.2	59.2	57.4	54.5	49.5	49.8	52.3	55.5	58.1	99	89
Test 3	67.7	63.5	63.7	64.7	59.2	57.3	53.7	48.0	49.2	52.3	55.4	58.2	99	88
Mean	67.3	63.8	64.8	65.2	59.2	57.5	54.6	48.7	49.5	52.3	55.6	58.1		
Right Insertion Loss	**27.0**	**33.8**	**33.7**	**35.2**	**41.6**	**44.2**	**45.5**	**50.6**	**42.1**	**37.7**	**36.3**	**23.2**		
Insertion Loss	**26.5**	**31.5**	**33.9**	**36.4**	**42.3**	**46.1**	**45.8**	**49.4**	**44.5**	**39.8**	**38.5**	**26.1**		

Table C-32. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 2.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.1	91.6	86.7	89.1	90.2	88.9	88.5	94.7	94.1	94.3	94.9	95.7	95.8
Test 2	87.9	91.3	86.9	89.5	90.2	92.9	88.6	94.2	91.9	93.1	95.2	95.5	96.0
Test 3	87.9	91.3	86.8	89.4	90.3	92.5	88.3	94.0	91.9	93.1	95.4	95.5	95.9
Mean	88.6	91.4	86.8	89.3	90.2	91.4	88.5	94.3	92.7	93.5	95.2	95.6	95.9
Occluded													
Test 1	84.8	87.7	82.9	85.0	85.9	87.3	84.8	86.6	82.2	80.7	83.9	81.6	79.6
Test 2	84.3	87.3	82.4	84.5	85.5	86.8	85.0	87.2	82.2	80.5	84.3	82.0	79.7
Test 3	84.2	87.1	82.6	84.7	85.5	87.4	84.9	86.8	82.2	80.8	84.1	81.7	79.6
Mean	84.4	87.4	82.6	84.7	85.7	87.2	84.9	86.9	82.2	80.6	84.1	81.8	79.6
Left Insertion Loss	**4.2**	**4.0**	**4.1**	**4.6**	**4.6**	**4.2**	**3.6**	**7.4**	**10.5**	**12.8**	**11.1**	**13.8**	**16.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.5	91.2	85.7	88.6	90.8	91.7	89.3	95.0	93.6	94.1	96.7	97.2	95.2
Test 2	88.4	91.1	86.3	89.4	90.9	92.6	88.5	94.6	93.0	94.0	96.8	97.2	96.2
Test 3	88.2	91.0	86.3	89.5	90.9	92.9	88.3	94.8	93.4	93.9	96.7	97.4	96.0
Mean	89.0	91.1	86.1	89.2	90.9	92.4	88.7	94.8	93.3	94.0	96.8	97.3	95.8
Occluded													
Test 1	85.2	87.6	82.9	86.3	87.8	88.2	86.4	85.8	82.4	83.6	82.8	78.8	77.4
Test 2	84.8	87.2	82.5	86.0	87.6	88.6	86.0	85.9	82.6	83.2	83.3	80.1	77.7
Test 3	84.8	87.0	82.8	86.4	87.7	89.0	86.5	85.5	82.4	83.1	82.7	79.1	76.4
Mean	85.0	87.2	82.8	86.2	87.7	88.6	86.3	85.7	82.5	83.3	82.9	79.3	77.1
Right Insertion Loss	**4.1**	**3.8**	**3.3**	**3.0**	**3.2**	**3.8**	**2.4**	**9.1**	**10.9**	**10.7**	**13.8**	**18.0**	**18.7**
Insertion Loss	**4.1**	**3.9**	**3.7**	**3.8**	**3.9**	**4.0**	**3.0**	**8.3**	**10.7**	**11.8**	**12.4**	**15.9**	**17.5**

Table C-32. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 2.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	95.7	97.6	98.9	100.5	102.2	100.2	98.4	97.4	90.5	87.5	79.9	110	110
Test 2	93.7	95.9	97.8	99.1	100.9	102.1	100.4	98.9	97.0	89.3	88.6	78.2	110	110
Test 3	93.2	95.6	98.2	98.7	101.4	102.0	100.5	99.1	96.8	88.6	88.5	78.0	110	110
Mean	93.5	95.7	97.9	98.9	100.9	102.1	100.4	98.8	97.1	89.5	88.2	78.7		
Occluded														
Test 1	71.1	65.7	66.0	63.9	58.0	58.0	55.4	48.8	46.8	45.9	47.9	50.6	96	88
Test 2	71.7	67.7	66.8	63.4	59.9	58.5	55.7	48.4	45.2	45.6	48.2	51.0	96	89
Test 3	72.2	67.1	66.3	63.1	58.8	57.5	54.1	47.7	44.8	45.6	48.2	51.0	96	88
Mean	71.7	66.8	66.4	63.5	58.9	58.0	55.1	48.3	45.6	45.7	48.1	50.9		
Left Insertion Loss	**21.8**	**28.9**	**31.5**	**35.4**	**42.1**	**44.1**	**45.3**	**50.5**	**51.5**	**43.8**	**40.1**	**27.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	96.0	98.4	100.4	101.1	102.5	100.8	99.9	98.8	97.4	86.2	73.6	111	111
Test 2	93.3	97.1	98.2	100.1	100.9	102.5	101.5	98.8	97.7	94.7	82.9	74.9	111	111
Test 3	93.5	97.5	98.8	101.0	100.8	102.6	101.7	99.4	97.9	95.0	83.1	74.8	111	111
Mean	93.2	96.8	98.5	100.5	100.9	102.6	101.3	99.4	98.1	95.7	84.1	74.4		
Occluded														
Test 1	67.1	63.2	63.0	61.0	56.5	54.8	51.9	48.0	49.2	52.2	55.3	58.3	96	88
Test 2	67.6	64.4	63.7	60.5	57.2	56.7	50.9	47.7	49.4	52.4	55.5	58.4	96	88
Test 3	66.2	63.8	65.3	61.2	55.9	55.5	52.2	48.0	49.4	52.5	55.6	58.5	96	88
Mean	67.0	63.8	64.0	60.9	56.6	55.7	51.7	47.9	49.4	52.3	55.5	58.4		
Right Insertion Loss	**26.2**	**33.0**	**34.5**	**39.6**	**44.4**	**46.9**	**49.7**	**51.5**	**48.7**	**43.4**	**28.6**	**16.0**		
Insertion Loss	**24.0**	**30.9**	**33.0**	**37.5**	**43.2**	**45.5**	**47.5**	**51.0**	**50.1**	**43.6**	**34.3**	**21.9**		

Table C-33. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 3.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.4	91.7	86.8	89.3	90.8	91.9	88.8	90.9	90.6	92.6	93.9	95.5	95.1
Test 2	88.6	91.8	86.9	89.2	91.0	91.1	89.0	90.4	89.4	92.7	94.1	96.0	95.4
Test 3	88.4	91.7	86.9	89.1	90.8	91.2	89.0	90.7	89.3	92.8	94.4	96.0	95.1
Mean	88.5	91.7	86.9	89.2	90.9	91.4	88.9	90.7	89.7	92.7	94.1	95.8	95.2
Occluded													
Test 1	85.4	88.1	82.6	84.2	85.3	86.3	85.1	87.0	81.9	81.7	83.9	81.1	80.5
Test 2	85.4	88.1	82.6	84.3	85.5	86.6	85.1	86.6	81.7	81.6	84.1	81.2	80.3
Test 3	87.7	88.7	82.2	83.5	85.2	82.4	86.0	87.1	83.0	82.2	84.0	81.4	81.0
Mean	86.2	88.3	82.5	84.0	85.3	85.1	85.4	86.9	82.2	81.8	84.0	81.2	80.6
Left Insertion Loss	**2.3**	**3.5**	**4.4**	**5.2**	**5.5**	**6.3**	**3.5**	**3.7**	**7.5**	**10.9**	**10.1**	**14.6**	**14.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.5	91.1	87.0	90.4	90.9	93.8	87.5	95.6	94.7	93.8	96.3	97.6	96.3
Test 2	88.5	91.1	87.0	90.4	91.2	93.8	87.5	95.5	93.9	94.0	96.1	96.8	96.4
Test 3	88.4	91.0	87.0	90.0	90.9	93.9	87.8	95.4	93.9	94.1	96.1	97.0	96.5
Mean	88.5	91.1	87.0	90.3	91.0	93.8	87.6	95.5	94.2	94.0	96.2	97.1	96.4
Occluded													
Test 1	84.7	87.3	83.5	86.7	87.8	90.1	87.2	89.2	84.8	82.8	83.3	79.6	77.7
Test 2	84.5	87.4	83.4	86.6	87.6	90.3	87.2	88.9	84.5	82.5	83.6	80.5	78.5
Test 3	86.6	87.7	82.9	85.6	87.6	88.5	88.6	89.2	84.5	83.1	84.3	79.3	77.6
Mean	85.2	87.5	83.3	86.3	87.7	89.6	87.7	89.1	84.6	82.8	83.7	79.8	77.9
Right Insertion Loss	**3.2**	**3.6**	**3.7**	**4.0**	**3.3**	**4.2**	**-0.1**	**6.4**	**9.6**	**11.1**	**12.4**	**17.3**	**18.4**
Insertion Loss	**2.8**	**3.5**	**4.1**	**4.6**	**4.4**	**5.2**	**1.7**	**5.1**	**8.5**	**11.0**	**11.3**	**15.9**	**16.5**

Table C-33. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 3.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	96.0	98.1	99.3	99.8	102.3	100.4	94.2	92.9	95.0	90.6	81.0	109	110
Test 2	93.0	95.8	98.5	99.6	99.6	100.9	99.3	94.5	92.0	94.8	90.2	80.9	109	109
Test 3	92.8	95.8	98.9	99.5	99.8	101.3	99.2	95.1	92.6	94.2	90.1	80.8	109	109
Mean	93.1	95.9	98.5	99.5	99.8	101.5	99.6	94.6	92.5	94.7	90.3	80.9		
Occluded														
Test 1	74.2	69.7	66.8	63.7	61.1	57.4	54.1	45.0	45.0	45.7	47.6	50.3	96	89
Test 2	73.9	70.0	67.2	63.3	61.1	58.5	54.9	46.1	44.9	45.7	47.6	50.3	96	89
Test 3	74.6	70.3	66.6	62.4	61.8	58.0	54.4	45.3	45.3	45.5	47.7	50.4	96	89
Mean	74.2	70.0	66.9	63.1	61.4	58.0	54.5	45.4	45.1	45.6	47.7	50.3		
Left Insertion Loss	**18.8**	**25.8**	**31.6**	**36.3**	**38.4**	**43.5**	**45.2**	**49.2**	**47.4**	**49.0**	**42.6**	**30.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.4	96.0	97.4	99.4	100.6	103.1	101.8	99.0	96.3	97.2	92.1	79.3	111	111
Test 2	94.2	96.6	97.9	99.3	100.4	102.8	102.1	99.4	96.0	97.3	92.4	78.9	111	111
Test 3	93.9	96.7	97.7	99.4	100.6	103.2	102.1	99.6	96.0	97.7	91.0	78.6	111	111
Mean	94.2	96.4	97.7	99.4	100.5	103.0	102.0	99.3	96.1	97.4	91.8	78.9		
Occluded														
Test 1	70.6	65.2	65.0	62.6	58.5	56.0	52.5	48.4	51.1	52.9	55.6	58.3	97	89
Test 2	71.4	64.9	64.5	62.6	58.8	56.4	53.5	48.2	50.1	52.7	55.6	58.3	97	89
Test 3	71.8	66.4	65.5	62.3	59.0	56.0	52.9	48.0	49.8	52.5	55.5	58.4	97	89
Mean	71.3	65.5	65.0	62.5	58.8	56.1	52.9	48.2	50.3	52.7	55.6	58.3		
Right Insertion Loss	**22.9**	**30.9**	**32.7**	**36.9**	**41.8**	**46.9**	**49.0**	**51.2**	**45.7**	**44.7**	**36.3**	**20.6**		
Insertion Loss	**20.9**	**28.4**	**32.1**	**36.6**	**40.1**	**45.2**	**47.1**	**50.2**	**46.6**	**46.9**	**39.4**	**25.6**		

Table C-34. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 4.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.5	91.9	87.2	89.6	90.3	91.6	88.4	91.8	90.8	92.2	95.8	96.5	95.8
Test 2	88.3	91.7	87.3	89.6	89.9	91.8	88.3	92.0	90.9	92.3	95.9	96.6	96.1
Test 3	88.4	91.9	87.3	89.7	90.1	91.9	88.3	92.4	91.0	92.6	95.8	96.8	96.3
Mean	88.4	91.8	87.2	89.6	90.1	91.8	88.4	92.1	90.9	92.4	95.8	96.6	96.1
Occluded													
Test 1	86.7	88.0	82.5	83.6	85.0	82.9	85.8	88.9	82.9	79.4	83.5	80.2	77.7
Test 2	84.7	87.7	82.6	84.0	85.5	87.1	85.7	88.2	81.7	78.8	83.0	81.7	78.2
Test 3	84.5	87.7	82.9	84.1	85.1	86.9	86.1	88.8	81.9	78.9	82.9	81.7	78.0
Mean	85.3	87.8	82.7	83.9	85.2	85.7	85.8	88.6	82.2	79.0	83.1	81.2	78.0
Left Insertion Loss	**3.1**	**4.0**	**4.6**	**5.7**	**4.9**	**6.1**	**2.5**	**3.4**	**8.8**	**13.3**	**12.7**	**15.4**	**18.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.7	91.3	86.0	88.7	91.1	90.9	90.4	92.7	90.8	94.1	96.8	94.5	95.7
Test 2	88.5	91.2	85.9	88.5	91.0	90.7	90.4	92.4	91.1	94.2	96.7	94.5	95.9
Test 3	88.7	91.5	86.0	88.7	91.1	90.7	90.4	92.2	90.9	94.4	97.2	94.7	96.5
Mean	88.6	91.3	86.0	88.7	91.1	90.7	90.4	92.4	90.9	94.2	96.9	94.6	96.0
Occluded													
Test 1	90.9	91.7	85.9	88.9	92.1	89.1	91.6	89.6	85.5	87.2	88.5	82.3	77.7
Test 2	88.1	90.6	85.7	89.0	91.3	90.8	90.1	88.6	83.3	86.2	87.7	81.8	77.8
Test 3	88.4	91.1	86.3	89.3	91.5	90.7	90.8	89.2	83.6	86.6	87.4	81.5	76.7
Mean	89.1	91.1	85.9	89.0	91.6	90.2	90.8	89.2	84.1	86.7	87.9	81.9	77.4
Right Insertion Loss	**-0.5**	**0.2**	**0.0**	**-0.4**	**-0.6**	**0.5**	**-0.5**	**3.3**	**6.8**	**7.6**	**9.0**	**12.7**	**18.7**
Insertion Loss	**1.3**	**2.1**	**2.3**	**2.7**	**2.2**	**3.3**	**1.0**	**3.3**	**7.8**	**10.4**	**10.9**	**14.1**	**18.4**

Table C-34. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 4.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.4	96.7	96.6	98.7	99.7	102.2	101.7	98.9	93.3	89.0	88.0	80.7	110	110
Test 2	94.8	96.4	96.9	99.0	100.2	102.5	101.2	99.1	94.1	89.0	87.8	80.9	110	110
Test 3	94.3	96.6	96.4	99.2	100.2	101.9	101.5	99.0	93.5	88.5	87.4	80.4	110	110
Mean	94.5	96.6	96.7	99.0	100.1	102.2	101.5	99.0	93.6	88.8	87.7	80.7	110	110
Occluded														
Test 1	72.4	68.6	66.2	64.9	62.2	57.1	53.1	47.7	43.6	45.3	47.7	50.3	96	88
Test 2	72.4	69.0	66.5	64.2	61.6	58.1	54.1	48.8	44.2	45.1	47.5	50.2	96	88
Test 3	74.1	70.9	68.3	63.4	60.2	58.0	54.2	48.7	43.8	45.1	47.5	50.2	96	88
Mean	73.0	69.5	67.0	64.1	61.3	57.7	53.8	48.4	43.9	45.2	47.5	50.2	96	88
Left Insertion Loss	**21.5**	**27.1**	**29.7**	**34.8**	**38.7**	**44.5**	**47.7**	**50.6**	**49.8**	**43.6**	**40.2**	**30.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.6	97.5	100.6	100.2	101.7	101.2	99.3	94.8	89.6	88.8	80.8	110	110
Test 2	93.1	94.6	97.6	100.6	100.1	101.0	100.9	99.0	94.3	90.2	89.0	81.0	110	110
Test 3	93.2	94.6	97.9	100.4	100.1	101.3	100.9	98.9	94.8	90.0	89.2	81.1	110	110
Mean	93.1	94.6	97.7	100.5	100.1	101.3	101.0	99.1	94.6	89.9	89.0	81.0	110	
Occluded														
Test 1	71.8	67.2	66.0	65.5	62.0	58.2	55.4	55.4	57.2	55.4	55.4	58.0	100	92
Test 2	70.3	67.5	67.3	65.1	60.7	58.4	54.3	53.6	55.5	54.5	55.2	58.0	99	91
Test 3	71.0	66.2	67.3	66.4	61.6	57.4	54.7	54.7	57.1	54.6	55.3	58.0	100	91
Mean	71.0	67.0	66.9	65.7	61.4	58.0	54.8	54.6	56.6	54.8	55.3	58.0	100	91
Right Insertion Loss	**22.1**	**27.7**	**30.8**	**34.9**	**38.7**	**43.4**	**46.2**	**44.5**	**38.0**	**35.1**	**33.7**	**23.0**		
Insertion Loss	**21.8**	**27.4**	**30.2**	**34.8**	**38.7**	**43.9**	**46.9**	**47.5**	**43.9**	**39.4**	**36.9**	**26.7**		

Table C-35. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 5.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.3	90.4	86.5	89.6	90.6	90.6	91.4	94.5	95.8	94.2	93.2	95.7	96.6
Test 2	87.2	90.5	86.8	90.2	91.0	94.9	90.9	93.2	93.5	93.1	93.4	96.4	96.7
Test 3	89.2	90.4	86.4	89.7	90.9	90.3	91.0	94.7	95.6	94.0	93.8	95.7	95.8
Mean	88.6	90.4	86.6	89.9	90.8	91.9	91.1	94.1	95.0	93.8	93.4	95.9	96.4
Occluded													
Test 1	84.2	85.8	81.6	83.9	84.6	84.5	87.7	89.2	86.9	82.2	80.1	78.5	77.9
Test 2	84.7	86.2	82.1	84.5	85.3	85.2	88.1	88.8	86.3	81.5	79.2	76.7	75.9
Test 3	82.4	86.1	82.3	85.0	85.9	89.7	87.3	87.0	84.0	80.6	80.1	78.0	75.5
Mean	83.8	86.0	82.0	84.5	85.3	86.5	87.7	88.4	85.7	81.5	79.8	77.7	76.4
Left Insertion Loss	**4.8**	**4.4**	**4.6**	**5.4**	**5.5**	**5.5**	**3.4**	**5.8**	**9.3**	**12.3**	**13.6**	**18.2**	**19.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.1	92.1	86.8	89.5	91.6	87.2	89.9	92.0	92.5	92.4	96.1	94.2	95.0
Test 2	88.9	92.1	87.4	90.5	91.7	91.9	89.5	91.5	91.2	91.4	95.3	93.9	95.7
Test 3	91.1	92.3	87.1	89.9	91.7	87.7	89.1	92.4	92.4	92.5	95.9	94.4	94.9
Mean	90.4	92.2	87.1	90.0	91.6	88.9	89.5	92.0	92.0	92.1	95.8	94.2	95.2
Occluded													
Test 1	91.5	92.0	86.0	88.4	90.0	85.8	90.0	88.9	85.3	81.2	86.3	79.6	79.0
Test 2	91.3	92.1	87.1	89.9	91.6	88.5	92.0	90.7	87.4	81.9	86.9	80.3	79.8
Test 3	88.6	91.4	86.5	89.7	90.7	91.7	90.4	88.5	84.6	80.3	85.6	79.7	79.3
Mean	90.5	91.8	86.6	89.3	90.8	88.7	90.8	89.4	85.8	81.1	86.3	79.8	79.4
Right Insertion Loss	**-0.1**	**0.3**	**0.5**	**0.7**	**0.9**	**0.3**	**-1.3**	**2.6**	**6.3**	**11.0**	**9.5**	**14.3**	**15.8**
Insertion Loss	**2.4**	**2.4**	**2.6**	**3.0**	**3.2**	**2.9**	**1.1**	**4.2**	**7.8**	**11.6**	**11.6**	**16.3**	**17.9**

Table C-35. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 5.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	96.8	97.9	99.5	101.4	102.7	101.0	97.4	99.0	97.9	89.1	75.3	111	111
Test 2	93.3	96.4	97.4	99.7	101.6	102.3	101.5	98.2	98.1	98.0	89.7	75.7	111	111
Test 3	93.6	95.8	97.2	98.7	100.9	102.0	100.9	98.3	97.7	97.6	89.8	75.5	110	110
Mean	93.4	96.4	97.5	99.3	101.3	102.4	101.1	98.0	98.3	97.9	89.5	75.5		
Occluded														
Test 1	71.5	71.1	70.1	68.0	63.5	57.7	57.7	54.5	55.6	57.4	54.6	49.3	96	89
Test 2	71.4	72.3	71.7	68.3	62.1	58.0	56.8	56.6	66.2	65.7	62.1	52.0	96	88
Test 3	72.4	71.9	72.4	69.0	63.8	58.8	59.0	59.9	66.5	67.1	62.8	53.0	96	88
Mean	71.8	71.8	71.4	68.4	63.1	58.2	57.8	57.0	62.8	63.4	59.8	51.4		
Left Insertion Loss	**21.7**	**24.6**	**26.1**	**30.9**	**38.2**	**44.2**	**43.3**	**41.0**	**35.5**	**34.5**	**29.7**	**24.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	96.0	97.7	100.2	100.4	101.8	100.2	98.1	96.2	93.2	85.7	74.4	110	110
Test 2	93.7	96.8	99.1	98.4	100.2	101.9	100.3	97.4	96.2	93.6	86.5	74.3	110	110
Test 3	93.9	97.0	98.8	98.9	100.3	101.7	99.5	97.8	96.6	92.9	86.3	74.8	110	110
Mean	93.8	96.6	98.5	99.2	100.3	101.8	100.0	97.8	96.3	93.2	86.2	74.5		
Occluded														
Test 1	71.8	71.2	72.5	67.7	64.7	64.0	59.7	59.8	56.2	56.0	56.3	57.5	99	90
Test 2	73.2	70.8	72.2	68.9	64.7	65.1	65.2	61.2	57.1	54.3	55.3	57.4	100	91
Test 3	72.1	70.6	73.8	71.5	68.5	71.7	71.3	65.8	65.6	64.1	61.8	57.8	100	91
Mean	72.4	70.9	72.8	69.4	66.0	66.9	65.4	62.3	59.6	58.1	57.8	57.6		
Right Insertion Loss	**21.4**	**25.7**	**25.7**	**29.8**	**34.3**	**34.9**	**34.5**	**35.5**	**36.7**	**35.1**	**28.4**	**16.9**		
Insertion Loss	**21.5**	**25.2**	**25.9**	**30.3**	**36.3**	**39.6**	**38.9**	**38.2**	**36.1**	**34.8**	**29.0**	**20.5**		

Table C-36. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 6.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.0	91.2	87.4	89.2	89.9	89.6	92.5	93.7	93.9	94.4	97.2	94.6	97.2
Test 2	90.0	91.2	87.5	89.3	89.9	90.1	92.9	94.2	94.2	94.8	97.0	95.6	97.2
Test 3	87.9	91.2	87.6	90.1	90.7	93.4	91.7	92.5	93.2	94.7	96.9	96.2	97.7
Mean	89.3	91.2	87.5	89.6	90.2	91.0	92.4	93.5	93.8	94.6	97.1	95.5	97.4
Occluded													
Test 1	88.7	91.9	87.8	90.1	90.3	90.8	85.9	85.3	83.1	81.9	80.8	75.3	73.6
Test 2	85.4	88.7	84.7	87.5	88.1	89.4	85.9	84.9	82.2	81.3	79.7	74.4	74.2
Test 3	85.0	88.6	85.2	87.6	87.7	89.7	87.7	86.2	82.9	80.5	80.3	77.1	75.8
Mean	86.4	89.7	85.9	88.4	88.7	90.0	86.5	85.5	82.7	81.2	80.3	75.6	74.5
Left Insertion Loss	**2.9**	**1.4**	**1.6**	**1.2**	**1.5**	**1.1**	**5.8**	**8.0**	**11.1**	**13.4**	**16.8**	**19.8**	**22.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.8	91.2	86.5	88.8	90.3	89.2	90.0	92.8	93.5	92.8	93.0	93.9	94.1
Test 2	90.8	91.2	86.8	89.0	90.2	89.0	90.2	92.8	93.3	92.6	93.4	93.3	94.4
Test 3	88.8	91.3	87.1	89.8	90.8	90.2	90.0	92.2	92.1	92.5	94.2	94.2	95.0
Mean	90.1	91.2	86.8	89.2	90.4	89.5	90.1	92.6	93.0	92.7	93.5	93.8	94.5
Occluded													
Test 1	87.0	89.0	84.7	88.1	88.6	89.5	84.7	83.0	82.5	81.0	78.8	75.2	72.4
Test 2	86.4	88.7	84.4	88.4	88.9	89.6	85.2	83.6	82.4	80.9	78.4	74.6	71.4
Test 3	86.3	88.6	84.3	87.4	88.3	88.4	87.0	84.4	82.3	80.5	78.8	75.9	74.6
Mean	86.6	88.7	84.5	88.0	88.6	89.2	85.6	83.7	82.4	80.8	78.7	75.2	72.8
Right Insertion Loss	**3.6**	**2.5**	**2.3**	**1.2**	**1.9**	**0.3**	**4.5**	**8.9**	**10.5**	**11.9**	**14.8**	**18.6**	**21.7**
Insertion Loss	**3.2**	**2.0**	**2.0**	**1.2**	**1.7**	**0.7**	**5.2**	**8.5**	**10.8**	**12.6**	**15.8**	**19.2**	**22.3**

Table C-36. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 6.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.7	96.3	97.7	98.3	99.1	98.2	97.4	96.6	95.1	95.4	92.0	82.0	109	109
Test 2	94.0	96.4	98.1	98.4	98.8	98.7	96.8	95.5	95.2	95.1	91.3	81.8	109	109
Test 3	94.9	96.3	97.6	98.6	99.0	98.8	97.5	94.8	95.6	95.1	91.7	82.6	109	109
Mean	94.2	96.3	97.8	98.4	99.0	98.6	97.2	95.7	95.3	95.2	91.7	82.1		
Occluded														
Test 1	70.6	68.7	64.6	60.0	56.2	53.7	51.6	50.2	50.2	51.9	52.2	50.8	99	87
Test 2	68.1	67.5	65.8	61.3	57.7	56.7	56.0	51.7	51.9	48.5	47.9	50.3	97	87
Test 3	70.6	71.3	70.2	64.3	60.4	57.5	57.1	50.9	48.5	48.0	47.8	50.0	97	88
Mean	69.7	69.1	66.9	61.9	58.1	56.0	54.9	50.9	50.2	49.5	49.3	50.3		
Left Insertion Loss	**24.5**	**27.2**	**30.9**	**36.5**	**40.9**	**42.6**	**42.3**	**44.7**	**45.1**	**45.7**	**42.4**	**31.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.3	96.3	97.8	98.4	99.2	100.7	99.2	97.5	94.5	96.1	93.9	83.1	109	109
Test 2	93.4	95.6	96.5	97.4	98.7	100.1	98.0	97.1	93.5	96.2	93.3	83.4	109	109
Test 3	92.8	96.3	97.1	97.7	99.1	100.2	98.3	96.0	93.2	94.7	91.8	81.3	109	109
Mean	93.5	96.1	97.1	97.8	99.0	100.4	98.5	96.9	93.7	95.7	93.0	82.6		
Occluded														
Test 1	68.0	67.9	65.6	64.4	59.9	56.5	50.6	52.2	53.3	54.8	56.5	56.7	97	87
Test 2	66.1	65.7	64.4	62.9	58.3	55.2	50.1	49.4	50.4	52.0	54.2	56.8	97	87
Test 3	66.9	68.1	68.3	67.9	63.0	58.2	57.3	62.5	66.4	66.2	57.7	56.6	97	87
Mean	67.0	67.2	66.1	65.1	60.4	56.6	52.7	54.7	56.7	57.7	56.1	56.7		
Right Insertion Loss	**26.5**	**28.8**	**31.1**	**32.8**	**38.6**	**43.7**	**45.8**	**42.2**	**37.0**	**38.0**	**36.9**	**25.9**		
Insertion Loss	**25.5**	**28.0**	**31.0**	**34.6**	**39.7**	**43.2**	**44.1**	**43.4**	**41.0**	**41.9**	**39.6**	**28.8**		

Table C-37. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 7.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.0	91.5	87.5	89.9	90.2	91.2	90.9	94.0	94.2	94.2	95.1	97.0	97.5
Test 2	87.6	91.3	87.6	90.5	90.7	94.7	89.9	92.4	92.8	93.9	95.6	97.4	96.6
Test 3	87.7	91.4	87.7	90.5	90.7	94.8	90.2	92.7	92.9	94.0	95.3	97.8	96.8
Mean	88.4	91.4	87.6	90.3	90.6	93.5	90.3	93.0	93.3	94.1	95.4	97.4	96.9
Occluded													
Test 1	87.4	91.1	87.6	90.3	90.2	93.2	86.7	85.3	82.7	81.4	80.8	76.9	71.5
Test 2	86.8	90.6	86.5	88.9	89.1	92.0	87.2	86.6	83.3	81.5	81.0	76.6	72.3
Test 3	85.0	88.6	84.4	86.8	87.1	90.1	86.1	85.8	82.8	80.5	80.4	76.3	71.6
Mean	86.4	90.1	86.1	88.7	88.8	91.8	86.7	85.9	82.9	81.1	80.7	76.6	71.8
Left Insertion Loss	**2.0**	**1.3**	**1.5**	**1.6**	**1.7**	**1.8**	**3.7**	**7.1**	**10.3**	**12.9**	**14.6**	**20.8**	**25.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	91.2	92.2	86.7	89.0	91.9	87.6	90.0	91.9	92.5	93.5	96.4	94.3	95.8
Test 2	88.8	92.0	87.2	89.9	91.7	90.9	89.2	91.1	90.5	92.2	95.6	93.4	96.4
Test 3	88.9	92.1	87.2	89.9	91.7	90.7	89.4	91.1	90.4	92.0	95.7	94.3	96.7
Mean	89.6	92.1	87.0	89.6	91.8	89.7	89.5	91.4	91.1	92.6	95.9	94.0	96.3
Occluded													
Test 1	85.5	88.1	84.0	87.2	88.9	90.9	86.5	84.2	80.7	80.3	79.9	75.1	71.7
Test 2	85.5	88.3	83.8	87.1	88.8	89.9	87.7	86.4	81.6	80.3	80.6	74.6	72.1
Test 3	85.6	88.3	83.9	87.2	89.0	89.9	87.8	86.3	81.5	79.8	80.6	75.2	73.5
Mean	85.6	88.3	83.9	87.2	88.9	90.2	87.3	85.6	81.2	80.1	80.4	75.0	72.4
Right Insertion Loss	**4.1**	**3.8**	**3.2**	**2.4**	**2.9**	**-0.5**	**2.2**	**5.8**	**9.9**	**12.5**	**15.5**	**19.0**	**23.8**
Insertion Loss	**3.0**	**2.6**	**2.3**	**2.0**	**2.3**	**0.6**	**2.9**	**6.4**	**10.1**	**12.7**	**15.1**	**19.9**	**24.5**

Table C-37. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 7.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.7	95.4	98.0	99.5	99.9	102.0	100.4	96.2	95.2	95.0	93.6	85.1	110	110
Test 2	94.1	95.3	98.2	98.8	98.9	101.6	99.8	95.7	94.3	94.8	93.5	84.3	110	110
Test 3	93.6	95.4	97.8	99.1	98.9	101.1	98.6	95.1	94.9	95.0	93.3	84.5	110	109
Mean	93.8	95.4	98.0	99.1	99.2	101.6	99.6	95.7	94.8	94.9	93.5	84.6		
Occluded														
Test 1	63.8	65.4	63.5	56.9	58.3	60.5	53.2	46.0	46.2	48.0	49.0	51.4	99	88
Test 2	65.7	65.7	63.9	58.6	59.8	60.5	53.4	46.9	45.3	46.8	49.0	51.6	98	88
Test 3	66.6	66.8	65.0	58.2	59.2	61.2	53.3	47.2	45.1	46.3	48.7	51.5	97	87
Mean	65.4	65.9	64.1	57.9	59.1	60.7	53.3	46.7	45.5	47.0	48.9	51.5		
Left Insertion Loss	**28.4**	**29.4**	**33.9**	**41.2**	**40.1**	**40.9**	**46.3**	**49.0**	**49.3**	**47.9**	**44.5**	**33.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.9	96.6	97.2	98.0	98.7	100.7	98.8	93.7	94.5	96.5	93.7	83.3	109	109
Test 2	93.2	96.7	97.9	98.5	99.4	100.8	99.5	93.7	94.7	96.1	93.5	83.1	109	109
Test 3	93.5	96.7	97.5	98.1	99.3	101.0	99.0	93.8	94.3	96.0	93.6	83.3	109	109
Mean	93.2	96.7	97.6	98.2	99.1	100.8	99.1	93.7	94.5	96.2	93.6	83.2		
Occluded														
Test 1	65.3	61.9	61.2	61.4	59.1	56.3	51.0	46.4	48.6	51.6	54.5	57.1	97	86
Test 2	66.2	63.6	63.2	61.9	59.1	55.2	50.7	46.3	48.3	51.6	54.6	57.3	97	87
Test 3	67.0	63.1	63.1	61.6	59.6	54.6	50.0	46.0	48.6	51.4	54.5	57.3	97	87
Mean	66.2	62.8	62.5	61.6	59.3	55.4	50.6	46.2	48.5	51.5	54.5	57.2		
Right Insertion Loss	**27.0**	**33.8**	**35.1**	**36.6**	**39.9**	**45.5**	**48.5**	**47.5**	**46.0**	**44.7**	**39.0**	**26.0**		
Insertion Loss	**27.7**	**31.6**	**34.5**	**38.9**	**40.0**	**43.2**	**47.4**	**48.2**	**47.6**	**46.3**	**41.8**	**29.6**		

Table C-38. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 8.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.9	92.2	87.6	89.9	90.9	91.2	88.2	91.9	91.2	92.5	95.7	97.0	96.6
Test 2	88.5	91.9	87.7	90.0	90.6	92.2	88.5	92.0	92.0	93.3	96.1	96.4	96.9
Test 3	88.7	92.1	87.7	90.1	90.9	91.8	87.7	91.9	90.9	92.6	96.2	96.4	97.5
Mean	88.7	92.1	87.7	90.0	90.8	91.7	88.1	91.9	91.4	92.8	96.0	96.6	97.0
Occluded													
Test 1	91.2	92.5	88.2	90.2	92.8	89.5	91.8	90.7	85.5	84.0	84.9	79.7	77.6
Test 2	88.9	92.3	88.1	90.5	91.9	92.4	89.4	89.1	83.1	82.2	82.4	78.4	76.0
Test 3	89.0	92.3	88.4	90.5	91.7	92.4	89.9	89.4	83.9	82.8	83.6	79.9	77.5
Mean	89.7	92.4	88.2	90.4	92.2	91.4	90.4	89.7	84.1	83.0	83.7	79.3	77.0
Left Insertion Loss	**-1.0**	**-0.3**	**-0.5**	**-0.4**	**-1.4**	**0.3**	**-2.2**	**2.2**	**7.3**	**9.8**	**12.3**	**17.3**	**19.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.0	91.9	86.9	89.7	91.8	93.1	89.4	92.7	91.5	93.8	96.9	94.6	96.4
Test 2	88.8	91.5	87.0	89.7	91.3	93.5	88.9	92.6	91.5	93.8	96.1	94.6	97.3
Test 3	89.0	91.8	87.0	90.0	91.6	93.0	88.8	93.3	91.6	94.0	96.0	94.5	97.7
Mean	88.9	91.7	87.0	89.8	91.5	93.2	89.0	92.9	91.5	93.9	96.3	94.6	97.1
Occluded													
Test 1	88.1	88.5	83.2	85.6	88.5	87.7	87.8	85.5	81.9	82.9	83.0	77.1	73.5
Test 2	86.0	88.5	83.5	86.5	88.6	89.8	86.6	86.4	81.2	81.8	81.5	77.3	75.7
Test 3	86.1	88.6	83.8	86.3	88.5	89.3	87.6	87.0	81.7	81.7	82.2	77.8	76.1
Mean	86.7	88.5	83.5	86.1	88.5	88.9	87.3	86.3	81.6	82.2	82.3	77.4	75.1
Right Insertion Loss	**2.2**	**3.2**	**3.5**	**3.7**	**3.0**	**4.3**	**1.7**	**6.6**	**9.9**	**11.7**	**14.1**	**17.2**	**22.1**
Insertion Loss	**0.6**	**1.4**	**1.5**	**1.6**	**0.8**	**2.3**	**-0.3**	**4.4**	**8.6**	**10.8**	**13.2**	**17.2**	**21.0**

Table C-38. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 8.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.5	94.8	97.0	99.2	98.7	100.5	97.6	94.3	93.7	92.9	90.1	80.6	109	109
Test 2	93.4	95.9	97.3	98.3	98.6	100.3	98.2	94.6	93.4	93.5	90.0	80.0	109	109
Test 3	93.7	95.9	97.0	98.2	98.1	100.5	97.4	93.7	93.1	92.8	90.2	80.5	109	108
Mean	93.2	95.5	97.1	98.6	98.5	100.4	97.7	94.2	93.4	93.1	90.1	80.4		
Occluded														
Test 1	73.4	70.4	69.4	64.8	57.2	59.8	56.9	58.4	57.9	60.5	57.0	51.7	101	91
Test 2	72.7	68.7	66.8	63.5	56.2	57.4	55.8	57.8	60.3	62.6	57.3	51.7	100	90
Test 3	73.3	71.5	69.6	65.7	59.3	59.4	57.0	61.1	61.7	62.1	58.4	52.8	100	90
Mean	73.1	70.2	68.6	64.7	57.5	58.9	56.6	59.1	60.0	61.7	57.6	52.1		
Left Insertion Loss	**20.1**	**25.3**	**28.5**	**33.9**	**40.9**	**41.6**	**41.1**	**35.1**	**33.4**	**31.4**	**32.5**	**28.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	96.6	98.5	98.2	100.0	101.0	99.1	95.0	93.4	93.4	93.0	83.5	109	109
Test 2	94.2	96.9	99.5	99.1	99.2	100.8	99.7	95.1	94.1	94.6	92.9	82.8	110	110
Test 3	94.0	96.9	99.3	99.1	99.0	100.8	99.3	94.9	93.9	94.7	93.2	82.4	110	109
Mean	94.0	96.8	99.1	98.8	99.4	100.9	99.3	95.0	93.8	94.2	93.0	82.9		
Occluded														
Test 1	69.5	71.0	69.8	63.2	59.2	55.3	50.5	47.1	50.1	52.8	55.3	57.5	97	88
Test 2	70.8	69.6	68.9	62.8	59.2	55.4	51.1	49.3	52.6	55.8	56.0	57.7	97	88
Test 3	71.6	70.8	71.6	65.3	61.0	57.8	55.4	55.3	57.5	58.5	57.2	57.8	97	89
Mean	70.6	70.5	70.1	63.8	59.8	56.2	52.3	50.6	53.4	55.7	56.2	57.7		
Right Insertion Loss	**23.4**	**26.3**	**29.0**	**35.1**	**39.6**	**44.7**	**47.0**	**44.4**	**40.4**	**38.5**	**36.9**	**25.2**		
Insertion Loss	**21.7**	**25.8**	**28.8**	**34.5**	**40.3**	**43.1**	**44.1**	**39.8**	**36.9**	**35.0**	**34.7**	**26.8**		

Table C-39. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 9.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.3	91.2	87.5	90.4	90.6	94.6	89.2	92.7	92.2	93.8	94.0	95.3	94.0
Test 2	89.5	91.2	87.2	89.7	90.1	91.1	90.2	94.0	94.2	95.2	94.3	95.7	93.4
Test 3	87.3	91.2	87.7	90.5	90.7	94.7	89.4	92.5	92.0	93.5	94.6	95.7	93.2
Mean	88.0	91.2	87.5	90.2	90.4	93.5	89.6	93.1	92.8	94.2	94.3	95.6	93.5
Occluded													
Test 1	90.9	93.0	89.5	92.9	94.9	94.6	93.2	92.9	89.2	86.8	86.2	81.9	80.0
Test 2	90.9	93.0	89.5	92.9	95.2	95.0	93.7	93.3	89.5	86.7	86.9	82.2	80.2
Test 3	88.8	93.0	90.0	93.7	95.4	98.7	92.2	90.8	86.5	84.5	83.9	82.1	80.7
Mean	90.2	93.0	89.7	93.2	95.1	96.1	93.1	92.3	88.4	86.0	85.6	82.1	80.3
Left Insertion Loss	**-2.2**	**-1.8**	**-2.2**	**-3.0**	**-4.7**	**-2.6**	**-3.5**	**0.8**	**4.4**	**8.2**	**8.7**	**13.5**	**13.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.4	91.7	87.2	89.8	91.7	92.8	89.4	92.9	90.9	93.2	94.6	94.2	96.4
Test 2	90.7	91.7	86.7	89.1	91.6	91.1	89.5	93.6	92.5	93.8	93.8	94.2	95.6
Test 3	88.3	91.5	87.3	89.9	91.6	93.3	89.1	92.9	91.2	93.6	94.6	95.4	96.3
Mean	89.1	91.7	87.1	89.6	91.6	92.4	89.3	93.1	91.5	93.5	94.4	94.6	96.1
Occluded													
Test 1	91.6	93.6	89.8	92.9	94.6	94.7	91.8	87.5	84.9	87.4	84.0	76.4	75.2
Test 2	91.7	93.6	89.6	92.6	94.6	94.2	91.1	86.7	84.1	87.0	83.6	77.4	75.4
Test 3	89.3	93.3	90.3	93.8	95.7	99.1	93.1	89.6	85.2	87.3	85.6	80.0	77.1
Mean	90.9	93.5	89.9	93.1	94.9	96.0	92.0	87.9	84.8	87.2	84.4	77.9	75.9
Right Insertion Loss	**-1.8**	**-1.9**	**-2.8**	**-3.5**	**-3.3**	**-3.6**	**-2.7**	**5.2**	**6.8**	**6.3**	**10.0**	**16.7**	**20.2**
Insertion Loss	**-2.0**	**-1.8**	**-2.5**	**-3.2**	**-4.0**	**-3.1**	**-3.1**	**3.0**	**5.6**	**7.2**	**9.3**	**15.1**	**16.7**

Table C-39. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 9.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.5	95.6	97.4	99.8	100.4	101.8	99.1	96.8	95.0	91.5	90.3	80.6	109	110
Test 2	94.0	95.3	96.9	99.3	100.9	102.4	99.3	97.1	95.5	91.4	90.3	80.2	110	110
Test 3	94.1	95.6	97.0	100.0	100.3	102.1	98.8	96.8	96.0	91.4	90.2	79.7	110	110
Mean	94.2	95.5	97.1	99.7	100.5	102.1	99.1	96.9	95.5	91.4	90.3	80.2		
Occluded														
Test 1	71.5	67.6	66.5	61.0	57.8	58.7	57.1	58.3	57.6	55.2	55.0	51.9	103	93
Test 2	72.2	67.2	66.3	61.1	58.0	60.1	58.4	59.0	54.4	51.3	50.6	51.4	103	93
Test 3	70.2	68.0	66.1	62.6	57.8	58.9	56.8	57.3	51.5	51.5	50.8	51.4	103	92
Mean	71.3	67.6	66.3	61.6	57.9	59.3	57.4	58.2	54.5	52.7	52.1	51.6		
Left Insertion Loss	**22.9**	**27.9**	**30.8**	**38.1**	**42.6**	**42.8**	**41.6**	**38.7**	**41.0**	**38.7**	**38.2**	**28.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.6	96.9	97.0	99.0	99.5	101.4	101.1	98.2	96.9	92.6	92.1	82.4	110	110
Test 2	93.4	97.1	97.5	99.4	100.0	101.6	100.2	98.3	96.8	92.8	91.9	81.8	110	110
Test 3	93.0	97.0	97.6	99.2	99.7	102.3	100.8	98.6	96.5	92.7	92.2	82.5	110	110
Mean	93.3	97.0	97.4	99.2	99.8	101.8	100.7	98.3	96.7	92.7	92.1	82.2		
Occluded														
Test 1	69.0	64.7	65.2	63.6	59.5	59.2	56.5	52.1	50.6	51.9	54.8	57.7	102	91
Test 2	68.6	64.1	64.9	64.0	61.1	59.4	58.9	56.4	54.0	52.2	54.9	57.6	102	91
Test 3	69.0	64.7	63.7	63.1	62.5	61.8	59.5	59.6	58.3	52.3	54.9	57.6	104	93
Mean	68.9	64.5	64.6	63.6	61.0	60.1	58.3	56.0	54.3	52.1	54.9	57.6		
Right Insertion Loss	**24.5**	**32.5**	**32.8**	**35.7**	**38.7**	**41.6**	**42.5**	**42.3**	**42.4**	**40.6**	**37.2**	**24.6**		
Insertion Loss	**23.7**	**30.2**	**31.8**	**36.9**	**40.7**	**42.2**	**42.0**	**40.5**	**41.7**	**39.7**	**37.7**	**26.6**		

Table C-40. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 10.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	89.9	91.5	87.2	89.7	90.3	91.1	90.7	95.0	94.8	95.2	95.9	96.2	95.4
Test 2	88.1	91.8	87.8	90.5	90.9	94.3	88.6	93.4	93.0	94.2	95.3	95.5	96.3
Test 3	88.2	91.8	87.6	90.4	90.9	94.2	88.9	93.6	93.2	94.2	96.0	95.9	96.8
Mean	88.7	91.7	87.5	90.2	90.7	93.2	89.4	94.0	93.7	94.5	95.7	95.9	96.2
Occluded													
Test 1	88.5	92.0	88.7	92.3	93.8	95.6	96.6	96.1	91.7	88.7	90.1	85.9	87.0
Test 2	88.9	92.5	89.0	93.0	94.9	96.3	94.8	92.9	88.8	88.1	91.5	86.6	87.1
Test 3	88.7	92.3	89.0	92.7	94.4	96.4	96.3	95.2	90.9	88.1	90.7	86.0	86.4
Mean	88.7	92.3	88.9	92.7	94.4	96.1	95.9	94.7	90.4	88.3	90.7	86.2	86.8
Left Insertion Loss	**0.0**	**-0.6**	**-1.4**	**-2.4**	**-3.7**	**-2.9**	**-6.5**	**-0.7**	**3.2**	**6.2**	**5.0**	**9.7**	**9.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	90.8	91.7	86.6	89.3	91.5	90.5	90.0	92.8	92.5	93.4	94.0	95.4	95.7
Test 2	88.9	91.9	87.2	90.3	91.8	91.6	89.2	92.6	90.6	93.4	96.0	94.8	96.6
Test 3	89.0	91.9	87.0	90.0	91.8	91.6	89.6	92.6	90.8	93.8	96.4	94.3	96.2
Mean	89.6	91.8	86.9	89.9	91.7	91.2	89.6	92.7	91.3	93.5	95.5	94.8	96.2
Occluded													
Test 1	89.4	92.5	88.9	92.8	94.3	95.1	96.7	95.1	91.9	90.4	90.0	87.9	85.1
Test 2	89.9	93.2	89.7	93.9	96.0	96.8	95.9	92.2	89.5	89.6	88.1	86.6	82.8
Test 3	89.4	92.7	89.3	93.1	94.9	96.1	95.9	92.7	89.9	89.0	87.4	86.7	83.5
Mean	89.6	92.8	89.3	93.3	95.1	96.0	96.2	93.4	90.4	89.7	88.5	87.1	83.8
Right Insertion Loss	**0.0**	**-0.9**	**-2.4**	**-3.4**	**-3.4**	**-4.8**	**-6.5**	**-0.7**	**0.9**	**3.9**	**7.0**	**7.8**	**12.4**
Insertion Loss	**0.0**	**-0.7**	**-1.9**	**-2.9**	**-3.5**	**-3.8**	**-6.5**	**-0.7**	**2.1**	**5.0**	**6.0**	**8.7**	**10.8**

Table C-40. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using normal-fitting instructions – Subject 10.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.7	94.9	98.3	101.0	101.5	102.7	99.7	96.3	92.7	91.4	91.3	81.7	110	111
Test 2	94.5	95.2	96.6	99.4	100.2	101.8	99.1	95.5	92.9	93.3	91.0	82.2	109	110
Test 3	95.0	96.0	97.2	99.7	100.5	101.9	99.3	94.3	92.7	93.5	91.8	82.3	110	110
Mean	94.7	95.4	97.4	100.0	100.7	102.1	99.4	95.4	92.8	92.7	91.4	82.0		
Occluded														
Test 1	79.6	76.0	73.8	71.8	71.1	73.9	78.7	80.7	75.5	78.8	77.3	61.1	104	97
Test 2	81.4	79.0	79.3	80.6	79.0	82.3	82.2	77.2	72.4	77.3	74.9	59.7	104	97
Test 3	78.5	73.6	73.7	72.7	68.8	69.2	69.9	75.8	71.3	74.7	72.1	59.2	104	96
Mean	79.8	76.2	75.6	75.0	73.0	75.1	76.9	77.9	73.0	76.9	74.8	60.0		
Left Insertion Loss	**14.9**	**19.2**	**21.8**	**25.0**	**27.7**	**27.0**	**22.5**	**17.5**	**19.7**	**15.8**	**16.6**	**22.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.6	96.1	98.0	101.6	102.2	105.4	101.6	100.1	93.4	90.4	88.6	81.4	111	112
Test 2	94.3	97.6	98.4	101.3	101.8	104.4	100.9	98.9	92.5	90.5	90.1	81.1	111	111
Test 3	94.3	97.4	98.1	101.0	101.9	104.3	102.2	99.0	91.4	90.7	91.6	81.1	111	112
Mean	94.1	97.0	98.2	101.3	102.0	104.7	101.5	99.3	92.4	90.5	90.1	81.2		
Occluded														
Test 1	76.7	74.2	70.9	66.0	64.4	64.5	63.8	67.4	65.1	62.6	65.5	59.2	104	96
Test 2	73.5	69.5	69.1	66.3	63.8	62.2	59.1	62.6	60.8	57.6	57.4	57.1	104	95
Test 3	75.1	73.2	72.1	66.1	63.7	66.3	67.3	68.2	63.4	62.9	66.4	58.0	103	95
Mean	75.1	72.3	70.7	66.1	64.0	64.3	63.4	66.1	63.1	61.0	63.1	58.1		
Right Insertion Loss	**19.0**	**24.7**	**27.5**	**35.2**	**38.0**	**40.4**	**38.1**	**33.3**	**29.3**	**29.5**	**27.0**	**23.1**		
Insertion Loss	**16.9**	**22.0**	**24.6**	**30.1**	**32.9**	**33.7**	**30.3**	**25.4**	**24.5**	**22.6**	**21.8**	**22.6**		

Table C-41. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	89.1	85.1	87.7	88.7	90.3	87.1	88.8	90.1	91.8	92.9	93.9	95.2
Test 2	85.7	89.2	85.1	87.8	88.7	90.7	87.2	89.4	90.6	91.5	94.2	94.5	94.2
Test 3	85.6	89.1	85.1	87.9	88.7	90.7	87.1	89.0	90.7	91.7	93.9	93.8	94.2
Mean	85.6	89.1	85.1	87.8	88.7	90.6	87.1	89.1	90.5	91.6	93.7	94.0	94.6
Occluded													
Test 1	87.4	91.3	88.3	92.7	96.1	97.3	90.1	89.0	83.3	79.0	78.8	75.7	72.8
Test 2	89.5	91.4	88.1	91.8	95.9	93.2	91.1	89.5	84.4	79.7	80.1	74.9	73.6
Test 3	89.5	91.4	88.0	91.7	96.0	93.0	91.0	89.4	84.2	79.5	80.2	75.3	74.1
Mean	88.8	91.4	88.1	92.1	96.0	94.5	90.8	89.3	84.0	79.4	79.7	75.3	73.5
Left Insertion Loss	**-3.2**	**-2.2**	**-3.1**	**-4.3**	**-7.3**	**-3.9**	**-3.6**	**-0.2**	**6.5**	**12.2**	**14.0**	**18.7**	**21.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.7	88.6	84.1	87.0	89.1	91.5	87.3	92.0	90.0	92.6	94.2	95.2	95.9
Test 2	85.9	88.9	84.3	87.4	89.2	90.9	87.5	91.7	90.0	92.9	94.2	93.4	95.2
Test 3	85.8	88.8	84.3	87.4	89.0	91.0	87.2	91.8	90.0	92.7	94.1	94.2	95.6
Mean	85.8	88.8	84.2	87.3	89.1	91.2	87.3	91.8	90.0	92.8	94.2	94.3	95.6
Occluded													
Test 1	87.8	91.3	88.1	93.2	96.1	96.5	89.7	88.6	81.5	79.1	77.3	73.1	71.4
Test 2	89.9	91.3	87.6	91.7	95.9	93.7	91.1	88.7	82.4	81.1	79.9	73.5	71.4
Test 3	89.6	90.8	86.7	90.5	95.1	94.5	93.3	90.7	84.3	83.4	81.0	74.7	72.8
Mean	89.1	91.2	87.5	91.8	95.7	94.9	91.4	89.3	82.7	81.2	79.4	73.8	71.9
Right Insertion Loss	**-3.3**	**-2.4**	**-3.3**	**-4.5**	**-6.6**	**-3.7**	**-4.1**	**2.5**	**7.3**	**11.6**	**14.8**	**20.5**	**23.7**
Insertion Loss	**-3.2**	**-2.3**	**-3.2**	**-4.4**	**-7.0**	**-3.8**	**-3.8**	**1.2**	**6.9**	**11.9**	**14.4**	**19.6**	**22.4**

Table C-41. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.1	95.2	97.1	98.2	98.8	102.4	99.6	95.8	93.9	91.8	90.3	79.0	109	109
Test 2	92.6	95.4	96.2	97.6	99.0	102.0	98.7	94.4	94.3	92.7	90.6	79.8	109	109
Test 3	92.6	95.4	96.1	97.1	99.2	102.6	99.3	93.6	93.6	93.1	90.4	80.2	109	109
Mean	92.8	95.4	96.5	97.6	99.0	102.3	99.2	94.6	93.9	92.5	90.4	79.7		
Occluded														
Test 1	66.8	61.3	61.3	61.3	54.7	52.6	51.0	47.4	43.6	43.8	45.5	47.7	102	90
Test 2	67.1	63.0	62.3	62.4	56.1	53.0	51.7	47.3	43.4	45.6	46.3	47.4	101	91
Test 3	67.2	63.0	62.2	62.4	57.0	52.9	52.0	48.5	44.5	46.4	46.1	47.3	101	91
Mean	67.0	62.5	61.9	62.0	55.9	52.8	51.6	47.7	43.8	45.3	46.0	47.4		
Left Insertion Loss	**25.7**	**32.9**	**34.5**	**35.6**	**43.1**	**49.5**	**47.6**	**46.9**	**50.1**	**47.2**	**44.4**	**32.2**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	95.7	97.3	98.5	99.5	102.1	101.2	98.4	97.2	96.0	91.6	82.8	110	110
Test 2	94.1	95.0	96.5	98.0	99.0	101.1	101.2	98.0	97.6	96.1	92.2	83.5	109	110
Test 3	94.1	94.3	96.4	98.5	99.8	101.7	101.2	97.6	98.0	95.6	91.6	83.2	110	110
Mean	93.7	95.0	96.7	98.3	99.4	101.6	101.2	98.0	97.6	95.9	91.8	83.2		
Occluded														
Test 1	62.2	56.8	53.8	55.0	53.6	58.8	52.0	49.3	49.4	51.0	53.6	56.2	102	90
Test 2	62.5	58.7	58.3	58.1	55.8	57.9	53.2	53.5	49.6	51.1	53.6	56.1	101	90
Test 3	62.0	59.0	60.5	61.2	57.8	60.6	54.2	52.2	50.4	52.1	53.9	56.0	101	91
Mean	62.2	58.2	57.5	58.1	55.7	59.1	53.1	51.7	49.8	51.4	53.7	56.1		
Right Insertion Loss	**31.5**	**36.8**	**39.2**	**40.2**	**43.7**	**42.5**	**48.1**	**46.3**	**47.8**	**44.5**	**38.1**	**27.1**		
Insertion Loss	**28.6**	**34.9**	**36.9**	**37.9**	**43.4**	**46.0**	**47.8**	**46.6**	**49.0**	**45.9**	**41.2**	**27.9**		

Table C-42. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.9	88.7	85.0	87.9	88.4	91.8	87.2	89.4	90.7	92.1	94.5	93.4	93.2
Test 2	85.1	88.9	85.1	88.0	88.6	92.0	87.3	89.9	91.0	92.1	94.9	93.8	93.4
Test 3	85.4	89.1	85.1	88.0	88.8	91.7	86.5	90.2	90.6	92.0	95.0	93.7	92.8
Mean	85.1	88.9	85.1	88.0	88.6	91.9	87.0	89.8	90.8	92.0	94.8	93.6	93.1
Occluded*													
Test 1	86.7	91.0	88.4	90.9	89.3	91.6	84.6	80.7	76.3	73.9	75.3	70.2	67.9
Test 2	86.7	91.3	88.9	91.2	89.2	91.1	84.4	79.9	76.3	74.8	77.5	72.7	69.3
Test 3	88.6	91.0	88.3	91.3	90.9	89.3	86.4	82.3	79.4	77.3	78.5	73.0	67.6
Mean	87.3	91.1	88.5	91.1	89.8	90.7	85.1	81.0	77.3	75.3	77.1	72.0	68.3
Left Insertion Loss	**-2.2**	**-2.2**	**-3.5**	**-3.2**	**-1.2**	**1.2**	**1.8**	**8.8**	**13.4**	**16.7**	**17.7**	**21.7**	**24.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.8	84.6	87.4	89.1	90.9	87.2	91.6	89.8	92.0	93.8	93.2	94.2
Test 2	85.8	89.1	84.6	87.6	89.3	91.1	86.9	91.8	89.8	92.1	93.7	93.5	95.0
Test 3	86.0	89.2	84.7	87.9	89.5	90.8	86.4	92.0	90.0	92.0	94.1	93.5	95.0
Mean	85.8	89.0	84.6	87.6	89.3	90.9	86.8	91.8	89.9	92.0	93.9	93.4	94.7
Occluded*													
Test 1	86.6	90.1	86.7	90.6	94.5	97.8	97.2	93.7	85.7	84.5	82.3	77.9	73.9
Test 2	86.3	89.9	86.6	90.5	94.3	97.9	97.3	93.7	85.4	84.6	81.8	77.5	73.3
Test 3	88.8	90.3	86.4	90.2	94.5	95.5	97.9	93.8	86.1	86.5	81.9	76.1	73.4
Mean	87.2	90.1	86.5	90.4	94.4	97.1	97.5	93.7	85.7	85.2	82.0	77.2	73.5
Right Insertion Loss	**-1.4**	**-1.1**	**-1.9**	**-2.8**	**-5.1**	**-6.1**	**-10.7**	**-1.9**	**4.1**	**6.8**	**11.8**	**16.3**	**21.2**
Insertion Loss	**-1.8**	**-1.6**	**-2.7**	**-3.0**	**-3.2**	**-2.5**	**-4.4**	**3.5**	**8.8**	**11.7**	**14.8**	**19.0**	**23.0**

Table C-42. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.5	93.9	96.7	97.4	97.5	100.2	97.5	97.8	94.1	90.3	91.0	80.1	108	108
Test 2	92.0	93.6	96.3	97.4	98.1	100.5	98.0	98.2	92.4	91.5	92.1	80.1	108	108
Test 3	92.3	93.7	96.0	98.1	97.9	100.6	98.1	98.2	93.4	90.5	92.0	80.0	108	108
Mean	92.3	93.7	96.4	97.6	97.8	100.4	97.9	98.1	93.3	90.7	91.7	80.1		
Occluded														
Test 1	60.4	61.2	66.4	65.0	64.3	67.5	66.4	61.2	58.2	55.1	56.8	48.6	98	85
Test 2	62.3	56.0	60.8	63.2	57.0	53.7	50.0	45.5	51.1	47.3	47.2	49.2	98	85
Test 3	59.3	58.8	65.4	63.9	61.4	64.4	59.6	57.1	58.4	54.1	59.8	53.2	98	86
Mean	60.7	58.7	64.2	64.0	60.9	61.9	58.7	54.6	55.9	52.2	54.6	50.3		
Left Insertion Loss	**31.6**	**35.1**	**32.2**	**33.6**	**36.9**	**38.6**	**39.2**	**43.5**	**37.4**	**38.6**	**37.1**	**29.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	95.3	98.1	100.0	100.4	101.7	101.0	99.3	98.2	90.6	88.5	81.0	110	110
Test 2	93.5	94.8	98.4	99.4	100.1	101.7	101.1	99.4	99.3	91.0	87.9	81.6	110	110
Test 3	93.1	94.7	97.4	99.7	100.0	102.3	101.5	99.6	99.1	91.6	89.3	80.4	110	110
Mean	93.1	94.9	98.0	99.7	100.2	101.9	101.2	99.4	98.9	91.1	88.6	81.0		
Occluded														
Test 1	68.5	65.5	68.9	63.8	62.3	67.0	66.4	70.7	78.5	69.8	63.8	57.2	103	94
Test 2	69.0	66.3	68.9	64.7	63.7	70.8	68.8	73.5	81.2	74.1	65.8	58.9	103	94
Test 3	70.9	68.9	70.1	64.5	63.8	65.0	68.0	71.7	80.9	71.7	60.5	57.1	103	94
Mean	69.5	66.9	69.3	64.3	63.3	67.6	67.8	72.0	80.2	71.9	63.4	57.8		
Right Insertion Loss	**23.7**	**28.0**	**28.7**	**35.3**	**36.9**	**34.3**	**33.4**	**27.5**	**18.7**	**19.2**	**25.2**	**23.2**		
Insertion Loss	**27.6**	**31.5**	**30.4**	**34.5**	**36.9**	**36.4**	**36.3**	**35.5**	**28.0**	**28.9**	**31.2**	**26.5**		

Table C-43. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.5	88.1	83.7	86.2	87.6	88.8	86.2	87.5	88.5	90.8	92.4	94.1	94.3
Test 2	87.0	88.5	83.3	85.1	87.7	83.2	86.9	87.7	89.4	92.4	93.8	93.3	94.1
Test 3	84.6	88.2	83.8	86.1	87.7	87.4	86.5	87.8	87.7	90.9	93.1	94.7	94.3
Mean	85.4	88.3	83.6	85.8	87.7	86.5	86.6	87.7	88.5	91.4	93.1	94.0	94.2
Occluded													
Test 1	86.2	90.5	87.5	91.3	92.6	92.5	85.8	83.7	77.6	76.5	75.2	74.4	70.4
Test 2	86.1	90.4	87.5	90.8	91.5	92.1	86.0	83.4	77.6	76.7	76.0	75.5	71.1
Test 3	86.3	90.5	87.2	90.7	91.7	92.0	87.0	84.8	78.9	78.6	77.3	76.7	72.5
Mean	86.2	90.5	87.4	90.9	91.9	92.2	86.3	83.9	78.0	77.3	76.2	75.5	71.3
Left Insertion Loss	**-0.8**	**-2.2**	**-3.8**	**-5.1**	**-4.3**	**-5.7**	**0.2**	**3.7**	**10.5**	**14.1**	**16.9**	**18.5**	**22.9**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.5	87.6	83.3	86.4	88.1	91.1	86.3	92.2	90.4	92.2	95.5	94.7	96.8
Test 2	86.9	88.0	82.8	85.1	88.4	91.1	88.0	92.7	91.8	93.2	94.8	93.4	95.2
Test 3	84.8	87.8	83.5	86.1	88.3	91.6	87.2	92.1	90.7	92.7	94.7	93.0	95.9
Mean	85.4	87.8	83.2	85.9	88.3	91.2	87.2	92.3	91.0	92.7	95.0	93.7	96.0
Occluded													
Test 1	85.8	89.7	86.6	91.1	94.2	97.9	95.0	92.8	86.3	85.2	82.7	75.1	71.5
Test 2	86.0	89.7	86.7	90.5	92.4	94.5	87.9	85.1	78.7	78.8	77.3	70.2	68.4
Test 3	86.3	90.1	87.0	91.2	92.9	95.3	88.5	85.9	79.5	79.7	77.3	71.1	69.2
Mean	86.1	89.8	86.7	90.9	93.2	95.9	90.5	87.9	81.5	81.3	79.1	72.1	69.7
Right Insertion Loss	**-0.7**	**-2.0**	**-3.5**	**-5.0**	**-4.9**	**-4.6**	**-3.3**	**4.4**	**9.5**	**11.4**	**15.9**	**21.6**	**26.3**
Insertion Loss	**-0.7**	**-2.1**	**-3.7**	**-5.1**	**-4.6**	**-5.2**	**-1.5**	**4.1**	**10.0**	**12.8**	**16.4**	**20.0**	**24.6**

Table C-43. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 13.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	92.3	94.5	96.3	98.6	100.4	102.7	99.0	93.8	91.1	89.4	90.3	79.9	109	109
Test 2	90.5	94.8	96.2	98.5	99.3	101.8	96.8	91.9	90.7	91.4	88.8	80.0	108	109
Test 3	91.2	94.7	96.9	98.0	99.3	102.0	96.9	92.0	91.5	91.6	89.2	79.6	108	108
Mean	91.3	94.7	96.5	98.4	99.7	102.2	97.6	92.6	91.1	90.8	89.4	79.8		
Occluded														
Test 1	65.0	64.4	63.7	62.2	59.9	59.1	52.1	45.9	44.8	45.2	47.0	49.2	99	87
Test 2	64.7	64.3	64.8	62.0	60.0	58.5	49.4	46.1	46.1	45.6	47.4	49.4	99	86
Test 3	65.7	65.1	64.8	62.2	59.1	58.4	51.7	46.7	44.7	45.5	47.0	48.7	99	87
Mean	65.1	64.6	64.4	62.1	59.7	58.6	51.1	46.2	45.2	45.4	47.1	49.1		
Left Insertion Loss	**26.2**	**30.1**	**32.0**	**36.2**	**40.0**	**43.5**	**46.5**	**46.3**	**45.9**	**45.4**	**42.3**	**30.7**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.8	96.2	97.3	99.1	101.3	103.1	99.8	95.3	94.2	92.2	92.5	82.3	110	110
Test 2	92.3	95.7	97.5	98.0	101.5	102.4	100.4	96.2	93.4	92.0	91.7	82.0	109	110
Test 3	93.3	95.4	97.5	98.0	101.5	103.1	100.6	95.6	93.4	92.0	90.3	81.6	110	110
Mean	93.1	95.7	97.5	98.4	101.4	102.9	100.3	95.7	93.7	92.1	91.5	81.9		
Occluded														
Test 1	63.0	59.7	65.7	63.4	60.5	62.2	62.8	56.4	56.1	52.5	54.1	56.6	103	93
Test 2	61.7	60.1	63.7	61.1	58.2	57.2	56.4	50.2	50.7	51.7	54.3	56.8	99	88
Test 3	58.8	57.4	65.4	62.8	60.6	56.7	55.2	51.8	51.1	51.4	53.8	56.4	100	89
Mean	61.2	59.1	64.9	62.4	59.7	58.7	58.1	52.8	52.6	51.8	54.1	56.6		
Right Insertion Loss	**32.0**	**36.7**	**32.5**	**35.9**	**41.7**	**44.2**	**42.1**	**42.9**	**41.0**	**40.2**	**37.4**	**25.3**		
Insertion Loss	**29.1**	**33.4**	**32.3**	**36.1**	**40.8**	**43.8**	**44.3**	**44.6**	**43.5**	**42.8**	**39.8**	**28.0**		

Table C-44. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	88.7	84.5	87.1	88.3	90.2	86.3	90.0	89.9	91.2	93.8	93.2	93.8
Test 2	85.3	88.8	84.5	87.2	88.2	89.9	86.8	89.7	89.6	91.3	93.5	93.3	94.1
Test 3	85.5	89.0	84.7	87.3	88.3	89.9	87.0	89.8	89.5	91.2	93.7	94.2	94.5
Mean	85.3	88.8	84.6	87.2	88.3	90.0	86.7	89.8	89.7	91.2	93.6	93.6	94.1
Occluded													
Test 1	85.9	89.8	86.7	90.8	94.3	97.1	95.6	94.3	87.5	80.5	80.3	75.0	72.4
Test 2	86.3	90.1	86.9	91.1	94.8	96.9	95.5	93.2	85.8	79.8	80.1	74.5	71.5
Test 3	88.6	90.2	86.6	90.3	94.7	93.3	95.6	93.1	87.4	80.2	81.4	74.6	70.5
Mean	87.0	90.0	86.7	90.8	94.6	95.8	95.5	93.5	86.9	80.1	80.6	74.7	71.5
Left Insertion Loss	**-1.7**	**-1.2**	**-2.2**	**-3.6**	**-6.3**	**-5.8**	**-8.8**	**-3.7**	**2.8**	**11.1**	**13.0**	**18.8**	**22.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.4	84.0	87.3	88.8	90.8	86.4	92.7	90.2	92.3	94.4	93.2	94.1
Test 2	85.6	88.4	84.0	87.3	88.6	91.1	86.5	93.0	90.6	92.5	94.4	93.4	94.5
Test 3	85.6	88.6	84.0	87.1	88.9	91.0	87.3	92.9	90.5	92.9	94.8	93.1	94.4
Mean	85.6	88.5	84.0	87.2	88.8	91.0	86.7	92.9	90.4	92.6	94.5	93.2	94.3
Occluded													
Test 1	86.0	89.6	86.4	90.7	93.7	96.8	95.3	93.2	88.8	86.7	84.8	78.2	74.5
Test 2	86.4	89.8	86.5	90.8	93.9	96.4	94.9	92.4	89.5	88.6	86.9	80.1	75.3
Test 3	88.8	90.1	86.3	90.0	94.1	94.0	95.8	92.4	90.5	89.8	86.6	79.9	74.0
Mean	87.1	89.8	86.4	90.5	93.9	95.7	95.4	92.6	89.6	88.4	86.1	79.4	74.6
Right Insertion Loss	**-1.5**	**-1.4**	**-2.4**	**-3.3**	**-5.1**	**-4.8**	**-8.6**	**0.2**	**0.8**	**4.2**	**8.4**	**13.9**	**19.7**
Insertion Loss	**-1.6**	**-1.3**	**-2.3**	**-3.4**	**-5.7**	**-5.3**	**-8.7**	**-1.7**	**1.8**	**7.6**	**10.7**	**16.3**	**21.2**

Table C-44. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.5	94.7	96.7	97.2	99.6	101.0	99.0	95.8	92.4	92.8	86.6	77.6	108	109
Test 2	91.7	94.5	96.6	97.6	99.7	101.3	98.6	95.5	92.4	92.4	86.6	77.6	108	109
Test 3	91.3	94.0	96.6	97.6	98.9	100.9	98.7	95.2	93.6	92.7	87.9	76.9	108	108
Mean	91.5	94.4	96.6	97.5	99.4	101.1	98.8	95.5	92.8	92.7	87.0	77.4		
Occluded														
Test 1	68.9	67.8	67.6	63.9	62.8	62.2	59.1	54.1	50.8	47.0	46.2	48.2	103	93
Test 2	67.6	65.1	64.3	61.0	59.3	57.8	56.3	49.1	48.4	46.7	47.6	48.2	102	93
Test 3	68.9	67.7	66.5	61.7	60.0	58.1	57.6	50.5	49.4	49.8	48.5	47.8	102	93
Mean	68.5	66.8	66.1	62.2	60.7	59.3	57.7	51.3	49.6	47.8	47.4	48.1		
Left Insertion Loss	**23.0**	**27.6**	**30.5**	**35.3**	**38.7**	**41.7**	**41.1**	**44.2**	**43.2**	**44.8**	**39.6**	**29.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	94.5	97.9	99.2	100.3	102.7	102.2	99.9	96.8	92.4	87.3	80.4	110	110
Test 2	93.6	94.5	97.4	99.5	100.8	103.3	102.6	100.3	96.8	93.0	87.0	79.9	110	111
Test 3	93.9	95.7	97.4	98.1	100.5	102.6	101.4	100.5	96.8	93.8	87.5	80.1	110	110
Mean	93.6	94.9	97.6	98.9	100.5	102.9	102.1	100.2	96.8	93.1	87.2	80.1		
Occluded														
Test 1	73.6	72.1	69.3	68.9	68.7	72.3	75.6	72.0	67.0	64.3	56.2	56.1	102	94
Test 2	71.4	69.8	68.9	68.4	68.2	70.6	71.2	68.0	69.0	69.1	59.9	57.3	102	94
Test 3	68.9	68.0	67.6	66.1	68.9	69.8	68.9	66.2	60.9	61.2	55.4	56.0	102	94
Mean	71.3	69.9	68.6	67.8	68.6	70.9	71.9	68.7	65.6	64.9	57.2	56.5		
Right Insertion Loss	**22.3**	**25.0**	**29.0**	**31.1**	**31.9**	**32.0**	**30.2**	**31.5**	**31.2**	**28.2**	**30.1**	**23.7**		
Insertion Loss	**22.7**	**26.3**	**29.7**	**33.2**	**35.3**	**36.8**	**35.6**	**37.9**	**37.2**	**36.5**	**34.8**	**26.5**		

Table C-45. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.1	87.5	83.7	86.6	87.8	89.6	86.3	90.1	89.9	90.8	91.5	91.5	93.7
Test 2	84.3	87.8	83.7	86.5	87.6	89.2	86.2	89.3	89.9	90.7	90.7	92.7	93.8
Test 3	84.4	87.9	83.7	86.5	87.9	88.8	86.0	88.9	90.2	90.9	91.3	92.5	94.0
Mean	84.3	87.7	83.7	86.5	87.8	89.2	86.2	89.4	90.0	90.8	91.2	92.2	93.9
Occluded*													
Test 1	85.4	89.6	87.0	89.6	87.0	87.2	81.7	82.4	76.9	73.6	71.7	69.8	67.4
Test 2	85.5	89.6	86.9	89.2	86.5	87.2	82.9	82.9	77.2	73.1	72.3	70.9	67.3
Test 3	85.6	89.7	87.3	89.6	86.7	87.2	82.9	83.2	77.3	73.4	72.8	71.4	68.8
Mean	85.5	89.6	87.1	89.5	86.7	87.2	82.5	82.8	77.1	73.4	72.3	70.7	67.9
Left Insertion Loss	**-1.2**	**-1.9**	**-3.3**	**-2.9**	**1.0**	**2.0**	**3.7**	**6.6**	**12.9**	**17.4**	**18.9**	**21.5**	**26.0**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.6	87.2	83.0	86.6	88.0	90.5	85.7	91.1	89.9	91.9	94.4	94.7	95.0
Test 2	84.7	87.6	83.3	86.6	88.2	90.8	86.1	91.4	90.4	92.2	94.5	94.6	95.3
Test 3	84.8	87.6	83.6	87.2	88.3	90.9	85.5	91.4	90.4	92.1	94.2	94.6	95.0
Mean	84.7	87.5	83.3	86.8	88.2	90.8	85.8	91.3	90.2	92.0	94.3	94.6	95.1
Occluded*													
Test 1	86.6	90.0	87.2	91.5	91.9	91.9	86.4	85.8	80.0	80.0	77.1	73.3	70.8
Test 2	86.5	89.9	87.1	91.3	92.1	92.4	87.5	86.1	80.6	80.1	77.7	74.1	72.0
Test 3	86.6	89.9	87.3	91.4	92.2	92.5	87.1	85.9	80.7	80.3	78.2	74.2	72.1
Mean	86.5	90.0	87.2	91.4	92.0	92.3	87.0	86.0	80.4	80.2	77.6	73.9	71.6
Right Insertion Loss	**-1.8**	**-2.5**	**-3.9**	**-4.6**	**-3.9**	**-1.5**	**-1.2**	**5.3**	**9.8**	**11.9**	**16.7**	**20.7**	**23.5**
Insertion Loss	**-1.5**	**-2.2**	**-3.6**	**-3.8**	**-1.4**	**0.2**	**1.2**	**6.0**	**11.3**	**14.7**	**17.8**	**21.1**	**24.7**

Table C-45. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 15.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	91.1	94.5	95.3	97.5	97.8	99.6	99.4	97.8	95.5	90.9	88.4	77.6	108	108
Test 2	91.2	95.0	95.5	96.1	98.2	99.6	98.7	97.3	94.6	89.9	88.1	77.4	108	108
Test 3	91.6	94.7	95.1	96.2	97.8	99.8	99.1	97.2	94.5	90.1	87.7	77.7	108	108
Mean	91.3	94.8	95.3	96.6	97.9	99.7	99.1	97.4	94.9	90.3	88.1	77.6		
Occluded														
Test 1	59.8	54.0	61.7	58.8	55.0	50.5	48.2	44.8	43.0	44.4	47.2	48.4	96	83
Test 2	58.5	53.3	59.2	58.8	52.6	50.8	48.4	45.5	46.2	45.0	46.9	48.7	96	83
Test 3	59.1	53.8	58.4	56.9	50.6	50.3	47.8	45.1	45.4	45.0	46.5	48.6	96	84
Mean	59.1	53.7	59.8	58.2	52.7	50.5	48.1	45.1	44.9	44.8	46.9	48.6		
Left Insertion Loss	**32.2**	**41.1**	**35.5**	**38.4**	**45.2**	**49.1**	**51.0**	**52.3**	**50.0**	**45.5**	**41.2**	**29.0**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.3	95.6	96.1	97.7	98.8	101.1	101.5	99.8	97.5	94.5	92.8	80.6	109	110
Test 2	93.7	95.6	96.6	98.7	99.0	101.3	101.2	99.9	97.5	95.1	93.0	80.0	110	110
Test 3	93.6	95.5	96.5	98.1	99.3	101.2	101.7	99.6	97.4	96.2	93.4	80.2	110	110
Mean	93.5	95.6	96.4	98.2	99.0	101.2	101.5	99.8	97.5	95.3	93.1	80.3		
Occluded														
Test 1	63.1	59.6	58.6	59.0	56.4	50.4	45.9	45.7	48.0	50.8	53.8	56.3	99	88
Test 2	63.7	61.6	60.9	59.7	56.5	52.6	47.8	45.6	48.4	51.0	53.9	56.5	99	88
Test 3	64.8	62.4	61.2	60.2	57.2	53.8	48.6	46.0	48.5	51.0	53.8	56.4	99	88
Mean	63.9	61.2	60.3	59.6	56.7	52.3	47.4	45.8	48.3	50.9	53.8	56.4		
Right Insertion Loss	**29.6**	**34.4**	**36.1**	**38.6**	**42.3**	**48.9**	**54.1**	**54.0**	**49.1**	**44.3**	**39.2**	**23.8**		
Insertion Loss	**30.9**	**37.7**	**35.8**	**38.5**	**43.8**	**49.0**	**52.5**	**53.2**	**49.6**	**44.9**	**40.2**	**26.4**		

Table C-46. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.8	88.4	84.4	87.3	88.0	90.7	85.8	91.4	90.6	90.7	93.8	94.7	95.0
Test 2	84.9	88.4	84.4	87.3	88.1	90.6	86.6	90.8	90.7	90.9	93.6	94.9	94.9
Test 3	84.7	88.5	84.5	87.4	88.0	90.8	87.1	91.1	90.8	91.0	93.3	95.0	95.0
Mean	84.8	88.4	84.4	87.3	88.1	90.7	86.5	91.1	90.7	90.9	93.6	94.9	95.0
Occluded*													
Test 1	85.8	90.3	87.1	89.7	88.5	90.3	84.9	83.0	77.8	73.7	73.8	71.6	68.6
Test 2	88.3	90.1	86.9	90.5	93.1	91.1	90.0	87.5	82.6	78.7	77.3	74.2	70.4
Test 3	86.2	90.5	87.6	89.7	87.4	89.5	84.2	81.6	76.8	73.1	73.5	71.7	68.7
Mean	86.8	90.3	87.2	90.0	89.7	90.3	86.4	84.0	79.1	75.2	74.9	72.5	69.2
Left Insertion Loss	**-2.0**	**-1.9**	**-2.8**	**-2.6**	**-1.6**	**0.4**	**0.1**	**7.1**	**11.7**	**15.7**	**18.7**	**22.3**	**25.7**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.6	84.1	87.3	88.9	90.5	86.3	91.3	90.0	91.8	92.5	93.2	94.1
Test 2	85.4	88.5	84.1	87.3	88.9	90.4	86.6	90.9	89.8	91.8	93.0	92.9	93.5
Test 3	85.3	88.4	84.2	87.4	88.8	90.6	86.8	90.5	89.8	91.5	92.4	92.6	93.9
Mean	85.4	88.5	84.1	87.3	88.9	90.5	86.6	90.9	89.9	91.7	92.6	92.9	93.8
Occluded*													
Test 1	86.4	90.1	86.7	91.0	94.0	95.8	90.2	86.1	79.3	79.6	77.7	72.4	67.7
Test 2	88.6	90.0	86.3	90.4	94.2	93.8	91.2	86.1	80.4	81.3	77.9	70.4	67.0
Test 3	86.2	89.4	85.8	90.1	93.8	96.5	95.5	91.8	84.5	84.2	81.2	76.1	72.5
Mean	87.1	89.8	86.3	90.5	94.0	95.4	92.3	88.0	81.4	81.7	79.0	72.9	69.1
Right Insertion Loss	**-1.7**	**-1.3**	**-2.2**	**-3.2**	**-5.1**	**-4.9**	**-5.7**	**2.9**	**8.5**	**10.0**	**13.7**	**19.9**	**24.7**
Insertion Loss	**-1.8**	**-1.6**	**-2.5**	**-2.9**	**-3.4**	**-2.2**	**-2.8**	**5.0**	**10.1**	**12.9**	**16.2**	**21.1**	**25.2**

Table C-46. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 16.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.3	94.0	95.6	96.6	96.3	98.1	96.6	94.0	93.2	92.9	92.0	80.6	107	107
Test 2	92.5	93.3	96.2	96.5	96.9	98.8	96.5	95.0	94.0	93.6	92.3	80.7	107	107
Test 3	92.8	93.4	95.8	96.8	96.7	98.2	96.3	94.6	94.0	93.5	91.8	80.5	107	107
Mean	92.9	93.6	95.9	96.6	96.6	98.4	96.5	94.5	93.7	93.4	92.0	80.6		
Occluded														
Test 1	59.2	58.7	56.4	58.4	59.8	57.4	53.4	46.4	45.1	49.5	48.0	49.1	97	85
Test 2	61.7	61.9	60.3	62.3	61.9	63.7	59.8	54.2	56.7	58.3	57.9	50.7	99	89
Test 3	59.4	59.3	56.9	58.4	59.5	56.3	52.4	47.5	47.8	48.0	47.9	49.1	97	84
Mean	60.1	59.9	57.9	59.7	60.4	59.1	55.2	49.4	49.9	51.9	51.3	49.6		
Left Insertion Loss	**32.8**	**33.6**	**38.0**	**36.9**	**36.2**	**39.3**	**41.2**	**45.1**	**43.8**	**41.4**	**40.7**	**31.0**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	92.5	94.0	96.1	98.3	98.4	98.5	96.4	95.0	93.7	92.3	90.3	81.1	108	108
Test 2	92.5	93.3	95.6	97.6	98.4	99.0	96.3	94.8	93.5	92.1	90.3	82.1	107	108
Test 3	92.4	93.0	94.8	97.3	98.5	98.8	96.2	94.2	93.8	92.1	90.0	81.6	107	107
Mean	92.5	93.4	95.5	97.7	98.4	98.8	96.3	94.7	93.6	92.2	90.2	81.6		
Occluded														
Test 1	61.3	61.6	63.6	64.2	59.5	58.7	61.2	57.6	53.8	54.9	56.1	57.0	100	89
Test 2	61.5	62.5	65.1	65.8	63.4	62.0	62.7	58.4	54.7	58.1	56.5	56.9	100	89
Test 3	67.1	68.3	71.2	71.5	67.9	68.7	71.6	65.8	60.0	65.8	61.1	57.4	102	93
Mean	63.3	64.1	66.6	67.2	63.6	63.1	65.2	60.6	56.2	59.6	57.9	57.1		
Right Insertion Loss	**29.2**	**29.3**	**28.9**	**30.6**	**34.8**	**35.6**	**31.2**	**34.1**	**37.5**	**32.6**	**32.3**	**24.5**		
Insertion Loss	**31.0**	**31.5**	**33.4**	**33.8**	**35.5**	**37.4**	**36.2**	**39.6**	**40.7**	**37.0**	**36.5**	**27.7**		

Table C-47. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.7	84.2	87.0	88.3	89.2	86.7	90.1	89.9	91.3	92.4	93.6	95.5
Test 2	87.6	88.7	84.0	86.4	88.1	85.1	87.5	90.4	92.1	92.9	92.8	92.2	94.7
Test 3	85.5	88.8	84.4	87.2	88.4	89.4	86.8	90.3	90.3	91.5	92.3	93.1	94.7
Mean	86.2	88.8	84.2	86.9	88.3	87.9	87.0	90.2	90.8	91.9	92.5	93.0	95.0
Occluded*													
Test 1	86.5	90.7	87.8	91.5	92.2	93.0	86.4	84.5	78.1	74.4	75.1	74.4	69.7
Test 2	86.6	90.6	87.8	91.6	92.5	93.1	86.9	85.3	78.5	74.9	76.0	74.6	69.4
Test 3	86.9	90.8	87.7	91.7	93.7	94.1	88.4	86.6	79.9	76.1	76.5	74.7	69.8
Mean	86.7	90.7	87.8	91.6	92.8	93.4	87.2	85.5	78.8	75.1	75.8	74.5	69.6
Left Insertion Loss	**-0.5**	**-1.9**	**-3.6**	**-4.7**	**-4.5**	**-5.5**	**-0.2**	**4.8**	**11.9**	**16.8**	**16.6**	**18.4**	**25.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.2	83.8	87.3	88.1	91.3	85.4	91.9	90.5	92.1	93.9	93.7	92.9
Test 2	87.6	88.1	83.2	86.2	88.1	90.7	86.4	92.3	91.4	92.7	93.7	92.4	92.1
Test 3	85.5	88.2	83.7	87.1	88.1	91.1	85.7	91.4	90.2	92.3	93.7	93.8	93.4
Mean	86.2	88.1	83.5	86.9	88.1	91.0	85.8	91.8	90.7	92.4	93.8	93.3	92.8
Occluded*													
Test 1	86.8	89.8	87.3	91.6	89.2	89.8	84.8	82.4	77.0	77.4	74.5	71.4	69.9
Test 2	86.7	89.6	87.2	91.4	89.5	90.1	84.7	83.2	77.5	77.5	74.3	71.9	70.2
Test 3	87.1	90.0	87.6	91.5	89.0	89.5	84.1	82.2	76.7	77.1	74.9	72.0	70.5
Mean	86.9	89.8	87.4	91.5	89.2	89.8	84.5	82.6	77.1	77.3	74.5	71.8	70.2
Right Insertion Loss	**-0.6**	**-1.6**	**-3.8**	**-4.6**	**-1.1**	**1.2**	**1.3**	**9.3**	**13.6**	**15.1**	**19.2**	**21.5**	**22.6**
Insertion Loss	**-0.6**	**-1.8**	**-3.7**	**-4.7**	**-2.8**	**-2.1**	**0.5**	**7.0**	**12.8**	**15.9**	**17.9**	**20.0**	**24.0**

Table C-47. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	94.2	95.9	97.2	97.8	100.2	99.4	98.7	94.3	88.9	88.3	76.7	108	108
Test 2	92.2	94.5	96.4	97.2	97.7	100.2	99.7	98.5	94.3	89.6	88.7	76.5	108	108
Test 3	92.7	94.5	96.5	96.8	97.9	99.9	99.0	97.8	94.1	89.6	88.6	76.6	108	108
Mean	92.6	94.4	96.3	97.1	97.8	100.1	99.4	98.3	94.2	89.4	88.5	76.6		
Occluded														
Test 1	59.9	60.3	62.3	61.1	60.5	55.2	54.1	53.5	46.7	47.8	49.5	49.8	99	87
Test 2	60.3	60.7	61.5	60.4	61.2	56.2	54.4	54.4	54.3	52.0	48.7	49.6	99	87
Test 3	62.5	63.5	63.6	63.4	65.6	59.8	59.2	63.0	58.8	47.8	49.6	49.0	100	88
Mean	60.9	61.5	62.5	61.6	62.4	57.0	55.9	57.0	53.3	49.2	49.3	49.5		
Left Insertion Loss	**31.7**	**32.9**	**33.8**	**35.4**	**35.4**	**43.1**	**43.5**	**41.4**	**41.0**	**40.2**	**39.2**	**27.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.3	94.1	95.8	95.9	97.7	99.2	100.6	96.4	91.5	92.4	87.6	78.6	108	108
Test 2	92.0	93.6	96.2	96.4	97.1	97.7	99.1	95.0	92.6	92.9	88.7	78.5	107	108
Test 3	92.3	94.2	96.2	96.5	97.0	98.1	99.0	92.4	93.2	93.1	89.4	78.5	107	107
Mean	92.2	94.0	96.1	96.3	97.3	98.3	99.6	94.6	92.4	92.8	88.5	78.5		
Occluded														
Test 1	63.0	59.1	60.9	56.3	53.8	46.5	46.1	46.2	46.2	48.8	51.7	54.1	98	85
Test 2	63.1	60.4	62.0	59.1	56.9	47.3	47.0	49.4	48.2	49.5	51.8	54.0	98	86
Test 3	62.5	58.9	60.5	57.2	52.7	45.6	45.2	45.3	46.0	48.8	51.5	54.0	98	85
Mean	62.9	59.4	61.1	57.6	54.5	46.5	46.1	47.0	46.8	49.1	51.7	54.0		
Right Insertion Loss	**29.4**	**34.5**	**34.9**	**38.7**	**42.8**	**51.9**	**53.5**	**47.6**	**45.6**	**43.7**	**36.9**	**24.5**		
Insertion Loss	**30.5**	**33.7**	**34.4**	**37.1**	**39.1**	**47.5**	**48.5**	**44.5**	**43.3**	**42.0**	**38.1**	**25.8**		

Table C-48. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.9	89.5	85.1	87.8	88.7	90.6	85.8	90.7	90.1	91.8	94.1	94.6	96.4
Test 2	86.0	89.6	85.2	87.8	88.8	90.4	85.6	90.6	89.9	91.7	94.3	94.8	96.2
Test 3	85.7	89.3	85.3	87.8	88.4	90.2	86.8	90.0	90.4	92.0	94.9	95.1	95.9
Mean	85.9	89.5	85.2	87.8	88.6	90.4	86.1	90.4	90.1	91.8	94.4	94.8	96.1
Occluded*													
Test 1	87.1	91.3	88.5	91.9	90.0	89.9	84.4	83.9	78.3	76.5	74.2	70.3	67.6
Test 2	87.1	91.2	88.4	91.9	89.5	89.6	84.5	84.4	79.2	77.1	74.8	70.8	67.3
Test 3	87.0	91.1	88.5	91.7	89.0	89.3	83.9	84.0	78.5	76.8	75.3	71.7	69.7
Mean	87.1	91.2	88.5	91.8	89.5	89.6	84.3	84.1	78.7	76.8	74.8	71.0	68.2
Left Insertion Loss	**-1.2**	**-1.7**	**-3.3**	**-4.0**	**-0.9**	**0.8**	**1.8**	**6.3**	**11.4**	**15.1**	**19.7**	**23.9**	**27.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.2	83.4	86.4	88.1	90.3	85.8	91.6	89.7	92.1	94.1	93.6	94.8
Test 2	85.4	88.3	83.3	86.2	88.3	90.1	86.1	91.5	89.5	92.3	94.3	93.7	94.9
Test 3	85.2	88.1	83.4	86.0	88.0	90.0	86.5	91.0	89.5	92.6	94.6	93.2	94.6
Mean	85.3	88.2	83.4	86.2	88.1	90.1	86.1	91.4	89.6	92.3	94.3	93.5	94.8
Occluded*													
Test 1	86.7	90.0	86.6	91.1	93.9	96.2	91.3	89.6	83.0	84.0	79.7	73.5	72.4
Test 2	86.3	89.7	86.5	91.1	94.3	97.7	94.7	93.1	86.1	85.6	81.2	74.0	71.8
Test 3	86.2	89.6	86.3	90.6	93.9	97.1	94.3	92.1	85.2	85.3	82.2	74.6	72.7
Mean	86.4	89.8	86.5	90.9	94.0	97.0	93.4	91.6	84.8	85.0	81.1	74.1	72.3
Right Insertion Loss	**-1.1**	**-1.6**	**-3.1**	**-4.7**	**-5.9**	**-6.9**	**-7.3**	**-0.2**	**4.8**	**7.4**	**13.3**	**19.5**	**22.4**
Insertion Loss	**-1.2**	**-1.7**	**-3.2**	**-4.4**	**-3.4**	**-3.0**	**-2.8**	**3.0**	**8.1**	**11.2**	**16.5**	**21.7**	**25.2**

Table C-48. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	95.0	96.2	98.1	99.6	102.7	96.1	91.4	92.6	92.9	89.6	80.1	109	109
Test 2	93.5	94.7	95.8	98.8	99.8	102.4	95.7	91.8	92.6	92.2	89.6	80.1	109	109
Test 3	93.2	94.3	95.9	98.6	99.5	101.7	94.7	91.8	92.6	92.4	90.0	80.5	108	108
Mean	93.3	94.7	96.0	98.5	99.6	102.3	95.5	91.7	92.6	92.5	89.8	80.2		
Occluded														
Test 1	59.8	59.6	57.2	56.3	50.3	47.1	46.3	42.8	43.0	44.6	46.4	48.9	98	85
Test 2	59.6	59.3	56.8	56.3	50.1	45.6	46.2	44.1	43.4	44.6	46.8	49.1	98	85
Test 3	63.8	62.5	59.4	57.3	50.9	48.0	45.2	42.1	42.3	43.8	45.8	48.1	98	85
Mean	61.1	60.5	57.8	56.7	50.4	46.9	45.9	43.0	42.9	44.3	46.3	48.7		
Left Insertion Loss	**32.3**	**34.2**	**38.2**	**41.9**	**49.2**	**55.3**	**49.6**	**48.6**	**49.7**	**48.2**	**43.4**	**31.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.1	95.0	97.0	98.3	101.1	104.2	101.9	99.7	96.9	91.4	89.5	82.9	110	111
Test 2	92.1	94.8	96.1	97.2	100.3	103.5	101.0	98.6	95.2	92.1	90.6	82.9	109	110
Test 3	91.7	94.7	96.4	97.8	100.6	103.7	100.1	98.0	95.6	92.9	90.8	83.2	109	110
Mean	92.0	94.8	96.5	97.8	100.6	103.8	101.0	98.7	95.9	92.1	90.3	83.0		
Occluded														
Test 1	67.5	63.0	59.9	59.8	56.2	54.0	59.4	61.4	53.6	52.7	54.9	56.6	101	91
Test 2	67.4	63.9	60.5	58.8	56.3	61.9	67.5	67.7	62.5	54.2	56.3	56.9	102	93
Test 3	69.2	64.5	61.0	59.3	55.2	57.5	62.4	63.6	57.5	54.3	54.9	56.4	102	92
Mean	68.0	63.8	60.5	59.3	55.9	57.8	63.1	64.2	57.9	53.8	55.4	56.6		
Right Insertion Loss	**24.0**	**31.0**	**36.0**	**38.5**	**44.7**	**45.9**	**37.9**	**34.5**	**38.1**	**38.4**	**34.9**	**26.4**		
Insertion Loss	**28.1**	**32.6**	**37.1**	**40.2**	**47.0**	**50.6**	**43.8**	**41.6**	**43.9**	**43.3**	**39.2**	**28.9**		

Table C-49. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.0	89.8	85.6	88.4	89.2	92.1	88.3	91.6	91.0	90.8	95.1	95.3	96.4
Test 2	88.3	89.9	85.3	87.8	88.8	88.4	88.8	92.3	91.8	92.1	96.2	95.3	95.6
Test 3	86.1	89.8	85.6	88.5	89.2	91.9	87.8	91.5	91.6	91.6	95.5	95.2	96.9
Mean	86.8	89.8	85.5	88.2	89.1	90.8	88.3	91.8	91.5	91.5	95.6	95.3	96.3
Occluded*													
Test 1	87.2	91.5	88.8	92.9	93.7	96.3	90.2	89.7	84.2	79.4	80.1	74.8	70.2
Test 2	89.2	91.5	88.5	92.1	93.2	92.2	91.2	90.3	85.7	80.7	80.5	75.2	68.7
Test 3	87.1	91.5	88.7	92.6	93.4	96.2	90.8	90.1	84.8	79.0	80.1	75.4	71.2
Mean	87.8	91.5	88.7	92.5	93.4	94.9	90.7	90.1	84.9	79.7	80.2	75.1	70.0
Left Insertion Loss	**-1.0**	**-1.7**	**-3.2**	**-4.3**	**-4.3**	**-4.1**	**-2.4**	**1.7**	**6.6**	**11.8**	**15.4**	**20.1**	**26.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.6	84.0	87.0	88.5	90.3	86.4	90.7	89.6	91.1	93.7	93.4	94.6
Test 2	87.6	88.5	83.3	86.0	88.4	89.0	86.8	91.4	90.6	92.2	93.7	93.4	93.7
Test 3	85.6	88.5	83.8	87.0	88.5	90.1	86.2	90.6	89.5	91.2	93.2	93.8	94.6
Mean	86.2	88.5	83.7	86.7	88.5	89.8	86.5	90.9	89.9	91.5	93.5	93.5	94.3
Occluded*													
Test 1	86.8	90.5	87.5	89.9	88.4	89.0	86.4	87.1	80.9	78.3	77.6	72.9	70.0
Test 2	88.8	90.5	87.4	89.4	88.6	86.6	86.7	85.7	81.7	79.4	78.3	72.1	69.5
Test 3	86.6	90.6	87.6	89.9	88.4	89.3	86.5	86.9	80.9	77.8	78.1	72.5	70.2
Mean	87.4	90.5	87.5	89.7	88.5	88.3	86.5	86.6	81.2	78.5	78.0	72.5	69.9
Right Insertion Loss	**-1.2**	**-2.0**	**-3.8**	**-3.0**	**0.0**	**1.5**	**-0.1**	**4.3**	**8.7**	**13.0**	**15.5**	**21.0**	**24.4**
Insertion Loss	**-1.1**	**-1.9**	**-3.5**	**-3.7**	**-2.2**	**-1.3**	**-1.2**	**3.0**	**7.7**	**12.4**	**15.5**	**20.6**	**25.3**

Table C-49. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	93.7	96.4	96.8	97.3	98.5	94.1	93.0	93.6	92.8	90.7	80.6	108	107
Test 2	93.3	93.9	96.5	96.8	96.3	97.9	94.9	93.5	93.0	92.6	90.7	80.3	107	107
Test 3	94.4	94.3	97.1	97.2	96.9	98.6	94.6	93.4	93.4	92.2	90.3	80.5	108	108
Mean	93.8	94.0	96.7	96.9	96.9	98.3	94.5	93.3	93.3	92.5	90.5	80.5		
Occluded														
Test 1	61.6	56.9	58.4	59.5	57.3	57.3	52.5	45.6	47.0	46.9	48.4	46.0	101	90
Test 2	62.3	59.7	62.2	62.2	58.1	59.8	55.3	46.5	46.4	46.0	44.3	45.3	101	90
Test 3	62.2	58.6	61.4	62.2	60.2	60.2	55.5	49.0	50.3	47.6	46.1	46.0	101	90
Mean	62.0	58.4	60.7	61.3	58.5	59.1	54.4	47.0	47.9	46.8	46.3	45.8		
Left Insertion Loss	**31.8**	**35.6**	**36.0**	**35.7**	**38.3**	**39.2**	**40.1**	**46.3**	**45.4**	**45.7**	**44.3**	**34.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.4	95.1	97.1	96.9	97.9	96.1	95.0	96.3	95.3	91.6	83.0	107	107
Test 2	92.0	93.7	94.5	96.6	95.9	96.4	94.1	95.8	97.1	95.1	91.1	82.4	107	107
Test 3	92.4	93.9	94.7	95.8	96.0	96.3	94.4	96.0	97.0	95.1	90.5	82.7	107	107
Mean	92.5	94.0	94.8	96.5	96.3	96.9	94.9	95.6	96.8	95.2	91.1	82.7		
Occluded														
Test 1	63.1	59.1	58.2	52.8	50.0	50.7	51.0	48.9	49.6	51.1	53.2	55.6	98	86
Test 2	62.4	58.6	58.3	52.1	49.2	50.2	48.2	48.8	49.1	51.2	53.2	55.7	98	86
Test 3	63.1	59.5	58.3	52.0	52.3	53.4	51.0	48.2	48.8	51.0	53.5	55.8	98	86
Mean	62.9	59.1	58.3	52.3	50.5	51.5	50.1	48.6	49.2	51.1	53.3	55.7		
Right Insertion Loss	**29.6**	**34.9**	**36.5**	**44.2**	**45.7**	**45.4**	**44.8**	**47.0**	**47.6**	**44.1**	**37.7**	**27.0**		
Insertion Loss	**30.7**	**35.2**	**36.2**	**39.9**	**42.0**	**42.3**	**42.5**	**46.6**	**46.5**	**44.9**	**41.0**	**30.9**		

Table C-50. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.7	84.8	87.6	88.8	91.3	88.0	92.6	92.1	92.1	96.5	95.8	95.5
Test 2	87.5	89.0	84.8	87.2	88.4	87.8	88.1	92.9	93.4	93.1	96.9	96.7	94.9
Test 3	87.4	88.7	84.7	87.0	88.2	88.0	89.4	93.4	93.5	92.8	97.4	96.6	94.6
Mean	86.7	88.8	84.8	87.2	88.4	89.0	88.5	93.0	93.0	92.7	96.9	96.4	95.0
Occluded													
Test 1	86.1	90.1	87.5	90.6	89.5	91.5	86.6	84.6	79.7	76.1	78.9	73.7	67.4
Test 2	88.4	90.5	87.3	89.9	89.2	86.7	86.8	85.1	80.7	75.9	78.9	72.5	64.8
Test 3	86.1	90.2	87.4	90.4	89.2	90.6	85.4	84.4	79.6	76.2	78.7	72.7	67.7
Mean	86.9	90.2	87.4	90.3	89.3	89.6	86.3	84.7	80.0	76.0	78.8	73.0	66.6
Left Insertion Loss	**-0.2**	**-1.4**	**-2.6**	**-3.0**	**-0.9**	**-0.6**	**2.2**	**8.3**	**13.0**	**16.6**	**18.1**	**23.4**	**28.4**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	87.7	83.3	86.8	88.2	89.6	86.3	91.9	89.5	91.2	93.4	93.0	95.1
Test 2	87.2	88.0	82.8	85.9	88.2	88.9	87.4	92.6	90.3	91.4	92.5	91.5	93.0
Test 3	87.2	87.8	82.9	85.8	88.1	88.3	87.3	92.5	90.5	91.7	93.7	91.4	93.2
Mean	86.5	87.8	83.0	86.2	88.2	88.9	87.0	92.3	90.1	91.4	93.2	91.9	93.7
Occluded													
Test 1	86.4	89.8	86.9	90.9	92.4	94.8	90.6	87.4	82.8	80.4	76.3	73.8	72.4
Test 2	88.5	89.6	86.0	89.7	92.4	92.0	93.0	89.5	86.2	83.9	79.5	74.4	71.9
Test 3	86.2	89.5	86.5	90.8	92.5	95.1	91.0	88.6	84.9	82.0	79.1	73.8	72.5
Mean	87.0	89.6	86.5	90.5	92.4	94.0	91.5	88.5	84.6	82.1	78.3	74.0	72.3
Right Insertion Loss	**-0.5**	**-1.8**	**-3.5**	**-4.3**	**-4.2**	**-5.0**	**-4.5**	**3.8**	**5.5**	**9.4**	**14.9**	**17.9**	**21.5**
Insertion Loss	**-0.3**	**-1.6**	**-3.1**	**-3.7**	**-2.5**	**-2.8**	**-1.2**	**6.0**	**9.2**	**13.0**	**16.5**	**20.7**	**24.9**

Table C-50. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – Subject 20.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.2	95.1	97.0	97.6	98.1	99.4	98.0	96.7	91.1	90.8	87.8	78.4	108	108
Test 2	92.2	96.2	96.9	97.7	98.6	99.1	97.1	95.3	90.3	90.3	87.5	77.6	108	108
Test 3	92.0	96.6	97.1	97.7	98.4	100.1	98.7	96.8	91.3	91.4	87.9	79.0	109	109
Mean	92.8	96.0	97.0	97.7	98.4	99.5	97.9	96.3	90.9	90.8	87.8	78.3		
Occluded														
Test 1	60.3	64.3	61.2	58.4	54.4	55.8	52.7	52.3	47.5	44.8	45.0	46.0	98	86
Test 2	58.9	64.3	61.8	59.7	57.0	58.0	53.9	53.3	47.7	45.0	45.2	46.5	98	86
Test 3	60.8	62.9	60.4	58.4	55.7	58.4	55.6	54.7	48.1	46.1	45.6	46.1	98	85
Mean	60.0	63.9	61.1	58.9	55.7	57.4	54.1	53.5	47.7	45.3	45.3	46.2		
Left Insertion Loss	**32.7**	**32.1**	**35.9**	**38.8**	**42.7**	**42.1**	**43.8**	**42.8**	**43.2**	**45.5**	**42.5**	**32.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	93.5	95.4	96.2	97.0	98.5	97.7	94.7	95.1	95.4	89.9	82.2	107	107
Test 2	92.9	94.5	95.8	96.3	97.0	98.7	97.3	95.1	96.7	96.5	91.8	82.4	108	108
Test 3	92.2	93.9	95.6	96.7	96.7	98.9	96.9	94.5	95.7	95.7	90.9	82.8	107	107
Mean	92.5	94.0	95.6	96.4	96.9	98.7	97.3	94.8	95.8	95.9	90.8	82.4		
Occluded														
Test 1	66.1	61.4	62.5	59.7	59.6	59.3	58.6	56.4	55.3	56.0	54.5	56.1	100	89
Test 2	66.5	63.1	62.6	59.9	60.4	62.8	62.4	59.3	59.7	56.1	57.2	56.4	100	90
Test 3	67.6	64.0	61.2	59.7	57.8	61.4	60.5	58.3	56.7	58.1	56.3	56.3	100	90
Mean	66.7	62.8	62.1	59.8	59.3	61.2	60.5	58.0	57.2	56.7	56.0	56.3		
Right Insertion Loss	**25.8**	**31.1**	**33.5**	**36.7**	**37.6**	**37.5**	**36.7**	**36.8**	**38.6**	**39.2**	**34.9**	**26.2**		
Insertion Loss	**29.3**	**31.6**	**34.7**	**37.7**	**40.2**	**39.8**	**40.3**	**39.8**	**40.9**	**42.4**	**38.7**	**29.2**		

Table C-51. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.6	89.1	84.6	86.8	88.1	86.0	87.8	89.9	91.3	92.7	94.5	93.1	95.1
Test 2	85.5	89.1	85.0	87.7	88.7	90.2	86.9	89.0	90.2	91.6	93.5	93.5	94.6
Test 3	87.6	89.0	84.7	86.9	88.2	86.2	88.0	90.0	91.7	93.0	94.1	92.8	94.9
Mean	86.9	89.1	84.7	87.1	88.3	87.4	87.6	89.6	91.1	92.4	94.0	93.2	94.9
Occluded													
Test 1	86.3	89.9	85.8	87.9	86.8	87.0	82.3	80.7	75.1	74.6	76.8	73.7	71.1
Test 2	85.9	89.1	84.5	86.2	84.8	85.3	80.4	79.3	73.9	74.0	76.4	73.9	71.5
Test 3	87.9	89.1	84.5	85.6	84.5	81.4	81.2	79.6	74.6	75.5	77.3	73.2	71.6
Mean	86.7	89.4	85.0	86.6	85.4	84.6	81.3	79.9	74.5	74.7	76.9	73.6	71.4
Left Insertion Loss	**0.2**	**-0.3**	**-0.2**	**0.5**	**3.0**	**2.9**	**6.3**	**9.8**	**16.5**	**17.8**	**17.2**	**19.6**	**23.5**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	88.8	83.6	86.1	89.0	90.7	88.1	92.9	91.3	93.7	94.8	93.9	94.9
Test 2	85.8	88.8	84.3	87.4	89.2	91.3	86.9	92.0	90.2	92.9	94.3	94.5	96.0
Test 3	87.9	88.7	83.7	86.3	89.0	90.8	87.8	93.0	91.6	93.6	94.3	94.0	94.6
Mean	87.2	88.8	83.9	86.6	89.1	91.0	87.6	92.7	91.0	93.4	94.4	94.1	95.2
Occluded													
Test 1	84.9	86.5	81.8	85.8	85.7	85.9	81.0	81.0	74.0	77.4	77.7	72.9	71.7
Test 2	86.0	88.1	83.8	87.7	88.1	88.3	83.5	83.0	76.4	80.4	80.4	75.2	73.1
Test 3	88.2	88.5	84.0	87.5	89.4	87.9	86.1	84.4	79.0	82.3	80.9	75.0	72.6
Mean	86.4	87.7	83.2	87.0	87.7	87.4	83.5	82.8	76.5	80.0	79.7	74.4	72.5
Right Insertion Loss	**0.8**	**1.1**	**0.7**	**-0.4**	**1.3**	**3.6**	**4.1**	**9.8**	**14.5**	**13.4**	**14.8**	**19.7**	**22.7**
Insertion Loss	**0.5**	**0.4**	**0.2**	**0.1**	**2.1**	**3.2**	**5.2**	**9.8**	**15.5**	**15.6**	**16.0**	**19.7**	**23.1**

Table C-51. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.9	94.3	96.7	98.1	98.6	100.9	98.6	95.5	93.2	92.8	90.8	79.2	108	109
Test 2	93.1	95.1	95.9	97.2	98.9	101.3	99.0	94.8	94.0	92.9	90.4	80.0	108	108
Test 3	93.1	95.1	96.0	97.2	98.9	100.8	98.0	94.6	94.2	93.1	90.8	80.6	108	108
Mean	93.0	94.8	96.2	97.5	98.8	101.0	98.5	95.0	93.8	92.9	90.7	79.9		
Occluded														
Test 1	65.4	63.8	61.4	59.6	54.6	54.3	50.3	50.4	49.2	48.2	47.2	47.6	96	84
Test 2	64.9	64.4	63.7	60.3	55.0	52.5	48.8	44.2	46.0	46.2	46.0	47.3	95	83
Test 3	64.8	64.9	64.1	62.7	57.6	53.0	49.7	44.6	45.3	45.7	46.4	47.7	95	83
Mean	65.0	64.4	63.0	60.8	55.7	53.3	49.6	46.4	46.8	46.7	46.5	47.5		
Left Insertion Loss	**28.0**	**30.5**	**33.2**	**36.7**	**43.1**	**47.7**	**49.0**	**48.6**	**47.0**	**46.2**	**44.1**	**32.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	94.9	97.1	97.5	100.1	101.2	100.9	98.4	97.3	95.2	91.2	83.9	109	110
Test 2	93.6	95.0	97.0	98.5	98.8	101.0	100.6	97.6	97.1	94.5	91.0	82.1	109	109
Test 3	92.9	94.6	97.2	97.8	99.2	100.8	100.5	97.9	97.6	94.3	90.8	82.9	109	109
Mean	93.1	94.8	97.1	98.0	99.4	101.0	100.7	98.0	97.3	94.7	91.0	82.9		
Occluded														
Test 1	64.7	61.2	60.3	57.5	57.3	54.9	51.3	47.1	48.3	51.0	53.6	56.1	94	83
Test 2	65.9	64.0	61.9	59.2	58.9	57.0	51.5	49.3	50.4	51.9	53.7	56.1	96	86
Test 3	68.1	64.7	61.1	59.8	59.6	57.3	51.8	51.2	51.8	52.9	54.0	56.2	97	87
Mean	66.2	63.3	61.1	58.9	58.6	56.4	51.5	49.2	50.2	51.9	53.8	56.1		
Right Insertion Loss	**26.9**	**31.5**	**36.0**	**39.1**	**40.8**	**44.6**	**49.1**	**48.7**	**47.2**	**42.8**	**37.2**	**26.8**		
Insertion Loss	**27.4**	**31.0**	**34.6**	**37.9**	**41.9**	**46.2**	**49.1**	**48.7**	**47.1**	**44.5**	**40.7**	**29.6**		

Table C-52. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	89.2	85.4	88.4	88.8	92.4	88.1	91.0	90.7	92.6	94.6	95.2	93.8
Test 2	85.2	89.1	85.4	88.4	88.8	92.6	88.4	91.0	91.0	92.7	94.4	95.3	93.9
Test 3	85.3	89.1	85.4	88.4	89.0	92.5	88.1	90.9	90.9	92.7	94.6	95.6	93.8
Mean	85.3	89.1	85.4	88.4	88.9	92.5	88.2	91.0	90.9	92.7	94.5	95.4	93.8
Occluded													
Test 1	86.0	89.5	85.1	86.3	85.3	87.5	82.4	77.9	74.4	74.6	76.2	72.7	68.4
Test 2	86.3	89.6	85.1	86.6	85.9	87.6	82.3	77.6	74.7	74.9	76.9	73.5	69.1
Test 3	89.8	92.2	89.0	89.9	89.3	87.2	84.9	81.6	78.0	77.8	78.4	74.2	68.5
Mean	87.4	90.4	86.4	87.6	86.8	87.4	83.2	79.0	75.7	75.8	77.1	73.4	68.6
Left Insertion Loss	**-2.1**	**-1.3**	**-1.0**	**0.8**	**2.0**	**5.0**	**5.0**	**11.9**	**15.2**	**16.9**	**17.4**	**21.9**	**25.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.3	89.4	84.7	87.6	89.5	90.1	87.8	91.0	88.8	92.1	93.5	92.9	94.6
Test 2	86.1	89.4	84.7	87.6	89.5	90.0	88.0	90.9	88.9	92.0	93.6	92.9	94.6
Test 3	86.4	89.5	84.8	87.8	89.7	89.8	87.8	90.7	89.0	91.9	93.8	93.0	95.0
Mean	86.3	89.4	84.7	87.7	89.6	90.0	87.9	90.9	88.9	92.0	93.7	92.9	94.8
Occluded													
Test 1	87.2	90.7	87.1	91.7	94.0	94.9	89.7	84.7	78.0	79.3	77.0	73.1	71.5
Test 2	87.1	90.6	87.2	92.0	94.8	95.8	91.1	86.3	79.8	81.2	77.6	74.1	72.9
Test 3	89.4	91.2	87.3	91.1	94.8	93.9	94.8	90.4	84.0	85.2	82.4	80.4	76.8
Mean	87.9	90.8	87.2	91.6	94.5	94.9	91.9	87.1	80.6	81.9	79.0	75.9	73.7
Right Insertion Loss	**-1.6**	**-1.4**	**-2.5**	**-3.9**	**-5.0**	**-4.9**	**-4.0**	**3.7**	**8.3**	**10.1**	**14.7**	**17.0**	**21.0**
Insertion Loss	**-1.8**	**-1.3**	**-1.7**	**-1.5**	**-1.5**	**0.1**	**0.5**	**7.8**	**11.7**	**13.5**	**16.0**	**19.5**	**23.1**

Table C-52. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.3	93.7	95.9	98.4	98.6	101.4	98.1	96.9	93.0	91.3	91.8	80.2	108	109
Test 2	92.5	93.9	96.2	98.1	98.2	101.0	98.2	96.6	93.1	91.4	92.4	80.6	108	109
Test 3	92.2	94.0	96.4	98.2	98.6	101.0	98.8	96.5	93.3	91.3	91.9	80.4	108	109
Mean	92.4	93.9	96.2	98.2	98.5	101.1	98.4	96.7	93.1	91.3	92.0	80.4		
Occluded														
Test 1	63.0	57.7	57.4	54.7	50.5	49.4	45.3	44.3	44.9	48.1	51.3	50.3	95	82
Test 2	62.0	57.3	58.7	57.2	53.2	52.0	46.4	46.1	47.4	47.8	47.9	48.6	95	83
Test 3	64.7	62.0	59.9	57.3	50.8	49.4	53.9	55.3	54.0	57.6	59.5	49.0	98	85
Mean	63.3	59.0	58.7	56.4	51.5	50.3	48.5	48.6	48.8	51.2	52.9	49.3		
Left Insertion Loss	**29.1**	**34.9**	**37.5**	**41.8**	**47.0**	**50.8**	**49.8**	**48.1**	**44.4**	**40.2**	**39.1**	**31.1**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	94.4	97.1	99.6	100.0	102.2	101.2	100.1	99.8	91.7	88.0	80.1	110	110
Test 2	92.3	94.5	96.6	98.8	100.5	102.9	101.4	100.4	100.1	91.6	87.5	79.8	110	111
Test 3	92.8	94.9	96.1	98.7	100.3	102.9	100.9	99.8	100.5	91.9	88.0	80.4	110	110
Mean	92.5	94.6	96.6	99.0	100.2	102.7	101.2	100.1	100.1	91.7	87.8	80.1		
Occluded														
Test 1	66.9	63.7	65.8	62.3	59.2	59.2	60.8	66.8	68.5	61.2	57.3	57.3	100	89
Test 2	67.7	64.2	65.7	62.2	61.4	66.3	61.1	64.4	72.0	61.4	58.3	56.8	101	90
Test 3	73.2	70.4	71.4	69.3	67.3	64.6	67.2	68.7	71.9	61.8	57.3	56.9	102	92
Mean	69.3	66.1	67.6	64.6	62.6	63.4	63.0	66.6	70.8	61.5	57.6	57.0		
Right Insertion Loss	**23.3**	**28.5**	**28.9**	**34.4**	**37.6**	**39.3**	**38.2**	**33.5**	**29.3**	**30.2**	**30.2**	**23.1**		
Insertion Loss	**26.2**	**31.7**	**33.2**	**38.1**	**42.3**	**45.1**	**44.0**	**40.8**	**36.8**	**35.2**	**34.7**	**27.1**		

Table C-53. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	89.4	83.7	85.6	88.4	83.4	87.8	88.2	89.2	91.5	95.5	93.1	94.3
Test 2	85.7	89.3	84.5	86.8	88.2	87.8	86.4	89.0	88.2	91.6	94.0	95.0	94.4
Test 3	87.9	89.5	84.3	86.4	88.2	84.7	86.7	88.7	90.0	92.5	95.0	93.7	94.6
Mean	87.1	89.4	84.2	86.3	88.3	85.3	87.0	88.6	89.1	91.9	94.8	93.9	94.4
Occluded													
Test 1	79.0	81.3	77.4	79.4	80.0	78.8	76.2	76.3	69.9	72.0	76.2	72.0	68.1
Test 2	82.7	85.8	81.0	83.5	85.3	86.1	81.2	81.8	76.6	77.7	79.2	76.2	71.0
Test 3	80.2	83.2	78.9	81.7	82.9	83.8	79.2	79.6	74.4	75.7	77.6	74.5	69.3
Mean	80.6	83.4	79.1	81.6	82.7	82.9	78.9	79.2	73.6	75.1	77.7	74.3	69.5
Left Insertion Loss	**6.5**	**6.0**	**5.1**	**4.7**	**5.5**	**2.4**	**8.1**	**9.4**	**15.5**	**16.7**	**17.2**	**19.7**	**24.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.8	88.9	83.0	85.3	89.1	91.9	89.4	92.8	92.0	93.1	94.9	93.5	94.2
Test 2	85.8	88.8	83.8	86.4	88.9	91.6	87.9	92.6	90.7	92.9	95.0	93.5	95.5
Test 3	88.0	89.0	83.4	85.9	89.0	91.5	88.5	92.8	92.2	93.4	95.6	93.5	94.5
Mean	87.2	88.9	83.4	85.9	89.0	91.6	88.6	92.8	91.6	93.1	95.1	93.5	94.7
Occluded													
Test 1	85.7	88.8	84.5	87.5	89.0	89.5	83.8	83.5	77.5	79.0	79.0	72.7	69.6
Test 2	85.8	89.4	85.9	89.5	90.7	92.5	85.5	85.3	80.0	81.5	79.5	73.8	69.4
Test 3	85.4	88.8	85.6	88.9	89.4	91.2	84.0	84.1	79.3	80.6	78.7	72.4	67.1
Mean	85.6	89.0	85.3	88.6	89.7	91.1	84.4	84.3	79.0	80.3	79.1	73.0	68.7
Right Insertion Loss	**1.5**	**-0.1**	**-1.9**	**-2.8**	**-0.7**	**0.6**	**4.2**	**8.4**	**12.7**	**12.8**	**16.1**	**20.5**	**26.0**
Insertion Loss	**4.0**	**2.9**	**1.6**	**1.0**	**2.4**	**1.5**	**6.2**	**8.9**	**14.1**	**14.8**	**16.6**	**20.1**	**25.5**

Table C-53. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 13.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.4	95.0	96.6	99.5	99.3	101.7	95.8	90.8	91.7	91.5	89.3	79.9	108	109
Test 2	91.0	95.5	97.4	98.9	100.4	103.0	99.4	93.2	91.5	90.6	89.4	81.2	109	109
Test 3	91.4	95.4	97.0	99.4	99.9	102.7	98.7	93.1	91.6	91.3	89.9	81.3	109	109
Mean	91.3	95.3	97.0	99.3	99.9	102.5	98.0	92.4	91.6	91.1	89.5	80.8		
Occluded														
Test 1	62.0	58.8	61.0	58.2	54.8	51.8	47.7	43.3	43.2	43.8	46.0	48.1	89	80
Test 2	64.5	60.5	60.3	58.9	53.9	51.6	49.1	45.0	43.2	43.6	45.8	47.8	93	84
Test 3	61.8	56.7	57.6	56.1	50.5	51.2	46.5	44.0	43.1	43.5	45.8	47.9	91	82
Mean	62.8	58.7	59.6	57.8	53.1	51.5	47.8	44.1	43.2	43.7	45.8	47.9		
Left Insertion Loss	**28.5**	**36.6**	**37.4**	**41.5**	**46.8**	**50.9**	**50.2**	**48.3**	**48.4**	**47.5**	**43.7**	**32.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.8	95.7	97.3	98.2	101.6	104.1	99.4	96.4	94.5	91.3	90.7	81.9	110	110
Test 2	93.3	95.4	98.0	98.6	100.7	103.7	99.8	95.5	94.2	91.7	90.8	82.6	110	110
Test 3	93.1	95.5	97.5	97.6	101.2	103.0	99.7	95.8	94.1	91.4	91.7	81.7	109	110
Mean	92.7	95.5	97.6	98.2	101.2	103.6	99.7	95.9	94.3	91.5	91.1	82.1		
Occluded														
Test 1	62.4	63.7	66.2	62.1	55.6	51.6	47.2	47.4	49.6	50.8	53.5	56.1	96	86
Test 2	61.1	61.3	62.4	59.7	54.6	50.0	45.1	45.3	48.1	50.6	53.4	55.9	98	87
Test 3	60.3	60.2	61.6	59.5	55.3	50.5	46.0	45.3	48.1	50.7	53.5	56.0	97	86
Mean	61.3	61.7	63.4	60.5	55.2	50.7	46.1	46.0	48.6	50.7	53.4	56.0		
Right Insertion Loss	**31.5**	**33.8**	**34.2**	**37.7**	**46.0**	**52.9**	**53.5**	**49.9**	**45.6**	**40.8**	**37.6**	**26.1**		
Insertion Loss	**30.0**	**35.2**	**35.8**	**39.6**	**46.4**	**51.9**	**51.9**	**49.1**	**47.0**	**44.1**	**40.6**	**29.5**		

Table C-54. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.0	89.5	84.8	87.0	88.3	86.9	88.2	90.4	91.5	92.0	95.0	93.7	94.0
Test 2	85.7	89.2	85.2	87.7	88.5	90.4	87.4	90.2	90.2	91.3	94.7	94.6	95.0
Test 3	85.7	89.3	85.2	87.7	88.5	90.5	87.4	90.3	90.4	91.3	94.7	94.2	94.7
Mean	86.5	89.3	85.1	87.5	88.4	89.3	87.7	90.3	90.7	91.5	94.8	94.1	94.6
Occluded													
Test 1	86.8	90.9	87.9	91.5	92.3	92.0	87.0	87.1	82.1	79.5	83.6	81.4	80.1
Test 2	87.4	91.6	88.6	92.5	94.1	94.1	88.1	87.9	81.7	77.8	80.6	76.0	74.3
Test 3	87.5	91.7	88.7	92.6	94.0	93.7	87.8	88.8	83.7	80.1	82.9	78.1	75.9
Mean	87.2	91.4	88.4	92.2	93.5	93.3	87.6	87.9	82.5	79.1	82.4	78.5	76.8
Left Insertion Loss	**-0.8**	**-2.1**	**-3.3**	**-4.8**	**-5.0**	**-4.0**	**0.0**	**2.4**	**8.2**	**12.4**	**12.4**	**15.6**	**17.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	88.9	83.9	86.6	89.2	90.1	88.6	93.3	91.9	93.8	93.9	92.0	92.6
Test 2	86.0	88.9	84.3	87.2	89.2	90.7	88.4	92.6	90.4	93.2	95.6	92.1	94.2
Test 3	85.8	88.8	84.3	87.3	89.1	90.8	87.8	92.9	90.5	93.1	95.2	92.3	94.1
Mean	86.6	88.9	84.2	87.1	89.1	90.6	88.3	92.9	90.9	93.4	94.9	92.2	93.6
Occluded													
Test 1	87.3	91.2	88.3	92.1	92.7	94.1	90.7	89.0	86.7	88.5	88.2	81.8	79.0
Test 2	87.6	91.5	88.5	92.6	93.5	94.6	90.2	89.0	87.0	88.9	88.2	82.6	80.3
Test 3	87.8	91.7	88.6	92.5	93.7	94.5	88.7	87.6	85.6	87.3	87.3	81.3	78.6
Mean	87.6	91.5	88.5	92.4	93.3	94.4	89.9	88.5	86.4	88.2	87.9	81.9	79.3
Right Insertion Loss	**-0.9**	**-2.6**	**-4.3**	**-5.4**	**-4.2**	**-3.8**	**-1.6**	**4.4**	**4.5**	**5.1**	**7.0**	**10.3**	**14.3**
Insertion Loss	**-0.9**	**-2.3**	**-3.8**	**-5.1**	**-4.6**	**-3.9**	**-0.8**	**3.4**	**6.4**	**8.8**	**9.7**	**12.9**	**16.0**

Table C-54. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.1	95.0	97.9	99.0	99.8	100.0	98.8	96.3	92.1	93.2	87.9	78.5	108	109
Test 2	91.8	93.6	96.8	98.6	99.0	99.9	99.0	94.6	92.9	92.5	89.0	78.4	108	108
Test 3	91.6	94.2	97.2	98.3	99.6	99.5	98.3	95.3	93.1	93.4	89.1	78.7	108	108
Mean	91.5	94.2	97.3	98.6	99.5	99.8	98.7	95.4	92.7	93.0	88.6	78.6		
Occluded														
Test 1	74.3	70.0	69.6	67.5	59.8	58.6	59.4	60.9	60.5	75.1	69.2	53.2	99	90
Test 2	68.0	63.2	61.1	58.4	53.9	50.1	47.0	43.7	44.3	45.6	47.9	50.5	101	89
Test 3	69.0	64.0	62.6	60.7	57.4	56.7	53.1	55.8	50.6	46.8	48.9	48.7	101	90
Mean	70.4	65.7	64.4	62.2	57.1	55.2	53.2	53.5	51.8	55.8	55.3	50.8		
Left Insertion Loss	**21.0**	**28.5**	**32.9**	**36.4**	**42.4**	**44.6**	**45.5**	**41.9**	**40.9**	**37.2**	**33.3**	**27.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	95.9	98.1	99.3	101.4	103.5	101.2	98.6	93.6	90.6	90.0	83.2	110	111
Test 2	93.2	95.3	98.1	99.4	100.7	103.6	101.6	98.9	94.5	91.8	89.3	81.7	110	111
Test 3	93.3	95.0	97.9	98.2	99.7	102.3	100.2	98.1	93.9	92.9	91.2	82.1	109	110
Mean	93.1	95.4	98.1	99.0	100.6	103.1	101.0	98.5	94.0	91.7	90.2	82.3		
Occluded														
Test 1	72.3	67.7	68.8	67.3	64.2	64.3	60.3	58.5	53.1	54.8	54.4	56.5	101	92
Test 2	73.6	68.5	69.8	66.2	63.2	63.3	57.7	59.7	53.7	53.0	54.9	57.0	101	93
Test 3	70.5	63.8	65.8	63.6	61.7	62.8	57.4	59.1	51.1	53.5	54.3	56.2	101	92
Mean	72.2	66.7	68.1	65.7	63.0	63.5	58.5	59.1	52.6	53.8	54.5	56.6		
Right Insertion Loss	**20.9**	**28.7**	**30.0**	**33.2**	**37.6**	**39.7**	**42.5**	**39.5**	**41.4**	**38.0**	**35.6**	**25.8**		
Insertion Loss	**21.0**	**28.6**	**31.4**	**34.8**	**40.0**	**42.2**	**44.0**	**40.7**	**41.1**	**37.6**	**34.5**	**26.8**		

Table C-55. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.0	88.5	84.3	87.0	88.0	89.2	86.5	89.4	90.1	91.1	91.9	92.7	94.6
Test 2	85.0	88.4	84.3	87.0	88.1	89.4	86.6	89.3	90.3	91.4	91.8	92.6	94.4
Test 3	85.0	88.5	84.4	87.0	88.2	89.6	86.8	89.7	90.3	91.3	91.4	92.9	94.4
Mean	85.0	88.4	84.3	87.0	88.1	89.4	86.6	89.5	90.3	91.3	91.7	92.7	94.4
Occluded													
Test 1	79.5	80.6	76.2	77.2	77.5	74.8	77.2	77.3	74.6	74.6	73.1	68.2	60.9
Test 2	76.7	79.7	76.0	77.3	77.3	78.6	76.0	76.8	73.4	73.2	73.1	69.3	62.8
Test 3	84.1	84.7	79.4	80.3	80.5	78.0	79.7	79.2	76.9	77.2	75.6	70.7	66.3
Mean	80.1	81.7	77.2	78.3	78.4	77.1	77.7	77.8	75.0	75.0	73.9	69.4	63.3
Left Insertion Loss	**4.9**	**6.8**	**7.1**	**8.7**	**9.6**	**12.3**	**9.0**	**11.7**	**15.3**	**16.3**	**17.8**	**23.4**	**31.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.0	83.7	86.9	88.3	91.2	86.4	91.5	90.6	92.1	94.7	95.0	95.0
Test 2	85.1	87.9	83.8	87.1	88.3	91.4	86.1	91.7	90.7	91.8	94.6	94.9	94.6
Test 3	85.2	88.1	83.7	86.8	88.4	91.2	86.5	91.6	90.7	92.4	94.8	94.9	95.8
Mean	85.2	88.0	83.7	86.9	88.3	91.2	86.3	91.6	90.6	92.1	94.7	94.9	95.1
Occluded													
Test 1	89.0	89.2	84.0	86.5	88.0	86.6	84.4	80.4	75.7	76.3	75.3	70.2	67.3
Test 2	86.7	88.6	83.6	86.2	86.9	87.6	82.5	80.3	74.6	75.0	74.7	69.6	65.9
Test 3	88.8	89.1	83.5	86.3	87.8	86.9	84.4	81.5	76.5	77.4	74.3	69.1	64.1
Mean	88.1	89.0	83.7	86.3	87.6	87.0	83.8	80.7	75.6	76.2	74.8	69.6	65.8
Right Insertion Loss	**-3.0**	**-1.0**	**0.0**	**0.6**	**0.8**	**4.2**	**2.5**	**10.9**	**15.1**	**15.9**	**19.9**	**25.3**	**29.3**
Insertion Loss	**1.0**	**2.9**	**3.6**	**4.7**	**5.2**	**8.2**	**5.8**	**11.3**	**15.2**	**16.1**	**18.8**	**24.3**	**30.2**

Table C-55. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 15.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.2	93.7	95.7	96.9	97.6	100.0	97.7	96.2	93.8	91.5	88.4	78.9	108	108
Test 2	92.3	94.0	95.4	97.0	97.5	99.9	98.8	97.4	96.2	91.5	89.0	78.3	108	108
Test 3	92.2	94.6	95.4	96.4	98.0	100.4	99.0	97.1	95.6	92.0	89.0	77.8	108	108
Mean	92.2	94.1	95.5	96.8	97.7	100.1	98.5	96.9	95.2	91.7	88.8	78.3		
Occluded														
Test 1	59.2	57.6	56.7	56.1	56.5	54.5	48.6	43.8	44.6	44.7	44.7	46.1	88	79
Test 2	58.8	56.8	56.9	56.3	55.3	53.1	48.2	44.1	45.1	44.7	46.1	48.0	87	79
Test 3	58.7	55.7	55.8	53.6	51.4	55.0	49.3	42.7	42.4	43.1	45.5	47.2	91	81
Mean	58.9	56.7	56.4	55.3	54.4	54.2	48.7	43.5	44.0	44.2	45.4	47.1		
Left Insertion Loss	**33.3**	**37.4**	**39.1**	**41.4**	**43.3**	**45.9**	**49.8**	**53.4**	**51.2**	**47.5**	**43.4**	**31.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	95.3	96.3	98.2	99.3	101.5	101.5	100.0	97.3	96.4	94.3	80.2	110	110
Test 2	93.2	94.9	96.3	97.9	99.4	101.0	101.8	99.7	97.1	96.2	94.0	80.5	110	110
Test 3	93.3	95.0	96.3	98.9	99.7	101.5	101.3	100.2	97.0	97.0	94.5	80.9	110	110
Mean	93.3	95.0	96.3	98.3	99.5	101.4	101.5	100.0	97.1	96.5	94.3	80.5		
Occluded														
Test 1	60.1	56.2	55.3	53.4	48.9	48.4	44.9	46.9	48.1	50.0	53.1	55.5	96	84
Test 2	58.5	55.2	55.7	53.2	49.6	49.5	46.3	45.9	47.8	50.7	53.8	56.3	95	83
Test 3	57.6	54.7	55.6	52.4	48.4	48.1	47.6	45.4	47.6	50.5	53.4	55.9	96	84
Mean	58.7	55.4	55.5	53.0	48.9	48.7	46.3	46.0	47.8	50.4	53.4	55.9		
Right Insertion Loss	**34.5**	**39.7**	**40.8**	**45.4**	**50.5**	**52.7**	**55.3**	**53.9**	**49.3**	**46.2**	**40.8**	**24.6**		
Insertion Loss	**33.9**	**38.6**	**39.9**	**43.4**	**46.9**	**49.3**	**52.5**	**53.6**	**50.2**	**46.8**	**42.1**	**29.7**		

Table C-56. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	88.7	84.6	87.5	88.2	90.6	87.1	91.4	90.9	90.8	93.9	94.9	94.8
Test 2	84.9	88.6	84.6	87.5	88.1	90.7	87.0	91.2	91.0	91.3	93.7	94.6	94.4
Test 3	84.8	88.5	84.7	87.6	88.1	90.9	86.8	91.4	91.1	91.2	93.8	94.9	94.9
Mean	84.9	88.6	84.6	87.5	88.2	90.7	87.0	91.3	91.0	91.1	93.8	94.8	94.7
Occluded													
Test 1	82.0	85.1	81.0	83.1	82.7	84.0	81.3	80.3	75.0	74.9	79.6	77.9	74.3
Test 2	78.5	81.9	78.0	80.1	80.6	82.8	79.3	77.0	72.5	71.8	75.1	73.1	70.7
Test 3	79.1	82.5	78.4	80.4	80.5	82.3	78.3	77.5	74.5	74.6	78.3	77.8	75.8
Mean	79.9	83.2	79.2	81.2	81.3	83.0	79.6	78.3	74.0	73.7	77.7	76.3	73.6
Left Insertion Loss	**5.1**	**5.4**	**5.5**	**6.3**	**6.9**	**7.7**	**7.3**	**13.1**	**17.0**	**17.3**	**16.1**	**18.5**	**21.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.7	88.6	84.1	87.3	89.0	90.3	87.0	90.6	89.7	92.0	92.9	92.5	94.2
Test 2	85.5	88.6	84.1	87.3	88.9	90.4	86.8	90.9	89.9	92.1	93.1	92.8	94.1
Test 3	85.4	88.4	84.1	87.3	88.8	90.3	86.7	90.9	89.9	91.8	92.9	92.5	93.9
Mean	85.5	88.5	84.1	87.3	88.9	90.3	86.8	90.8	89.8	92.0	93.0	92.6	94.1
Occluded													
Test 1	85.6	88.3	84.2	88.1	89.4	89.3	85.5	83.3	76.9	78.3	78.7	73.2	70.0
Test 2	86.6	89.9	86.3	90.8	94.2	95.3	92.8	90.3	84.5	84.0	82.9	78.5	75.3
Test 3	86.9	90.1	86.1	90.9	94.3	95.0	93.4	90.6	84.6	84.4	83.3	79.6	78.0
Mean	86.4	89.4	85.5	89.9	92.7	93.2	90.6	88.0	82.0	82.2	81.6	77.1	74.5
Right Insertion Loss	**-0.8**	**-0.9**	**-1.4**	**-2.6**	**-3.8**	**-2.9**	**-3.7**	**2.7**	**7.8**	**9.7**	**11.3**	**15.5**	**19.6**
Insertion Loss	**2.1**	**2.3**	**2.0**	**1.8**	**1.6**	**2.4**	**1.8**	**7.9**	**12.4**	**13.5**	**13.7**	**17.0**	**20.4**

Table C-56. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 16.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	93.2	95.1	96.4	96.7	98.9	96.3	95.6	94.0	93.5	92.8	81.4	107	107
Test 2	92.5	93.3	95.3	96.4	97.0	99.2	96.7	95.7	94.3	94.3	93.2	81.3	108	108
Test 3	92.6	92.9	95.5	96.4	96.7	98.5	96.5	95.3	94.3	93.6	93.2	81.8	107	107
Mean	92.6	93.1	95.3	96.4	96.8	98.9	96.5	95.5	94.2	93.8	93.0	81.5		
Occluded														
Test 1	65.3	62.8	60.8	59.4	53.5	53.5	55.3	52.9	46.8	47.0	46.9	49.2	92	84
Test 2	63.9	62.1	59.1	58.6	52.9	49.9	48.2	45.1	44.8	45.1	46.6	49.0	90	80
Test 3	66.5	65.2	64.0	61.9	55.0	51.9	48.6	48.6	46.7	46.8	47.7	49.2	90	83
Mean	65.2	63.4	61.3	60.0	53.8	51.8	50.7	48.9	46.1	46.3	47.0	49.1		
Left Insertion Loss	**27.3**	**29.8**	**34.0**	**36.4**	**43.0**	**47.1**	**45.8**	**46.6**	**48.1**	**47.5**	**46.0**	**32.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	94.3	96.3	97.5	97.9	98.7	97.0	95.2	93.9	92.5	90.4	81.6	107	108
Test 2	92.7	94.4	96.3	97.7	97.7	98.5	96.7	94.9	94.0	92.5	90.1	81.8	107	107
Test 3	92.6	93.7	96.1	97.6	97.5	98.7	96.9	94.7	93.1	92.1	90.3	81.4	107	107
Mean	92.7	94.1	96.3	97.6	97.7	98.6	96.9	94.9	93.7	92.4	90.3	81.6		
Occluded														
Test 1	63.4	60.3	60.5	61.8	58.1	57.4	53.4	51.4	50.2	53.4	55.8	57.1	96	86
Test 2	69.0	69.7	70.8	70.9	67.2	63.1	58.1	55.2	53.2	56.9	58.1	57.1	101	92
Test 3	72.6	72.4	71.6	69.2	66.5	63.8	59.2	60.1	60.1	62.8	59.8	57.3	101	92
Mean	68.3	67.5	67.6	67.3	63.9	61.4	56.9	55.5	54.5	57.7	57.9	57.2		
Right Insertion Loss	**24.3**	**26.7**	**28.6**	**30.3**	**33.8**	**37.2**	**40.0**	**39.4**	**39.2**	**34.7**	**32.4**	**24.4**		
Insertion Loss	**25.8**	**28.2**	**31.3**	**33.4**	**38.4**	**42.2**	**42.9**	**43.0**	**43.6**	**41.1**	**39.2**	**28.4**		

Table C-57. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.8	84.4	87.2	88.3	89.3	86.8	90.3	90.5	91.6	92.3	93.7	95.1
Test 2	85.5	88.9	84.5	87.4	88.6	89.4	87.0	90.6	90.7	91.4	92.5	93.1	95.2
Test 3	85.6	88.8	84.5	87.4	88.6	89.7	87.0	90.6	90.8	91.6	92.6	93.3	95.3
Mean	85.5	88.8	84.5	87.3	88.5	89.5	86.9	90.5	90.7	91.5	92.4	93.3	95.2
Occluded													
Test 1	85.2	88.3	83.1	84.6	84.5	85.1	80.1	77.9	73.1	72.3	70.8	67.6	62.4
Test 2	85.9	89.4	84.4	86.2	84.9	84.0	80.3	79.1	73.1	73.5	72.8	69.1	60.5
Test 3	86.8	90.2	85.4	87.2	86.3	85.4	81.6	79.7	73.8	73.9	72.4	69.0	61.0
Mean	85.9	89.3	84.3	86.0	85.3	84.8	80.7	78.9	73.3	73.2	72.0	68.5	61.3
Left Insertion Loss	**-0.4**	**-0.4**	**0.2**	**1.3**	**3.3**	**4.6**	**6.3**	**11.6**	**17.3**	**18.3**	**20.5**	**24.8**	**33.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.2	83.7	87.0	88.2	91.1	86.0	91.6	90.7	92.5	94.2	94.1	93.5
Test 2	85.7	88.2	83.7	87.2	88.3	90.9	85.9	91.4	90.4	92.4	93.9	94.0	93.5
Test 3	85.8	88.3	83.6	87.0	88.3	90.9	85.9	91.5	90.3	92.4	94.0	93.9	93.7
Mean	85.7	88.2	83.7	87.0	88.3	91.0	85.9	91.5	90.5	92.4	94.1	94.0	93.6
Occluded													
Test 1	86.0	88.0	83.7	87.5	87.2	88.4	82.1	78.9	73.2	73.1	69.0	62.0	60.5
Test 2	86.1	88.3	83.9	87.6	87.4	88.4	82.3	80.5	74.3	74.7	70.7	64.1	59.8
Test 3	86.2	88.5	83.9	87.4	87.4	88.4	82.2	79.9	73.6	73.7	68.6	61.2	63.7
Mean	86.1	88.2	83.8	87.5	87.3	88.4	82.2	79.8	73.7	73.8	69.4	62.4	61.3
Right Insertion Loss	**-0.4**	**0.0**	**-0.2**	**-0.5**	**1.0**	**2.6**	**3.7**	**11.7**	**16.8**	**18.6**	**24.6**	**31.6**	**32.2**
Insertion Loss	**-0.4**	**-0.2**	**0.0**	**0.4**	**2.1**	**3.6**	**5.0**	**11.7**	**17.0**	**18.5**	**22.6**	**28.2**	**33.1**

Table C-57. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	93.7	95.7	97.7	98.0	99.5	98.8	98.2	93.6	90.9	89.9	78.3	108	108
Test 2	92.8	94.3	95.9	97.1	97.8	99.7	98.8	97.5	92.6	90.8	90.7	78.5	108	108
Test 3	92.8	94.6	96.2	97.5	98.1	100.2	99.4	97.4	92.6	91.3	90.8	78.6	108	108
Mean	92.8	94.2	95.9	97.4	97.9	99.8	99.0	97.7	93.0	91.0	90.5	78.5		
Occluded														
Test 1	54.8	55.5	62.3	63.3	58.6	56.5	51.9	45.8	46.1	46.4	46.9	48.9	94	81
Test 2	57.8	58.8	59.3	57.6	54.1	52.8	51.1	46.7	46.9	47.3	47.5	49.1	94	81
Test 3	60.5	62.4	63.0	61.4	59.8	57.0	53.4	55.3	51.4	51.2	49.4	49.2	95	82
Mean	57.7	58.9	61.6	60.7	57.5	55.4	52.2	49.3	48.1	48.3	48.0	49.1		
Left Insertion Loss	**35.1**	**35.3**	**34.4**	**36.7**	**40.4**	**44.4**	**46.9**	**48.4**	**44.8**	**42.7**	**42.5**	**29.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	94.2	96.2	97.1	98.1	99.3	100.4	95.4	92.2	93.4	89.4	79.2	108	108
Test 2	92.3	94.2	96.5	97.0	97.7	98.6	100.1	95.8	92.9	92.9	88.7	78.5	108	108
Test 3	92.2	94.3	96.5	97.3	98.3	99.5	101.0	99.3	95.2	92.9	85.4	76.8	109	109
Mean	92.3	94.3	96.4	97.1	98.0	99.1	100.5	96.8	93.4	93.0	87.8	78.2		
Occluded														
Test 1	61.7	60.7	62.1	58.8	59.1	62.4	64.0	57.4	52.3	52.4	51.6	53.8	95	83
Test 2	57.3	55.2	57.4	56.1	56.0	53.1	51.0	45.6	46.0	48.7	51.5	54.0	95	83
Test 3	64.3	61.5	63.1	61.4	62.1	69.1	73.6	66.3	62.4	59.1	53.0	53.8	95	84
Mean	61.1	59.1	60.9	58.7	59.1	61.5	62.9	56.4	53.6	53.4	52.0	53.9		
Right Insertion Loss	**31.2**	**35.1**	**35.5**	**38.4**	**39.0**	**37.6**	**37.7**	**40.4**	**39.9**	**39.7**	**35.8**	**24.3**		
Insertion Loss	**33.2**	**35.2**	**34.9**	**37.5**	**39.7**	**41.0**	**42.3**	**44.4**	**42.3**	**41.2**	**39.2**	**26.8**		

Table C-58. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.7	89.4	85.3	88.0	88.6	90.7	86.4	91.0	90.6	92.1	94.5	94.7	96.5
Test 2	88.2	89.8	85.0	87.4	88.7	87.2	87.4	91.2	92.0	93.3	96.1	94.3	94.6
Test 3	85.8	89.4	85.4	87.9	88.6	90.4	87.1	90.4	90.2	92.2	95.5	95.7	95.5
Mean	86.6	89.5	85.2	87.8	88.6	89.4	87.0	90.9	90.9	92.5	95.4	94.9	95.5
Occluded													
Test 1	86.1	89.6	85.0	86.8	86.8	86.7	82.2	80.2	74.6	75.7	75.0	70.7	67.5
Test 2	86.1	89.7	85.1	87.1	86.8	87.1	82.8	81.1	75.2	75.9	75.3	71.7	68.7
Test 3	86.2	89.8	85.3	87.0	87.1	87.1	83.4	81.5	75.1	75.8	75.7	71.4	66.9
Mean	86.1	89.7	85.1	87.0	86.9	87.0	82.8	80.9	75.0	75.8	75.4	71.3	67.7
Left Insertion Loss	**0.5**	**-0.2**	**0.1**	**0.8**	**1.7**	**2.5**	**4.2**	**9.9**	**15.9**	**16.7**	**20.0**	**23.6**	**27.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.0	87.9	83.5	86.5	87.9	90.4	85.4	92.1	90.3	92.3	93.7	93.2	95.1
Test 2	87.4	88.3	82.9	85.8	88.1	89.8	87.0	91.6	90.9	92.9	93.7	91.7	92.8
Test 3	85.3	88.1	83.4	86.0	88.0	90.0	86.7	90.9	89.8	92.7	94.9	92.9	94.7
Mean	85.9	88.1	83.3	86.1	88.0	90.0	86.4	91.6	90.3	92.6	94.1	92.6	94.2
Occluded													
Test 1	85.9	87.9	82.8	86.1	86.4	86.8	81.4	78.7	72.7	74.3	72.6	67.1	64.6
Test 2	86.1	88.5	83.8	87.1	86.9	87.6	82.6	80.2	74.2	75.0	74.4	68.9	61.7
Test 3	86.0	88.6	83.8	87.3	87.4	87.9	83.2	80.6	74.1	75.2	75.0	68.4	62.6
Mean	86.0	88.3	83.5	86.8	86.9	87.4	82.4	79.8	73.7	74.9	74.0	68.1	62.9
Right Insertion Loss	**-0.1**	**-0.2**	**-0.2**	**-0.7**	**1.1**	**2.6**	**4.0**	**11.7**	**16.6**	**17.8**	**20.1**	**24.5**	**31.3**
Insertion Loss	**0.2**	**-0.2**	**-0.1**	**0.0**	**1.4**	**2.5**	**4.1**	**10.8**	**16.3**	**17.2**	**20.0**	**24.1**	**29.6**

Table C-58. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	94.9	96.6	97.4	98.6	101.0	93.4	92.8	93.2	92.7	90.1	81.1	108	108
Test 2	93.1	94.8	96.4	98.1	98.9	100.0	92.8	92.8	93.2	92.5	90.2	80.8	108	108
Test 3	93.5	94.1	95.9	98.1	99.2	100.5	93.4	92.9	93.5	92.9	90.1	81.2	108	108
Mean	93.1	94.6	96.3	97.8	98.9	100.5	93.2	92.8	93.3	92.7	90.1	81.0		
Occluded														
Test 1	59.2	53.3	53.8	53.5	50.1	49.3	44.7	41.0	41.6	41.8	43.4	45.3	95	83
Test 2	58.5	53.5	53.7	55.3	52.3	50.0	45.0	41.3	41.8	42.5	43.8	45.3	96	83
Test 3	57.5	54.2	55.1	53.9	52.1	48.8	46.0	41.6	41.5	42.5	43.9	45.2	96	83
Mean	58.4	53.7	54.2	54.2	51.5	49.3	45.2	41.3	41.6	42.3	43.7	45.3		
Left Insertion Loss	**34.7**	**40.9**	**42.1**	**43.6**	**47.4**	**51.2**	**48.0**	**51.6**	**51.7**	**50.4**	**46.4**	**35.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	94.6	97.0	98.4	100.2	103.3	98.4	95.9	95.1	93.6	91.5	84.7	109	110
Test 2	93.1	93.9	96.2	97.5	100.9	103.0	98.7	97.7	96.4	94.2	91.2	84.6	109	110
Test 3	93.5	95.0	96.3	97.6	100.2	103.1	98.1	97.0	95.1	94.2	91.9	84.0	109	110
Mean	93.1	94.5	96.5	97.8	100.4	103.2	98.4	96.9	95.5	94.0	91.5	84.4		
Occluded														
Test 1	58.1	57.3	58.8	55.5	53.0	50.2	44.9	45.9	48.0	50.5	53.1	55.5	94	82
Test 2	55.5	56.1	58.0	56.4	53.4	49.7	46.4	45.1	47.5	50.3	53.1	55.5	95	83
Test 3	54.4	52.6	55.7	53.2	51.2	48.7	44.2	45.1	47.5	50.4	53.4	55.5	95	83
Mean	56.0	55.3	57.5	55.0	52.5	49.5	45.2	45.4	47.7	50.4	53.2	55.5		
Right Insertion Loss	**37.1**	**39.2**	**39.0**	**42.8**	**47.9**	**53.6**	**53.2**	**51.5**	**47.9**	**43.6**	**38.3**	**28.9**		
Insertion Loss	**35.9**	**40.0**	**40.5**	**43.2**	**47.7**	**52.4**	**50.6**	**51.5**	**49.8**	**47.0**	**42.4**	**32.3**		

Table C-59. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	89.9	85.3	88.0	89.1	88.5	87.8	94.2	92.6	91.7	94.8	95.4	95.2
Test 2	85.6	89.3	85.5	88.4	88.9	92.0	88.3	91.6	91.3	91.2	95.6	95.0	96.3
Test 3	88.0	89.6	85.2	87.7	88.7	88.5	89.0	92.1	92.0	92.1	95.7	94.8	95.7
Mean	87.2	89.6	85.3	88.1	88.9	89.7	88.3	92.6	92.0	91.7	95.4	95.1	95.7
Occluded													
Test 1	85.2	88.4	83.6	85.0	84.5	87.6	82.4	81.5	76.7	73.8	77.3	71.9	68.6
Test 2	87.3	88.6	83.3	84.3	83.9	83.5	83.1	82.9	78.3	75.2	77.8	71.9	66.3
Test 3	85.3	88.6	83.8	85.0	84.6	87.3	82.6	82.6	77.3	73.7	77.8	73.3	69.5
Mean	85.9	88.6	83.6	84.8	84.3	86.1	82.7	82.3	77.4	74.3	77.6	72.4	68.1
Left Insertion Loss	**1.3**	**1.1**	**1.7**	**3.3**	**4.5**	**3.5**	**5.7**	**10.3**	**14.5**	**17.4**	**17.8**	**22.7**	**27.6**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.5	88.4	83.3	86.4	88.2	89.4	86.9	92.2	90.8	92.2	92.4	93.1	93.4
Test 2	85.2	88.2	83.8	86.8	88.2	90.0	86.5	90.7	89.5	91.2	93.3	92.7	94.0
Test 3	87.7	88.5	83.1	85.7	88.5	88.5	87.4	91.4	90.0	92.3	93.1	91.8	93.9
Mean	86.8	88.3	83.4	86.3	88.3	89.3	87.0	91.4	90.1	91.9	92.9	92.5	93.8
Occluded													
Test 1	76.7	80.1	77.3	80.5	81.0	83.5	78.1	78.7	73.6	72.1	73.2	68.9	66.3
Test 2	78.0	79.7	77.0	79.4	80.5	80.0	78.7	78.0	74.6	73.6	73.2	67.4	64.6
Test 3	77.0	80.7	77.4	80.4	81.7	83.4	78.0	79.2	73.9	72.6	73.9	69.1	66.3
Mean	77.2	80.2	77.2	80.1	81.1	82.3	78.3	78.6	74.0	72.8	73.4	68.5	65.7
Right Insertion Loss	**9.6**	**8.2**	**6.2**	**6.2**	**7.3**	**7.0**	**8.7**	**12.8**	**16.1**	**19.1**	**19.5**	**24.0**	**28.1**
Insertion Loss	**5.4**	**4.6**	**3.9**	**4.7**	**5.9**	**5.2**	**7.2**	**11.5**	**15.3**	**18.3**	**18.6**	**23.4**	**27.8**

Table C-59. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	93.9	95.8	97.5	98.5	100.6	96.8	96.4	93.2	90.7	90.5	79.9	108	108
Test 2	93.9	93.8	97.0	97.3	97.5	99.4	96.6	94.9	92.3	91.9	90.8	80.9	108	108
Test 3	92.9	93.9	96.9	97.4	97.9	99.1	96.4	94.2	92.3	92.3	91.4	80.3	108	108
Mean	93.1	93.9	96.5	97.4	98.0	99.7	96.6	95.1	92.6	91.6	90.9	80.4		
Occluded														
Test 1	61.0	57.5	56.9	55.0	49.8	51.1	49.9	47.2	43.6	42.8	44.9	47.1	95	83
Test 2	59.1	56.7	57.9	55.1	50.7	50.5	49.0	44.6	43.4	43.5	44.9	47.2	94	83
Test 3	61.0	57.8	58.1	54.0	49.7	50.1	48.1	44.3	43.1	43.3	44.6	46.6	95	83
Mean	60.3	57.3	57.6	54.7	50.0	50.6	49.0	45.4	43.4	43.2	44.8	47.0		
Left Insertion Loss	**32.8**	**36.5**	**38.9**	**42.7**	**47.9**	**49.1**	**47.6**	**49.8**	**49.2**	**48.4**	**46.1**	**33.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.0	94.1	94.9	97.5	98.1	100.8	99.9	99.7	94.1	93.0	91.2	84.7	109	109
Test 2	92.5	93.1	95.4	98.5	98.0	100.1	99.5	99.5	95.1	93.6	90.8	83.9	108	109
Test 3	92.3	93.5	95.0	97.1	97.8	99.2	97.0	96.1	94.6	94.4	91.1	83.3	108	108
Mean	92.3	93.6	95.1	97.7	98.0	100.0	98.8	98.4	94.6	93.7	91.0	84.0		
Occluded														
Test 1	57.1	55.4	54.5	51.8	49.6	49.1	44.1	45.2	48.0	50.9	53.8	56.4	89	79
Test 2	55.1	53.7	53.9	50.9	48.6	47.6	43.7	44.9	47.9	50.9	53.8	56.4	89	79
Test 3	56.9	53.2	53.5	51.2	49.3	47.3	42.7	45.0	48.0	50.8	53.6	56.2	90	80
Mean	56.4	54.1	53.9	51.3	49.2	48.0	43.5	45.0	48.0	50.9	53.8	56.3		
Right Insertion Loss	**35.9**	**39.5**	**41.1**	**46.4**	**48.8**	**52.0**	**55.3**	**53.4**	**46.6**	**42.8**	**37.3**	**27.7**		
Insertion Loss	**34.3**	**38.0**	**40.0**	**44.6**	**48.4**	**50.6**	**51.4**	**51.6**	**47.9**	**45.6**	**41.7**	**30.5**		

Table C-60. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.6	85.1	87.9	88.8	92.0	88.9	93.2	92.5	92.6	96.7	96.3	95.9
Test 2	85.4	88.8	85.0	87.9	89.1	92.1	88.9	93.3	92.5	92.2	96.7	96.3	95.9
Test 3	85.5	88.9	85.0	87.9	89.1	91.9	88.6	92.9	92.5	92.1	96.7	95.8	95.9
Mean	85.4	88.8	85.0	87.9	89.0	92.0	88.8	93.1	92.5	92.3	96.7	96.1	95.9
Occluded													
Test 1	86.6	90.2	86.5	89.9	92.2	94.3	88.9	87.0	82.4	80.4	82.8	75.9	72.7
Test 2	86.0	89.7	85.8	89.0	90.4	91.7	87.2	85.3	80.4	79.4	82.2	75.8	70.3
Test 3	86.4	90.1	86.6	90.1	91.7	93.2	88.6	87.1	82.3	80.8	83.0	76.1	72.2
Mean	86.3	90.0	86.3	89.7	91.4	93.1	88.3	86.5	81.7	80.2	82.7	75.9	71.7
Left Insertion Loss	**-1.0**	**-1.2**	**-1.3**	**-1.8**	**-2.4**	**-1.1**	**0.6**	**6.7**	**10.8**	**12.1**	**14.0**	**20.2**	**24.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.9	87.5	83.2	86.7	87.9	89.4	86.7	91.7	89.5	90.4	92.0	93.1	95.1
Test 2	85.2	87.8	83.3	86.9	88.4	89.3	86.9	91.8	89.4	90.3	90.5	92.9	94.4
Test 3	85.1	87.6	83.2	86.8	88.1	89.4	86.7	92.1	89.7	90.6	91.7	92.9	94.2
Mean	85.1	87.6	83.2	86.8	88.1	89.3	86.8	91.9	89.5	90.4	91.4	92.9	94.6
Occluded													
Test 1	85.2	88.0	83.4	86.5	87.8	88.5	82.3	80.7	78.4	76.7	75.9	73.8	71.3
Test 2	85.9	88.8	85.5	89.5	90.5	92.6	87.4	85.2	82.4	79.8	79.5	75.1	72.5
Test 3	85.7	88.7	85.2	89.2	89.9	91.3	86.0	83.2	80.7	78.5	78.6	74.7	71.5
Mean	85.6	88.5	84.7	88.4	89.4	90.8	85.2	83.0	80.5	78.3	78.0	74.5	71.8
Right Insertion Loss	**-0.5**	**-0.9**	**-1.5**	**-1.6**	**-1.3**	**-1.5**	**1.5**	**8.8**	**9.0**	**12.1**	**13.4**	**18.4**	**22.8**
Insertion Loss	**-0.7**	**-1.1**	**-1.4**	**-1.7**	**-1.9**	**-1.3**	**1.0**	**7.8**	**9.9**	**12.1**	**13.7**	**19.3**	**23.5**

Table C-60. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – Subject 20.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	94.8	96.9	98.1	98.4	99.7	98.3	95.3	89.4	91.5	89.1	79.3	108	108
Test 2	92.9	94.6	97.1	98.0	98.1	99.7	98.0	94.7	90.0	92.1	88.6	79.6	108	108
Test 3	93.7	94.1	96.6	97.8	98.2	99.2	97.7	94.4	89.1	92.1	88.9	79.5	108	108
Mean	93.4	94.5	96.9	98.0	98.3	99.6	98.0	94.8	89.5	91.9	88.8	79.5		
Occluded														
Test 1	62.9	62.7	62.8	61.4	56.3	53.4	49.3	46.6	43.7	44.7	43.6	45.1	100	88
Test 2	63.8	66.3	64.1	61.3	59.0	58.5	53.5	50.8	46.6	45.5	43.8	45.2	98	87
Test 3	65.8	67.9	66.3	63.2	60.2	61.6	60.4	56.7	47.3	45.6	47.3	45.5	99	88
Mean	64.2	65.6	64.4	62.0	58.5	57.8	54.4	51.4	45.9	45.3	44.9	45.3		
Left Insertion Loss	**29.2**	**28.9**	**32.5**	**36.0**	**39.8**	**41.7**	**43.6**	**43.4**	**43.6**	**46.7**	**43.9**	**34.2**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.5	93.2	95.6	96.3	96.5	98.5	96.4	94.9	96.9	95.6	89.4	82.7	107	107
Test 2	91.6	94.0	95.6	96.3	96.5	98.1	96.3	94.4	97.1	94.9	90.6	83.8	107	107
Test 3	91.4	93.2	95.8	95.8	96.3	97.4	95.8	95.0	96.6	94.3	90.4	82.8	107	107
Mean	91.5	93.5	95.7	96.2	96.5	98.0	96.2	94.8	96.9	94.9	90.1	83.1		
Occluded														
Test 1	66.7	64.4	62.8	63.2	57.9	54.4	51.4	50.4	52.1	52.4	54.0	55.7	95	84
Test 2	65.8	62.6	61.1	62.7	57.2	57.4	57.4	58.9	55.0	54.0	54.5	55.8	98	88
Test 3	66.4	65.2	63.8	64.8	59.8	59.7	56.5	51.6	51.8	53.8	55.2	55.9	97	86
Mean	66.3	64.1	62.6	63.5	58.3	57.2	55.1	53.6	53.0	53.4	54.6	55.8		
Right Insertion Loss	**25.2**	**29.4**	**33.1**	**32.6**	**38.1**	**40.8**	**41.1**	**41.2**	**43.9**	**41.5**	**35.5**	**27.3**		
Insertion Loss	**27.2**	**29.1**	**32.8**	**34.3**	**38.9**	**41.3**	**42.3**	**42.3**	**43.8**	**44.1**	**39.7**	**30.7**		

Table C-61. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	88.7	84.9	87.5	88.3	90.1	86.9	89.3	89.9	91.4	93.5	93.9	94.9
Test 2	85.3	88.8	84.9	87.7	88.6	90.2	87.2	89.4	90.2	91.7	93.7	92.6	94.5
Test 3	85.2	88.9	84.9	87.6	88.4	90.3	86.9	89.2	90.1	91.7	93.5	93.8	94.6
Mean	85.2	88.8	84.9	87.6	88.4	90.2	87.0	89.3	90.1	91.6	93.6	93.5	94.7
Occluded													
Test 1	77.1	80.2	75.5	78.2	79.0	79.6	76.2	75.6	71.5	71.6	72.2	68.9	67.5
Test 2	76.8	79.8	76.0	78.4	78.9	79.6	75.7	75.6	71.4	71.9	72.5	68.6	67.1
Test 3	79.5	82.1	77.8	80.1	80.7	81.5	77.3	77.2	72.9	73.0	74.2	70.7	68.3
Mean	77.8	80.7	76.4	78.9	79.5	80.2	76.4	76.1	71.9	72.2	73.0	69.4	67.6
Left Insertion Loss	**7.4**	**8.1**	**8.5**	**8.7**	**8.9**	**10.0**	**10.6**	**13.2**	**18.1**	**19.4**	**20.6**	**24.0**	**27.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.4	84.2	87.0	88.8	91.3	87.2	92.0	89.9	92.8	95.0	94.5	96.2
Test 2	85.7	88.6	84.2	87.4	88.9	91.2	86.9	92.2	89.9	92.2	94.8	95.1	96.6
Test 3	85.6	88.7	84.2	87.1	88.9	91.2	87.1	91.9	90.1	92.9	94.3	94.0	95.4
Mean	85.6	88.6	84.2	87.2	88.9	91.2	87.0	92.0	90.0	92.7	94.7	94.5	96.1
Occluded													
Test 1	86.0	88.1	83.5	86.8	87.3	87.2	81.8	82.2	75.1	76.6	75.0	71.1	69.7
Test 2	85.7	88.0	83.7	87.0	87.3	87.1	82.3	82.7	75.5	76.6	75.3	71.9	71.8
Test 3	85.5	87.7	83.6	86.8	87.0	87.1	82.0	82.2	75.1	76.3	75.7	72.5	72.2
Mean	85.7	87.9	83.6	86.9	87.2	87.1	82.0	82.4	75.2	76.5	75.3	71.8	71.3
Right Insertion Loss	**-0.1**	**0.6**	**0.6**	**0.3**	**1.7**	**4.1**	**5.0**	**9.7**	**14.7**	**16.1**	**19.3**	**22.7**	**24.8**
Insertion Loss	**3.6**	**4.4**	**4.5**	**4.5**	**5.3**	**7.0**	**7.8**	**11.4**	**16.4**	**17.8**	**19.9**	**23.4**	**25.9**

Table C-61. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	95.0	96.9	98.1	98.9	100.9	99.1	95.0	93.1	93.0	89.8	78.9	108	109
Test 2	92.9	95.0	96.0	97.2	99.2	101.5	98.7	94.7	93.5	93.2	90.4	79.0	108	108
Test 3	92.7	95.5	96.1	97.6	98.7	100.8	98.7	95.0	93.9	92.8	90.1	80.0	108	108
Mean	92.7	95.1	96.3	97.6	99.0	101.1	98.8	94.9	93.5	93.0	90.1	79.3		
Occluded														
Test 1	61.2	61.9	62.1	61.2	53.0	50.7	49.5	44.0	45.7	44.0	44.9	47.2	88	79
Test 2	61.2	60.2	61.2	59.7	50.9	48.2	46.6	43.7	43.6	43.3	45.1	47.5	87	78
Test 3	60.1	61.8	61.3	57.8	50.5	47.7	44.9	42.8	43.8	44.5	45.3	47.3	89	80
Mean	60.8	61.3	61.6	59.5	51.5	48.9	47.0	43.5	44.4	43.9	45.1	47.3		
Left Insertion Loss	**31.9**	**33.8**	**34.8**	**38.1**	**47.5**	**52.2**	**51.8**	**51.4**	**49.1**	**49.1**	**45.0**	**32.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.7	95.4	97.1	97.6	99.1	101.6	100.8	98.1	96.8	94.2	91.0	84.3	109	110
Test 2	93.3	94.8	96.7	97.8	99.0	101.0	100.6	97.9	97.3	94.4	91.5	82.6	109	109
Test 3	94.2	95.3	97.0	97.8	99.1	101.2	100.8	97.5	97.2	94.4	90.9	82.9	109	109
Mean	93.7	95.2	96.9	97.7	99.1	101.3	100.7	97.8	97.1	94.3	91.1	83.3		
Occluded														
Test 1	60.7	60.2	61.3	56.9	56.3	56.4	52.1	47.4	48.0	50.6	53.5	56.1	95	84
Test 2	62.0	59.2	61.2	57.0	54.4	55.6	50.1	47.1	48.0	50.8	53.6	56.1	95	84
Test 3	63.5	60.9	62.3	58.6	56.2	57.0	52.2	47.1	48.0	50.7	53.6	56.1	95	84
Mean	62.1	60.1	61.6	57.5	55.6	56.4	51.5	47.2	48.0	50.7	53.6	56.1		
Right Insertion Loss	**31.6**	**35.1**	**35.3**	**40.3**	**43.4**	**44.9**	**49.3**	**50.6**	**49.1**	**43.6**	**37.5**	**27.2**		
Insertion Loss	**31.8**	**34.4**	**35.0**	**39.2**	**45.5**	**48.6**	**50.5**	**51.0**	**49.1**	**46.4**	**41.3**	**29.6**		

Table C-62. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	89.8	85.4	88.0	88.8	88.9	88.3	91.3	92.4	93.6	94.8	94.5	93.2
Test 2	87.9	89.8	85.3	87.9	88.8	88.9	88.4	90.9	92.8	93.7	95.4	94.7	93.3
Test 3	85.8	89.6	85.6	88.4	89.0	92.4	87.9	89.7	91.1	92.2	94.9	94.4	94.2
Mean	87.2	89.7	85.4	88.1	88.9	90.1	88.2	90.6	92.1	93.2	95.0	94.5	93.6
Occluded													
Test 1	86.6	90.2	85.9	87.6	87.2	88.9	84.0	81.1	76.7	75.3	76.3	72.6	70.8
Test 2	86.8	90.6	86.5	88.3	87.6	89.4	84.3	81.0	76.8	75.7	78.0	73.8	71.0
Test 3	86.8	90.7	86.6	88.6	88.2	89.4	84.6	81.3	76.7	75.4	77.3	73.1	71.0
Mean	86.7	90.5	86.3	88.2	87.7	89.2	84.3	81.1	76.8	75.5	77.2	73.2	70.9
Left Insertion Loss	**0.5**	**-0.8**	**-0.9**	**-0.1**	**1.2**	**0.8**	**3.9**	**9.5**	**15.3**	**17.7**	**17.8**	**21.3**	**22.7**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.4	89.5	84.3	87.1	89.7	90.6	88.4	92.7	91.3	93.0	94.6	93.3	94.2
Test 2	88.5	89.6	84.3	87.0	89.7	90.5	88.6	92.5	91.0	92.9	95.1	93.2	94.2
Test 3	86.3	89.4	84.9	87.9	89.7	91.4	87.3	91.6	90.0	92.4	95.1	94.5	95.8
Mean	87.7	89.5	84.5	87.3	89.7	90.8	88.1	92.3	90.8	92.8	94.9	93.7	94.7
Occluded													
Test 1	86.4	89.2	84.5	86.9	87.9	87.5	82.6	79.3	73.3	74.4	72.1	68.5	68.1
Test 2	86.5	89.2	84.4	86.6	87.4	87.9	82.7	79.5	74.1	74.7	73.3	68.5	68.1
Test 3	86.8	89.6	85.4	88.4	89.0	89.0	83.6	81.3	75.1	75.1	74.2	69.4	69.7
Mean	86.6	89.3	84.7	87.3	88.1	88.2	83.0	80.0	74.1	74.7	73.2	68.8	68.7
Right Insertion Loss	**1.1**	**0.2**	**-0.2**	**0.0**	**1.6**	**2.7**	**5.1**	**12.2**	**16.6**	**18.1**	**21.7**	**24.9**	**26.1**
Insertion Loss	**0.8**	**-0.3**	**-0.6**	**0.0**	**1.4**	**1.7**	**4.5**	**10.9**	**16.0**	**17.9**	**19.8**	**23.1**	**24.4**

Table C-62. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	94.4	96.6	98.0	98.6	101.3	97.5	96.5	90.9	93.4	90.6	79.4	108	109
Test 2	92.4	93.9	96.3	98.8	98.0	100.9	97.4	97.0	92.6	91.8	91.4	79.5	108	108
Test 3	93.1	94.3	96.5	97.6	97.6	100.7	98.0	97.1	92.0	92.4	91.2	79.6	108	108
Mean	92.7	94.2	96.5	98.1	98.1	101.0	97.6	96.9	91.8	92.5	91.1	79.5		
Occluded														
Test 1	62.4	55.9	55.7	55.7	52.0	53.8	48.8	42.2	41.5	42.2	44.4	46.2	96	84
Test 2	62.0	56.3	55.5	54.3	50.6	49.2	46.8	41.3	42.6	45.7	46.5	47.2	97	84
Test 3	62.1	59.4	59.5	58.3	54.1	54.9	55.2	55.6	59.3	54.8	50.7	46.8	97	85
Mean	62.2	57.2	56.9	56.1	52.2	52.7	50.3	46.4	47.8	47.6	47.2	46.7		
Left Insertion Loss	**30.5**	**37.0**	**39.6**	**42.0**	**45.8**	**48.3**	**47.4**	**50.5**	**44.1**	**45.0**	**43.9**	**32.8**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	95.4	97.1	98.9	100.3	103.5	103.2	101.8	100.7	90.7	85.6	80.4	111	111
Test 2	93.2	95.6	97.5	99.8	100.8	103.0	101.3	100.8	100.1	92.2	89.0	79.6	110	111
Test 3	93.0	95.1	97.5	99.7	100.1	102.9	102.0	100.3	99.6	91.4	88.8	80.4	110	111
Mean	93.1	95.3	97.4	99.5	100.4	103.1	102.2	101.0	100.2	91.4	87.8	80.1		
Occluded														
Test 1	60.6	54.8	58.4	56.8	55.0	52.8	50.2	46.4	52.8	51.0	53.5	55.9	96	83
Test 2	57.5	52.7	56.2	55.0	52.9	53.5	48.5	49.4	55.7	52.1	53.9	56.2	96	83
Test 3	62.8	60.0	60.5	57.1	54.4	55.6	53.8	52.9	54.6	51.5	53.6	55.9	97	84
Mean	60.3	55.8	58.3	56.3	54.1	54.0	50.8	49.6	54.4	51.5	53.7	56.0		
Right Insertion Loss	**32.8**	**39.5**	**39.0**	**43.2**	**46.3**	**49.2**	**51.4**	**51.4**	**45.8**	**39.9**	**34.1**	**24.1**		
Insertion Loss	**31.6**	**38.3**	**39.3**	**42.6**	**46.1**	**48.7**	**49.4**	**50.9**	**44.9**	**42.4**	**39.0**	**28.4**		

Table C-63. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.8	89.2	84.5	86.6	88.3	85.7	87.5	89.6	92.2	94.0	93.3	93.5	95.9
Test 2	85.8	89.4	84.8	87.0	88.7	88.8	87.3	88.4	88.7	92.3	94.1	95.0	94.5
Test 3	86.2	89.6	84.7	86.9	89.0	88.0	87.4	88.2	88.4	92.3	95.0	95.2	94.1
Mean	86.6	89.4	84.7	86.8	88.7	87.5	87.4	88.7	89.8	92.8	94.1	94.6	94.8
Occluded													
Test 1	86.8	90.6	87.3	90.7	93.0	94.7	88.8	87.8	82.2	81.5	80.6	77.2	72.0
Test 2	86.6	90.4	86.8	89.8	91.9	93.1	87.6	84.9	80.1	80.0	79.2	76.3	71.1
Test 3	87.1	91.0	87.3	90.9	93.7	94.8	89.3	88.3	82.0	81.6	81.4	77.8	72.6
Mean	86.8	90.7	87.1	90.5	92.9	94.2	88.6	87.0	81.4	81.1	80.4	77.1	71.9
Left Insertion Loss	**-0.2**	**-1.3**	**-2.5**	**-3.6**	**-4.2**	**-6.7**	**-1.2**	**1.7**	**8.3**	**11.8**	**13.8**	**17.4**	**22.9**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.8	88.5	83.8	86.6	88.6	91.4	86.9	94.0	92.5	93.6	95.3	94.2	94.6
Test 2	85.7	88.7	84.3	87.1	88.8	92.3	86.9	92.6	91.2	93.0	95.1	93.9	95.9
Test 3	85.9	88.9	84.3	87.1	89.1	92.3	87.0	92.5	91.1	92.9	95.0	93.5	96.0
Mean	86.5	88.7	84.1	86.9	88.8	92.0	87.0	93.0	91.6	93.2	95.1	93.9	95.5
Occluded													
Test 1	86.1	89.0	85.5	88.4	88.6	91.2	83.1	82.3	77.7	78.8	77.4	71.8	67.9
Test 2	86.0	89.0	85.6	88.5	88.6	91.1	83.6	81.5	77.4	78.4	77.0	71.5	66.4
Test 3	86.3	89.4	85.5	88.5	89.1	91.0	82.9	82.4	77.1	78.2	77.0	71.3	68.6
Mean	86.1	89.1	85.5	88.5	88.8	91.1	83.2	82.1	77.4	78.5	77.1	71.5	67.6
Right Insertion Loss	**0.3**	**-0.4**	**-1.4**	**-1.6**	**0.1**	**0.9**	**3.8**	**11.0**	**14.2**	**14.7**	**18.0**	**22.3**	**27.9**
Insertion Loss	**0.1**	**-0.8**	**-1.9**	**-2.6**	**-2.1**	**-2.9**	**1.3**	**6.4**	**11.3**	**13.2**	**15.9**	**19.9**	**25.4**

Table C-63. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 13.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.2	94.8	97.1	98.9	100.4	102.1	98.7	93.0	91.1	91.5	89.9	81.0	109	109
Test 2	92.2	95.2	96.8	99.3	99.8	101.7	96.8	90.7	92.3	92.2	89.4	81.3	108	109
Test 3	92.3	94.8	96.9	97.9	99.6	102.7	97.7	90.3	91.9	92.2	89.3	81.2	109	109
Mean	92.2	94.9	96.9	98.7	99.9	102.2	97.7	91.3	91.8	92.0	89.6	81.2		
Occluded														
Test 1	65.2	61.7	59.6	58.1	55.6	52.8	48.0	44.3	43.7	43.5	45.1	47.0	100	89
Test 2	64.6	60.8	58.9	58.9	55.7	52.8	47.4	42.8	43.8	43.9	45.6	47.7	99	88
Test 3	65.6	61.5	59.6	57.9	56.1	53.4	49.3	44.8	43.7	43.3	44.9	46.6	100	90
Mean	65.1	61.3	59.4	58.3	55.8	53.0	48.2	44.0	43.7	43.6	45.2	47.1		
Left Insertion Loss	**27.1**	**33.6**	**37.6**	**40.4**	**44.1**	**49.2**	**49.5**	**47.4**	**48.0**	**48.4**	**44.4**	**34.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.9	95.3	96.9	98.9	101.2	103.5	99.3	95.3	93.8	91.0	91.3	82.5	110	110
Test 2	92.9	95.6	98.2	99.3	101.0	104.2	99.6	95.5	93.9	91.5	90.7	81.9	110	110
Test 3	93.5	95.2	98.3	98.6	101.6	103.2	100.6	95.6	93.9	91.3	90.7	81.5	110	110
Mean	92.8	95.3	97.8	98.9	101.3	103.6	99.8	95.5	93.9	91.3	90.9	82.0		
Occluded														
Test 1	58.8	56.4	57.9	57.7	55.4	52.0	47.5	45.6	47.4	50.1	53.1	55.7	97	85
Test 2	58.4	58.4	60.8	59.1	56.6	52.3	47.2	44.7	47.4	50.4	53.3	55.9	97	85
Test 3	59.4	57.5	60.6	59.5	57.2	52.7	47.5	45.0	47.2	50.1	53.0	55.6	97	85
Mean	58.9	57.4	59.7	58.8	56.4	52.3	47.4	45.1	47.3	50.2	53.1	55.7		
Right Insertion Loss	**33.9**	**37.9**	**38.0**	**40.1**	**44.9**	**51.3**	**52.5**	**50.4**	**46.5**	**41.1**	**37.7**	**26.2**		
Insertion Loss	**30.5**	**35.7**	**37.8**	**40.3**	**44.5**	**50.2**	**51.0**	**48.9**	**47.3**	**44.7**	**41.1**	**30.2**		

Table C-64. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	89.0	84.8	87.3	88.5	90.0	86.4	89.8	89.6	91.3	94.5	94.1	94.3
Test 2	85.5	89.1	84.9	87.5	88.5	90.2	86.7	90.1	89.9	91.2	94.5	94.2	94.6
Test 3	87.8	89.3	84.7	86.8	88.1	86.8	88.0	90.1	91.0	92.3	94.5	93.1	94.4
Mean	86.3	89.1	84.8	87.2	88.4	89.0	87.0	90.0	90.2	91.6	94.5	93.8	94.4
Occluded													
Test 1	86.0	89.7	85.5	88.5	89.8	90.5	84.1	82.0	74.9	72.6	73.5	69.9	67.0
Test 2	85.9	89.5	85.4	88.3	89.4	90.3	84.1	81.6	75.0	72.9	73.9	69.9	68.1
Test 3	86.1	89.6	85.5	88.5	89.8	90.4	84.3	81.6	74.4	72.9	73.7	69.7	68.4
Mean	86.0	89.6	85.5	88.4	89.7	90.4	84.1	81.7	74.8	72.8	73.7	69.8	67.8
Left Insertion Loss	**0.3**	**-0.5**	**-0.7**	**-1.2**	**-1.3**	**-1.4**	**2.9**	**8.3**	**15.4**	**18.8**	**20.7**	**24.0**	**26.6**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.8	88.7	84.1	87.3	89.1	90.7	87.3	92.5	89.9	92.1	94.5	92.0	94.4
Test 2	85.9	88.9	84.3	87.5	89.2	90.6	87.2	92.8	90.2	93.0	95.0	92.4	93.8
Test 3	88.1	88.9	83.7	86.3	89.2	90.2	88.4	93.3	91.8	94.2	94.4	92.3	92.9
Mean	86.6	88.8	84.0	87.0	89.2	90.5	87.6	92.9	90.6	93.1	94.6	92.2	93.7
Occluded													
Test 1	86.9	90.3	86.7	90.4	93.1	94.8	91.6	87.7	81.3	81.2	82.2	75.8	69.8
Test 2	86.4	89.8	86.2	89.7	92.2	93.9	91.1	87.5	81.3	80.6	81.0	74.0	68.7
Test 3	86.9	90.3	86.9	90.7	93.5	95.3	92.2	88.1	81.8	81.2	82.1	74.8	69.2
Mean	86.8	90.1	86.6	90.2	92.9	94.7	91.6	87.8	81.5	81.0	81.8	74.9	69.2
Right Insertion Loss	**-0.2**	**-1.3**	**-2.5**	**-3.2**	**-3.8**	**-4.2**	**-4.0**	**5.1**	**9.2**	**12.1**	**12.9**	**17.4**	**24.5**
Insertion Loss	**0.1**	**-0.9**	**-1.6**	**-2.2**	**-2.5**	**-2.8**	**-0.6**	**6.7**	**12.3**	**15.4**	**16.8**	**20.7**	**25.5**

Table C-64. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.9	93.7	97.0	98.9	99.6	100.3	98.7	95.9	91.4	92.4	88.1	78.1	108	109
Test 2	91.8	94.3	97.2	98.2	99.9	100.3	99.2	95.8	93.6	93.5	88.3	78.4	108	109
Test 3	91.0	94.8	97.3	98.7	99.3	100.4	97.9	95.7	92.9	93.4	86.8	77.9	108	108
Mean	91.6	94.3	97.2	98.6	99.6	100.3	98.6	95.8	92.6	93.1	87.7	78.1		
Occluded														
Test 1	62.8	60.6	58.8	57.5	53.1	50.1	49.9	44.3	43.1	43.7	45.7	47.8	97	84
Test 2	64.7	61.5	59.1	57.4	52.8	50.1	47.4	47.1	45.6	46.6	48.2	50.6	97	84
Test 3	66.6	63.0	62.9	61.3	56.8	55.1	52.5	48.9	47.9	45.5	46.8	49.1	97	84
Mean	64.7	61.7	60.3	58.7	54.2	51.8	49.9	46.8	45.6	45.3	46.9	49.2		
Left Insertion Loss	**26.9**	**32.6**	**36.9**	**39.9**	**45.4**	**48.6**	**48.7**	**49.0**	**47.1**	**47.8**	**40.8**	**29.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.5	95.2	98.3	99.4	100.7	103.7	102.4	100.5	95.4	92.7	87.7	81.9	110	111
Test 2	93.3	94.9	97.5	98.6	99.7	102.1	101.0	99.5	95.9	92.6	88.8	80.7	109	110
Test 3	92.5	95.6	97.5	98.3	99.9	102.7	100.3	99.8	96.1	92.6	89.8	80.7	110	110
Mean	92.8	95.2	97.8	98.8	100.1	102.8	101.3	99.9	95.8	92.7	88.8	81.1		
Occluded														
Test 1	65.7	62.0	61.2	56.3	53.0	56.2	51.9	49.1	48.5	50.7	53.3	55.9	100	90
Test 2	62.5	60.4	59.9	55.3	50.8	53.4	52.3	51.2	49.2	51.5	54.4	57.0	100	89
Test 3	63.3	61.7	60.5	55.9	51.5	54.5	52.0	49.7	48.4	51.2	54.1	56.6	101	90
Mean	63.8	61.3	60.5	55.8	51.7	54.7	52.1	50.0	48.7	51.1	53.9	56.5		
Right Insertion Loss	**29.0**	**33.9**	**37.3**	**42.9**	**48.4**	**48.2**	**49.2**	**50.0**	**47.1**	**41.6**	**34.8**	**24.6**		
Insertion Loss	**27.9**	**33.2**	**37.1**	**41.4**	**46.9**	**48.4**	**48.9**	**49.5**	**47.1**	**44.7**	**37.8**	**26.8**		

Table C-65. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.7	84.7	87.6	88.5	90.9	87.1	90.0	91.5	91.7	94.0	93.1	93.9
Test 2	85.1	88.7	84.8	87.6	88.4	91.1	87.1	89.8	91.7	91.8	94.4	93.5	94.1
Test 3	85.0	88.4	84.8	87.6	88.3	91.1	87.5	90.7	91.8	91.6	94.1	93.7	93.7
Mean	85.1	88.6	84.8	87.6	88.4	91.0	87.2	90.2	91.7	91.7	94.2	93.4	93.9
Occluded													
Test 1	74.6	78.0	74.5	77.3	78.0	80.0	77.8	78.1	75.5	73.2	72.0	67.8	63.4
Test 2	74.3	78.0	74.6	77.2	78.2	80.2	77.6	78.6	75.3	73.0	72.1	68.2	63.7
Test 3	75.1	77.9	74.2	77.2	78.4	80.2	77.8	77.1	74.6	72.8	72.4	68.4	63.9
Mean	74.7	78.0	74.4	77.2	78.2	80.1	77.7	77.9	75.2	73.0	72.2	68.2	63.6
Left Insertion Loss	**10.4**	**10.6**	**10.4**	**10.4**	**10.2**	**10.9**	**9.5**	**12.2**	**16.5**	**18.7**	**22.0**	**25.3**	**30.3**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.5	84.1	87.5	88.8	90.7	86.8	91.1	90.1	92.1	94.2	94.1	95.5
Test 2	85.5	88.6	84.2	87.6	89.0	90.7	87.0	91.1	90.0	91.6	94.2	94.1	95.5
Test 3	85.5	88.4	84.2	87.4	88.9	90.6	87.1	90.6	89.7	91.7	94.4	93.8	96.3
Mean	85.6	88.5	84.2	87.5	88.9	90.7	87.0	90.9	89.9	91.8	94.3	94.0	95.8
Occluded													
Test 1	86.9	89.6	85.0	87.9	88.4	88.1	84.5	82.5	77.9	77.6	77.2	73.0	69.8
Test 2	87.0	89.8	84.9	87.7	88.6	87.9	84.4	82.8	77.9	77.8	78.0	72.6	68.8
Test 3	86.8	89.6	85.1	87.9	88.4	88.0	84.6	82.7	78.5	77.5	77.2	72.5	69.0
Mean	86.9	89.7	85.0	87.8	88.5	88.0	84.5	82.7	78.1	77.6	77.5	72.7	69.2
Right Insertion Loss	**-1.3**	**-1.2**	**-0.9**	**-0.4**	**0.5**	**2.7**	**2.4**	**8.3**	**11.8**	**14.1**	**16.8**	**21.3**	**26.6**
Insertion Loss	**4.5**	**4.7**	**4.7**	**5.0**	**5.3**	**6.8**	**6.0**	**10.2**	**14.2**	**16.4**	**19.4**	**23.3**	**28.4**

Table C-65. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 15.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.7	96.0	95.4	96.6	96.8	99.5	98.2	97.1	94.4	92.2	90.4	79.4	108	108
Test 2	92.9	94.9	95.2	96.7	97.4	99.0	98.4	96.8	94.5	91.5	90.3	79.7	108	108
Test 3	91.8	94.5	95.7	97.4	97.2	99.3	98.4	97.1	94.7	91.8	90.8	79.5	108	108
Mean	92.5	95.2	95.4	96.9	97.1	99.3	98.3	97.0	94.5	91.9	90.5	79.5		
Occluded														
Test 1	56.5	53.4	54.2	51.0	46.3	46.4	44.3	42.1	41.8	42.4	43.9	45.1	87	79
Test 2	57.3	54.3	55.0	50.2	47.1	46.1	44.3	41.8	41.8	42.6	44.5	46.2	87	79
Test 3	55.7	52.6	53.0	48.9	47.6	48.7	47.4	47.0	45.8	45.1	46.9	46.4	87	79
Mean	56.5	53.4	54.1	50.0	47.0	47.1	45.3	43.6	43.1	43.4	45.1	45.9		
Left Insertion Loss	**36.0**	**41.7**	**41.4**	**46.9**	**50.2**	**52.2**	**53.0**	**53.3**	**51.4**	**48.5**	**45.4**	**33.7**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.5	94.2	96.3	99.1	99.3	101.2	101.9	100.1	97.1	97.8	93.3	80.2	110	110
Test 2	93.8	93.9	95.6	98.7	99.7	101.2	101.5	99.7	97.2	98.8	93.4	80.2	110	110
Test 3	93.6	94.0	95.7	98.4	99.2	100.7	101.5	99.6	97.0	97.5	93.4	80.0	110	110
Mean	94.0	94.0	95.8	98.7	99.4	101.1	101.7	99.8	97.1	98.0	93.4	80.1		
Occluded														
Test 1	60.4	56.1	57.3	53.3	50.6	50.4	46.2	45.4	47.3	49.8	52.7	55.1	96	85
Test 2	59.4	55.2	57.1	54.2	50.4	50.2	47.5	45.8	47.7	50.1	53.1	55.6	96	85
Test 3	58.0	53.9	56.7	54.4	48.9	48.9	47.9	46.9	50.4	51.4	53.7	55.5	96	85
Mean	59.3	55.1	57.0	54.0	50.0	49.8	47.2	46.0	48.5	50.4	53.2	55.4		
Right Insertion Loss	**34.7**	**39.0**	**38.8**	**44.7**	**49.4**	**51.3**	**54.4**	**53.8**	**48.6**	**47.6**	**40.2**	**24.8**		
Insertion Loss	**35.4**	**40.4**	**40.1**	**45.8**	**49.8**	**51.7**	**53.7**	**53.6**	**50.0**	**48.1**	**42.8**	**29.2**		

Table C-66. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.4	88.9	84.6	87.0	88.0	87.7	88.1	92.9	92.8	92.3	94.7	95.2	94.9
Test 2	85.2	88.8	85.0	87.7	88.1	91.1	87.2	91.8	91.4	91.3	94.1	95.2	95.7
Test 3	85.2	89.0	84.9	87.7	88.3	91.1	87.0	91.7	91.4	91.3	94.1	95.3	95.7
Mean	86.0	88.9	84.8	87.5	88.1	89.9	87.4	92.1	91.9	91.7	94.3	95.2	95.4
Occluded													
Test 1	77.4	80.9	77.1	79.3	79.9	81.6	78.9	79.0	72.9	69.3	70.1	65.1	66.1
Test 2	77.6	80.9	77.2	79.8	79.9	82.4	80.3	79.5	73.4	69.4	69.9	64.3	65.4
Test 3	75.8	79.4	75.3	78.2	78.7	81.2	78.9	79.1	72.8	68.1	66.8	62.6	67.6
Mean	77.0	80.4	76.5	79.1	79.5	81.7	79.4	79.2	73.0	68.9	68.9	64.0	66.4
Left Insertion Loss	**9.0**	**8.5**	**8.3**	**8.4**	**8.6**	**8.2**	**8.1**	**12.9**	**18.9**	**22.7**	**25.4**	**31.2**	**29.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	88.8	83.7	86.4	89.1	88.7	88.0	91.3	90.9	92.6	92.9	91.3	92.9
Test 2	85.7	88.6	84.2	87.2	88.8	89.9	87.2	90.7	89.8	92.0	93.4	91.9	93.8
Test 3	85.8	88.9	84.3	87.4	89.0	89.8	87.1	90.9	89.7	92.0	93.1	91.8	93.6
Mean	86.5	88.8	84.1	87.0	89.0	89.5	87.4	90.9	90.1	92.2	93.2	91.7	93.4
Occluded													
Test 1	86.1	88.8	84.3	87.6	87.8	87.2	83.1	82.1	76.3	75.7	76.1	72.2	71.5
Test 2	85.5	88.2	84.4	87.8	87.3	87.5	84.0	82.6	77.1	75.9	78.1	73.3	68.6
Test 3	85.7	88.3	83.9	87.2	87.4	87.2	82.8	82.1	76.7	76.0	76.4	71.6	67.3
Mean	85.8	88.4	84.2	87.5	87.5	87.3	83.3	82.3	76.7	75.9	76.9	72.4	69.1
Right Insertion Loss	**0.7**	**0.3**	**-0.1**	**-0.5**	**1.5**	**2.2**	**4.2**	**8.7**	**13.4**	**16.3**	**16.3**	**19.3**	**24.3**
Insertion Loss	**4.8**	**4.4**	**4.1**	**4.0**	**5.1**	**5.2**	**6.1**	**10.8**	**16.1**	**19.5**	**20.8**	**25.2**	**26.7**

Table C-66. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 16.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.8	93.2	95.5	96.3	97.1	97.5	97.0	94.7	93.5	92.8	91.2	81.1	107	107
Test 2	92.7	92.8	95.7	96.7	96.9	97.9	96.9	94.8	93.5	93.6	92.2	81.0	107	107
Test 3	92.6	92.8	95.6	96.7	97.2	98.2	96.8	94.4	93.6	93.1	91.8	81.0	107	107
Mean	92.4	92.9	95.6	96.6	97.0	97.9	96.9	94.6	93.5	93.2	91.7	81.1		
Occluded														
Test 1	64.8	62.7	62.1	58.4	53.8	52.9	49.9	54.6	54.2	49.7	48.7	49.2	89	79
Test 2	63.0	62.3	61.6	56.6	53.8	52.2	47.4	52.4	52.9	47.6	46.8	47.8	89	79
Test 3	63.1	62.8	62.2	58.4	53.2	47.5	44.3	48.4	49.8	46.0	46.6	48.9	88	78
Mean	63.6	62.6	62.0	57.8	53.6	50.9	47.2	51.8	52.3	47.8	47.4	48.6		
Left Insertion Loss	**28.8**	**30.3**	**33.7**	**38.8**	**43.4**	**47.0**	**49.7**	**42.9**	**41.2**	**45.4**	**44.3**	**32.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	94.4	96.3	96.8	96.5	98.4	96.7	94.9	94.1	92.3	90.0	81.0	107	107
Test 2	92.6	94.3	96.5	97.2	96.6	99.0	96.5	94.5	94.5	92.2	90.2	81.0	107	107
Test 3	92.5	94.1	96.5	97.3	96.6	99.0	96.4	94.4	94.5	92.1	90.5	81.2	107	107
Mean	92.5	94.2	96.4	97.1	96.6	98.8	96.6	94.6	94.3	92.2	90.2	81.1		
Occluded														
Test 1	65.9	64.2	61.0	56.5	56.8	52.5	47.8	46.5	48.9	51.7	54.6	56.9	96	84
Test 2	61.5	64.7	61.8	58.5	58.2	52.1	48.4	47.6	48.7	51.5	54.0	56.4	96	84
Test 3	62.8	65.2	62.8	57.6	59.0	54.0	49.3	47.8	49.5	52.6	54.7	56.8	95	84
Mean	63.4	64.7	61.9	57.5	58.0	52.9	48.5	47.3	49.0	51.9	54.4	56.7		
Right Insertion Loss	**29.1**	**29.6**	**34.5**	**39.6**	**38.6**	**45.9**	**48.0**	**47.3**	**45.3**	**40.3**	**35.8**	**24.4**		
Insertion Loss	**28.9**	**29.9**	**34.1**	**39.2**	**41.0**	**46.4**	**48.9**	**45.1**	**43.3**	**42.8**	**40.0**	**28.4**		

Table C-67. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.8	84.5	87.2	88.4	89.3	86.9	90.2	90.4	91.7	92.4	93.8	95.0
Test 2	85.6	88.9	84.4	87.3	88.5	89.5	87.1	90.1	90.7	91.6	92.3	93.6	95.4
Test 3	85.7	88.9	84.5	87.3	88.6	89.4	86.8	90.2	90.6	91.7	92.3	93.5	95.2
Mean	85.6	88.9	84.5	87.3	88.5	89.4	86.9	90.2	90.6	91.7	92.3	93.6	95.2
Occluded													
Test 1	86.0	89.0	84.2	86.3	85.7	86.2	82.2	82.1	76.9	75.9	74.0	70.1	65.2
Test 2	85.7	89.0	84.2	86.2	85.9	85.8	82.2	82.0	76.3	75.1	74.4	70.4	67.8
Test 3	86.1	89.2	84.3	86.4	86.0	85.7	82.7	82.4	76.6	75.4	75.1	71.0	66.8
Mean	85.9	89.0	84.2	86.3	85.8	85.9	82.4	82.2	76.6	75.5	74.5	70.5	66.6
Left Insertion Loss	**-0.3**	**-0.2**	**0.2**	**1.0**	**2.7**	**3.5**	**4.6**	**8.0**	**14.0**	**16.2**	**17.8**	**23.1**	**28.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.2	83.7	87.0	88.2	91.2	85.9	91.7	90.9	92.5	94.4	94.3	93.6
Test 2	85.8	88.3	83.7	87.1	88.3	91.2	85.8	91.7	90.7	92.5	94.2	94.0	93.4
Test 3	85.8	88.3	83.7	87.1	88.4	91.1	85.7	91.6	90.6	92.6	94.1	94.1	93.8
Mean	85.7	88.3	83.7	87.1	88.3	91.2	85.8	91.7	90.7	92.5	94.2	94.1	93.6
Occluded													
Test 1	85.8	88.1	84.6	89.1	91.6	95.4	92.1	90.5	85.7	87.1	87.0	85.4	86.9
Test 2	87.4	89.7	85.5	88.8	88.9	89.5	84.8	83.2	76.9	76.6	73.3	68.5	69.0
Test 3	85.8	88.2	84.4	88.7	90.7	93.7	90.9	92.4	87.5	88.6	90.1	90.6	92.0
Mean	86.3	88.7	84.8	88.9	90.4	92.9	89.3	88.7	83.4	84.1	83.5	81.5	82.6
Right Insertion Loss	**-0.6**	**-0.4**	**-1.1**	**-1.8**	**-2.2**	**-1.7**	**-3.5**	**3.0**	**7.3**	**8.4**	**10.8**	**12.6**	**11.0**
Insertion Loss	**-0.5**	**-0.3**	**-0.4**	**-0.4**	**0.3**	**0.9**	**0.5**	**5.5**	**10.7**	**12.3**	**14.3**	**17.9**	**19.8**

Table C-67. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	93.9	95.4	97.3	97.7	99.5	98.5	97.6	92.8	91.2	90.3	78.3	108	108
Test 2	93.1	94.3	95.9	97.4	97.8	99.5	98.4	97.8	93.3	90.8	90.4	77.9	108	108
Test 3	93.1	94.4	96.3	97.5	97.9	99.9	98.7	97.4	93.2	91.3	90.7	78.0	108	108
Mean	93.0	94.2	95.9	97.4	97.8	99.6	98.5	97.6	93.1	91.1	90.5	78.1		
Occluded														
Test 1	65.9	65.2	66.1	62.5	60.8	58.6	54.0	47.5	44.4	44.2	45.7	44.9	95	83
Test 2	67.0	68.0	67.0	63.6	62.1	59.9	54.4	45.8	44.5	46.2	47.5	48.8	95	83
Test 3	63.5	65.0	64.2	59.7	59.1	56.8	51.8	47.5	46.9	47.8	46.2	44.4	95	83
Mean	65.5	66.1	65.8	62.0	60.7	58.4	53.4	47.0	45.3	46.1	46.5	46.0		
Left Insertion Loss	**27.5**	**28.1**	**30.1**	**35.5**	**37.1**	**41.2**	**45.1**	**50.7**	**47.9**	**45.0**	**44.0**	**32.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	94.4	96.1	97.3	98.3	100.0	101.4	99.2	95.1	92.7	86.7	78.7	109	109
Test 2	92.6	94.5	96.2	97.0	97.8	99.0	100.0	94.0	94.1	92.1	88.5	78.6	108	108
Test 3	92.5	94.3	96.2	96.9	97.8	99.2	101.4	98.5	93.1	91.7	86.7	77.0	108	109
Mean	92.6	94.4	96.2	97.0	98.0	99.4	100.9	97.2	94.1	92.2	87.3	78.1		
Occluded														
Test 1	83.7	78.6	77.5	72.6	68.8	61.7	60.3	66.2	61.8	64.1	53.0	52.4	101	94
Test 2	69.4	66.3	65.4	60.8	56.2	51.1	51.2	52.4	57.2	54.5	53.1	54.0	97	85
Test 3	88.9	82.8	79.8	74.2	71.1	62.4	48.5	49.8	53.6	61.9	50.6	52.2	102	98
Mean	80.7	75.9	74.2	69.2	65.4	58.4	53.4	56.1	57.5	60.2	52.2	52.9		
Right Insertion Loss	**11.9**	**18.4**	**21.9**	**27.8**	**32.6**	**41.0**	**47.6**	**41.1**	**36.6**	**32.0**	**35.0**	**25.2**		
Insertion Loss	**19.7**	**23.3**	**26.0**	**31.6**	**34.9**	**41.1**	**46.4**	**45.9**	**42.2**	**38.5**	**39.5**	**28.6**		

Table C-68. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.8	89.5	85.5	87.9	88.5	90.3	88.0	90.4	90.5	91.3	92.9	92.7	95.7
Test 2	86.2	89.9	85.6	88.0	89.0	90.1	88.1	90.7	90.3	90.3	92.9	93.2	95.3
Test 3	86.0	89.8	85.6	88.0	88.6	90.7	88.4	90.7	91.0	91.3	93.9	93.4	95.7
Mean	86.0	89.7	85.6	88.0	88.7	90.4	88.2	90.6	90.6	91.0	93.2	93.1	95.6
Occluded													
Test 1	88.6	90.0	84.8	86.4	87.2	83.0	85.2	82.7	78.5	77.7	76.6	72.9	72.1
Test 2	88.4	90.0	85.2	87.2	87.4	84.3	85.4	83.1	79.0	78.3	77.3	73.0	71.9
Test 3	88.3	89.9	85.1	86.7	87.1	83.6	85.3	83.2	79.1	78.8	77.3	72.9	71.5
Mean	88.5	89.9	85.1	86.8	87.3	83.6	85.3	83.0	78.8	78.3	77.1	72.9	71.8
Left Insertion Loss	**-2.4**	**-0.2**	**0.5**	**1.2**	**1.4**	**6.7**	**2.9**	**7.6**	**11.7**	**12.7**	**16.1**	**20.2**	**23.8**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.0	83.5	86.0	87.6	88.5	86.4	90.9	90.1	92.7	93.0	91.4	92.4
Test 2	85.5	88.4	83.6	86.1	88.2	88.2	86.8	90.9	90.0	93.1	92.8	91.2	92.3
Test 3	85.4	88.4	83.5	86.1	87.8	87.7	87.1	90.4	89.7	92.8	93.5	91.1	92.2
Mean	85.4	88.3	83.5	86.1	87.9	88.1	86.8	90.7	89.9	92.9	93.1	91.2	92.3
Occluded													
Test 1	87.9	88.5	83.5	85.8	86.9	84.1	83.6	79.9	76.3	77.4	69.9	64.1	64.7
Test 2	87.8	88.8	83.7	86.2	86.7	83.8	82.8	79.1	75.6	77.0	69.8	62.7	60.5
Test 3	87.8	88.4	83.2	85.3	86.3	83.1	82.8	79.3	75.7	76.6	69.8	62.6	61.6
Mean	87.8	88.5	83.5	85.7	86.6	83.7	83.0	79.5	75.8	77.0	69.8	63.1	62.3
Right Insertion Loss	**-2.4**	**-0.3**	**0.0**	**0.3**	**1.2**	**4.5**	**3.7**	**11.3**	**14.1**	**15.8**	**23.2**	**28.1**	**30.0**
Insertion Loss	**-2.4**	**-0.2**	**0.3**	**0.8**	**1.3**	**5.6**	**3.3**	**9.4**	**12.9**	**14.3**	**19.7**	**24.1**	**26.9**

Table C-68. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.4	96.8	98.0	99.2	101.2	94.4	92.2	93.6	93.4	90.4	80.8	108	108
Test 2	93.6	94.7	97.2	98.2	99.1	101.8	96.7	92.4	91.7	92.3	90.0	80.5	108	109
Test 3	92.8	95.0	96.4	97.6	99.0	101.1	94.4	92.2	94.0	93.0	90.8	80.5	108	108
Mean	93.1	94.7	96.8	97.9	99.1	101.4	95.2	92.3	93.1	92.9	90.4	80.6		
Occluded														
Test 1	63.8	60.9	59.4	57.2	51.7	51.3	44.8	41.3	41.2	42.5	44.7	47.1	96	84
Test 2	64.2	58.4	57.2	53.2	47.0	48.0	42.6	40.3	41.4	43.0	45.3	47.7	96	85
Test 3	62.2	59.4	58.4	54.2	50.5	51.2	43.6	40.2	41.0	41.7	43.6	45.7	96	85
Mean	63.4	59.6	58.3	54.9	49.7	50.2	43.6	40.6	41.2	42.4	44.5	46.8		
Left Insertion Loss	**29.8**	**35.2**	**38.5**	**43.0**	**49.3**	**51.2**	**51.5**	**51.6**	**51.9**	**50.5**	**45.9**	**33.8**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.1	95.3	96.8	98.0	101.1	103.3	100.1	97.5	95.3	93.0	90.3	83.7	109	110
Test 2	91.3	95.6	96.4	98.0	101.4	103.8	100.2	98.0	95.9	92.8	90.1	83.4	110	110
Test 3	91.0	94.7	95.8	98.4	100.7	103.2	99.5	97.4	96.0	93.5	90.0	83.9	109	110
Mean	91.1	95.2	96.3	98.1	101.1	103.4	99.9	97.6	95.7	93.1	90.2	83.7		
Occluded														
Test 1	58.9	59.6	61.1	58.0	51.9	49.7	49.0	50.1	49.0	51.6	53.7	56.0	95	83
Test 2	54.9	56.0	59.6	55.8	50.7	49.5	46.2	45.7	48.1	51.0	53.9	56.3	95	82
Test 3	54.9	57.2	60.7	57.9	52.0	49.7	45.8	45.7	48.1	50.8	53.2	55.6	95	82
Mean	56.2	57.6	60.5	57.3	51.5	49.7	47.0	47.2	48.4	51.2	53.6	56.0		
Right Insertion Loss	**34.9**	**37.7**	**35.9**	**40.9**	**49.5**	**53.8**	**52.9**	**50.5**	**47.4**	**41.9**	**36.6**	**27.7**		
Insertion Loss	**32.3**	**36.4**	**37.2**	**42.0**	**49.4**	**52.5**	**52.2**	**51.0**	**49.6**	**46.2**	**41.2**	**30.7**		

Table C-69. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.9	89.6	85.6	88.3	88.9	91.8	88.4	91.3	91.3	91.2	95.8	95.4	96.6
Test 2	85.8	89.5	85.6	88.4	88.9	91.7	88.2	91.5	90.7	90.8	95.4	95.5	96.5
Test 3	88.1	89.8	85.2	87.7	88.9	88.3	89.1	91.7	91.7	92.2	95.6	95.6	95.3
Mean	86.6	89.6	85.5	88.1	88.9	90.6	88.6	91.5	91.2	91.4	95.6	95.5	96.1
Occluded													
Test 1	89.0	90.6	86.3	88.9	90.5	87.8	87.4	87.0	81.2	77.3	81.9	76.8	73.5
Test 2	89.0	90.8	86.7	89.5	91.5	89.3	89.3	88.8	83.0	78.0	82.9	77.7	74.4
Test 3	89.1	90.8	86.9	90.0	92.3	90.1	90.4	90.0	84.4	79.1	83.9	78.5	75.1
Mean	89.0	90.7	86.7	89.5	91.4	89.1	89.0	88.6	82.8	78.2	82.9	77.7	74.3
Left Insertion Loss	**-2.4**	**-1.1**	**-1.2**	**-1.3**	**-2.5**	**1.6**	**-0.5**	**2.9**	**8.4**	**13.2**	**12.7**	**17.8**	**21.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.2	83.8	86.8	88.3	90.1	86.6	90.6	89.1	91.0	93.4	92.6	94.7
Test 2	85.3	88.2	83.8	86.6	88.2	90.2	86.4	90.8	89.4	91.6	93.5	93.0	94.9
Test 3	87.6	88.4	83.3	86.0	88.4	88.9	86.9	91.7	90.1	92.0	93.5	92.8	93.7
Mean	86.1	88.3	83.6	86.5	88.3	89.8	86.6	91.0	89.6	91.5	93.5	92.8	94.5
Occluded													
Test 1	87.6	88.2	83.2	86.0	87.6	86.1	84.4	83.3	79.4	78.4	79.4	75.7	72.9
Test 2	87.5	88.1	83.0	85.8	87.2	85.5	83.7	82.8	79.2	78.1	79.2	75.6	73.0
Test 3	87.5	87.8	82.8	85.5	86.9	85.2	83.7	82.9	79.1	77.9	79.3	75.4	72.0
Mean	87.5	88.0	83.0	85.8	87.2	85.6	83.9	83.0	79.2	78.1	79.3	75.6	72.6
Right Insertion Loss	**-1.4**	**0.2**	**0.6**	**0.7**	**1.0**	**4.2**	**2.7**	**8.0**	**10.3**	**13.4**	**14.2**	**17.3**	**21.8**
Insertion Loss	**-1.9**	**-0.4**	**-0.3**	**-0.3**	**-0.7**	**2.9**	**1.1**	**5.4**	**9.4**	**13.3**	**13.4**	**17.5**	**21.8**

Table C-69. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.9	93.6	96.5	97.7	97.7	99.4	96.6	94.0	92.2	91.6	90.0	80.1	108	108
Test 2	94.0	93.5	96.2	97.8	97.5	99.1	96.3	93.4	92.5	92.9	90.7	80.6	108	108
Test 3	92.4	93.8	96.6	98.5	97.3	98.8	95.2	93.2	92.6	93.2	90.6	80.3	108	108
Mean	93.4	93.6	96.5	98.0	97.5	99.1	96.0	93.5	92.4	92.5	90.4	80.4		
Occluded														
Test 1	65.4	60.8	60.0	58.2	50.3	50.1	47.0	43.4	42.6	42.3	43.9	46.1	98	87
Test 2	65.8	60.9	59.7	58.7	50.6	50.5	49.3	47.5	44.6	43.0	44.2	46.2	99	88
Test 3	66.6	61.6	61.1	58.5	49.9	49.4	50.2	49.8	45.0	44.3	45.0	46.6	100	89
Mean	65.9	61.1	60.3	58.5	50.3	50.0	48.9	46.9	44.1	43.2	44.4	46.3		
Left Insertion Loss	**27.5**	**32.5**	**36.2**	**39.5**	**47.2**	**49.1**	**47.2**	**46.7**	**48.4**	**49.3**	**46.0**	**34.1**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.5	94.0	95.2	96.4	96.8	99.0	96.8	95.3	95.9	95.4	91.3	83.8	107	108
Test 2	93.3	94.4	95.6	96.1	97.2	99.3	97.1	95.0	95.8	95.3	91.3	83.8	108	108
Test 3	92.3	94.0	95.2	96.6	97.1	98.8	96.3	95.3	96.1	95.2	91.5	83.5	107	108
Mean	92.7	94.1	95.3	96.3	97.0	99.1	96.7	95.2	95.9	95.3	91.4	83.7		
Occluded														
Test 1	62.8	54.7	58.2	57.4	52.5	53.4	51.4	47.8	48.3	50.9	53.5	56.0	96	85
Test 2	62.0	55.7	57.6	56.7	53.1	54.5	52.2	47.6	48.1	50.8	53.4	56.0	95	85
Test 3	62.7	56.1	57.1	57.3	54.5	55.4	52.1	47.3	48.2	50.9	53.5	56.1	95	85
Mean	62.5	55.5	57.6	57.1	53.3	54.4	51.9	47.6	48.2	50.8	53.5	56.0		
Right Insertion Loss	**30.2**	**38.6**	**37.7**	**39.2**	**43.7**	**44.6**	**44.8**	**47.6**	**47.7**	**44.5**	**37.9**	**27.7**		
Insertion Loss	**28.8**	**35.6**	**36.9**	**39.4**	**45.5**	**46.9**	**46.0**	**47.2**	**48.0**	**46.9**	**42.0**	**30.9**		

Table C-70. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.8	84.9	87.8	89.0	91.8	88.7	93.0	92.6	92.8	96.6	96.3	95.9
Test 2	85.5	89.0	85.1	87.9	89.0	91.7	88.4	92.9	92.2	92.4	97.1	96.2	96.0
Test 3	85.6	89.0	85.0	87.8	88.9	91.6	88.6	92.5	92.2	92.5	97.1	96.0	96.1
Mean	85.5	88.9	85.0	87.8	89.0	91.7	88.5	92.8	92.3	92.6	96.9	96.2	96.0
Occluded													
Test 1	85.4	88.7	84.3	86.5	86.9	87.9	82.7	80.3	76.4	74.6	76.4	71.0	69.4
Test 2	85.6	88.7	84.1	86.6	87.8	88.8	82.8	80.2	76.4	75.4	78.6	73.7	71.5
Test 3	85.3	88.7	84.3	86.3	87.0	88.1	83.0	80.1	77.0	75.1	77.9	72.1	70.4
Mean	85.4	88.7	84.2	86.4	87.2	88.3	82.9	80.2	76.6	75.0	77.7	72.3	70.4
Left Insertion Loss	**0.1**	**0.2**	**0.8**	**1.4**	**1.8**	**3.4**	**5.7**	**12.6**	**15.7**	**17.5**	**19.3**	**23.9**	**25.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	87.7	83.2	86.7	88.2	89.2	86.7	91.7	89.2	90.6	92.6	92.4	95.4
Test 2	85.1	87.8	83.2	86.7	88.2	89.1	86.3	91.6	89.2	91.0	93.3	92.9	94.5
Test 3	85.1	87.7	83.1	86.7	88.0	89.4	86.8	91.6	89.3	90.6	93.6	92.8	95.3
Mean	85.1	87.7	83.1	86.7	88.2	89.2	86.6	91.7	89.2	90.7	93.2	92.7	95.1
Occluded													
Test 1	86.4	89.2	84.4	86.6	86.4	86.4	80.4	78.6	76.2	75.9	75.3	71.3	67.7
Test 2	86.0	88.7	84.0	87.0	87.7	88.1	82.5	80.9	77.2	76.9	76.7	72.4	68.4
Test 3	86.1	88.9	84.4	87.4	88.0	88.6	82.9	81.6	78.4	77.1	76.4	72.0	68.2
Mean	86.2	89.0	84.3	87.0	87.4	87.7	81.9	80.4	77.3	76.6	76.1	71.9	68.1
Right Insertion Loss	**-1.1**	**-1.2**	**-1.1**	**-0.3**	**0.8**	**1.5**	**4.7**	**11.3**	**12.0**	**14.1**	**17.0**	**20.8**	**27.0**
Insertion Loss	**-0.5**	**-0.5**	**-0.2**	**0.5**	**1.3**	**2.5**	**5.2**	**11.9**	**13.9**	**15.8**	**18.2**	**22.3**	**26.3**

Table C-70. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ using tight-fitting instructions – Subject 20.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.1	95.0	96.9	98.1	98.7	99.2	99.3	96.3	90.5	92.2	88.9	79.5	109	109
Test 2	93.5	94.0	97.0	97.8	97.7	98.9	98.9	95.4	90.1	92.2	88.5	78.9	108	108
Test 3	93.3	95.3	97.2	97.6	97.4	99.5	98.3	94.5	89.2	91.6	88.4	78.7	108	108
Mean	93.7	94.8	97.1	97.8	97.9	99.2	98.8	95.4	90.0	92.0	88.6	79.0		
Occluded														
Test 1	64.0	59.9	56.6	54.9	52.5	47.4	45.2	42.5	41.1	41.7	43.5	45.4	95	83
Test 2	63.8	58.5	56.3	55.5	52.5	48.6	48.6	45.5	41.2	41.5	43.6	45.1	96	84
Test 3	65.3	63.4	61.2	54.8	51.7	50.7	50.1	47.5	41.5	41.6	43.8	45.3	95	84
Mean	64.4	60.6	58.1	55.1	52.2	48.9	47.9	45.2	41.3	41.6	43.6	45.3		
Left Insertion Loss	**29.3**	**34.2**	**39.0**	**42.7**	**45.7**	**50.3**	**50.9**	**50.3**	**48.7**	**50.4**	**45.0**	**33.7**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.4	93.7	95.1	95.9	96.8	98.8	97.1	95.3	96.8	95.3	89.9	83.1	107	107
Test 2	92.0	94.7	95.2	95.5	96.7	98.6	96.5	94.9	96.2	95.4	90.5	82.9	107	107
Test 3	92.3	94.7	95.1	96.2	97.0	98.8	98.1	95.7	96.4	95.4	91.0	82.9	108	108
Mean	91.9	94.4	95.1	95.8	96.8	98.7	97.2	95.3	96.5	95.3	90.5	83.0		
Occluded														
Test 1	61.3	60.8	61.7	64.3	58.5	55.2	50.8	49.3	49.6	50.7	53.3	55.7	95	83
Test 2	63.2	62.2	63.2	64.3	58.6	54.9	51.5	50.7	50.5	51.1	53.3	55.7	96	84
Test 3	63.5	63.3	64.1	63.8	58.4	55.9	51.7	53.7	53.3	51.0	53.4	55.8	96	84
Mean	62.7	62.1	63.0	64.1	58.5	55.3	51.3	51.2	51.1	50.9	53.3	55.7		
Right Insertion Loss	**29.2**	**32.3**	**32.1**	**31.7**	**38.3**	**43.4**	**45.9**	**44.1**	**45.3**	**44.4**	**37.1**	**27.3**		
Insertion Loss	**29.2**	**33.2**	**35.6**	**37.2**	**42.0**	**46.8**	**48.4**	**47.2**	**47.0**	**47.4**	**41.0**	**30.5**		

Table C-71. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.8	88.4	84.3	87.1	88.0	89.9	86.4	88.5	89.7	91.3	93.1	92.9	94.5
Test 2	86.9	88.8	84.3	86.8	88.0	86.3	87.3	89.7	91.0	92.3	92.8	91.8	94.5
Test 3	84.6	88.2	84.4	87.1	87.9	90.0	86.6	88.7	89.8	91.8	93.2	93.3	94.7
Mean	85.4	88.5	84.3	87.0	88.0	88.7	86.8	89.0	90.2	91.8	93.0	92.7	94.6
Occluded													
Test 1	88.2	89.7	85.5	88.5	91.8	89.2	92.1	91.1	88.3	88.1	88.0	83.2	80.8
Test 2	86.0	89.5	85.6	89.1	92.0	93.1	91.5	92.1	87.6	86.9	87.6	84.3	82.0
Test 3	85.9	89.5	85.7	89.1	91.9	93.1	91.2	91.6	87.0	86.6	87.3	84.3	81.7
Mean	86.7	89.5	85.6	88.9	91.9	91.8	91.6	91.6	87.6	87.2	87.6	83.9	81.5
Left Insertion Loss	**-1.3**	**-1.1**	**-1.2**	**-1.9**	**-4.0**	**-3.1**	**-4.8**	**-2.6**	**2.6**	**4.6**	**5.4**	**8.7**	**13.1**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.3	83.9	87.0	88.5	91.2	86.4	91.9	89.9	92.4	94.5	94.9	96.2
Test 2	87.4	88.7	83.6	86.6	88.8	91.0	87.5	92.5	91.2	92.8	93.8	93.6	94.1
Test 3	85.1	88.1	84.0	87.0	88.5	91.4	86.2	91.9	90.2	92.5	94.0	94.8	95.7
Mean	85.9	88.4	83.8	86.9	88.6	91.2	86.7	92.1	90.4	92.6	94.1	94.4	95.3
Occluded													
Test 1	83.6	83.6	78.8	81.6	83.9	84.3	83.7	84.0	79.7	82.7	80.1	74.0	69.7
Test 2	81.4	83.6	79.1	82.4	84.1	86.0	82.3	83.8	78.1	80.9	80.2	74.8	73.4
Test 3	81.0	83.4	79.1	82.4	84.1	86.3	82.6	83.4	77.8	80.8	80.3	75.2	73.6
Mean	82.0	83.6	79.0	82.1	84.0	85.5	82.8	83.7	78.5	81.5	80.2	74.7	72.2
Right Insertion Loss	**3.9**	**4.8**	**4.8**	**4.7**	**4.5**	**5.7**	**3.8**	**8.4**	**11.9**	**11.1**	**13.9**	**19.8**	**23.1**
Insertion Loss	**1.3**	**1.9**	**1.8**	**1.4**	**0.3**	**1.3**	**-0.5**	**2.9**	**7.2**	**7.8**	**9.7**	**14.3**	**18.1**

Table C-71. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	95.3	96.1	97.2	99.1	101.6	98.6	94.1	92.5	93.2	89.8	79.1	108	109
Test 2	92.9	95.6	96.1	96.7	99.1	101.1	98.3	93.7	93.2	93.2	90.3	79.9	108	108
Test 3	92.8	95.1	95.9	97.1	99.6	101.4	98.0	93.0	93.2	93.1	90.2	80.1	108	108
Mean	92.9	95.3	96.0	97.0	99.3	101.4	98.3	93.6	93.0	93.2	90.1	79.7		
Occluded														
Test 1	73.1	69.0	67.9	67.8	62.2	59.4	56.0	50.9	53.8	52.5	49.5	48.2	100	93
Test 2	74.0	69.0	68.5	69.5	64.4	61.5	58.4	54.1	55.7	53.5	49.6	47.7	101	93
Test 3	74.3	69.4	69.0	69.4	64.9	62.9	60.4	55.0	56.7	54.9	49.6	47.6	100	93
Mean	73.8	69.1	68.5	68.9	63.9	61.2	58.3	53.3	55.4	53.6	49.6	47.8		
Left Insertion Loss	**19.1**	**26.2**	**27.5**	**28.1**	**35.4**	**40.1**	**40.0**	**40.3**	**37.6**	**39.6**	**40.6**	**31.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.1	95.0	96.9	98.7	99.3	101.5	100.5	98.0	97.6	96.3	93.4	84.5	109	110
Test 2	92.8	94.2	97.0	98.7	98.5	101.1	101.0	98.3	97.6	95.8	92.1	83.3	109	110
Test 3	93.0	94.9	96.9	98.7	98.6	101.9	101.9	98.5	97.9	95.8	92.0	82.8	110	110
Mean	92.9	94.7	96.9	98.7	98.8	101.5	101.1	98.3	97.7	96.0	92.5	83.6		
Occluded														
Test 1	63.6	59.2	58.2	59.3	58.2	54.4	48.2	48.9	48.3	50.8	53.7	56.3	93	85
Test 2	65.3	61.9	60.7	60.0	58.4	55.9	49.6	49.0	48.3	50.8	53.7	56.1	93	85
Test 3	65.0	62.5	62.0	59.9	58.1	56.1	50.7	49.2	48.3	50.7	53.6	56.1	93	85
Mean	64.6	61.2	60.3	59.7	58.2	55.4	49.5	49.0	48.3	50.8	53.7	56.2		
Right Insertion Loss	**28.3**	**33.5**	**36.6**	**39.0**	**40.6**	**46.0**	**51.6**	**49.2**	**49.4**	**45.2**	**38.8**	**27.4**		
Insertion Loss	**23.7**	**29.9**	**32.1**	**33.6**	**38.0**	**43.1**	**45.8**	**44.8**	**43.5**	**42.4**	**39.7**	**29.6**		

Table C-72. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.0	89.7	85.6	88.3	89.2	91.7	88.1	89.1	90.6	92.0	95.3	94.2	94.9
Test 2	85.9	89.6	85.6	88.4	89.0	92.1	88.1	89.4	91.1	92.4	95.6	94.4	94.4
Test 3	88.0	89.6	85.4	87.8	88.7	88.8	88.5	92.2	93.1	93.8	95.5	94.7	93.8
Mean	86.6	89.6	85.5	88.2	89.0	90.9	88.2	90.2	91.6	92.7	95.5	94.4	94.4
Occluded													
Test 1	81.6	84.8	80.7	82.3	82.4	85.5	82.0	80.8	79.1	80.9	81.9	77.5	76.4
Test 2	81.9	85.1	80.7	82.2	82.6	85.5	82.0	80.6	79.4	80.7	81.4	77.9	77.0
Test 3	82.0	85.2	80.7	82.5	82.9	85.9	81.9	80.4	79.9	81.2	81.8	77.5	76.3
Mean	81.8	85.0	80.7	82.3	82.6	85.6	82.0	80.6	79.5	80.9	81.7	77.6	76.6
Left Insertion Loss	**4.8**	**4.6**	**4.8**	**5.8**	**6.3**	**5.2**	**6.3**	**9.6**	**12.1**	**11.8**	**13.8**	**16.8**	**17.8**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.3	89.3	84.9	87.9	89.5	91.6	87.5	92.1	90.1	92.5	95.0	94.2	95.4
Test 2	86.3	89.3	84.8	87.8	89.5	91.5	87.6	91.9	90.2	92.5	95.2	94.0	95.1
Test 3	88.4	89.4	84.4	87.0	89.6	90.2	88.0	93.2	91.6	93.3	94.6	93.6	94.5
Mean	87.0	89.3	84.7	87.5	89.5	91.1	87.7	92.4	90.6	92.8	94.9	93.9	95.0
Occluded													
Test 1	87.3	90.6	86.7	89.9	92.0	93.8	90.1	86.4	82.2	84.2	83.4	80.3	76.6
Test 2	87.1	90.5	86.4	89.4	91.6	93.2	89.1	86.1	81.8	84.0	82.9	80.3	76.4
Test 3	87.4	90.8	87.0	90.5	92.7	94.7	90.6	87.6	83.7	85.0	83.6	80.7	77.1
Mean	87.3	90.6	86.7	89.9	92.1	93.9	90.0	86.7	82.6	84.4	83.3	80.4	76.7
Right Insertion Loss	**-0.3**	**-1.3**	**-2.0**	**-2.4**	**-2.5**	**-2.8**	**-2.3**	**5.7**	**8.1**	**8.4**	**11.6**	**13.5**	**18.3**
Insertion Loss	**2.2**	**1.7**	**1.4**	**1.7**	**1.9**	**1.2**	**2.0**	**7.6**	**10.1**	**10.1**	**12.7**	**15.2**	**18.0**

Table C-72. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	95.0	96.1	98.2	98.4	100.7	98.0	96.1	92.7	92.0	90.9	79.4	108	108
Test 2	93.1	94.4	96.0	98.1	98.1	101.1	97.1	96.7	93.0	91.0	91.0	79.6	108	108
Test 3	92.2	94.1	96.4	98.7	98.6	100.3	97.3	96.7	92.2	91.8	91.8	79.6	108	108
Mean	92.8	94.5	96.2	98.3	98.4	100.7	97.5	96.5	92.6	91.6	91.2	79.5		
Occluded														
Test 1	68.5	63.2	61.7	61.7	55.5	56.6	49.2	44.2	42.8	43.7	46.2	48.7	93	86
Test 2	70.1	63.8	62.7	64.8	58.7	57.4	50.9	45.1	43.5	44.0	46.7	49.1	93	86
Test 3	69.3	64.0	62.2	64.1	58.1	56.8	50.9	44.2	43.5	43.0	45.4	47.4	93	86
Mean	69.3	63.6	62.2	63.5	57.4	56.9	50.3	44.5	43.3	43.6	46.1	48.4		
Left Insertion Loss	**23.5**	**30.9**	**34.0**	**34.8**	**41.0**	**43.8**	**47.1**	**52.0**	**49.4**	**48.0**	**45.1**	**31.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.3	95.7	97.3	98.7	100.1	103.3	102.0	100.6	99.9	91.8	90.0	79.5	110	111
Test 2	93.2	95.4	97.5	99.3	99.9	103.0	102.1	100.8	99.9	92.0	89.5	79.4	110	111
Test 3	93.0	95.8	97.5	99.8	100.6	102.7	102.0	100.6	100.1	92.1	89.0	80.5	110	111
Mean	93.2	95.6	97.4	99.3	100.2	103.0	102.0	100.7	100.0	92.0	89.5	79.8		
Occluded														
Test 1	67.5	66.8	68.2	65.2	60.4	59.1	54.7	53.1	55.5	52.7	54.4	56.8	100	90
Test 2	67.0	64.9	67.5	64.7	60.0	56.0	52.6	50.5	50.9	51.6	54.5	57.1	99	90
Test 3	68.5	68.5	68.9	65.9	61.5	59.8	56.5	53.8	54.4	51.7	54.0	56.5	100	91
Mean	67.7	66.7	68.2	65.3	60.6	58.3	54.6	52.4	53.6	52.0	54.3	56.8		
Right Insertion Loss	**25.5**	**28.9**	**29.2**	**34.0**	**39.5**	**44.7**	**47.4**	**48.2**	**46.4**	**40.0**	**35.2**	**23.0**		
Insertion Loss	**24.5**	**29.9**	**31.6**	**34.4**	**40.3**	**44.2**	**47.3**	**50.1**	**47.9**	**44.0**	**40.2**	**27.1**		

Table C-73. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.2	89.6	85.0	87.4	88.7	89.0	86.0	89.7	88.8	92.1	93.0	95.0	94.9
Test 2	86.0	89.4	85.0	87.1	88.5	88.4	86.0	89.4	88.5	92.4	94.6	94.8	94.3
Test 3	85.9	89.4	85.0	87.4	88.6	89.0	87.0	88.9	88.8	92.3	94.9	95.8	94.2
Mean	86.0	89.5	85.0	87.3	88.6	88.8	86.3	89.3	88.7	92.3	94.1	95.2	94.5
Occluded													
Test 1	83.2	86.4	81.6	83.9	85.0	86.2	82.3	82.9	81.6	82.7	79.9	78.0	75.9
Test 2	83.5	86.8	82.0	84.1	85.3	86.0	82.0	83.3	81.3	82.4	81.0	78.3	75.2
Test 3	82.7	85.9	81.2	83.1	84.3	85.6	81.9	82.6	80.2	81.9	81.1	77.4	74.0
Mean	83.1	86.3	81.6	83.7	84.9	86.0	82.1	83.0	81.0	82.3	80.7	77.9	75.0
Left Insertion Loss	**2.9**	**3.1**	**3.4**	**3.6**	**3.7**	**2.9**	**4.3**	**6.3**	**7.7**	**10.0**	**13.5**	**17.3**	**19.4**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.1	88.9	84.3	87.2	89.0	91.9	86.4	93.8	91.1	93.1	95.0	94.5	96.6
Test 2	85.8	88.7	84.2	86.8	88.8	92.0	87.1	93.5	91.3	92.8	95.6	94.5	96.7
Test 3	85.9	88.7	84.2	86.7	89.0	91.8	88.0	92.1	90.7	93.5	95.6	93.7	95.9
Mean	85.9	88.8	84.2	86.9	88.9	91.9	87.2	93.1	91.0	93.1	95.4	94.2	96.4
Occluded													
Test 1	85.7	88.7	84.8	88.0	88.9	91.3	84.8	83.5	80.2	82.1	80.0	75.2	73.5
Test 2	86.2	89.4	85.3	88.2	89.7	91.6	85.5	83.5	79.8	82.1	80.6	75.7	74.2
Test 3	86.7	90.0	86.1	88.8	90.6	92.7	86.9	84.0	79.7	82.1	81.3	75.5	73.7
Mean	86.2	89.4	85.4	88.4	89.7	91.9	85.7	83.6	79.9	82.1	80.6	75.5	73.8
Right Insertion Loss	**-0.3**	**-0.6**	**-1.2**	**-1.5**	**-0.8**	**0.0**	**1.4**	**9.5**	**11.1**	**11.1**	**14.8**	**18.8**	**22.6**
Insertion Loss	**1.3**	**1.3**	**1.1**	**1.1**	**1.5**	**1.5**	**2.9**	**7.9**	**9.4**	**10.5**	**14.1**	**18.0**	**21.0**

Table C-73. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 13.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.6	94.6	96.4	99.6	100.1	101.4	96.7	91.6	92.1	92.0	89.7	80.6	108	109
Test 2	91.1	95.0	96.3	99.1	99.8	102.2	96.0	91.7	92.2	92.2	89.1	80.1	108	109
Test 3	91.9	94.5	96.1	99.4	99.9	101.5	95.9	91.8	92.2	92.2	89.0	80.7	108	109
Mean	91.5	94.7	96.3	99.4	99.9	101.7	96.2	91.7	92.2	92.1	89.3	80.4		
Occluded														
Test 1	68.4	63.0	62.9	62.6	56.1	52.8	49.2	44.5	43.2	43.8	45.6	47.5	94	86
Test 2	68.5	63.4	63.6	63.2	56.4	53.3	49.6	44.9	43.9	44.6	45.8	48.0	94	87
Test 3	68.1	62.8	62.3	62.2	56.6	52.6	49.6	44.3	43.2	43.5	45.4	47.4	94	86
Mean	68.3	63.1	62.9	62.7	56.4	52.9	49.5	44.6	43.5	44.0	45.6	47.6		
Left Insertion Loss	**23.2**	**31.6**	**33.4**	**36.7**	**43.6**	**48.9**	**46.7**	**47.1**	**48.7**	**48.2**	**43.7**	**32.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.6	96.0	98.2	98.2	101.2	104.2	100.2	95.2	93.6	91.8	92.0	82.4	110	110
Test 2	93.8	95.5	98.2	98.0	101.2	103.4	100.6	95.5	93.8	90.7	90.9	81.9	110	110
Test 3	93.8	95.2	98.1	98.1	101.7	103.4	100.2	96.1	93.8	91.1	91.3	81.7	110	110
Mean	93.7	95.6	98.2	98.1	101.4	103.7	100.4	95.6	93.7	91.2	91.4	82.0		
Occluded														
Test 1	63.3	62.7	65.5	64.2	57.7	52.2	50.2	47.1	48.4	50.2	53.2	55.8	97	87
Test 2	64.3	62.4	65.4	64.3	56.8	52.8	50.5	46.8	48.3	50.5	53.5	56.1	98	87
Test 3	64.7	63.1	66.7	64.5	57.8	53.6	51.5	47.6	49.0	50.3	53.2	55.8	98	88
Mean	64.1	62.7	65.9	64.3	57.5	52.9	50.7	47.2	48.6	50.4	53.3	55.9		
Right Insertion Loss	**29.6**	**32.9**	**32.3**	**33.8**	**43.9**	**50.8**	**49.6**	**48.4**	**45.2**	**40.8**	**38.1**	**26.1**		
Insertion Loss	**26.4**	**32.3**	**32.8**	**35.2**	**43.8**	**49.8**	**48.2**	**47.8**	**46.9**	**44.5**	**40.9**	**29.5**		

Table C-74. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.8	89.3	85.2	87.7	88.5	90.3	87.3	90.3	90.0	91.3	94.3	94.9	94.8
Test 2	86.0	89.5	85.1	87.7	88.6	90.2	86.9	90.1	90.0	91.2	94.4	94.8	94.8
Test 3	85.9	89.6	85.2	87.7	88.7	90.2	87.4	90.3	90.1	91.1	94.5	95.0	95.0
Mean	85.9	89.5	85.2	87.7	88.6	90.2	87.2	90.3	90.0	91.2	94.4	94.9	94.9
Occluded													
Test 1	87.0	90.7	87.2	90.7	93.5	94.6	91.9	91.2	85.3	80.9	84.9	78.9	76.6
Test 2	89.5	91.1	86.9	90.1	93.8	91.0	90.5	88.2	84.1	79.7	83.8	77.9	76.7
Test 3	87.0	90.7	87.2	90.8	93.6	94.7	92.4	91.2	85.5	80.6	84.9	79.4	76.5
Mean	87.8	90.8	87.1	90.5	93.6	93.4	91.6	90.2	85.0	80.4	84.6	78.7	76.6
Left Insertion Loss	**-1.9**	**-1.4**	**-1.9**	**-2.8**	**-5.0**	**-3.2**	**-4.4**	**0.0**	**5.1**	**10.8**	**9.9**	**16.2**	**18.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.0	88.8	84.3	87.2	89.2	90.9	88.1	92.9	90.6	93.1	95.3	92.5	94.3
Test 2	86.2	89.1	84.3	87.4	89.2	90.9	88.0	92.9	90.5	93.1	95.3	92.3	94.4
Test 3	86.1	89.1	84.4	87.3	89.3	90.8	88.1	92.9	90.6	93.2	95.4	92.4	94.4
Mean	86.1	89.0	84.3	87.3	89.2	90.9	88.1	92.9	90.6	93.2	95.3	92.4	94.4
Occluded													
Test 1	87.1	90.5	86.9	90.3	93.2	95.2	93.2	90.7	86.8	88.6	88.6	81.8	77.5
Test 2	89.6	90.9	86.6	89.8	93.8	92.7	93.3	89.3	87.5	89.7	88.5	82.4	77.9
Test 3	87.2	90.6	86.9	90.3	93.2	95.2	93.4	90.7	86.7	88.0	88.2	81.2	76.8
Mean	87.9	90.7	86.8	90.1	93.4	94.4	93.3	90.2	87.0	88.8	88.4	81.8	77.4
Right Insertion Loss	**-1.8**	**-1.6**	**-2.5**	**-2.8**	**-4.2**	**-3.5**	**-5.2**	**2.6**	**3.6**	**4.4**	**6.9**	**10.6**	**17.0**
Insertion Loss	**-1.9**	**-1.5**	**-2.2**	**-2.8**	**-4.6**	**-3.3**	**-4.8**	**1.3**	**4.3**	**7.6**	**8.4**	**13.4**	**17.6**

Table C-74. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.9	93.5	96.3	98.3	98.4	100.0	96.9	93.3	93.6	93.2	90.0	80.0	108	108
Test 2	92.2	94.1	96.6	98.7	99.1	100.3	98.5	95.7	93.1	92.2	89.3	78.9	108	109
Test 3	92.0	93.7	96.1	98.1	98.5	99.8	97.5	93.4	93.5	93.3	90.4	79.6	108	108
Mean	92.0	93.8	96.3	98.4	98.7	100.0	97.6	94.1	93.4	92.9	89.9	79.5		
Occluded														
Test 1	71.9	68.1	65.8	62.3	60.0	59.8	56.7	52.0	51.0	50.4	49.6	49.1	101	91
Test 2	72.6	69.3	67.8	64.1	61.4	61.3	60.0	55.9	56.9	56.2	53.2	48.8	100	90
Test 3	70.8	66.2	63.8	61.3	58.7	57.6	54.5	48.2	46.5	47.6	46.8	48.2	101	91
Mean	71.7	67.9	65.8	62.6	60.1	59.6	57.1	52.1	51.5	51.4	49.8	48.7		
Left Insertion Loss	**20.3**	**25.9**	**30.5**	**35.8**	**38.6**	**40.5**	**40.5**	**42.1**	**41.9**	**41.5**	**40.1**	**30.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.1	95.4	98.0	99.1	100.1	102.6	101.4	99.9	95.9	92.5	89.7	81.5	110	110
Test 2	93.3	95.2	98.1	98.7	99.6	102.2	100.1	98.6	94.9	92.5	90.1	81.4	109	110
Test 3	93.5	95.3	98.3	99.0	99.8	102.4	100.3	98.7	95.1	92.4	90.1	81.3	110	110
Mean	93.3	95.3	98.1	98.9	99.8	102.4	100.6	99.1	95.3	92.5	90.0	81.4		
Occluded														
Test 1	72.4	69.0	70.0	69.0	64.1	62.7	59.2	58.7	56.7	51.6	53.7	56.2	101	93
Test 2	70.9	67.5	68.0	67.7	63.5	64.3	61.3	61.3	58.1	52.6	54.6	56.0	101	93
Test 3	72.3	67.1	69.4	66.9	62.3	61.0	58.7	57.2	55.5	51.3	53.6	56.1	101	93
Mean	71.9	67.9	69.1	67.9	63.3	62.7	59.7	59.1	56.8	51.8	53.9	56.1		
Right Insertion Loss	**21.5**	**27.4**	**29.0**	**31.1**	**36.5**	**39.8**	**40.9**	**40.0**	**38.5**	**40.6**	**36.0**	**25.3**		
Insertion Loss	**20.9**	**26.7**	**29.8**	**33.4**	**37.6**	**40.1**	**40.7**	**41.0**	**40.2**	**41.1**	**38.0**	**28.1**		

Table C-75. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.0	88.4	84.7	87.5	88.4	90.8	87.2	90.0	91.3	91.7	93.4	93.3	94.0
Test 2	59.6	61.9	59.2	61.3	62.0	63.5	60.9	63.3	63.7	64.3	65.4	65.5	66.2
Test 3	85.2	88.6	84.7	87.5	88.5	90.5	86.9	89.4	90.8	91.8	92.4	91.8	94.6
Mean	76.6	79.6	76.2	78.8	79.6	81.6	78.3	80.9	81.9	82.6	83.7	83.5	84.9
Occluded*													
Test 1	81.7	85.0	80.4	82.7	83.6	85.6	83.4	83.8	81.5	81.4	80.7	76.9	74.3
Test 2	81.8	85.3	80.9	83.0	83.6	85.5	83.3	83.7	80.6	80.2	80.1	77.9	76.9
Test 3	81.5	84.7	80.5	82.8	83.6	85.8	83.6	83.7	80.5	80.9	79.4	77.2	75.7
Mean	81.7	85.0	80.6	82.8	83.6	85.6	83.4	83.7	80.9	80.8	80.1	77.3	75.6
Left Insertion Loss	**-5.1**	**-5.4**	**-4.4**	**-4.1**	**-4.0**	**-4.0**	**-5.1**	**-2.8**	**1.1**	**1.8**	**3.7**	**6.2**	**9.3**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.1	84.0	87.4	88.7	91.1	86.5	91.3	90.5	91.9	94.7	94.7	95.3
Test 2	59.8	61.7	58.8	61.1	62.0	63.6	60.5	63.8	63.3	64.5	66.2	66.0	66.9
Test 3	85.4	88.1	83.9	87.3	88.5	91.5	86.1	92.0	90.8	91.8	94.8	95.0	94.8
Mean	76.8	79.3	75.6	78.6	79.7	82.1	77.7	82.4	81.5	82.7	85.3	85.2	85.6
Occluded*													
Test 1	81.7	83.7	79.6	83.5	85.0	86.7	83.8	82.7	79.3	81.0	79.6	77.3	76.3
Test 2	81.8	83.8	79.6	83.4	85.1	86.6	84.1	83.0	79.4	81.2	79.8	77.2	76.0
Test 3	82.7	84.5	80.5	84.3	85.3	87.8	83.9	83.3	79.7	81.7	80.3	77.4	75.1
Mean	82.1	84.0	79.9	83.7	85.1	87.0	83.9	83.0	79.5	81.3	79.9	77.3	75.8
Right Insertion Loss	**-5.2**	**-4.7**	**-4.3**	**-5.1**	**-5.4**	**-4.9**	**-6.2**	**-0.6**	**2.0**	**1.4**	**5.4**	**7.9**	**9.9**
Insertion Loss	**-5.2**	**-5.0**	**-4.3**	**-4.6**	**-4.7**	**-4.5**	**-5.7**	**-1.7**	**1.5**	**1.6**	**4.5**	**7.1**	**9.6**

Table C-75. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 15.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	95.6	95.2	97.4	97.5	100.0	98.6	96.1	93.9	92.3	89.2	78.7	108	108
Test 2	64.7	66.5	66.8	68.2	68.5	69.9	69.3	68.0	66.5	65.4	62.7	55.8	76	
Test 3	92.3	94.7	96.2	97.3	97.7	99.4	99.0	96.0	94.4	91.5	89.7	78.8	108	108
Mean	83.1	85.6	86.0	87.6	87.9	89.8	89.0	86.7	84.9	83.1	80.5	71.1		
Occluded														
Test 1	70.1	67.9	65.9	63.3	55.0	50.7	48.1	42.1	42.6	43.8	45.8	46.5	94	86
Test 2	70.8	68.8	67.6	62.8	56.3	52.4	48.1	45.1	44.9	46.6	47.9	46.7	94	86
Test 3	70.0	68.1	67.4	63.6	55.8	53.9	50.2	50.9	51.3	46.4	46.5	46.6	94	86
Mean	70.3	68.3	67.0	63.2	55.7	52.3	48.8	46.0	46.3	45.6	46.7	46.6		
Left Insertion Loss	**12.8**	**17.4**	**19.1**	**24.4**	**32.2**	**37.4**	**40.2**	**40.7**	**38.6**	**37.5**	**33.8**	**24.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.3	94.9	96.7	98.6	98.9	100.7	101.9	99.4	96.9	98.1	94.6	81.6	110	110
Test 2	65.9	66.3	67.6	69.2	69.3	70.5	70.9	69.4	68.1	68.1	65.2	57.2	77	
Test 3	93.7	95.5	96.2	97.4	98.9	100.6	101.6	99.0	96.9	95.9	94.3	81.4	109	110
Mean	84.6	85.6	86.8	88.4	89.0	90.6	91.5	89.3	87.3	87.3	84.7	73.4		
Occluded														
Test 1	64.5	64.3	65.9	63.7	56.7	55.2	48.1	45.8	47.8	50.2	53.1	55.7	94	86
Test 2	65.5	65.4	64.1	63.1	59.0	58.5	50.8	46.9	48.0	50.2	53.2	55.7	94	86
Test 3	66.0	65.5	67.6	64.0	58.1	55.6	48.9	46.4	48.0	50.3	53.1	55.7	94	86
Mean	65.3	65.0	65.9	63.6	57.9	56.4	49.3	46.4	47.9	50.2	53.2	55.7		
Right Insertion Loss	**19.3**	**20.5**	**21.0**	**24.8**	**31.1**	**34.2**	**42.2**	**42.9**	**39.4**	**37.1**	**31.5**	**17.7**		
Insertion Loss	**16.1**	**18.9**	**20.0**	**24.6**	**31.7**	**35.8**	**41.2**	**41.8**	**39.0**	**37.3**	**32.7**	**21.1**		

Table C-76. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.9	84.9	87.7	88.4	90.8	87.2	91.7	91.1	91.2	93.9	95.0	95.7
Test 2	85.4	89.0	84.9	87.7	88.6	90.7	87.5	91.6	91.0	91.3	93.9	95.0	95.3
Test 3	85.4	89.0	84.9	87.8	88.5	90.8	87.3	91.4	91.2	91.4	93.9	94.9	95.2
Mean	85.4	89.0	84.9	87.7	88.5	90.8	87.3	91.6	91.1	91.3	93.9	95.0	95.4
Occluded													
Test 1	82.2	85.2	80.4	82.5	83.4	84.9	83.7	84.9	80.4	78.1	78.9	77.5	75.9
Test 2	82.2	85.3	80.7	83.0	83.9	85.8	84.0	84.8	80.6	78.4	78.8	77.4	76.5
Test 3	82.2	85.4	81.0	83.2	84.1	85.9	84.3	85.1	80.7	78.0	78.1	77.2	75.8
Mean	82.2	85.3	80.7	82.9	83.8	85.5	84.0	84.9	80.6	78.1	78.6	77.4	76.1
Left Insertion Loss	**3.2**	**3.7**	**4.2**	**4.8**	**4.7**	**5.3**	**3.3**	**6.6**	**10.5**	**13.2**	**15.3**	**17.6**	**19.4**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.6	84.1	87.1	88.9	90.2	87.3	90.9	89.9	92.3	93.5	91.9	93.6
Test 2	85.8	88.8	84.1	87.4	88.9	90.4	87.3	90.6	89.6	92.1	93.3	92.9	93.9
Test 3	85.8	88.8	84.1	87.4	88.9	90.4	87.0	90.9	90.0	92.3	93.4	92.7	94.2
Mean	85.8	88.7	84.1	87.3	88.9	90.3	87.2	90.8	89.9	92.3	93.4	92.5	93.9
Occluded													
Test 1	87.3	90.2	85.3	89.5	92.6	92.3	91.3	90.6	87.6	88.8	88.1	82.5	81.3
Test 2	87.2	90.2	85.7	89.8	92.4	91.7	90.8	90.0	86.5	86.9	87.1	83.0	80.9
Test 3	87.1	90.0	85.4	89.5	92.5	92.1	91.6	91.1	88.2	89.1	88.6	84.3	83.1
Mean	87.2	90.1	85.5	89.6	92.5	92.0	91.2	90.6	87.4	88.3	87.9	83.3	81.8
Right Insertion Loss	**-1.4**	**-1.4**	**-1.4**	**-2.3**	**-3.6**	**-1.7**	**-4.0**	**0.2**	**2.4**	**4.0**	**5.5**	**9.2**	**12.1**
Insertion Loss	**0.9**	**1.1**	**1.4**	**1.3**	**0.5**	**1.8**	**-0.3**	**3.4**	**6.5**	**8.6**	**10.4**	**13.4**	**15.8**

Table C-76. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 16.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.2	93.1	95.8	97.0	96.9	97.9	96.7	93.7	94.1	93.5	91.3	80.5	107	107
Test 2	92.4	93.6	95.7	96.4	96.7	98.2	95.9	94.1	93.9	93.2	91.3	80.9	107	107
Test 3	92.6	93.6	95.8	96.3	96.6	99.2	96.9	95.8	94.2	93.8	93.1	80.9	108	108
Mean	92.4	93.4	95.8	96.6	96.7	98.5	96.5	94.5	94.1	93.5	91.9	80.8		
Occluded														
Test 1	69.6	65.5	65.1	63.4	62.7	55.2	50.7	46.8	43.3	44.2	46.4	48.7	93	85
Test 2	68.5	64.6	63.5	64.1	61.2	54.2	52.2	47.7	46.0	46.7	47.2	49.1	94	85
Test 3	69.2	67.1	66.6	65.9	61.9	56.3	51.9	47.3	45.9	46.2	47.2	49.0	94	85
Mean	69.1	65.8	65.1	64.5	61.9	55.2	51.6	47.3	45.1	45.7	47.0	48.9		
Left Insertion Loss	**23.3**	**27.7**	**30.7**	**32.1**	**34.8**	**43.2**	**44.9**	**47.3**	**49.0**	**47.8**	**45.0**	**31.9**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.3	94.1	96.8	97.8	97.0	98.4	96.0	94.5	94.4	92.6	90.3	80.9	107	107
Test 2	92.8	94.3	96.5	98.1	97.5	98.2	96.7	94.8	93.9	93.1	90.8	80.9	107	108
Test 3	92.9	93.7	96.2	97.8	97.3	98.0	96.8	94.6	93.8	92.9	90.4	81.1	107	107
Mean	92.7	94.0	96.5	97.9	97.3	98.2	96.5	94.6	94.0	92.9	90.5	81.0		
Occluded														
Test 1	77.1	76.3	76.2	72.6	69.0	61.0	62.4	61.0	59.7	54.4	55.0	56.8	101	93
Test 2	76.9	76.8	75.2	71.1	66.8	61.1	64.6	60.4	57.4	53.3	54.9	57.0	100	93
Test 3	79.5	79.2	78.1	75.5	71.5	63.7	67.7	61.2	59.3	53.4	55.2	57.1	101	94
Mean	77.8	77.4	76.5	73.1	69.1	61.9	64.9	60.9	58.8	53.7	55.0	57.0		
Right Insertion Loss	**14.9**	**16.7**	**20.0**	**24.8**	**28.2**	**36.3**	**31.6**	**33.7**	**35.2**	**39.1**	**35.4**	**24.0**		
Insertion Loss	**19.1**	**22.2**	**25.4**	**28.5**	**31.5**	**39.8**	**38.3**	**40.5**	**42.1**	**43.5**	**40.2**	**27.5**		

Table C-77. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.0	89.3	84.3	86.7	88.5	85.4	87.2	90.7	92.3	92.0	93.9	93.7	94.8
Test 2	85.6	89.0	84.5	87.3	88.5	89.4	87.2	90.6	90.7	91.2	92.6	94.0	95.0
Test 3	87.9	89.1	84.2	86.5	88.3	85.1	87.6	90.7	92.3	92.9	93.4	93.0	94.4
Mean	87.1	89.1	84.4	86.8	88.5	86.7	87.3	90.7	91.7	92.0	93.3	93.6	94.7
Occluded													
Test 1	82.7	85.7	80.8	83.1	84.8	85.4	83.0	83.3	80.2	80.6	80.6	76.0	72.8
Test 2	82.6	85.7	80.9	82.8	84.5	85.6	83.2	83.5	80.3	80.6	80.4	76.5	74.7
Test 3	82.6	85.7	81.0	83.2	84.6	85.6	83.2	83.4	80.5	80.9	80.1	75.9	73.1
Mean	82.6	85.7	80.9	83.0	84.6	85.5	83.1	83.4	80.3	80.7	80.4	76.1	73.5
Left Insertion Loss	**4.5**	**3.4**	**3.5**	**3.8**	**3.8**	**1.2**	**4.2**	**7.3**	**11.4**	**11.3**	**13.0**	**17.5**	**21.2**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	88.6	83.3	86.4	88.5	90.6	87.3	92.4	91.8	92.8	94.3	92.4	92.8
Test 2	85.7	88.4	83.7	87.0	88.3	90.9	86.4	91.3	90.3	92.4	94.4	93.9	94.1
Test 3	87.9	88.3	83.2	86.1	88.3	90.4	87.0	92.3	91.6	93.0	94.3	92.5	92.4
Mean	87.2	88.4	83.4	86.5	88.4	90.6	86.9	92.0	91.2	92.7	94.3	92.9	93.1
Occluded													
Test 1	84.2	86.0	81.2	84.9	86.3	87.3	84.1	82.6	79.6	82.8	82.3	81.2	82.1
Test 2	83.4	85.4	81.0	84.4	85.7	87.0	84.4	83.5	79.4	80.8	79.9	75.8	75.0
Test 3	84.1	86.3	81.8	85.3	86.6	88.2	85.2	83.8	81.3	84.4	83.8	82.7	83.0
Mean	83.9	85.9	81.4	84.8	86.2	87.5	84.6	83.3	80.1	82.7	82.0	79.9	80.0
Right Insertion Loss	**3.3**	**2.5**	**2.0**	**1.7**	**2.2**	**3.1**	**2.3**	**8.6**	**11.1**	**10.0**	**12.3**	**13.0**	**13.1**
Insertion Loss	**3.9**	**3.0**	**2.8**	**2.8**	**3.0**	**2.1**	**3.3**	**8.0**	**11.2**	**10.7**	**12.6**	**15.3**	**17.1**

Table C-77. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.9	94.5	96.1	97.6	96.7	99.7	98.7	97.9	93.5	91.3	90.5	77.5	108	108
Test 2	92.6	94.6	96.2	97.1	97.2	99.9	98.6	97.6	93.2	91.3	90.3	78.3	108	108
Test 3	92.5	94.6	96.1	97.3	97.1	99.4	98.2	97.8	92.3	91.6	90.9	78.8	108	108
Mean	92.3	94.5	96.1	97.3	97.0	99.7	98.5	97.8	93.0	91.4	90.6	78.2		
Occluded														
Test 1	66.7	68.4	69.7	67.7	61.3	55.3	51.3	46.6	48.0	46.9	46.5	46.4	94	86
Test 2	68.0	69.5	70.1	67.3	61.4	57.0	50.2	43.9	43.7	45.1	47.0	48.0	94	86
Test 3	67.8	70.4	70.9	67.5	61.3	55.3	51.5	46.9	51.5	50.5	50.7	48.6	94	86
Mean	67.5	69.4	70.3	67.5	61.4	55.9	51.0	45.8	47.7	47.5	48.0	47.7		
Left Insertion Loss	**24.8**	**25.1**	**25.9**	**29.8**	**35.7**	**43.8**	**47.5**	**52.0**	**45.3**	**43.9**	**42.6**	**30.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.7	94.6	96.3	97.6	98.1	99.5	98.9	92.5	94.2	93.1	89.6	79.0	108	108
Test 2	92.2	94.3	96.2	97.1	97.9	99.2	96.8	93.2	93.6	92.8	90.2	79.0	108	108
Test 3	91.7	94.2	96.4	97.7	97.9	99.0	98.0	93.0	93.9	93.4	89.8	78.0	108	108
Mean	91.8	94.4	96.3	97.5	98.0	99.2	97.9	92.9	93.9	93.1	89.9	78.7		
Occluded														
Test 1	77.7	79.6	76.9	70.6	77.5	78.4	73.9	74.9	76.7	73.0	62.7	57.0	96	91
Test 2	69.7	70.4	71.6	66.6	58.6	54.1	63.3	66.5	63.7	57.3	54.7	54.2	94	87
Test 3	78.9	81.9	81.5	69.9	69.3	74.2	77.1	75.2	79.8	76.1	70.0	57.8	97	92
Mean	75.4	77.3	76.7	69.0	68.5	68.9	71.4	72.2	73.4	68.8	62.4	56.3		
Right Insertion Loss	**16.4**	**17.0**	**19.6**	**28.4**	**29.5**	**30.3**	**26.5**	**20.7**	**20.5**	**24.3**	**27.4**	**22.4**		
Insertion Loss	**20.6**	**21.1**	**22.7**	**29.1**	**32.6**	**37.1**	**37.0**	**36.3**	**32.9**	**34.1**	**35.0**	**26.4**		

Table C-78. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.2	89.9	85.4	88.0	88.9	90.4	87.2	91.1	89.8	91.9	94.4	95.6	95.7
Test 2	88.4	90.1	85.1	87.5	88.9	87.1	88.2	91.2	91.4	92.8	95.7	94.8	94.4
Test 3	86.1	89.6	85.5	88.1	88.7	90.7	87.6	91.3	90.1	91.7	94.7	95.9	96.0
Mean	86.9	89.9	85.4	87.9	88.8	89.4	87.7	91.2	90.4	92.1	94.9	95.4	95.4
Occluded													
Test 1	85.0	86.3	81.7	83.7	84.4	82.0	84.2	83.9	81.3	81.4	81.3	76.4	74.0
Test 2	82.5	86.2	82.3	84.4	84.5	86.5	84.3	83.7	80.1	80.2	80.4	77.3	75.0
Test 3	82.6	86.2	82.3	84.7	84.6	86.6	84.3	83.8	80.3	80.0	80.6	77.5	75.8
Mean	83.4	86.2	82.1	84.3	84.5	85.0	84.3	83.8	80.6	80.5	80.8	77.0	74.9
Left Insertion Loss	**3.5**	**3.6**	**3.3**	**3.6**	**4.4**	**4.4**	**3.4**	**7.4**	**9.9**	**11.6**	**14.2**	**18.4**	**20.4**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.3	83.5	86.3	88.1	90.2	86.4	91.9	90.0	92.5	94.3	93.0	94.3
Test 2	87.5	88.4	83.0	85.8	88.3	89.9	87.3	92.5	91.5	93.1	93.3	91.9	92.4
Test 3	85.3	88.2	83.4	86.2	88.1	90.0	86.8	91.6	90.0	92.8	94.1	92.3	94.1
Mean	86.1	88.3	83.3	86.1	88.2	90.0	86.8	92.0	90.5	92.8	93.9	92.4	93.6
Occluded													
Test 1	85.2	85.5	80.7	84.0	85.9	85.6	84.2	82.9	81.2	84.1	80.4	75.1	72.6
Test 2	82.3	84.8	80.8	84.5	85.8	87.5	84.1	83.3	80.5	82.9	80.8	76.0	73.1
Test 3	81.5	84.3	80.4	84.3	85.6	87.5	84.7	83.4	80.8	83.3	80.3	76.3	74.1
Mean	83.0	84.9	80.6	84.3	85.8	86.9	84.4	83.2	80.8	83.4	80.5	75.8	73.3
Right Insertion Loss	**3.0**	**3.4**	**2.7**	**1.8**	**2.4**	**3.2**	**2.5**	**8.8**	**9.7**	**9.4**	**13.4**	**16.6**	**20.3**
Insertion Loss	**3.3**	**3.5**	**3.0**	**2.7**	**3.4**	**3.8**	**2.9**	**8.1**	**9.8**	**10.5**	**13.8**	**17.5**	**20.4**

Table C-78. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.5	94.3	96.2	98.4	99.4	101.8	94.7	92.6	93.3	92.9	90.3	81.0	108	109
Test 2	92.9	95.1	96.8	98.5	99.0	101.1	92.8	92.1	93.5	93.2	89.9	81.4	108	108
Test 3	93.5	94.5	96.6	98.3	99.2	101.0	93.1	92.3	93.6	92.6	90.2	81.2	108	108
Mean	93.3	94.6	96.5	98.4	99.2	101.3	93.5	92.3	93.5	92.9	90.1	81.2		
Occluded														
Test 1	67.3	64.2	64.6	63.4	58.0	51.8	46.7	45.2	41.2	41.2	43.5	45.2	94	86
Test 2	67.7	64.3	64.6	64.1	57.8	50.7	45.4	44.4	41.9	42.6	45.0	46.8	94	86
Test 3	68.1	65.2	64.9	63.4	57.1	51.2	47.3	45.6	41.2	41.7	43.9	45.7	94	86
Mean	67.7	64.6	64.7	63.6	57.6	51.2	46.5	45.1	41.4	41.8	44.1	45.9		
Left Insertion Loss	**25.6**	**30.1**	**31.8**	**34.8**	**41.6**	**50.1**	**47.1**	**47.3**	**52.0**	**51.1**	**46.0**	**35.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.8	97.0	97.8	101.0	103.2	99.6	97.3	95.5	94.2	91.7	84.2	109	110
Test 2	92.7	93.9	97.2	98.0	101.5	104.2	100.4	99.1	96.7	92.2	90.9	83.3	110	111
Test 3	93.2	94.3	96.8	98.3	100.7	103.8	99.8	98.0	95.7	92.9	91.4	83.8	110	110
Mean	93.0	94.3	97.0	98.0	101.1	103.7	99.9	98.1	96.0	93.1	91.3	83.8		
Occluded														
Test 1	64.0	58.0	58.9	56.8	51.3	49.6	48.9	47.9	48.3	50.2	52.9	55.5	95	86
Test 2	63.3	55.8	56.9	56.0	50.9	49.5	48.1	47.4	48.5	50.8	53.5	56.0	94	86
Test 3	62.6	56.3	57.1	55.6	49.9	49.2	47.9	47.2	48.2	50.4	53.2	55.7	94	86
Mean	63.3	56.7	57.6	56.1	50.7	49.4	48.3	47.5	48.3	50.5	53.2	55.7		
Right Insertion Loss	**29.7**	**37.7**	**39.4**	**41.9**	**50.4**	**54.3**	**51.6**	**50.6**	**47.6**	**42.6**	**38.1**	**28.1**		
Insertion Loss	**27.6**	**33.9**	**35.6**	**38.4**	**46.0**	**52.2**	**49.3**	**48.9**	**49.8**	**46.8**	**42.0**	**31.7**		

Table C-79. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.8	89.4	84.9	87.4	88.4	88.1	88.7	92.0	91.4	92.1	96.3	95.5	95.6
Test 2	85.5	89.2	85.3	88.2	88.7	91.4	87.9	91.2	90.6	91.0	95.4	95.1	96.7
Test 3	85.6	89.3	85.3	88.1	88.7	91.2	87.7	90.9	90.3	90.8	95.3	95.3	96.7
Mean	86.3	89.3	85.2	87.9	88.6	90.2	88.1	91.4	90.8	91.3	95.7	95.3	96.3
Occluded													
Test 1	82.0	85.4	80.6	82.7	83.4	86.0	82.8	84.6	80.5	79.9	83.8	81.6	79.7
Test 2	84.0	87.1	82.5	84.7	84.9	87.3	84.0	84.9	81.1	80.9	84.5	82.0	80.7
Test 3	86.2	87.5	82.2	84.4	85.3	83.7	84.1	85.5	81.9	82.0	84.8	81.2	78.4
Mean	84.1	86.6	81.8	83.9	84.5	85.7	83.6	85.0	81.2	80.9	84.4	81.6	79.6
Left Insertion Loss	**2.2**	**2.7**	**3.4**	**4.0**	**4.1**	**4.6**	**4.5**	**6.4**	**9.6**	**10.3**	**11.3**	**13.7**	**16.8**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.4	88.2	83.3	86.1	88.1	88.8	86.5	91.5	91.2	92.1	93.0	93.5	93.8
Test 2	85.2	88.1	83.7	86.7	88.0	90.1	86.2	90.6	90.0	91.4	93.1	93.0	94.4
Test 3	85.2	88.1	83.7	86.7	88.0	90.2	86.2	90.6	89.9	91.6	93.1	93.0	94.3
Mean	85.9	88.1	83.6	86.5	88.0	89.7	86.3	90.9	90.4	91.7	93.0	93.2	94.2
Occluded													
Test 1	86.0	89.2	84.8	88.1	89.9	91.4	86.7	86.0	81.4	82.8	81.4	76.9	75.1
Test 2	85.9	89.1	85.2	88.5	90.0	92.0	87.5	86.6	82.5	83.0	81.5	78.2	75.7
Test 3	87.5	88.5	83.5	86.6	88.5	88.0	86.1	84.2	80.9	83.1	79.2	75.5	73.9
Mean	86.5	88.9	84.5	87.8	89.5	90.5	86.8	85.6	81.6	83.0	80.7	76.9	74.9
Right Insertion Loss	**-0.6**	**-0.8**	**-1.0**	**-1.3**	**-1.4**	**-0.8**	**-0.5**	**5.3**	**8.8**	**8.7**	**12.4**	**16.3**	**19.3**
Insertion Loss	**0.8**	**0.9**	**1.2**	**1.3**	**1.3**	**1.9**	**2.0**	**5.8**	**9.2**	**9.5**	**11.8**	**15.0**	**18.0**

Table C-79. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.5	94.0	95.9	97.6	98.0	100.3	97.3	96.7	94.0	91.4	91.3	79.5	108	108
Test 2	93.7	93.9	96.0	97.2	97.8	100.6	97.7	96.0	93.6	91.8	90.7	80.0	108	108
Test 3	93.6	94.3	96.1	97.3	98.4	99.9	97.3	94.9	93.7	92.1	89.8	78.5	108	108
Mean	92.9	94.1	96.0	97.4	98.0	100.3	97.4	95.9	93.8	91.8	90.6	79.3		
Occluded														
Test 1	68.6	64.6	62.5	60.8	55.0	53.1	48.8	43.7	43.6	44.9	47.1	49.4	94	87
Test 2	68.6	64.1	62.2	61.9	55.5	53.9	49.4	47.8	44.6	44.6	46.3	48.7	95	88
Test 3	68.2	64.0	62.5	61.8	55.7	52.8	47.7	47.3	45.9	45.0	46.3	48.4	95	88
Mean	68.5	64.2	62.4	61.5	55.4	53.3	48.6	46.2	44.7	44.8	46.6	48.8		
Left Insertion Loss	**24.5**	**29.8**	**33.6**	**35.9**	**42.7**	**47.0**	**48.8**	**49.6**	**49.1**	**47.0**	**44.0**	**30.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.1	92.6	95.1	97.9	98.0	101.4	99.9	99.1	95.6	96.0	92.9	83.6	109	109
Test 2	93.2	93.8	95.4	98.0	98.8	100.6	100.2	99.7	95.8	95.2	92.5	82.2	109	109
Test 3	93.4	94.0	95.2	97.6	98.7	100.8	100.5	99.4	96.0	96.7	92.3	82.3	109	109
Mean	92.6	93.4	95.2	97.8	98.5	100.9	100.2	99.4	95.8	96.0	92.5	82.7		
Occluded														
Test 1	66.0	62.9	65.6	61.7	55.3	54.7	51.6	51.0	55.3	54.6	54.8	57.1	98	88
Test 2	66.4	63.9	65.9	62.8	57.0	54.6	52.0	51.0	57.9	56.7	54.8	56.9	98	88
Test 3	65.0	61.3	65.0	61.7	53.7	52.5	49.9	49.9	54.1	54.0	54.4	56.8	96	87
Mean	65.8	62.7	65.5	62.0	55.3	53.9	51.2	50.6	55.8	55.1	54.7	56.9		
Right Insertion Loss	**26.8**	**30.7**	**29.7**	**35.8**	**43.2**	**47.0**	**49.0**	**48.8**	**40.0**	**40.9**	**37.9**	**25.8**		
Insertion Loss	**25.6**	**30.3**	**31.7**	**35.8**	**42.9**	**47.0**	**48.9**	**49.2**	**44.5**	**43.9**	**41.0**	**28.1**		

Table C-80. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.7	85.0	87.9	88.8	91.7	88.6	93.0	92.4	92.4	96.4	95.5	95.8
Test 2	85.4	88.8	84.9	87.7	88.9	91.3	88.2	92.8	92.3	92.6	97.3	96.1	95.9
Test 3	85.3	88.9	84.9	87.8	88.8	91.4	88.2	92.6	92.2	93.0	96.8	96.1	95.8
Mean	85.3	88.8	85.0	87.8	88.9	91.5	88.3	92.8	92.3	92.7	96.8	95.9	95.8
Occluded													
Test 1	83.0	86.4	82.5	84.8	84.9	87.1	83.8	83.7	80.7	79.9	82.1	76.2	73.0
Test 2	83.8	87.3	83.3	85.6	85.7	87.0	84.0	84.1	80.9	79.1	82.0	75.6	72.2
Test 3	86.2	87.6	82.9	84.6	86.0	83.0	84.4	84.0	81.7	79.2	83.4	76.2	74.2
Mean	84.3	87.1	82.9	85.0	85.5	85.7	84.1	83.9	81.1	79.4	82.5	76.0	73.1
Left Insertion Loss	**1.0**	**1.7**	**2.1**	**2.8**	**3.3**	**5.8**	**4.3**	**8.9**	**11.2**	**13.3**	**14.3**	**20.0**	**22.7**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.8	87.3	83.2	86.8	87.8	89.6	86.4	92.1	90.1	90.5	91.4	92.9	94.7
Test 2	85.1	87.7	83.2	86.8	88.2	89.2	86.2	91.7	89.3	91.0	92.3	93.3	95.1
Test 3	85.1	87.7	83.1	86.7	88.0	89.3	86.4	91.7	88.9	91.0	92.5	92.8	95.0
Mean	85.0	87.6	83.2	86.8	88.0	89.4	86.3	91.8	89.4	90.8	92.1	93.0	95.0
Occluded													
Test 1	82.6	84.7	79.9	82.8	83.0	84.5	80.6	79.7	77.1	77.0	76.8	74.1	72.1
Test 2	82.0	83.8	78.7	81.7	81.7	82.7	79.4	78.6	76.0	75.9	74.6	73.0	72.0
Test 3	84.7	84.4	78.9	81.6	83.5	81.6	81.4	79.5	77.3	78.1	76.4	73.8	71.0
Mean	83.1	84.3	79.2	82.0	82.8	82.9	80.4	79.3	76.8	77.0	75.9	73.6	71.7
Right Insertion Loss	**1.9**	**3.3**	**4.0**	**4.7**	**5.3**	**6.4**	**5.9**	**12.6**	**12.6**	**13.9**	**16.1**	**19.4**	**23.2**
Insertion Loss	**1.4**	**2.5**	**3.0**	**3.8**	**4.3**	**6.1**	**5.1**	**10.7**	**11.9**	**13.6**	**15.2**	**19.7**	**23.0**

Table C-80. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 20.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.8	96.6	98.1	97.6	99.1	97.3	94.8	89.4	92.4	87.5	78.7	108	108
Test 2	93.5	95.4	96.8	97.8	97.9	98.8	97.7	94.8	89.4	92.0	88.8	79.3	108	108
Test 3	93.7	95.6	97.5	98.4	98.3	99.1	97.8	94.2	89.3	91.6	89.1	79.4	108	108
Mean	93.4	95.3	97.0	98.1	97.9	99.0	97.6	94.6	89.4	92.0	88.4	79.1		
Occluded														
Test 1	66.6	68.3	67.2	63.1	54.2	49.8	47.5	45.2	41.9	42.2	44.0	45.3	95	86
Test 2	65.8	68.4	67.4	63.1	56.9	52.8	48.7	49.6	43.9	43.5	46.0	47.2	95	86
Test 3	68.5	69.7	70.4	66.8	59.0	50.7	45.1	44.5	42.0	42.3	43.4	44.9	95	86
Mean	67.0	68.8	68.4	64.4	56.7	51.1	47.1	46.5	42.6	42.7	44.5	45.8		
Left Insertion Loss	**26.4**	**26.5**	**28.6**	**33.7**	**41.2**	**47.9**	**50.5**	**48.1**	**46.8**	**49.4**	**44.0**	**33.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.0	93.9	95.9	96.1	96.3	98.2	97.1	95.7	97.0	94.4	90.3	83.0	107	107
Test 2	92.3	93.5	95.2	95.8	96.5	98.5	97.7	95.7	96.5	95.6	91.0	82.8	107	107
Test 3	91.9	93.5	95.7	95.1	96.1	98.5	98.0	96.5	96.7	95.3	90.3	83.4	107	107
Mean	92.1	93.6	95.6	95.7	96.3	98.4	97.6	95.9	96.7	95.1	90.5	83.1		
Occluded														
Test 1	63.5	65.2	66.2	62.9	57.3	52.8	51.8	52.0	54.6	52.3	53.3	55.7	92	83
Test 2	65.0	63.6	64.0	63.1	57.5	55.9	54.2	52.3	51.1	51.3	53.8	56.2	91	82
Test 3	64.0	64.9	67.8	66.1	61.9	57.1	52.5	53.2	53.1	51.1	53.1	55.6	92	83
Mean	64.2	64.5	66.0	64.0	58.9	55.3	52.8	52.5	53.0	51.6	53.4	55.9		
Right Insertion Loss	**27.9**	**29.1**	**29.6**	**31.7**	**37.4**	**43.1**	**44.8**	**43.5**	**43.7**	**43.6**	**37.1**	**27.2**		
Insertion Loss	**27.2**	**27.8**	**29.1**	**32.7**	**39.3**	**45.5**	**47.7**	**45.8**	**45.3**	**46.5**	**40.5**	**30.3**		

Table C-81. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.8	85.0	87.6	88.3	90.5	87.0	89.5	90.3	91.6	93.6	93.8	95.0
Test 2	85.3	88.8	85.1	87.7	88.4	90.5	87.0	89.4	90.4	91.7	93.6	94.0	94.6
Test 3	87.6	89.1	84.8	87.0	88.3	86.6	88.1	90.3	91.9	92.9	94.4	93.5	94.6
Mean	86.1	88.9	85.0	87.5	88.3	89.2	87.4	89.7	90.9	92.1	93.8	93.8	94.7
Occluded													
Test 1	86.8	90.6	87.7	91.6	94.6	96.5	92.1	91.1	84.5	79.8	79.7	76.2	74.2
Test 2	89.2	91.0	87.4	90.7	94.4	91.9	92.6	91.0	85.6	80.7	80.9	75.6	73.9
Test 3	89.3	91.0	87.3	90.6	94.6	91.8	92.5	91.1	85.6	80.8	81.5	75.8	74.7
Mean	88.4	90.9	87.4	91.0	94.5	93.4	92.4	91.0	85.2	80.4	80.7	75.9	74.3
Left Insertion Loss	**-2.3**	**-1.9**	**-2.5**	**-3.5**	**-6.2**	**-4.2**	**-5.0**	**-1.3**	**5.7**	**11.7**	**13.1**	**17.9**	**20.4**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.5	84.2	87.2	88.8	91.4	86.9	91.8	90.1	92.9	94.7	94.9	96.4
Test 2	85.6	88.5	84.2	87.1	88.9	91.3	87.2	91.9	90.2	93.0	94.4	94.3	95.8
Test 3	87.9	88.8	83.7	86.3	89.1	90.5	88.0	92.8	91.5	93.6	94.1	93.5	94.3
Mean	86.4	88.6	84.0	86.9	88.9	91.1	87.4	92.2	90.6	93.2	94.4	94.2	95.5
Occluded													
Test 1	88.0	91.5	88.7	92.6	93.1	92.6	85.7	85.3	79.1	79.5	77.3	70.8	70.0
Test 2	90.3	91.7	87.8	91.0	94.2	91.6	87.8	86.0	80.8	79.9	77.2	70.5	68.9
Test 3	90.5	92.0	88.0	91.5	93.0	90.9	87.5	85.3	80.6	79.9	78.0	70.8	69.9
Mean	89.6	91.7	88.2	91.7	93.5	91.7	87.0	85.5	80.1	79.8	77.5	70.7	69.6
Right Insertion Loss	**-3.2**	**-3.2**	**-4.1**	**-4.8**	**-4.5**	**-0.7**	**0.4**	**6.6**	**10.5**	**13.4**	**16.9**	**23.5**	**25.9**
Insertion Loss	**-2.8**	**-2.6**	**-3.3**	**-4.2**	**-5.3**	**-2.4**	**-2.3**	**2.7**	**8.1**	**12.5**	**15.0**	**20.7**	**23.2**

Table C-81. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	95.7	96.5	97.8	99.1	101.6	99.5	95.1	93.3	93.1	90.2	79.5	109	109
Test 2	92.7	95.7	96.4	97.5	98.9	100.9	98.7	94.7	93.5	93.0	90.7	80.1	108	108
Test 3	92.8	95.0	96.3	97.0	98.8	100.9	98.0	94.7	93.8	93.2	90.4	80.8	108	108
Mean	92.8	95.5	96.4	97.4	98.9	101.2	98.8	94.8	93.5	93.1	90.4	80.1		
Occluded														
Test 1	66.7	63.0	63.3	64.0	58.0	57.9	54.3	47.9	45.5	44.3	45.5	47.8	102	91
Test 2	65.6	64.0	63.2	64.3	58.7	57.0	52.0	47.7	45.5	44.9	46.3	47.8	101	91
Test 3	67.3	65.0	63.7	64.0	59.4	56.3	51.8	47.8	46.7	47.2	46.7	47.5	101	91
Mean	66.5	64.0	63.4	64.1	58.7	57.1	52.7	47.8	45.9	45.4	46.2	47.7		
Left Insertion Loss	**26.3**	**31.5**	**33.0**	**33.3**	**40.2**	**44.1**	**46.0**	**47.0**	**47.6**	**47.7**	**44.3**	**32.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.8	95.1	96.9	98.4	99.5	101.2	100.5	97.8	97.4	95.7	91.4	83.7	109	110
Test 2	94.3	95.6	96.8	97.6	99.0	101.0	100.7	97.6	97.3	94.8	91.1	82.5	109	109
Test 3	93.4	94.8	96.9	97.0	99.1	100.6	100.4	97.6	97.4	95.0	91.2	82.9	109	109
Mean	93.8	95.2	96.8	97.7	99.2	101.0	100.5	97.7	97.4	95.1	91.2	83.0		
Occluded														
Test 1	62.4	58.6	55.7	54.0	52.2	51.7	48.5	47.0	48.4	51.0	53.9	56.3	100	87
Test 2	62.1	59.5	58.0	53.0	51.2	52.3	48.9	47.3	48.5	51.0	53.8	56.3	100	88
Test 3	63.0	59.9	58.5	53.0	52.3	52.0	51.0	46.8	48.5	50.9	53.7	56.1	100	88
Mean	62.5	59.3	57.4	53.3	51.9	52.0	49.4	47.0	48.5	50.9	53.8	56.2		
Right Insertion Loss	**31.3**	**35.9**	**39.4**	**44.3**	**47.3**	**48.9**	**51.1**	**50.7**	**48.9**	**44.2**	**37.4**	**26.8**		
Insertion Loss	**28.8**	**33.7**	**36.2**	**38.8**	**43.8**	**46.5**	**48.6**	**48.8**	**48.3**	**45.9**	**40.8**	**29.6**		

Table C-82. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.3	89.0	84.9	87.5	88.3	88.9	88.9	92.1	92.7	93.8	94.7	94.6	93.4
Test 2	85.4	89.1	85.2	88.1	88.8	92.0	87.7	89.8	90.7	92.3	94.6	94.5	93.9
Test 3	85.0	89.0	85.3	88.2	88.7	92.4	87.9	90.5	90.9	92.5	94.6	94.6	93.5
Mean	85.9	89.0	85.1	87.9	88.6	91.1	88.2	90.8	91.4	92.9	94.6	94.6	93.6
Occluded													
Test 1	86.3	90.4	88.0	92.1	94.1	97.1	91.3	87.6	83.3	79.6	78.2	75.8	73.0
Test 2	88.3	90.4	87.9	91.6	93.4	92.3	91.3	88.2	84.5	80.9	79.5	75.9	72.3
Test 3	86.4	90.6	88.1	92.0	93.6	96.1	90.1	86.6	82.4	78.9	77.4	74.3	72.8
Mean	87.0	90.5	88.0	91.9	93.7	95.2	90.9	87.5	83.4	79.8	78.4	75.4	72.7
Left Insertion Loss	**-1.1**	**-1.5**	**-2.8**	**-4.0**	**-5.1**	**-4.1**	**-2.8**	**3.3**	**8.0**	**13.0**	**16.3**	**19.2**	**20.9**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.2	89.2	84.1	86.6	89.5	89.0	88.2	92.1	90.8	92.7	93.4	92.5	94.3
Test 2	86.1	89.1	84.6	87.6	89.5	90.8	87.5	91.4	89.6	92.2	93.2	92.8	94.8
Test 3	85.9	89.2	84.7	87.5	89.4	90.6	87.5	91.2	89.6	92.2	93.7	92.7	94.7
Mean	86.7	89.2	84.5	87.2	89.5	90.2	87.7	91.5	90.0	92.3	93.5	92.7	94.6
Occluded													
Test 1	87.8	91.7	88.5	92.9	96.6	98.3	94.0	90.3	83.8	81.5	80.2	75.4	72.9
Test 2	89.9	91.7	88.2	92.4	96.7	95.6	94.4	90.1	84.6	83.2	79.8	73.9	71.7
Test 3	87.5	91.2	88.0	92.4	96.3	98.5	95.3	91.2	83.9	82.8	80.0	76.0	72.3
Mean	88.4	91.5	88.2	92.6	96.5	97.5	94.6	90.6	84.1	82.5	80.0	75.1	72.3
Right Insertion Loss	**-1.7**	**-2.3**	**-3.8**	**-5.3**	**-7.1**	**-7.3**	**-6.8**	**1.0**	**5.9**	**9.8**	**13.4**	**17.6**	**22.3**
Insertion Loss	**-1.4**	**-1.9**	**-3.3**	**-4.7**	**-6.1**	**-5.7**	**-4.8**	**2.2**	**6.9**	**11.4**	**14.9**	**18.4**	**21.6**

Table C-82. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.1	93.5	95.6	98.1	98.5	101.0	97.5	97.3	93.4	90.4	91.9	79.9	108	108
Test 2	92.1	93.1	95.4	97.7	98.0	100.8	97.1	97.6	93.0	90.2	91.6	79.9	108	108
Test 3	92.1	93.3	95.5	97.5	98.2	101.3	97.7	97.7	93.6	90.9	91.7	79.5	108	108
Mean	92.1	93.3	95.5	97.7	98.2	101.0	97.4	97.5	93.4	90.5	91.8	79.8		
Occluded														
Test 1	65.8	62.8	66.1	61.3	57.0	52.1	49.1	44.8	50.9	45.9	44.0	45.5	101	90
Test 2	65.5	63.6	65.6	62.8	57.9	52.4	48.6	44.1	45.8	45.6	44.8	46.1	100	89
Test 3	66.2	65.0	65.9	63.9	58.9	55.2	56.2	48.4	49.6	46.0	46.3	45.8	101	89
Mean	65.8	63.8	65.9	62.6	57.9	53.2	51.3	45.7	48.8	45.8	45.0	45.8		
Left Insertion Loss	**26.3**	**29.5**	**29.6**	**35.1**	**40.3**	**47.8**	**46.1**	**51.8**	**44.6**	**44.7**	**46.7**	**34.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	95.0	96.8	100.2	100.8	101.8	101.1	100.3	99.3	91.4	88.6	80.0	110	110
Test 2	93.2	94.5	97.9	100.0	100.0	102.0	101.1	99.6	99.2	92.1	89.4	79.5	110	110
Test 3	93.2	94.3	97.3	100.3	100.6	102.0	100.9	100.2	99.7	91.2	88.1	79.7	110	110
Mean	93.3	94.6	97.3	100.2	100.4	102.0	101.0	100.0	99.4	91.6	88.7	79.7		
Occluded														
Test 1	68.7	63.1	61.0	54.3	53.7	55.3	54.2	58.5	61.1	53.7	54.3	55.7	103	92
Test 2	67.7	63.3	60.7	56.4	52.1	50.0	51.1	52.1	57.0	52.4	53.4	55.9	102	92
Test 3	68.6	64.4	62.4	59.5	60.1	63.0	58.0	64.3	65.9	55.8	55.2	55.8	103	93
Mean	68.3	63.6	61.4	56.7	55.3	56.1	54.4	58.3	61.3	54.0	54.3	55.8		
Right Insertion Loss	**25.0**	**31.0**	**36.0**	**43.4**	**45.1**	**45.8**	**46.6**	**41.7**	**38.1**	**37.6**	**34.4**	**24.0**		
Insertion Loss	**25.6**	**30.2**	**32.8**	**39.3**	**42.7**	**46.8**	**46.4**	**46.8**	**41.3**	**41.1**	**40.6**	**29.0**		

Table C-83. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	89.5	84.0	86.1	88.6	84.3	88.0	88.1	89.9	92.8	94.6	93.9	94.1
Test 2	85.9	89.4	84.6	86.9	88.6	88.1	86.9	89.2	88.2	92.1	93.5	94.3	94.0
Test 3	86.1	89.4	84.6	86.8	88.7	87.8	86.9	89.0	88.3	92.1	93.8	94.4	93.9
Mean	86.7	89.5	84.4	86.6	88.6	86.8	87.3	88.8	88.8	92.3	94.0	94.2	94.0
Occluded													
Test 1	86.5	90.6	88.0	91.9	94.2	96.7	91.3	89.1	82.3	80.5	77.3	77.0	73.5
Test 2	86.6	90.8	88.1	91.8	94.2	96.2	91.1	88.7	81.6	80.4	77.2	77.1	73.6
Test 3	86.6	90.9	88.0	92.0	94.2	96.1	91.1	88.5	81.8	80.5	77.3	77.2	74.1
Mean	86.6	90.8	88.0	91.9	94.2	96.3	91.2	88.8	81.9	80.5	77.3	77.1	73.7
Left Insertion Loss	**0.1**	**-1.3**	**-3.6**	**-5.3**	**-5.5**	**-9.6**	**-3.9**	**0.0**	**6.9**	**11.9**	**16.7**	**17.1**	**20.3**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	88.8	83.2	85.8	88.8	92.2	88.6	93.2	92.4	93.3	95.4	93.6	94.9
Test 2	85.8	88.7	84.0	86.7	88.8	92.3	87.1	93.0	91.1	92.6	94.7	93.3	95.9
Test 3	85.8	88.7	84.1	86.8	88.9	92.3	86.8	92.9	91.2	92.7	95.2	93.5	96.2
Mean	86.5	88.8	83.8	86.5	88.8	92.3	87.5	93.0	91.6	92.9	95.1	93.5	95.7
Occluded													
Test 1	86.9	90.6	88.3	92.8	95.4	99.5	91.8	88.0	81.2	80.8	77.7	73.0	71.3
Test 2	87.0	90.8	88.3	92.8	95.5	99.3	91.9	88.1	81.5	80.7	78.1	72.8	71.3
Test 3	87.0	90.9	88.4	93.1	95.6	99.3	91.9	88.1	81.5	80.6	77.8	72.7	71.3
Mean	87.0	90.8	88.3	92.9	95.5	99.3	91.9	88.1	81.4	80.7	77.8	72.8	71.3
Right Insertion Loss	**-0.5**	**-2.0**	**-4.5**	**-6.5**	**-6.7**	**-7.1**	**-4.4**	**5.0**	**10.2**	**12.1**	**17.2**	**20.7**	**24.3**
Insertion Loss	**-0.2**	**-1.7**	**-4.1**	**-5.9**	**-6.1**	**-8.3**	**-4.1**	**2.5**	**8.5**	**12.0**	**17.0**	**18.9**	**22.3**

Table C-83. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 13.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.1	94.5	96.8	98.2	99.7	103.3	98.3	91.1	91.0	91.9	89.2	81.0	109	109
Test 2	92.0	95.2	97.1	98.2	100.2	102.3	98.0	92.0	91.2	92.0	88.9	80.7	108	109
Test 3	91.9	95.4	96.8	98.2	100.3	102.7	98.1	91.8	91.2	91.9	89.2	80.3	109	109
Mean	92.0	95.0	96.9	98.2	100.0	102.8	98.1	91.6	91.1	91.9	89.1	80.7		
Occluded														
Test 1	67.2	64.1	64.0	61.3	59.8	58.4	51.4	47.0	45.3	44.4	45.3	46.9	101	90
Test 2	67.0	65.2	64.2	61.0	59.7	56.5	49.4	46.7	45.5	44.3	45.8	47.8	101	90
Test 3	67.0	63.8	63.3	60.6	59.3	56.0	48.6	45.4	45.4	43.9	45.5	47.4	101	90
Mean	67.1	64.4	63.8	61.0	59.6	57.0	49.8	46.3	45.4	44.2	45.5	47.4		
Left Insertion Loss	**24.9**	**30.7**	**33.1**	**37.2**	**40.4**	**45.8**	**48.4**	**45.3**	**45.7**	**47.7**	**43.6**	**33.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.6	95.6	97.7	98.4	101.4	102.9	100.1	95.9	93.9	91.1	90.3	82.1	110	110
Test 2	93.5	95.5	97.8	97.6	101.2	103.6	99.8	95.5	94.0	91.0	89.9	81.6	110	110
Test 3	93.6	95.1	97.9	98.7	101.2	103.3	100.3	94.6	93.4	91.8	91.2	81.6	110	110
Mean	92.9	95.4	97.8	98.3	101.3	103.3	100.1	95.4	93.8	91.3	90.5	81.8		
Occluded														
Test 1	60.8	58.9	65.1	65.2	62.7	58.9	54.8	49.3	48.2	50.3	53.1	55.7	103	92
Test 2	61.5	58.2	61.7	62.0	60.5	58.3	54.0	49.2	48.4	50.5	53.4	55.9	103	92
Test 3	60.2	57.0	61.8	62.8	60.9	57.8	53.5	48.2	48.2	50.6	53.2	55.8	103	92
Mean	60.8	58.0	62.8	63.3	61.4	58.3	54.1	48.9	48.3	50.4	53.3	55.8		
Right Insertion Loss	**32.1**	**37.4**	**35.0**	**35.0**	**39.9**	**44.9**	**46.0**	**46.5**	**45.5**	**40.9**	**37.2**	**26.0**		
Insertion Loss	**28.5**	**34.0**	**34.0**	**36.1**	**40.1**	**45.4**	**47.2**	**45.9**	**45.6**	**44.3**	**40.4**	**29.6**		

Table C-84. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	89.1	85.1	87.5	88.3	90.3	87.1	90.3	90.0	91.3	94.1	94.7	95.2
Test 2	85.4	89.0	85.0	87.6	88.5	90.7	87.5	90.5	90.4	91.6	94.2	93.8	94.5
Test 3	85.8	89.3	85.0	87.6	88.7	90.3	87.2	90.1	89.9	91.3	94.0	94.3	94.6
Mean	85.6	89.1	85.0	87.6	88.5	90.4	87.3	90.3	90.1	91.4	94.1	94.3	94.8
Occluded													
Test 1	87.0	90.9	88.2	92.3	95.4	97.1	92.7	90.3	82.7	76.7	78.0	73.2	72.5
Test 2	89.3	91.5	88.1	92.1	96.1	94.0	92.7	90.2	83.9	75.9	77.7	72.4	71.6
Test 3	87.1	91.0	87.8	92.1	95.4	96.4	92.8	91.5	83.6	77.3	78.9	73.6	71.8
Mean	87.8	91.1	88.0	92.2	95.6	95.8	92.7	90.6	83.4	76.7	78.2	73.1	72.0
Left Insertion Loss	**-2.2**	**-2.0**	**-3.0**	**-4.6**	**-7.1**	**-5.4**	**-5.5**	**-0.3**	**6.7**	**14.7**	**15.9**	**21.3**	**22.8**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.8	88.8	84.4	87.3	89.0	91.0	87.4	92.8	90.5	93.1	95.1	92.5	94.2
Test 2	85.6	88.6	84.2	87.3	88.9	90.9	87.5	92.9	90.5	93.0	94.7	92.4	93.9
Test 3	86.0	88.9	84.2	87.4	89.2	90.8	87.5	92.9	90.3	93.0	94.9	92.4	94.2
Mean	85.8	88.7	84.2	87.3	89.0	90.9	87.5	92.9	90.4	93.0	94.9	92.4	94.1
Occluded													
Test 1	87.1	90.6	87.7	91.8	95.0	97.8	95.6	92.5	86.1	83.9	82.1	74.8	71.4
Test 2	89.5	91.1	87.3	91.3	94.9	94.9	96.9	93.3	87.5	86.9	83.8	76.0	70.1
Test 3	87.1	90.7	87.4	91.8	95.2	97.7	96.0	93.4	85.9	83.1	81.9	74.5	70.8
Mean	87.9	90.8	87.5	91.6	95.0	96.8	96.2	93.1	86.5	84.6	82.6	75.1	70.8
Right Insertion Loss	**-2.1**	**-2.1**	**-3.2**	**-4.3**	**-6.0**	**-5.9**	**-8.7**	**-0.2**	**3.9**	**8.4**	**12.3**	**17.3**	**23.3**
Insertion Loss	**-2.1**	**-2.0**	**-3.1**	**-4.4**	**-6.6**	**-5.6**	**-7.1**	**-0.3**	**5.3**	**11.5**	**14.1**	**19.3**	**23.1**

Table C-84. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.7	94.1	96.8	98.7	99.3	99.4	98.8	95.1	94.1	93.0	88.2	78.8	108	108
Test 2	91.6	94.5	97.4	97.9	100.3	100.9	99.2	95.8	93.0	92.4	88.5	77.7	109	109
Test 3	91.8	94.5	97.3	98.7	99.9	100.4	98.6	95.9	92.2	92.4	88.9	78.3	108	109
Mean	91.7	94.4	97.1	98.4	99.8	100.2	98.9	95.6	93.1	92.6	88.5	78.3		
Occluded														
Test 1	69.8	64.4	61.1	57.1	56.2	56.1	55.9	50.1	44.0	44.5	45.7	47.9	102	91
Test 2	68.3	63.5	59.6	55.6	58.9	58.1	56.7	53.1	46.8	44.2	46.2	48.5	102	91
Test 3	69.9	65.1	62.3	57.3	58.3	59.2	56.4	54.8	53.9	47.0	46.1	48.0	102	91
Mean	69.3	64.3	61.0	56.7	57.8	57.8	56.3	52.7	48.2	45.2	46.0	48.1		
Left Insertion Loss	**22.4**	**30.0**	**36.1**	**41.7**	**42.0**	**42.5**	**42.5**	**42.9**	**44.9**	**47.4**	**42.5**	**30.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	95.4	98.1	98.8	100.7	103.6	102.0	100.5	95.5	91.8	90.2	80.6	110	111
Test 2	93.5	95.0	98.3	99.0	101.0	103.1	101.5	98.7	93.7	90.6	89.7	83.2	110	110
Test 3	93.4	95.6	98.2	99.0	101.3	103.2	101.2	99.2	93.1	90.9	90.3	83.4	110	111
Mean	93.4	95.3	98.2	98.9	101.0	103.3	101.6	99.4	94.1	91.1	90.1	82.4		
Occluded														
Test 1	63.7	60.3	60.4	55.1	54.0	57.3	51.8	54.2	50.9	50.7	53.4	56.0	103	93
Test 2	63.4	61.8	61.2	57.1	57.2	59.9	51.8	54.0	52.0	51.3	53.6	56.2	103	94
Test 3	62.6	59.4	58.9	54.9	55.7	58.2	54.4	55.3	52.1	51.6	53.5	56.1	103	93
Mean	63.3	60.5	60.2	55.7	55.7	58.5	52.7	54.5	51.7	51.2	53.5	56.1		
Right Insertion Loss	**30.2**	**34.9**	**38.0**	**43.2**	**45.3**	**44.8**	**48.9**	**44.9**	**42.4**	**39.8**	**36.6**	**26.3**		
Insertion Loss	**26.3**	**32.5**	**37.1**	**42.5**	**43.7**	**43.6**	**45.7**	**43.9**	**43.6**	**43.6**	**39.5**	**28.2**		

Table C-85. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.8	88.3	84.0	86.6	88.1	88.9	86.5	90.1	90.0	90.6	92.3	93.5	93.7
Test 2	87.0	88.5	83.9	86.3	87.8	85.5	87.2	91.1	91.4	91.6	93.4	92.4	93.9
Test 3	84.8	88.3	84.1	86.8	87.9	89.2	86.6	89.5	90.3	90.9	92.2	92.8	94.6
Mean	85.5	88.3	84.0	86.6	88.0	87.9	86.8	90.2	90.6	91.0	92.6	92.9	94.1
Occluded													
Test 1	88.4	90.2	86.4	89.7	92.3	88.9	89.3	88.9	84.2	81.1	80.9	76.1	69.9
Test 2	88.3	89.9	86.4	89.5	92.2	88.7	89.9	89.0	83.9	80.8	80.7	75.6	71.3
Test 3	86.1	89.8	86.6	90.2	92.0	92.4	88.9	88.9	82.9	80.0	79.9	76.6	71.6
Mean	87.6	90.0	86.5	89.8	92.2	90.0	89.4	88.9	83.7	80.6	80.5	76.1	70.9
Left Insertion Loss	**-2.0**	**-1.6**	**-2.5**	**-3.2**	**-4.2**	**-2.1**	**-2.6**	**1.3**	**6.9**	**10.4**	**12.1**	**16.8**	**23.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.1	83.6	86.9	88.7	90.5	86.5	90.8	89.8	92.1	94.6	94.2	96.0
Test 2	87.4	88.3	82.9	86.0	88.6	90.5	87.7	91.9	91.2	92.8	94.7	93.4	94.2
Test 3	85.3	88.1	83.6	86.8	88.5	90.9	86.5	91.4	90.3	92.4	94.8	94.7	95.6
Mean	86.0	88.2	83.4	86.6	88.6	90.6	86.9	91.4	90.4	92.4	94.7	94.1	95.2
Occluded													
Test 1	88.8	90.3	86.1	90.5	95.4	95.5	93.3	90.0	85.9	85.5	82.3	76.5	74.8
Test 2	88.8	90.0	86.1	90.1	94.9	95.0	93.2	90.2	85.8	85.1	82.0	75.7	74.5
Test 3	86.4	89.8	86.4	91.0	94.8	96.7	92.1	90.4	84.6	83.7	81.4	77.2	75.2
Mean	88.0	90.0	86.2	90.5	95.0	95.7	92.9	90.2	85.5	84.8	81.9	76.5	74.8
Right Insertion Loss	**-2.0**	**-1.9**	**-2.8**	**-3.9**	**-6.4**	**-5.1**	**-6.0**	**1.2**	**5.0**	**7.7**	**12.8**	**17.7**	**20.4**
Insertion Loss	**-2.0**	**-1.7**	**-2.7**	**-3.6**	**-5.3**	**-3.6**	**-4.3**	**1.3**	**6.0**	**9.0**	**12.5**	**17.2**	**21.8**

Table C-85. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 15.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.6	94.7	95.5	95.8	98.0	100.4	98.9	96.6	93.7	90.3	88.1	77.8	108	108
Test 2	91.8	94.6	95.3	96.2	97.9	100.6	99.0	97.3	94.2	91.5	88.9	78.0	108	108
Test 3	91.8	94.7	95.1	96.4	97.4	100.5	99.2	96.7	94.2	91.4	88.0	78.1	108	108
Mean	91.7	94.7	95.3	96.1	97.8	100.5	99.0	96.9	94.0	91.0	88.3	78.0		
Occluded														
Test 1	63.4	61.8	60.6	60.2	55.1	57.7	50.4	46.5	44.9	43.6	44.6	46.3	99	89
Test 2	64.4	61.1	60.1	58.5	53.3	55.9	48.8	45.8	44.4	44.1	45.4	47.5	99	89
Test 3	63.5	60.7	61.3	59.2	56.1	57.4	51.6	46.0	45.3	44.8	45.5	46.4	99	89
Mean	63.8	61.2	60.6	59.3	54.8	57.0	50.3	46.1	44.9	44.2	45.2	46.7		
Left Insertion Loss	**27.9**	**33.5**	**34.7**	**36.9**	**43.0**	**43.5**	**48.8**	**50.8**	**49.2**	**46.9**	**43.1**	**31.2**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.3	95.4	96.6	98.6	98.9	101.6	100.7	99.9	97.2	97.1	93.9	81.0	110	110
Test 2	92.9	95.0	96.8	99.0	98.6	101.6	101.1	100.8	97.5	96.4	94.0	80.7	110	110
Test 3	93.4	95.0	96.5	98.8	99.0	101.2	100.8	100.2	97.7	97.4	94.3	80.9	110	110
Mean	93.2	95.1	96.6	98.8	98.9	101.5	100.9	100.3	97.5	97.0	94.1	80.9		
Occluded														
Test 1	65.5	62.3	62.4	56.6	50.4	52.4	46.7	45.1	47.6	50.1	53.0	55.6	102	92
Test 2	64.8	59.9	61.6	56.2	53.4	52.0	46.7	46.1	48.3	50.7	53.5	56.0	101	92
Test 3	65.3	61.4	62.6	56.8	52.3	51.8	45.9	44.9	47.9	50.2	53.0	55.5	102	92
Mean	65.2	61.2	62.2	56.5	52.0	52.1	46.4	45.4	47.9	50.3	53.1	55.7		
Right Insertion Loss	**28.0**	**33.9**	**34.5**	**42.3**	**46.8**	**49.4**	**54.4**	**54.9**	**49.5**	**46.6**	**40.9**	**25.2**		
Insertion Loss	**28.0**	**33.7**	**34.6**	**39.6**	**44.9**	**46.4**	**51.6**	**52.8**	**49.4**	**46.7**	**42.0**	**28.2**		

Table C-86. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.4	89.0	84.5	87.0	88.0	87.4	87.7	92.7	92.6	92.2	94.3	95.5	94.8
Test 2	87.4	88.9	84.5	87.0	88.0	87.3	87.6	92.5	92.6	92.4	94.5	95.3	94.6
Test 3	85.3	88.9	84.9	87.7	88.5	90.9	86.9	91.4	91.2	91.2	94.3	95.3	95.6
Mean	86.7	88.9	84.6	87.2	88.2	88.6	87.4	92.2	92.1	91.9	94.3	95.4	95.0
Occluded*													
Test 1	86.5	90.4	87.4	91.6	94.9	97.5	94.6	92.9	85.8	78.3	79.7	78.4	76.2
Test 2	88.8	90.5	86.7	90.0	93.8	92.0	94.2	93.3	87.0	81.3	83.1	79.1	78.0
Test 3	86.6	90.4	86.7	90.3	93.5	95.6	95.2	94.8	87.6	81.5	82.0	82.3	78.6
Mean	87.3	90.4	86.9	90.6	94.1	95.1	94.6	93.7	86.8	80.4	81.6	79.9	77.6
Left Insertion Loss	**-0.6**	**-1.5**	**-2.3**	**-3.4**	**-5.9**	**-6.5**	**-7.2**	**-1.5**	**5.3**	**11.6**	**12.7**	**15.4**	**17.4**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.9	88.8	83.6	86.3	89.1	89.0	87.9	91.5	91.1	92.6	93.3	91.5	93.1
Test 2	87.9	88.8	83.6	86.3	89.1	89.1	87.8	91.7	91.1	92.8	93.6	91.8	93.1
Test 3	85.8	88.8	84.3	87.5	89.1	89.8	87.2	90.7	89.5	91.9	93.3	91.9	93.8
Mean	87.2	88.8	83.8	86.7	89.1	89.3	87.6	91.3	90.6	92.4	93.4	91.8	93.3
Occluded*													
Test 1	87.1	90.8	87.6	92.0	94.8	96.1	91.0	88.5	83.0	79.6	77.1	72.3	71.6
Test 2	89.4	90.5	86.1	89.9	94.8	93.5	94.4	90.4	85.2	83.8	81.9	75.1	71.6
Test 3	87.2	90.6	87.0	91.2	94.6	95.6	92.1	88.9	82.9	80.8	79.2	74.6	71.3
Mean	87.9	90.6	86.9	91.0	94.7	95.1	92.5	89.2	83.7	81.4	79.4	74.0	71.5
Right Insertion Loss	**-0.7**	**-1.8**	**-3.1**	**-4.3**	**-5.6**	**-5.8**	**-4.9**	**2.1**	**6.9**	**11.1**	**14.0**	**17.8**	**21.8**
Insertion Loss	**-0.7**	**-1.7**	**-2.7**	**-3.9**	**-5.8**	**-6.1**	**-6.1**	**0.3**	**6.1**	**11.3**	**13.4**	**16.6**	**19.6**

Table C-86. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 16.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.8	93.3	95.7	97.8	97.0	98.1	96.1	95.0	94.4	93.8	92.4	81.3	108	107
Test 2	92.2	93.8	96.1	97.2	97.2	98.2	96.2	95.2	94.1	93.5	92.1	81.1	108	107
Test 3	92.4	92.4	96.0	96.9	96.9	98.2	96.5	94.3	94.0	93.4	91.6	80.7	107	107
Mean	92.1	93.2	95.9	97.3	97.0	98.2	96.3	94.8	94.1	93.6	92.0	81.0		
Occluded														
Test 1	68.0	64.1	63.5	60.9	57.9	52.0	49.7	46.5	45.1	45.2	46.7	48.9	102	92
Test 2	70.8	65.7	64.9	62.7	60.1	55.0	50.8	52.3	50.9	47.8	46.9	49.0	101	92
Test 3	70.2	66.1	64.2	64.6	63.8	60.8	59.6	61.3	57.4	52.0	48.7	49.0	102	93
Mean	69.7	65.3	64.2	62.7	60.6	55.9	53.3	53.4	51.2	48.3	47.4	49.0		
Left Insertion Loss	**22.5**	**27.9**	**31.8**	**34.6**	**36.5**	**42.2**	**43.0**	**41.5**	**43.0**	**45.2**	**44.6**	**32.1**		

Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.9	93.7	96.4	97.1	97.0	98.6	96.4	95.0	94.0	92.5	90.5	81.7	107	107
Test 2	91.9	94.1	96.7	97.3	97.2	98.4	96.4	94.6	94.2	92.7	90.2	81.4	107	108
Test 3	92.7	94.1	96.4	97.5	97.6	98.7	96.3	94.6	94.0	92.0	90.1	81.0	107	108
Mean	92.2	94.0	96.5	97.3	97.2	98.6	96.4	94.7	94.1	92.4	90.3	81.4		
Occluded														
Test 1	61.8	59.1	61.4	61.8	58.0	61.3	56.6	49.6	49.8	52.0	54.3	56.9	101	90
Test 2	62.0	68.5	69.8	68.8	64.8	63.9	62.9	63.0	58.9	58.4	57.4	57.4	101	92
Test 3	61.4	65.3	66.2	65.8	60.7	61.3	56.9	55.3	53.2	55.8	55.9	56.9	101	90
Mean	61.8	64.3	65.8	65.5	61.2	62.2	58.8	56.0	54.0	55.4	55.9	57.0		
Right Insertion Loss	**30.4**	**29.7**	**30.7**	**31.8**	**36.0**	**36.4**	**37.6**	**38.8**	**40.1**	**37.0**	**34.4**	**24.4**		
Insertion Loss	**26.4**	**28.8**	**31.2**	**33.2**	**36.2**	**39.3**	**40.3**	**40.1**	**41.5**	**41.1**	**39.5**	**28.2**		

Table C-87. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	88.8	84.3	87.1	88.4	89.1	86.2	89.8	90.0	91.9	92.4	93.3	95.1
Test 2	85.6	88.9	84.4	87.3	88.7	89.3	86.9	89.8	90.4	91.6	92.1	93.3	95.0
Test 3	85.6	88.8	84.4	87.3	88.6	89.2	86.7	90.4	90.3	91.6	92.5	92.7	95.1
Mean	85.6	88.8	84.4	87.2	88.6	89.2	86.6	90.0	90.2	91.7	92.3	93.1	95.1
Occluded*													
Test 1	86.8	90.8	87.7	91.4	92.6	93.3	87.0	86.3	80.0	76.8	74.6	72.0	69.2
Test 2	86.6	90.5	87.8	91.5	92.1	93.3	87.5	86.0	80.0	76.9	75.6	72.1	69.5
Test 3	86.8	90.7	87.8	91.5	92.6	93.6	87.7	86.6	80.4	77.4	75.9	72.6	71.0
Mean	86.7	90.7	87.8	91.4	92.4	93.4	87.4	86.3	80.1	77.1	75.4	72.3	69.9
Left Insertion Loss	**-1.2**	**-1.9**	**-3.4**	**-4.2**	**-3.9**	**-4.2**	**-0.8**	**3.7**	**10.1**	**14.6**	**17.0**	**20.8**	**25.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.2	83.8	87.3	88.1	91.4	85.1	92.0	91.1	92.6	94.0	94.0	93.9
Test 2	85.7	88.3	83.8	87.3	88.4	91.3	85.5	91.6	90.7	92.5	94.0	93.7	93.4
Test 3	85.7	88.2	83.8	87.4	88.3	91.1	85.4	91.2	90.4	92.2	93.5	93.6	93.4
Mean	85.6	88.2	83.8	87.3	88.3	91.3	85.3	91.6	90.7	92.4	93.8	93.8	93.6
Occluded*													
Test 1	87.0	89.8	86.3	90.3	89.9	90.2	84.4	83.6	77.9	78.3	76.6	72.5	69.3
Test 2	86.6	89.5	86.4	90.1	89.1	90.1	84.5	83.9	78.4	78.3	76.0	72.4	69.6
Test 3	86.8	89.7	86.6	90.4	89.5	90.4	85.1	84.7	78.6	78.5	76.1	71.6	68.3
Mean	86.8	89.7	86.4	90.2	89.5	90.2	84.7	84.1	78.3	78.4	76.2	72.2	69.1
Right Insertion Loss	**-1.2**	**-1.5**	**-2.6**	**-2.9**	**-1.2**	**1.0**	**0.7**	**7.5**	**12.4**	**14.1**	**17.6**	**21.6**	**24.5**
Insertion Loss	**-1.2**	**-1.7**	**-3.0**	**-3.6**	**-2.6**	**-1.6**	**-0.1**	**5.6**	**11.3**	**14.3**	**17.3**	**21.2**	**24.8**

Table C-87. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.1	94.2	95.9	97.3	98.8	100.5	99.6	98.6	93.7	89.2	88.1	76.7	108	109
Test 2	92.9	94.0	96.1	96.6	98.1	99.5	99.4	98.1	93.9	90.4	89.5	77.0	108	108
Test 3	93.1	94.7	96.4	97.1	97.9	99.1	99.2	97.8	93.7	90.7	90.3	77.3	108	108
Mean	93.0	94.3	96.1	97.0	98.2	99.7	99.4	98.2	93.8	90.1	89.3	77.0		
Occluded														
Test 1	62.9	62.2	64.6	64.1	60.6	59.0	51.3	47.5	46.5	45.5	47.3	48.7	99	87
Test 2	63.2	62.4	64.1	64.0	60.5	59.3	51.9	48.7	46.2	45.8	47.0	48.9	99	87
Test 3	64.7	62.3	62.5	61.7	59.8	61.2	51.0	48.8	44.2	44.6	46.7	48.7	100	88
Mean	63.6	62.3	63.7	63.2	60.3	59.8	51.4	48.3	45.6	45.3	47.0	48.7		
Left Insertion Loss	**29.4**	**32.0**	**32.4**	**33.8**	**37.9**	**39.9**	**48.0**	**49.9**	**48.1**	**44.8**	**42.3**	**28.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.8	96.4	96.0	97.9	99.4	100.7	97.0	91.7	92.6	87.2	79.4	108	108
Test 2	92.7	94.5	96.2	96.0	96.9	98.4	99.7	94.3	92.4	93.0	88.9	78.5	108	108
Test 3	92.7	94.1	96.3	95.7	97.0	97.9	99.2	94.4	93.2	92.7	89.5	78.5	107	107
Mean	92.8	94.5	96.3	95.9	97.3	98.6	99.9	95.2	92.4	92.7	88.5	78.8		
Occluded														
Test 1	64.7	62.1	62.2	59.5	55.1	50.9	51.6	50.2	54.7	53.4	51.6	53.7	98	86
Test 2	65.1	62.2	62.9	60.3	56.7	51.5	51.3	49.0	52.0	51.1	51.4	53.7	97	86
Test 3	64.1	61.8	63.1	58.2	53.8	55.0	59.4	57.7	53.1	55.8	52.6	53.6	98	86
Mean	64.6	62.0	62.7	59.3	55.2	52.5	54.1	52.3	53.2	53.4	51.9	53.7		
Right Insertion Loss	**28.2**	**32.5**	**33.6**	**36.5**	**42.1**	**46.1**	**45.8**	**42.9**	**39.2**	**39.3**	**36.6**	**25.1**		
Insertion Loss	**28.8**	**32.2**	**33.0**	**35.1**	**40.0**	**43.0**	**46.9**	**46.4**	**43.6**	**42.1**	**39.5**	**26.7**		

Table C-88. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.1	89.7	85.1	87.4	88.2	87.7	87.8	91.8	92.3	93.2	95.6	94.7	94.6
Test 2	88.1	89.8	85.1	87.7	88.5	88.2	87.5	92.0	92.5	93.3	95.5	94.8	94.5
Test 3	85.7	89.4	85.4	88.1	88.4	91.2	87.0	91.2	91.4	92.3	95.2	95.1	95.2
Mean	87.3	89.6	85.2	87.7	88.4	89.0	87.4	91.6	92.1	92.9	95.4	94.8	94.7
Occluded													
Test 1	86.7	90.9	88.3	92.5	93.9	96.8	91.2	89.4	83.9	80.5	78.1	72.7	70.1
Test 2	86.6	90.9	88.3	92.5	94.1	97.1	91.6	89.2	83.7	80.6	78.2	73.6	70.4
Test 3	86.9	91.1	88.2	92.5	94.2	96.8	91.3	89.4	84.0	80.5	77.9	73.4	69.8
Mean	86.7	91.0	88.3	92.5	94.1	96.9	91.4	89.3	83.8	80.6	78.1	73.2	70.1
Left Insertion Loss	**0.5**	**-1.4**	**-3.1**	**-4.8**	**-5.7**	**-7.9**	**-3.9**	**2.3**	**8.2**	**12.4**	**17.3**	**21.6**	**24.6**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	87.5	88.4	82.8	85.2	88.3	88.5	87.5	91.1	90.2	93.5	94.3	90.6	91.6
Test 2	87.5	88.6	82.8	85.6	88.3	88.6	87.4	91.2	90.1	93.0	93.8	90.2	91.7
Test 3	85.1	88.2	83.4	86.3	88.1	88.9	86.7	90.8	89.0	92.6	94.7	90.8	92.8
Mean	86.7	88.4	83.0	85.7	88.2	88.7	87.2	91.0	89.8	93.0	94.3	90.6	92.0
Occluded													
Test 1	86.6	90.4	87.5	91.7	93.0	94.1	85.7	83.9	78.4	78.5	75.5	69.3	63.1
Test 2	86.5	90.4	87.5	91.9	93.1	94.1	86.4	84.7	78.7	78.3	76.2	69.8	63.4
Test 3	86.8	90.6	87.3	91.8	93.1	93.6	86.1	85.1	78.5	78.5	76.2	69.8	63.5
Mean	86.7	90.4	87.4	91.8	93.1	94.0	86.1	84.6	78.5	78.4	76.0	69.6	63.3
Right Insertion Loss	**0.0**	**-2.1**	**-4.4**	**-6.1**	**-4.8**	**-5.3**	**1.1**	**6.5**	**11.3**	**14.6**	**18.3**	**20.9**	**28.7**
Insertion Loss	**0.3**	**-1.7**	**-3.8**	**-5.4**	**-5.2**	**-6.6**	**-1.4**	**4.4**	**9.7**	**13.5**	**17.8**	**21.3**	**26.7**

Table C-88. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.3	93.9	96.6	99.0	99.4	101.3	95.2	92.2	92.9	92.9	90.1	80.3	108	109
Test 2	92.5	94.3	96.4	98.6	99.5	101.7	94.8	91.8	93.0	93.2	90.3	80.4	108	109
Test 3	93.2	94.6	96.0	97.7	99.9	102.1	95.3	91.7	93.1	92.7	89.9	80.5	108	109
Mean	92.7	94.2	96.3	98.4	99.6	101.7	95.1	91.9	93.0	92.9	90.1	80.4		
Occluded														
Test 1	63.4	65.2	63.7	61.7	57.9	55.4	48.8	44.0	44.6	43.9	44.4	45.8	101	90
Test 2	64.8	64.9	64.2	62.6	58.1	54.7	47.4	42.7	44.7	44.1	44.7	45.9	102	90
Test 3	64.1	65.3	63.8	61.5	58.2	55.7	47.3	42.8	44.8	44.7	44.5	46.2	102	90
Mean	64.1	65.1	63.9	61.9	58.0	55.3	47.8	43.1	44.7	44.2	44.5	46.0		
Left Insertion Loss	**28.5**	**29.1**	**32.4**	**36.5**	**41.6**	**46.5**	**47.3**	**48.7**	**48.3**	**48.7**	**45.6**	**34.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.4	94.4	96.8	97.4	100.1	103.4	98.7	97.6	94.8	92.7	91.3	83.5	109	110
Test 2	91.6	94.2	96.8	97.7	100.0	103.0	98.9	97.5	95.6	93.4	90.4	83.1	109	110
Test 3	92.3	94.0	96.9	98.1	100.1	103.4	99.3	96.9	95.3	93.6	90.6	83.2	109	110
Mean	91.8	94.2	96.8	97.8	100.1	103.3	98.9	97.4	95.2	93.2	90.8	83.2		
Occluded														
Test 1	56.0	54.4	61.9	61.1	57.3	54.7	50.0	47.8	48.8	50.8	53.2	55.5	100	87
Test 2	55.9	52.4	60.8	59.2	56.3	55.3	50.0	48.1	49.1	50.9	53.2	55.6	100	87
Test 3	56.4	52.0	60.6	59.7	57.0	55.1	49.8	47.3	49.1	50.8	53.3	55.7	100	87
Mean	56.1	52.9	61.1	60.0	56.9	55.1	49.9	47.8	49.0	50.8	53.2	55.6		
Right Insertion Loss	**35.7**	**41.2**	**35.8**	**37.8**	**43.2**	**48.2**	**49.0**	**49.6**	**46.2**	**42.4**	**37.6**	**27.6**		
Insertion Loss	**32.1**	**35.2**	**34.1**	**37.1**	**42.4**	**47.4**	**48.1**	**49.2**	**47.3**	**45.6**	**41.6**	**31.0**		

Table C-89. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.0	89.7	85.6	88.5	89.4	92.2	88.2	90.9	91.2	90.8	95.3	95.4	96.2
Test 2	86.2	89.8	85.6	88.5	89.3	91.9	88.1	91.2	90.8	90.7	94.9	95.6	96.4
Test 3	85.9	89.6	85.6	88.4	89.0	92.0	88.3	91.2	91.1	90.8	95.1	95.5	95.8
Mean	86.0	89.7	85.6	88.5	89.2	92.0	88.2	91.1	91.0	90.8	95.1	95.5	96.2
Occluded													
Test 1	86.7	90.7	87.8	90.3	90.1	92.7	87.4	86.8	81.4	75.0	80.0	77.7	75.8
Test 2	89.0	91.2	87.7	90.1	90.6	89.4	87.7	87.4	82.1	76.1	79.8	76.9	74.8
Test 3	86.7	90.7	87.9	90.6	90.6	93.6	88.1	87.5	81.8	75.6	80.7	78.1	75.7
Mean	87.5	90.9	87.8	90.3	90.4	91.9	87.7	87.2	81.8	75.6	80.1	77.6	75.4
Left Insertion Loss	**-1.5**	**-1.2**	**-2.2**	**-1.9**	**-1.2**	**0.1**	**0.4**	**3.9**	**9.2**	**15.2**	**14.9**	**17.9**	**20.7**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.4	84.0	87.3	88.6	90.3	86.1	91.0	89.8	91.0	92.8	93.6	94.1
Test 2	85.5	88.5	83.8	86.9	88.4	90.2	86.4	90.9	89.6	91.2	93.0	93.3	94.3
Test 3	85.4	88.3	83.8	86.8	88.3	90.3	86.4	90.7	89.6	91.1	93.2	93.0	94.4
Mean	85.4	88.4	83.9	87.0	88.4	90.3	86.3	90.9	89.7	91.1	93.0	93.3	94.2
Occluded													
Test 1	86.4	89.8	86.6	90.4	92.5	94.9	90.0	88.3	82.6	80.2	79.4	76.4	75.4
Test 2	88.7	90.3	86.3	90.1	93.1	92.7	90.3	87.3	82.6	81.2	79.1	75.8	74.9
Test 3	86.4	89.9	86.9	90.7	92.7	95.5	90.0	87.7	81.9	79.3	79.1	76.2	75.7
Mean	87.1	90.0	86.6	90.4	92.7	94.4	90.1	87.7	82.4	80.2	79.2	76.1	75.3
Right Insertion Loss	**-1.7**	**-1.6**	**-2.7**	**-3.4**	**-4.3**	**-4.1**	**-3.8**	**3.1**	**7.3**	**10.8**	**13.8**	**17.2**	**18.9**
Insertion Loss	**-1.6**	**-1.4**	**-2.5**	**-2.6**	**-2.8**	**-2.0**	**-1.7**	**3.5**	**8.3**	**13.0**	**14.4**	**17.6**	**19.8**

Table C-89. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.1	93.6	95.7	96.2	96.9	99.2	94.6	92.7	93.1	93.3	91.1	80.7	107	107
Test 2	93.3	93.4	95.7	96.8	97.7	98.8	95.3	93.2	93.4	92.7	90.8	80.3	108	108
Test 3	93.3	94.2	97.1	96.7	97.4	98.8	94.8	93.1	93.3	93.0	91.1	80.0	108	108
Mean	93.2	93.7	96.2	96.6	97.3	98.9	94.9	93.0	93.3	93.0	91.0	80.3		
Occluded														
Test 1	67.5	61.7	60.7	61.0	52.8	54.3	53.2	53.1	46.4	43.2	44.7	45.7	99	87
Test 2	67.0	60.4	61.0	61.8	53.0	56.0	53.7	51.9	45.5	43.0	44.4	45.6	99	87
Test 3	67.8	59.4	60.2	61.6	53.3	54.3	52.8	50.8	45.4	44.4	46.4	46.0	99	88
Mean	67.5	60.5	60.6	61.5	53.0	54.9	53.2	51.9	45.8	43.5	45.2	45.8		
Left Insertion Loss	**25.7**	**33.2**	**35.5**	**35.1**	**44.3**	**44.1**	**41.7**	**41.1**	**47.5**	**49.4**	**45.9**	**34.6**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	93.4	94.8	96.7	97.1	98.7	95.5	95.1	96.2	95.0	90.9	83.9	107	107
Test 2	93.1	94.3	95.3	96.5	96.8	98.0	96.0	95.1	96.6	95.2	91.2	82.9	107	107
Test 3	92.9	94.1	95.6	96.7	97.0	97.9	95.7	95.0	96.6	95.1	91.6	83.3	107	107
Mean	92.8	93.9	95.3	96.6	97.0	98.2	95.7	95.1	96.5	95.1	91.2	83.4		
Occluded														
Test 1	68.5	64.4	63.4	60.3	59.9	53.5	52.4	49.6	49.7	51.8	53.7	55.8	100	89
Test 2	68.3	64.1	64.0	61.4	59.9	54.2	50.6	48.3	49.5	51.7	53.4	55.7	100	89
Test 3	68.1	64.5	63.8	59.9	58.6	54.3	50.9	48.5	50.2	51.9	53.7	55.9	100	89
Mean	68.3	64.3	63.7	60.5	59.5	54.0	51.3	48.8	49.8	51.8	53.6	55.8		
Right Insertion Loss	**24.5**	**29.6**	**31.5**	**36.1**	**37.5**	**44.2**	**44.4**	**46.3**	**46.7**	**43.3**	**37.7**	**27.5**		
Insertion Loss	**25.1**	**31.4**	**33.5**	**35.6**	**40.9**	**44.1**	**43.0**	**43.7**	**47.1**	**46.4**	**41.8**	**31.0**		

Table C-90. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.2	88.6	85.0	87.8	88.7	91.6	88.3	92.9	92.2	92.4	96.5	95.7	95.4
Test 2	87.6	89.1	84.9	87.3	88.5	88.3	89.1	93.2	93.7	93.4	96.5	96.3	95.4
Test 3	85.0	88.5	85.0	87.8	88.7	91.9	88.7	93.1	92.5	92.8	96.4	96.0	95.5
Mean	85.9	88.7	84.9	87.7	88.7	90.6	88.7	93.1	92.8	92.8	96.5	96.0	95.4
Occluded													
Test 1	86.2	90.3	87.5	90.5	90.0	91.6	85.7	84.4	80.0	77.1	78.1	73.4	66.7
Test 2	86.3	90.6	87.7	90.9	89.7	90.9	85.8	84.2	79.8	76.3	78.5	74.4	70.1
Test 3	88.8	90.7	87.6	90.4	89.8	86.1	85.4	83.5	80.8	77.2	78.6	73.8	69.0
Mean	87.1	90.5	87.6	90.6	89.8	89.5	85.7	84.0	80.2	76.9	78.4	73.9	68.6
Left Insertion Loss	**-1.2**	**-1.8**	**-2.6**	**-2.9**	**-1.2**	**1.0**	**3.0**	**9.1**	**12.6**	**16.0**	**18.0**	**22.2**	**26.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.9	87.5	83.2	86.7	88.0	89.8	86.3	92.0	89.8	90.9	93.0	92.9	94.8
Test 2	87.2	87.9	83.0	86.1	88.2	88.5	87.4	92.6	90.4	91.2	92.1	91.0	92.8
Test 3	84.9	87.5	83.2	86.6	88.0	89.4	86.5	91.7	89.4	90.6	92.4	92.7	95.4
Mean	85.6	87.6	83.1	86.5	88.0	89.2	86.7	92.1	89.9	90.9	92.5	92.2	94.3
Occluded													
Test 1	86.7	90.1	86.8	90.8	92.5	94.1	88.4	85.4	80.0	79.0	76.4	73.6	73.3
Test 2	86.7	90.3	87.3	91.4	92.4	93.7	88.5	85.3	79.8	78.5	76.0	72.0	70.7
Test 3	89.2	90.4	86.8	90.4	92.5	90.4	88.4	84.1	80.1	80.1	76.5	71.4	69.9
Mean	87.5	90.3	87.0	90.9	92.4	92.7	88.4	84.9	79.9	79.2	76.3	72.3	71.3
Right Insertion Loss	**-1.9**	**-2.6**	**-3.8**	**-4.4**	**-4.4**	**-3.5**	**-1.7**	**7.2**	**9.9**	**11.7**	**16.2**	**19.9**	**23.1**
Insertion Loss	**-1.5**	**-2.2**	**-3.2**	**-3.7**	**-2.8**	**-1.2**	**0.7**	**8.1**	**11.3**	**13.8**	**17.1**	**21.0**	**25.0**

Table C-90. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ using tight-fitting instructions – Subject 20.

Left	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	93.7	94.7	96.0	97.8	97.8	99.2	98.2	96.6	90.4	91.9	88.6	78.9	108	108
Test 2	92.1	95.2	97.0	98.1	98.3	99.3	97.8	95.6	90.1	91.8	87.9	78.6	108	108
Test 3	93.1	95.4	97.2	98.0	97.9	99.3	98.6	95.5	90.2	92.4	88.9	79.4	108	108
Mean	93.0	95.1	96.7	98.0	98.0	99.2	98.2	95.9	90.2	92.0	88.5	79.0		
Occluded														
Test 1	60.0	65.3	63.8	61.1	59.3	58.0	51.4	50.8	47.6	47.4	49.1	46.6	98	86
Test 2	58.2	61.9	60.9	61.2	59.0	56.0	49.6	50.2	44.6	42.1	43.7	45.4	98	86
Test 3	59.9	63.7	63.2	61.8	57.7	53.1	47.7	47.0	45.0	43.4	43.5	45.2	98	85
Mean	59.4	63.7	62.7	61.4	58.7	55.7	49.6	49.4	45.7	44.3	45.4	45.7		
Left Insertion Loss	**33.6**	**31.4**	**34.1**	**36.6**	**39.3**	**43.5**	**48.6**	**46.5**	**44.5**	**47.8**	**43.1**	**33.2**		

Right	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	LIN	Awt
Unoccluded														
Test 1	92.2	93.6	95.5	96.5	96.7	98.7	98.0	95.3	95.9	95.5	90.9	83.2	108	108
Test 2	91.7	94.0	95.3	96.3	96.6	98.7	97.0	94.7	95.2	95.1	90.1	82.5	107	107
Test 3	91.9	93.5	95.4	96.5	96.6	98.3	96.4	94.3	94.9	94.6	89.6	83.2	107	107
Mean	91.9	93.7	95.4	96.4	96.6	98.6	97.1	94.8	95.3	95.1	90.2	83.0		
Occluded														
Test 1	66.3	62.7	63.0	60.7	58.3	55.5	53.0	53.6	51.9	51.1	53.5	55.9	99	88
Test 2	66.4	63.0	63.7	62.4	59.2	56.5	51.5	54.1	51.7	51.1	53.4	55.8	99	88
Test 3	65.7	62.1	61.0	58.6	57.5	57.0	53.7	53.1	51.4	51.2	53.4	55.8	99	87
Mean	66.1	62.6	62.6	60.6	58.3	56.3	52.7	53.6	51.7	51.2	53.4	55.8		
Right Insertion Loss	**25.8**	**31.1**	**32.8**	**35.9**	**38.3**	**42.2**	**44.4**	**41.2**	**43.6**	**43.9**	**36.8**	**27.1**		
Insertion Loss	**29.7**	**31.3**	**33.4**	**36.2**	**38.8**	**42.9**	**46.5**	**43.9**	**44.1**	**45.8**	**39.9**	**30.2**		

Table C-91. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 11.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	84.5	88.1	84.2	86.8	87.8	89.6	86.3	88.9	89.3	89.8	92.9	92.9	94.0
Test 2	86.8	88.5	84.0	86.4	87.6	85.7	86.7	89.2	90.6	92.0	93.8	92.4	94.4
Test 3	86.8	88.4	84.0	86.2	87.5	85.5	87.2	89.4	90.7	92.2	94.1	92.5	94.6
Mean	86.1	88.3	84.0	86.4	87.6	87.0	86.7	89.2	90.2	91.3	93.6	92.6	94.3
Occluded													
Test 1	87.5	89.4	85.5	87.4	88.3	85.4	86.5	85.6	84.6	84.9	85.2	80.7	81.2
Test 2	85.4	89.2	85.5	88.3	90.2	90.8	87.9	88.0	84.9	85.0	85.8	83.6	82.0
Test 3	85.5	89.0	85.1	88.3	90.9	91.6	90.3	90.5	87.9	87.5	87.3	85.0	84.4
Mean	86.1	89.2	85.4	88.0	89.8	89.3	88.2	88.0	85.8	85.8	86.1	83.1	82.5
Left Insertion Loss	**-0.1**	**-0.9**	**-1.3**	**-1.6**	**-2.2**	**-2.3**	**-1.5**	**1.2**	**4.4**	**5.5**	**7.5**	**9.5**	**11.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.0	88.1	83.7	86.6	88.6	90.8	86.6	92.3	89.3	92.4	94.2	94.3	96.4
Test 2	87.4	88.4	83.2	86.0	88.7	90.6	87.7	92.1	91.0	93.0	93.9	93.1	94.0
Test 3	87.3	88.3	83.2	85.7	88.6	90.3	87.7	92.5	90.9	93.5	94.4	93.4	94.7
Mean	86.6	88.3	83.4	86.1	88.6	90.6	87.4	92.3	90.4	92.9	94.1	93.6	95.1
Occluded													
Test 1	88.5	89.5	84.5	88.0	93.1	93.2	92.5	91.6	87.4	89.2	87.0	83.3	83.5
Test 2	86.4	89.6	85.2	89.0	92.7	92.7	90.0	89.5	84.3	86.7	86.7	82.8	83.1
Test 3	86.4	89.4	84.9	89.0	92.8	93.7	91.9	92.0	86.7	89.0	88.2	85.2	85.5
Mean	87.1	89.5	84.8	88.6	92.9	93.2	91.5	91.0	86.1	88.3	87.3	83.8	84.0
Right Insertion Loss	**-0.5**	**-1.3**	**-1.4**	**-2.5**	**-4.2**	**-2.7**	**-4.1**	**1.3**	**4.2**	**4.7**	**6.8**	**9.9**	**11.0**
Insertion Loss	**-0.3**	**-1.1**	**-1.4**	**-2.0**	**-3.2**	**-2.5**	**-2.8**	**1.2**	**4.3**	**5.1**	**7.1**	**9.7**	**11.4**

Table C-91. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 11.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.1	95.4	97.2	99.0	101.4	99.4	95.0	92.0	92.3	89.3	79.2	108	109
Test 2	93.0	95.3	96.5	97.7	98.7	100.8	98.6	95.3	92.1	92.8	89.9	79.3	108	108
Test 3	92.8	94.4	96.1	97.8	98.6	101.1	98.5	94.8	92.2	92.8	89.5	79.7	108	108
Mean	92.9	94.6	96.0	97.6	98.8	101.1	98.8	95.0	92.1	92.6	89.6	79.4		
Occluded														
Test 1	74.8	71.6	70.5	65.1	60.6	61.8	62.1	52.2	51.5	54.5	53.0	48.9	97	90
Test 2	76.4	72.4	72.1	66.1	60.3	63.3	64.2	55.4	54.4	56.1	52.1	49.3	99	92
Test 3	78.8	75.9	75.2	70.7	62.3	64.0	67.2	57.3	54.5	56.7	55.7	49.9	100	94
Mean	76.6	73.3	72.6	67.3	61.1	63.0	64.5	55.0	53.5	55.8	53.6	49.4		
Left Insertion Loss	**16.3**	**21.3**	**23.4**	**30.2**	**37.7**	**38.1**	**34.3**	**40.1**	**38.6**	**36.9**	**36.0**	**30.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	95.0	96.8	97.7	99.2	101.4	101.2	98.3	97.6	95.3	91.0	83.0	109	110
Test 2	92.9	94.4	97.0	96.9	99.5	101.2	100.6	98.7	97.9	96.8	92.8	84.3	109	110
Test 3	93.3	94.7	96.9	96.9	99.5	101.3	100.9	98.2	98.2	97.1	93.1	84.2	109	110
Mean	93.2	94.7	96.9	97.2	99.4	101.3	100.9	98.4	97.9	96.4	92.3	83.9		
Occluded														
Test 1	78.4	74.2	71.4	69.9	62.3	60.2	65.7	74.7	72.4	73.6	61.9	56.9	101	93
Test 2	76.5	74.1	70.6	65.4	57.7	60.4	63.6	70.5	69.4	71.1	60.7	56.6	100	92
Test 3	79.4	77.3	73.6	70.2	64.9	64.0	70.5	79.9	75.7	72.3	61.1	56.9	101	94
Mean	78.1	75.2	71.9	68.5	61.6	61.5	66.6	75.1	72.5	72.3	61.2	56.8		
Right Insertion Loss	**15.1**	**19.5**	**25.0**	**28.7**	**37.8**	**39.8**	**34.3**	**23.4**	**25.4**	**24.1**	**31.0**	**27.1**		
Insertion Loss	**15.7**	**20.4**	**24.2**	**29.4**	**37.8**	**38.9**	**34.3**	**31.7**	**32.0**	**30.5**	**33.5**	**25.8**		

Table C-92. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 12.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	89.3	85.4	88.4	88.9	92.4	88.1	90.3	91.2	92.7	94.5	94.9	93.7
Test 2	85.6	89.4	85.5	88.5	88.9	92.2	87.9	90.0	91.4	92.7	94.4	94.6	94.1
Test 3	85.6	89.5	85.5	88.5	88.9	92.2	87.7	90.3	91.1	92.7	94.4	94.6	93.9
Mean	85.6	89.4	85.5	88.5	88.9	92.3	87.9	90.2	91.3	92.7	94.5	94.7	93.9
Occluded													
Test 1	82.7	86.2	81.7	83.1	82.5	84.9	81.1	80.1	79.5	80.6	80.2	76.5	74.5
Test 2	85.0	86.4	81.6	82.6	82.0	81.1	81.9	80.8	81.0	82.3	81.1	77.5	74.4
Test 3	83.6	87.1	82.8	84.3	84.3	86.9	82.7	81.3	81.3	81.8	81.2	77.1	75.6
Mean	83.8	86.6	82.0	83.3	83.0	84.3	81.9	80.7	80.6	81.6	80.8	77.0	74.8
Left Insertion Loss	**1.8**	**2.8**	**3.5**	**5.1**	**6.0**	**8.0**	**6.0**	**9.5**	**10.7**	**11.1**	**13.6**	**17.7**	**19.1**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.3	89.4	84.8	87.8	89.6	90.7	87.9	91.2	89.5	92.3	94.7	92.9	94.9
Test 2	86.1	89.4	84.8	87.8	89.5	91.1	87.7	91.6	89.9	92.5	94.8	93.3	94.3
Test 3	86.2	89.3	84.8	87.9	89.5	91.2	87.5	91.8	90.1	92.6	94.9	93.1	94.8
Mean	86.2	89.4	84.8	87.8	89.5	91.0	87.7	91.5	89.8	92.5	94.8	93.1	94.7
Occluded													
Test 1	86.6	89.7	86.2	90.2	92.2	93.5	91.6	90.5	85.7	86.4	84.2	80.5	80.9
Test 2	88.7	89.6	85.9	89.3	92.2	92.7	92.0	91.2	87.2	87.6	83.6	78.5	76.7
Test 3	86.8	89.9	86.1	89.9	91.9	93.0	90.0	89.0	84.2	85.5	83.5	79.5	78.4
Mean	87.4	89.7	86.0	89.8	92.1	93.1	91.2	90.2	85.7	86.5	83.8	79.5	78.7
Right Insertion Loss	**-1.2**	**-0.4**	**-1.2**	**-2.0**	**-2.6**	**-2.1**	**-3.5**	**1.3**	**4.1**	**6.0**	**11.0**	**13.6**	**16.0**
Insertion Loss	**0.3**	**1.2**	**1.1**	**1.6**	**1.7**	**2.9**	**1.3**	**5.4**	**7.4**	**8.6**	**12.3**	**15.6**	**17.5**

Table C-92. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 12.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.3	93.5	95.6	98.0	98.3	101.6	98.5	97.3	91.5	92.9	91.4	79.6	108	109
Test 2	92.6	93.3	95.9	97.7	97.5	100.5	97.7	97.1	92.9	91.4	92.1	80.2	108	108
Test 3	92.7	93.9	95.9	97.6	97.7	100.8	98.0	97.1	91.8	92.3	91.4	79.7	108	108
Mean	92.5	93.6	95.8	97.8	97.9	101.0	98.1	97.2	92.1	92.2	91.6	79.8		
Occluded														
Test 1	66.9	61.2	57.7	56.8	53.7	52.3	47.7	49.1	50.8	47.1	45.6	45.8	93	85
Test 2	67.4	62.6	58.6	56.1	52.1	51.2	47.9	49.9	48.2	44.9	47.0	45.5	93	85
Test 3	68.5	62.9	59.6	59.4	54.7	51.7	51.0	56.1	61.9	62.2	63.0	52.8	94	86
Mean	67.6	62.3	58.7	57.4	53.5	51.7	48.9	51.7	53.6	51.4	51.9	48.0		
Left Insertion Loss	**25.0**	**31.3**	**37.1**	**40.4**	**44.4**	**49.2**	**49.2**	**45.4**	**38.4**	**40.8**	**39.8**	**31.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.5	96.3	100.2	100.6	102.4	102.0	101.3	100.2	91.1	86.1	80.7	110	111
Test 2	92.3	95.0	97.3	99.8	100.2	102.1	101.3	100.2	99.9	93.2	88.6	79.6	110	111
Test 3	92.4	94.4	97.3	99.8	99.9	102.4	102.7	100.9	100.3	91.9	85.6	80.4	110	111
Mean	92.6	94.6	97.0	99.9	100.2	102.3	102.0	100.8	100.1	92.1	86.8	80.3		
Occluded														
Test 1	72.0	69.7	71.2	76.5	82.6	82.5	74.1	81.0	82.1	75.1	61.6	58.5	101	94
Test 2	70.8	70.8	73.6	82.6	81.9	81.7	76.0	81.9	79.3	68.8	66.3	58.6	101	94
Test 3	71.5	69.7	72.4	80.3	81.0	81.4	70.7	83.1	76.7	68.1	63.7	58.6	100	93
Mean	71.5	70.1	72.4	79.8	81.8	81.9	73.6	82.0	79.4	70.7	63.8	58.6		
Right Insertion Loss	**21.1**	**24.6**	**24.5**	**20.1**	**18.4**	**20.4**	**28.4**	**18.8**	**20.8**	**21.4**	**22.9**	**21.7**		
Insertion Loss	**23.0**	**27.9**	**30.8**	**30.2**	**31.4**	**34.8**	**38.8**	**32.1**	**29.6**	**31.1**	**31.3**	**26.7**		

Table C-93. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 13.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.5	89.9	84.7	86.4	88.9	84.9	88.0	89.4	90.9	94.2	92.1	94.0	94.9
Test 2	86.2	89.6	85.0	87.0	89.0	88.4	87.2	89.3	88.4	92.5	94.5	94.7	94.4
Test 3	86.2	89.5	84.8	86.9	89.0	88.2	87.0	89.0	88.3	92.9	95.1	94.5	94.4
Mean	87.0	89.7	84.8	86.8	89.0	87.2	87.4	89.2	89.2	93.2	93.9	94.4	94.6
Occluded													
Test 1	87.3	91.2	87.4	90.8	93.1	93.8	89.0	90.8	86.0	85.7	83.9	81.5	77.9
Test 2	87.2	91.1	87.2	90.4	92.9	93.6	89.8	91.2	86.3	86.3	84.9	82.5	78.6
Test 3	89.5	91.3	87.1	89.9	92.4	89.3	89.2	90.1	87.2	86.7	83.0	80.0	77.3
Mean	88.0	91.2	87.2	90.4	92.8	92.2	89.3	90.7	86.5	86.2	83.9	81.4	77.9
Left Insertion Loss	**-1.0**	**-1.5**	**-2.4**	**-3.6**	**-3.9**	**-5.1**	**-2.0**	**-1.4**	**2.7**	**7.0**	**10.0**	**13.1**	**16.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	88.2	89.1	83.9	86.2	89.1	92.3	87.8	93.6	92.5	93.5	94.8	94.1	95.7
Test 2	85.9	88.8	84.4	86.9	89.0	92.8	86.9	93.0	91.3	92.6	94.8	93.6	96.1
Test 3	86.0	88.7	84.3	86.6	89.0	93.0	87.0	93.1	91.2	92.4	94.9	93.7	96.2
Mean	86.7	88.9	84.2	86.5	89.0	92.7	87.2	93.3	91.7	92.9	94.8	93.8	96.0
Occluded													
Test 1	87.3	90.9	87.8	91.7	94.2	98.1	93.5	92.3	88.1	89.3	86.9	82.9	82.3
Test 2	87.2	90.9	87.6	91.4	94.0	98.0	93.4	91.5	87.0	88.1	86.1	82.1	81.5
Test 3	89.3	90.9	87.3	90.7	93.8	95.5	94.2	91.7	89.5	90.7	87.5	82.3	80.2
Mean	87.9	90.9	87.6	91.3	94.0	97.2	93.7	91.8	88.2	89.3	86.9	82.4	81.3
Right Insertion Loss	**-1.2**	**-2.0**	**-3.4**	**-4.7**	**-5.0**	**-4.5**	**-6.5**	**1.4**	**3.5**	**3.5**	**8.0**	**11.4**	**14.7**
Insertion Loss	**-1.1**	**-1.8**	**-2.9**	**-4.1**	**-4.4**	**-4.8**	**-4.2**	**0.0**	**3.1**	**5.3**	**9.0**	**12.2**	**15.7**

Table C-93. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 13.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.5	95.9	96.7	98.5	100.6	102.8	96.1	90.8	91.8	92.4	89.3	80.9	109	109
Test 2	91.8	95.8	97.1	98.0	100.1	101.2	96.1	91.2	91.4	92.1	89.2	80.7	108	109
Test 3	92.3	95.4	97.0	98.2	100.1	101.8	96.1	92.6	91.8	91.8	89.2	81.1	108	109
Mean	92.2	95.7	96.9	98.3	100.3	101.9	96.1	91.5	91.7	92.1	89.2	80.9		
Occluded														
Test 1	70.7	69.0	65.6	64.4	60.1	57.9	53.0	49.0	48.2	48.6	47.3	47.1	101	91
Test 2	71.0	69.3	66.4	63.9	60.2	58.9	53.9	51.0	49.2	48.2	47.1	48.2	101	92
Test 3	71.5	68.0	64.8	64.1	60.5	57.9	51.4	50.6	49.4	49.0	47.6	47.3	100	91
Mean	71.1	68.8	65.6	64.1	60.3	58.2	52.7	50.2	48.9	48.6	47.3	47.5		
Left Insertion Loss	**21.2**	**27.0**	**31.3**	**34.1**	**40.0**	**43.7**	**43.4**	**41.3**	**42.8**	**43.5**	**41.9**	**33.4**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	95.9	98.2	98.9	101.5	103.2	99.8	96.3	94.2	91.4	90.0	82.8	110	110
Test 2	93.8	96.0	98.2	98.8	101.7	104.4	100.0	95.9	93.3	91.0	90.1	82.0	110	110
Test 3	93.4	95.6	97.8	99.0	101.4	104.8	100.6	96.1	93.9	92.0	90.4	82.2	110	111
Mean	93.5	95.8	98.1	98.9	101.5	104.1	100.1	96.1	93.8	91.5	90.2	82.3		
Occluded														
Test 1	74.9	71.1	67.4	62.3	57.2	58.8	61.4	56.1	52.9	51.9	53.8	55.6	103	94
Test 2	73.0	69.6	66.4	63.0	58.9	60.5	59.8	54.4	49.7	50.6	53.6	56.0	103	94
Test 3	74.5	71.5	68.2	63.6	57.6	59.7	62.8	56.9	53.2	52.1	54.1	55.7	102	94
Mean	74.1	70.7	67.3	63.0	57.9	59.7	61.3	55.8	51.9	51.5	53.8	55.8		
Right Insertion Loss	**19.3**	**25.1**	**30.7**	**35.9**	**43.6**	**44.5**	**38.8**	**40.3**	**41.9**	**39.9**	**36.3**	**26.6**		
Insertion Loss	**20.3**	**26.0**	**31.0**	**35.0**	**41.8**	**44.1**	**41.1**	**40.8**	**42.3**	**41.7**	**39.1**	**30.0**		

Table C-94. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 14.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.9	89.4	85.2	87.7	88.6	90.0	86.6	89.8	89.8	91.4	94.4	95.1	95.0
Test 2	88.4	89.8	84.9	86.9	88.5	86.2	87.3	89.7	90.7	92.4	95.1	93.7	94.7
Test 3	85.9	89.5	85.2	87.7	88.6	90.2	87.3	90.2	89.9	91.3	94.3	94.9	95.1
Mean	86.7	89.6	85.1	87.4	88.5	88.8	87.0	89.9	90.1	91.7	94.6	94.6	94.9
Occluded													
Test 1	89.4	91.5	88.5	91.4	89.7	88.1	89.4	88.3	84.3	79.4	82.0	76.4	74.1
Test 2	86.8	91.0	88.3	91.2	90.6	92.3	89.9	89.2	83.9	79.4	82.2	77.6	74.2
Test 3	89.2	91.4	88.1	91.0	91.3	89.9	90.6	89.7	85.6	79.7	81.9	77.1	74.1
Mean	88.5	91.3	88.3	91.2	90.5	90.1	90.0	89.1	84.6	79.5	82.1	77.0	74.2
Left Insertion Loss	**-1.7**	**-1.8**	**-3.2**	**-3.8**	**-2.0**	**-1.3**	**-2.9**	**0.8**	**5.5**	**12.2**	**12.5**	**17.5**	**20.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.0	88.9	84.3	87.1	89.2	91.0	88.1	92.6	90.5	92.9	95.5	92.4	94.5
Test 2	88.3	89.1	83.8	86.3	89.4	90.4	88.7	93.4	92.0	94.1	94.6	92.1	93.5
Test 3	86.0	89.0	84.4	87.4	89.2	91.0	87.9	93.0	90.7	93.1	95.1	92.5	94.5
Mean	86.8	89.0	84.2	86.9	89.2	90.8	88.2	93.0	91.1	93.4	95.1	92.3	94.2
Occluded													
Test 1	89.8	91.6	88.5	91.0	88.4	89.6	91.1	85.9	83.6	86.5	85.8	80.0	77.3
Test 2	87.2	90.9	88.0	90.0	88.8	91.5	88.3	84.2	81.0	83.6	84.5	79.0	76.7
Test 3	89.8	91.6	88.0	90.5	90.2	90.9	90.4	85.0	82.6	86.1	85.2	79.8	76.4
Mean	88.9	91.4	88.1	90.5	89.1	90.7	89.9	85.0	82.4	85.4	85.2	79.6	76.8
Right Insertion Loss	**-2.1**	**-2.4**	**-4.0**	**-3.6**	**0.1**	**0.1**	**-1.7**	**8.0**	**8.6**	**8.0**	**9.9**	**12.7**	**17.3**
Insertion Loss	**-1.9**	**-2.1**	**-3.6**	**-3.7**	**-0.9**	**-0.6**	**-2.3**	**4.4**	**7.1**	**10.1**	**11.2**	**15.1**	**19.1**

Table C-94. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 14.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	91.8	94.0	96.1	98.6	98.9	100.7	97.6	93.9	93.0	92.9	89.4	78.8	108	108
Test 2	91.5	93.7	95.6	98.4	98.5	99.6	96.5	92.4	92.7	93.6	89.6	79.9	108	108
Test 3	92.0	94.1	96.3	98.1	98.9	100.0	97.3	94.0	92.8	93.3	89.9	79.2	108	108
Mean	91.8	93.9	96.0	98.4	98.8	100.1	97.1	93.4	92.8	93.3	89.7	79.3		
Occluded														
Test 1	66.4	63.5	61.0	61.2	61.2	59.8	55.0	49.3	48.0	48.4	46.9	48.4	99	89
Test 2	67.8	64.1	60.6	60.6	58.3	58.0	53.9	47.7	44.7	47.8	48.2	49.4	100	89
Test 3	67.7	66.0	64.3	67.1	66.7	64.3	64.7	59.2	56.7	55.2	50.1	47.8	100	90
Mean	67.3	64.5	62.0	63.0	62.1	60.7	57.9	52.1	49.8	50.5	48.4	48.5		
Left Insertion Loss	**24.5**	**29.4**	**34.0**	**35.4**	**36.7**	**39.4**	**39.3**	**41.3**	**43.0**	**42.8**	**41.3**	**30.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.4	95.9	97.9	99.1	99.6	102.1	99.5	97.7	94.6	92.8	90.8	81.5	109	110
Test 2	93.0	96.4	97.8	99.3	99.9	101.9	99.9	98.6	95.0	92.7	90.8	81.6	109	110
Test 3	93.7	95.7	98.1	98.7	99.4	101.9	99.4	98.3	94.8	93.1	90.7	81.4	109	110
Mean	93.4	96.0	97.9	99.0	99.6	102.0	99.6	98.2	94.8	92.9	90.8	81.5		
Occluded														
Test 1	69.1	62.0	57.8	57.3	55.4	53.1	48.1	49.9	48.9	50.8	53.6	56.2	99	90
Test 2	67.4	60.0	56.2	55.4	52.9	50.8	47.3	49.9	48.7	51.3	54.1	56.6	99	89
Test 3	67.9	61.5	57.4	56.3	53.1	51.7	47.9	49.6	47.7	50.2	53.3	55.7	99	90
Mean	68.1	61.2	57.1	56.3	53.8	51.9	47.8	49.8	48.5	50.8	53.7	56.2		
Right Insertion Loss	**25.3**	**34.8**	**40.8**	**42.7**	**45.8**	**50.1**	**51.8**	**48.4**	**46.3**	**42.1**	**37.1**	**25.3**		
Insertion Loss	**24.9**	**32.1**	**37.4**	**39.0**	**41.3**	**44.7**	**45.5**	**44.9**	**44.7**	**42.4**	**39.2**	**28.1**		

Table C-95. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 15.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	88.7	84.8	87.6	88.6	90.9	87.4	90.4	91.3	91.7	93.6	92.9	94.1
Test 2	85.4	88.7	84.7	87.7	88.7	90.8	87.3	89.8	91.5	91.7	93.3	92.3	94.4
Test 3	85.1	88.5	84.8	87.7	88.5	90.9	87.4	90.3	91.5	91.6	93.5	93.2	94.4
Mean	85.2	88.6	84.8	87.7	88.6	90.8	87.4	90.1	91.5	91.7	93.5	92.8	94.3
Occluded													
Test 1	85.5	87.1	82.1	83.7	84.1	82.2	84.4	85.6	84.4	82.9	81.8	77.5	76.7
Test 2	83.4	86.9	82.3	84.0	84.5	86.4	84.0	85.2	83.5	82.1	81.0	78.7	78.4
Test 3	82.7	86.0	81.6	83.5	84.3	86.2	84.2	84.8	82.8	81.3	80.5	79.0	78.1
Mean	83.9	86.7	82.0	83.7	84.3	84.9	84.2	85.2	83.6	82.1	81.1	78.4	77.7
Left Insertion Loss	**1.3**	**1.9**	**2.8**	**3.9**	**4.2**	**5.9**	**3.2**	**4.9**	**7.9**	**9.6**	**12.4**	**14.4**	**16.6**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.3	84.0	87.4	88.7	90.9	86.7	91.3	90.4	92.1	94.5	94.4	95.3
Test 2	85.7	88.3	84.0	87.5	88.7	91.0	86.4	91.7	90.4	91.9	94.7	94.6	95.5
Test 3	85.5	88.2	84.0	87.4	88.7	91.1	86.7	91.5	90.3	91.9	94.5	94.7	95.5
Mean	85.6	88.3	84.0	87.4	88.7	91.0	86.6	91.5	90.3	92.0	94.6	94.5	95.4
Occluded													
Test 1	83.9	83.7	78.9	82.6	84.4	84.6	83.3	83.5	81.5	83.7	81.3	77.7	75.6
Test 2	82.1	83.4	79.1	83.0	84.4	86.1	82.5	83.7	80.8	83.1	82.2	80.1	78.6
Test 3	81.6	83.0	79.0	82.9	84.2	86.2	82.3	83.8	80.9	82.7	81.9	79.6	78.3
Mean	82.5	83.4	79.0	82.8	84.3	85.7	82.7	83.7	81.1	83.1	81.8	79.1	77.5
Right Insertion Loss	**3.1**	**4.9**	**5.0**	**4.6**	**4.4**	**5.4**	**3.9**	**7.8**	**9.3**	**8.8**	**12.8**	**15.4**	**17.9**
Insertion Loss	**2.2**	**3.4**	**3.9**	**4.3**	**4.3**	**5.6**	**3.5**	**6.4**	**8.6**	**9.2**	**12.6**	**14.9**	**17.2**

Table C-95. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 15.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.4	95.8	95.6	97.3	97.5	100.0	98.2	97.1	94.5	92.1	89.9	79.1	108	108
Test 2	92.2	95.2	95.6	97.9	98.2	99.1	98.0	96.7	94.0	91.5	89.4	79.6	108	108
Test 3	92.6	95.7	95.8	97.3	97.9	99.2	98.5	96.2	94.2	92.5	89.7	79.3	108	108
Mean	92.4	95.5	95.7	97.5	97.9	99.4	98.2	96.7	94.2	92.0	89.7	79.3		
Occluded														
Test 1	70.6	67.4	66.0	64.5	59.0	59.6	58.8	59.8	48.8	45.6	46.8	46.3	95	87
Test 2	70.9	67.6	66.4	65.3	61.6	58.8	58.5	57.7	49.8	45.1	45.9	45.8	95	88
Test 3	70.2	66.4	65.0	64.3	60.2	56.7	56.5	54.5	46.8	44.5	45.3	46.1	95	87
Mean	70.6	67.1	65.8	64.7	60.3	58.4	57.9	57.3	48.5	45.1	46.0	46.1		
Left Insertion Loss	**21.9**	**28.4**	**29.9**	**32.8**	**37.6**	**41.0**	**40.3**	**39.3**	**45.8**	**47.0**	**43.7**	**33.3**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	94.3	95.1	96.8	98.8	98.8	100.2	101.8	99.4	97.8	97.4	95.1	82.5	110	110
Test 2	94.1	95.6	96.9	98.2	99.1	100.8	101.4	99.4	97.1	97.2	95.2	82.4	110	110
Test 3	94.5	95.0	96.9	98.1	98.7	100.3	101.3	99.5	96.8	97.8	94.8	82.2	110	110
Mean	94.3	95.2	96.9	98.4	98.9	100.5	101.5	99.4	97.2	97.5	95.0	82.4		
Occluded														
Test 1	64.9	64.1	64.8	62.0	57.2	52.0	45.7	46.0	48.3	50.9	53.3	55.6	94	87
Test 2	66.0	63.5	64.0	59.4	54.5	53.0	50.1	45.3	47.5	50.1	52.9	55.4	94	87
Test 3	66.0	61.4	62.1	59.3	53.9	51.8	45.4	45.0	47.7	50.3	53.1	55.7	94	87
Mean	65.6	63.0	63.6	60.2	55.2	52.3	47.0	45.4	47.9	50.4	53.1	55.5		
Right Insertion Loss	**28.7**	**32.2**	**33.2**	**38.2**	**43.6**	**48.2**	**54.5**	**54.0**	**49.4**	**47.0**	**41.9**	**26.8**		
Insertion Loss	**25.3**	**30.3**	**31.6**	**35.5**	**40.6**	**44.6**	**47.4**	**46.7**	**47.6**	**47.0**	**42.8**	**30.0**		

Table C-96. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 16.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.5	89.1	84.9	87.8	88.6	90.9	87.0	91.7	91.1	91.2	94.2	94.8	95.5
Test 2	85.4	89.0	84.9	87.8	88.6	90.9	87.3	91.5	91.3	91.5	94.0	94.4	94.9
Test 3	85.4	89.1	84.9	87.8	88.6	90.8	87.4	91.7	91.2	91.0	94.3	95.1	95.6
Mean	85.4	89.1	84.9	87.8	88.6	90.9	87.2	91.6	91.2	91.2	94.2	94.8	95.3
Occluded													
Test 1	86.5	90.1	86.0	88.7	90.0	91.1	87.9	88.4	85.0	83.1	85.0	84.5	82.8
Test 2	88.4	89.6	85.3	88.0	91.2	89.1	93.3	94.2	92.6	91.0	91.3	87.6	87.5
Test 3	86.8	90.2	86.2	89.6	91.8	92.5	89.8	89.9	87.1	85.5	86.6	86.6	85.2
Mean	87.2	90.0	85.8	88.8	91.0	90.9	90.3	90.8	88.2	86.5	87.6	86.3	85.1
Left Insertion Loss	**-1.8**	**-0.9**	**-0.9**	**-1.0**	**-2.4**	**0.0**	**-3.1**	**0.8**	**2.9**	**4.7**	**6.5**	**8.5**	**10.2**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.8	88.8	84.1	87.3	89.0	90.3	87.0	91.2	90.1	92.4	94.1	92.5	94.6
Test 2	85.7	88.7	84.2	87.4	88.9	90.5	86.9	90.8	90.1	92.2	93.6	92.9	94.9
Test 3	85.8	88.8	84.2	87.4	89.0	90.4	87.1	90.6	90.0	92.4	94.1	92.4	95.3
Mean	85.8	88.7	84.1	87.4	88.9	90.4	87.0	90.9	90.1	92.3	93.9	92.6	95.0
Occluded													
Test 1	87.9	91.0	86.6	90.4	92.4	90.9	87.2	86.1	82.9	84.7	84.4	80.1	80.7
Test 2	89.1	89.9	85.1	88.8	93.4	92.4	92.8	91.0	88.9	90.0	88.1	82.8	83.7
Test 3	86.8	89.6	84.8	88.9	92.5	92.9	93.0	93.2	90.2	91.3	89.9	85.5	85.6
Mean	87.9	90.2	85.5	89.4	92.8	92.0	91.0	90.1	87.3	88.7	87.5	82.8	83.3
Right Insertion Loss	**-2.1**	**-1.4**	**-1.3**	**-2.0**	**-3.8**	**-1.6**	**-4.0**	**0.8**	**2.7**	**3.6**	**6.5**	**9.8**	**11.6**
Insertion Loss	**-2.0**	**-1.2**	**-1.1**	**-1.5**	**-3.1**	**-0.8**	**-3.5**	**0.8**	**2.8**	**4.2**	**6.5**	**9.2**	**10.9**

Table C-96. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 16.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.8	93.3	96.1	96.5	97.0	98.0	96.2	95.2	94.2	93.3	91.4	80.8	107	107
Test 2	92.7	94.0	95.7	95.7	96.5	99.0	96.7	95.6	94.6	93.7	92.0	80.9	108	107
Test 3	92.6	93.0	95.8	96.5	96.4	97.6	96.0	95.1	93.9	92.9	91.5	81.0	107	107
Mean	92.7	93.4	95.9	96.2	96.6	98.2	96.3	95.3	94.2	93.3	91.6	80.9		
Occluded														
Test 1	74.8	70.1	69.7	66.2	60.2	64.7	66.8	58.4	53.9	54.2	55.0	49.2	99	91
Test 2	80.0	77.9	77.2	73.3	69.3	75.5	77.3	69.2	68.6	67.3	63.1	56.4	102	96
Test 3	77.7	74.7	73.5	66.7	61.7	67.4	69.7	65.6	65.4	63.3	59.1	51.7	100	93
Mean	77.5	74.3	73.5	68.7	63.7	69.2	71.3	64.4	62.6	61.6	59.1	52.4		
Left Insertion Loss	**15.2**	**19.1**	**22.4**	**27.5**	**32.9**	**29.0**	**25.0**	**30.9**	**31.6**	**31.8**	**32.5**	**28.5**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.6	94.2	96.3	97.9	97.2	98.6	97.1	94.6	94.1	92.7	90.2	81.0	108	107
Test 2	93.0	94.1	95.8	97.7	97.7	98.2	97.0	94.2	93.8	92.6	89.9	80.8	107	107
Test 3	93.1	93.5	96.4	98.1	97.0	98.2	97.1	94.5	94.1	92.4	90.3	80.8	107	108
Mean	92.9	94.0	96.1	97.9	97.3	98.3	97.1	94.4	94.0	92.5	90.1	80.9		
Occluded														
Test 1	75.4	73.1	70.7	66.0	60.6	59.7	58.2	57.7	55.7	57.1	56.1	56.8	99	90
Test 2	77.8	77.0	73.7	71.7	66.6	70.2	70.5	67.2	63.3	65.3	64.2	58.6	101	94
Test 3	80.1	79.0	76.9	76.8	72.1	73.0	74.6	68.2	63.7	64.6	62.9	57.9	102	96
Mean	77.8	76.3	73.8	71.5	66.4	67.6	67.8	64.4	60.9	62.3	61.1	57.8		
Right Insertion Loss	**15.1**	**17.6**	**22.4**	**26.4**	**30.9**	**30.7**	**29.3**	**30.1**	**33.1**	**30.2**	**29.0**	**23.1**		
Insertion Loss	**15.2**	**18.4**	**22.4**	**26.9**	**31.9**	**29.9**	**27.2**	**30.5**	**32.3**	**31.0**	**30.8**	**25.8**		

Table C-97. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 17.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.6	88.9	84.5	87.3	88.6	89.6	87.2	89.9	90.1	91.7	92.0	93.7	95.5
Test 2	85.7	89.1	84.6	87.3	88.6	89.5	87.0	90.1	90.5	91.6	92.4	93.9	95.3
Test 3	85.6	88.9	84.6	87.3	88.5	89.5	87.1	90.0	90.6	91.7	92.2	93.7	95.5
Mean	85.6	89.0	84.6	87.3	88.6	89.5	87.1	90.0	90.4	91.7	92.2	93.8	95.5
Occluded													
Test 1	82.4	85.9	81.1	83.3	83.8	84.5	80.9	81.8	82.6	83.5	80.8	78.7	79.0
Test 2	83.2	86.4	81.1	83.4	84.2	84.5	81.2	82.3	82.6	83.4	80.9	78.7	78.6
Test 3	82.8	86.3	81.5	83.5	83.6	84.3	80.7	82.1	82.6	84.0	81.4	79.0	78.7
Mean	82.8	86.2	81.2	83.4	83.8	84.4	80.9	82.1	82.6	83.6	81.0	78.8	78.8
Left Insertion Loss	**2.8**	**2.8**	**3.3**	**3.9**	**4.7**	**5.1**	**6.2**	**8.0**	**7.9**	**8.0**	**11.2**	**15.0**	**16.7**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.7	88.3	83.8	87.0	88.4	91.6	86.1	92.1	90.7	92.2	94.2	93.9	93.8
Test 2	85.8	88.5	83.9	87.1	88.4	91.3	86.1	91.7	90.6	92.7	94.4	93.9	93.7
Test 3	85.5	88.2	83.8	87.1	88.2	91.3	85.8	91.7	90.8	92.5	94.2	94.0	93.5
Mean	85.7	88.3	83.8	87.0	88.3	91.4	86.0	91.8	90.7	92.5	94.3	93.9	93.7
Occluded													
Test 1	82.4	83.6	79.0	83.2	83.8	86.3	81.3	81.8	79.9	82.2	80.9	77.6	74.1
Test 2	84.5	85.8	80.8	84.6	85.4	87.2	82.5	83.7	80.7	83.1	81.1	79.2	78.4
Test 3	82.7	83.9	79.9	83.7	84.0	86.5	82.5	82.9	80.6	82.5	81.0	79.0	76.2
Mean	83.2	84.4	79.9	83.9	84.4	86.7	82.1	82.8	80.4	82.6	81.0	78.6	76.2
Right Insertion Loss	**2.4**	**3.9**	**3.9**	**3.2**	**3.9**	**4.7**	**3.9**	**9.0**	**10.3**	**9.9**	**13.3**	**15.3**	**17.4**
Insertion Loss	**2.6**	**3.3**	**3.6**	**3.5**	**4.3**	**4.9**	**5.0**	**8.5**	**9.1**	**9.0**	**12.2**	**15.2**	**17.1**

Table C-97. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 17.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.3	96.1	97.1	97.8	99.4	98.7	97.3	93.2	91.4	91.1	78.1	108	108
Test 2	93.0	94.2	96.0	97.0	97.6	99.3	98.5	97.4	93.1	92.2	90.9	78.4	108	108
Test 3	93.1	94.5	96.3	97.2	97.8	98.9	97.8	97.2	93.3	91.8	90.9	78.3	108	108
Mean	93.0	94.4	96.1	97.1	97.7	99.2	98.4	97.3	93.2	91.8	91.0	78.3		
Occluded														
Test 1	69.6	67.7	66.6	64.8	58.3	52.6	48.4	44.5	46.1	45.0	46.4	47.6	94	87
Test 2	69.5	66.8	66.0	64.4	58.8	56.1	61.1	67.1	63.1	58.1	50.2	48.4	94	87
Test 3	69.7	67.7	67.1	65.1	57.9	54.3	49.9	45.4	44.9	45.4	47.3	48.7	94	87
Mean	69.6	67.4	66.6	64.8	58.3	54.3	53.2	52.3	51.4	49.5	48.0	48.2		
Left Insertion Loss	**23.4**	**27.0**	**29.6**	**32.3**	**39.4**	**44.9**	**45.2**	**44.9**	**41.9**	**42.3**	**43.0**	**30.1**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	92.9	94.5	96.4	98.0	98.2	100.2	101.5	99.3	95.7	91.6	85.8	78.0	109	109
Test 2	92.6	94.8	96.2	97.5	97.8	99.8	101.0	99.6	95.0	92.2	85.7	77.4	109	109
Test 3	92.6	94.4	96.2	96.5	97.5	98.9	101.1	97.5	92.3	92.5	87.7	77.8	108	108
Mean	92.7	94.5	96.3	97.3	97.8	99.6	101.2	98.8	94.3	92.1	86.4	77.8		
Occluded														
Test 1	63.0	64.2	65.3	64.4	61.7	55.1	49.6	44.5	53.4	52.2	51.6	53.8	93	86
Test 2	76.8	78.2	78.4	81.7	84.3	86.2	94.0	99.3	94.3	87.8	75.0	60.5	103	102
Test 3	65.2	63.6	65.1	65.2	63.2	63.4	67.7	70.3	69.2	63.6	55.1	54.0	94	87
Mean	68.4	68.7	69.6	70.4	69.7	68.2	70.4	71.3	72.3	67.9	60.5	56.1		
Right Insertion Loss	**24.4**	**25.9**	**26.7**	**26.9**	**28.1**	**31.4**	**30.8**	**27.4**	**22.1**	**24.2**	**25.9**	**21.6**		
Insertion Loss	**23.9**	**26.4**	**28.1**	**29.6**	**33.7**	**38.1**	**38.0**	**36.2**	**32.0**	**33.3**	**34.4**	**25.8**		

Table C-98. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 18.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	86.2	89.8	85.5	88.2	88.9	91.0	87.2	91.1	90.8	92.3	95.1	95.7	96.2
Test 2	86.3	90.0	85.6	88.2	88.9	90.6	87.4	91.4	90.1	91.6	94.9	96.2	96.1
Test 3	86.1	89.8	85.6	88.2	88.9	91.0	87.6	91.5	90.4	91.8	95.2	96.2	96.1
Mean	86.2	89.8	85.5	88.2	88.9	90.9	87.4	91.4	90.5	91.9	95.1	96.0	96.1
Occluded													
Test 1	85.5	86.9	82.2	84.2	85.1	83.7	84.7	85.0	83.4	82.6	81.6	76.9	75.1
Test 2	83.4	87.0	82.8	85.0	86.0	88.4	85.4	85.2	81.6	80.8	80.9	78.5	77.4
Test 3	83.5	87.0	82.6	85.1	86.2	88.4	85.6	85.4	81.9	80.9	81.4	78.5	76.7
Mean	84.1	87.0	82.5	84.8	85.8	86.8	85.2	85.2	82.3	81.4	81.3	77.9	76.4
Left Insertion Loss	**2.1**	**2.9**	**3.0**	**3.4**	**3.1**	**4.1**	**2.2**	**6.1**	**8.1**	**10.5**	**13.7**	**18.1**	**19.8**
Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.3	88.3	83.5	86.5	88.1	89.9	86.4	91.5	89.8	92.6	94.0	92.6	94.4
Test 2	85.5	88.5	83.3	86.3	88.2	89.5	87.0	91.6	89.8	92.9	94.5	92.1	93.4
Test 3	85.3	88.3	83.4	86.2	88.2	89.8	86.9	91.5	89.9	93.0	94.3	92.1	93.8
Mean	85.4	88.3	83.4	86.3	88.2	89.7	86.8	91.5	89.8	92.8	94.3	92.3	93.9
Occluded													
Test 1	84.1	84.3	79.2	82.5	84.5	84.4	81.0	80.9	79.5	82.4	78.8	75.4	73.3
Test 2	82.4	85.0	81.0	83.7	85.1	86.4	80.4	81.3	78.9	81.7	80.6	77.3	75.1
Test 3	82.3	84.7	79.8	83.4	84.5	85.8	80.8	81.5	79.3	82.2	80.7	77.1	74.8
Mean	82.9	84.7	80.0	83.2	84.7	85.6	80.7	81.2	79.3	82.1	80.0	76.6	74.4
Right Insertion Loss	**2.5**	**3.7**	**3.4**	**3.1**	**3.5**	**4.2**	**6.1**	**10.3**	**10.6**	**10.7**	**14.2**	**15.7**	**19.5**
Insertion Loss	**2.3**	**3.3**	**3.2**	**3.3**	**3.3**	**4.1**	**4.1**	**8.2**	**9.4**	**10.6**	**14.0**	**16.9**	**19.6**

Table C-98. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 18.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.8	96.0	98.3	100.2	101.9	96.0	91.6	92.9	93.2	90.7	81.3	109	109
Test 2	93.3	94.9	96.6	99.6	100.5	101.7	96.1	91.4	92.9	92.6	90.4	81.4	109	109
Test 3	93.3	94.6	96.6	99.1	100.1	101.3	94.6	92.0	93.5	93.7	90.7	81.6	109	109
Mean	93.2	94.8	96.4	99.0	100.2	101.6	95.6	91.6	93.1	93.1	90.6	81.4		
Occluded														
Test 1	67.5	62.2	59.7	58.4	52.3	51.1	46.7	40.7	42.1	42.7	46.2	46.1	95	86
Test 2	68.7	61.8	59.8	58.6	53.4	52.0	47.5	40.9	41.8	43.0	45.0	46.9	95	87
Test 3	68.4	61.6	60.3	58.6	53.3	52.4	47.8	41.2	41.6	42.7	44.7	46.1	96	87
Mean	68.2	61.8	59.9	58.5	53.0	51.8	47.3	40.9	41.8	42.8	45.3	46.4		
Left Insertion Loss	**25.0**	**32.9**	**36.5**	**40.5**	**47.2**	**49.8**	**48.2**	**50.7**	**51.3**	**50.3**	**45.3**	**35.0**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.2	94.8	97.0	98.0	100.7	103.0	99.3	97.4	96.1	93.9	91.4	84.5	109	110
Test 2	93.3	94.2	96.4	99.0	101.2	103.7	99.5	97.0	95.2	93.3	91.3	83.6	109	110
Test 3	93.5	94.5	96.0	98.6	100.9	103.4	99.3	97.4	95.1	93.5	91.5	84.0	109	110
Mean	93.3	94.5	96.5	98.5	100.9	103.4	99.4	97.2	95.5	93.6	91.4	84.0		
Occluded														
Test 1	62.7	59.1	61.0	57.9	54.2	52.2	46.3	48.2	49.2	52.1	54.2	55.9	93	85
Test 2	64.7	60.8	63.0	59.7	56.2	52.4	47.7	46.2	48.4	51.1	53.8	56.1	94	85
Test 3	64.1	60.2	62.8	59.3	55.7	52.0	47.2	50.1	49.1	51.5	53.7	55.9	93	86
Mean	63.8	60.1	62.3	59.0	55.4	52.2	47.1	48.2	48.9	51.5	53.9	55.9		
Right Insertion Loss	**29.5**	**34.5**	**34.2**	**39.5**	**45.5**	**51.2**	**52.3**	**49.1**	**46.6**	**42.0**	**37.5**	**28.1**		
Insertion Loss	**27.3**	**33.7**	**35.4**	**40.0**	**46.4**	**50.5**	**50.3**	**49.9**	**48.9**	**46.2**	**41.4**	**31.6**		

Table C-99. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 19.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.9	85.0	87.9	88.9	91.9	88.3	92.9	92.2	92.2	96.5	96.9	96.3
Test 2	85.4	88.9	84.9	87.8	88.8	91.4	88.4	92.5	92.4	92.7	96.2	96.4	96.0
Test 3	85.6	89.0	85.0	87.8	88.9	91.4	88.2	92.2	92.1	92.5	96.2	96.2	96.0
Mean	85.5	89.0	85.0	87.8	88.9	91.6	88.3	92.5	92.2	92.5	96.3	96.5	96.1
Occluded													
Test 1	83.2	86.8	82.8	85.1	84.3	85.8	82.0	83.0	81.5	79.9	81.8	76.5	72.7
Test 2	87.0	88.2	83.8	86.0	86.1	83.3	83.8	84.1	82.7	80.4	82.7	76.1	72.2
Test 3	83.9	87.6	83.5	86.0	85.9	87.3	83.0	83.6	81.7	80.3	82.3	76.4	72.2
Mean	84.7	87.5	83.4	85.7	85.4	85.5	82.9	83.6	82.0	80.2	82.3	76.3	72.4
Left Insertion Loss	**0.8**	**1.4**	**1.6**	**2.1**	**3.4**	**6.1**	**5.4**	**8.9**	**10.3**	**12.3**	**14.0**	**20.2**	**23.7**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	87.8	83.4	86.9	88.3	89.2	86.7	91.6	89.1	90.7	92.6	92.6	94.9
Test 2	85.0	87.7	83.3	87.0	88.1	89.7	86.7	92.0	89.2	90.7	92.3	92.4	95.2
Test 3	85.1	87.6	83.1	86.7	88.1	89.4	86.7	91.9	89.1	91.0	92.5	92.5	95.1
Mean	85.1	87.7	83.3	86.9	88.2	89.4	86.7	91.8	89.1	90.8	92.5	92.5	95.1
Occluded													
Test 1	83.9	86.2	81.0	83.6	83.6	84.2	81.0	80.5	79.5	79.2	78.3	73.3	69.5
Test 2	85.1	85.0	79.0	81.2	82.2	81.2	80.7	81.3	80.2	80.7	78.0	71.5	68.1
Test 3	83.5	85.6	80.5	83.5	83.8	84.9	81.1	81.4	79.3	79.5	78.3	72.9	70.0
Mean	84.2	85.6	80.2	82.8	83.2	83.4	80.9	81.0	79.6	79.8	78.2	72.6	69.2
Right Insertion Loss	**0.9**	**2.1**	**3.1**	**4.1**	**5.0**	**6.0**	**5.8**	**10.8**	**9.5**	**11.0**	**14.3**	**19.9**	**25.9**
Insertion Loss	**0.8**	**1.8**	**2.4**	**3.1**	**4.2**	**6.0**	**5.6**	**9.9**	**9.9**	**11.6**	**14.2**	**20.0**	**24.8**

Table C-99. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 19.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.5	96.7	97.8	96.9	98.5	97.8	94.9	90.2	91.5	88.5	79.2	108	108
Test 2	93.3	95.5	97.3	98.2	98.2	99.9	96.7	93.7	89.2	90.7	88.3	78.8	108	108
Test 3	93.7	95.0	96.9	98.2	97.8	99.5	96.9	94.1	89.5	91.3	88.6	78.5	108	108
Mean	93.3	95.0	97.0	98.1	97.6	99.3	97.1	94.2	89.6	91.2	88.5	78.8		
Occluded														
Test 1	62.1	59.1	58.8	59.2	54.3	49.2	45.4	40.9	40.8	41.3	43.2	45.1	94	85
Test 2	62.3	60.5	59.7	58.6	54.6	53.0	47.2	43.9	42.3	42.3	43.4	45.1	95	86
Test 3	62.2	61.8	61.8	59.6	54.3	51.4	48.1	45.9	46.0	45.2	43.8	45.1	95	86
Mean	62.2	60.5	60.1	59.1	54.4	51.2	46.9	43.6	43.0	42.9	43.5	45.1		
Left Insertion Loss	**31.1**	**34.5**	**36.9**	**38.9**	**43.3**	**48.1**	**50.2**	**50.6**	**46.6**	**48.2**	**45.0**	**33.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	90.5	93.9	95.5	96.3	96.9	98.0	96.2	95.7	96.5	95.0	90.0	83.8	107	107
Test 2	92.0	93.6	95.6	96.1	96.3	98.1	97.4	95.9	97.0	94.1	90.2	83.6	107	107
Test 3	91.6	93.4	95.5	96.0	96.0	98.4	97.8	96.3	96.8	95.2	90.4	83.2	107	107
Mean	91.4	93.6	95.5	96.1	96.4	98.2	97.1	96.0	96.8	94.8	90.2	83.5		
Occluded														
Test 1	59.2	57.3	58.6	59.6	54.7	49.1	44.5	45.3	47.8	50.4	53.2	55.6	93	84
Test 2	58.5	57.9	61.8	62.6	57.5	51.2	48.9	50.1	51.3	51.4	53.2	55.7	92	83
Test 3	59.9	59.3	60.6	62.5	57.9	54.2	51.7	51.9	52.9	53.8	53.6	55.7	93	84
Mean	59.2	58.2	60.3	61.6	56.7	51.5	48.4	49.1	50.7	51.9	53.3	55.7		
Right Insertion Loss	**32.2**	**35.5**	**35.2**	**34.6**	**39.7**	**46.7**	**48.8**	**46.8**	**46.1**	**42.9**	**36.9**	**27.9**		
Insertion Loss	**31.6**	**35.0**	**36.0**	**36.7**	**41.5**	**47.4**	**49.5**	**48.7**	**46.4**	**45.5**	**40.9**	**30.8**		

Table C-100. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 20.

Left	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.4	88.9	85.0	87.9	88.9	91.9	88.3	92.9	92.2	92.2	96.5	96.9	96.3
Test 2	85.4	88.9	84.9	87.8	88.8	91.4	88.4	92.5	92.4	92.7	96.2	96.4	96.0
Test 3	85.6	89.0	85.0	87.8	88.9	91.4	88.2	92.2	92.1	92.5	96.2	96.2	96.0
Mean	85.5	89.0	85.0	87.8	88.9	91.6	88.3	92.5	92.2	92.5	96.3	96.5	96.1
Occluded													
Test 1	83.2	86.8	82.8	85.1	84.3	85.8	82.0	83.0	81.5	79.9	81.8	76.5	72.7
Test 2	87.0	88.2	83.8	86.0	86.1	83.3	83.8	84.1	82.7	80.4	82.7	76.1	72.2
Test 3	83.9	87.6	83.5	86.0	85.9	87.3	83.0	83.6	81.7	80.3	82.3	76.4	72.2
Mean	84.7	87.5	83.4	85.7	85.4	85.5	82.9	83.6	82.0	80.2	82.3	76.3	72.4
Left Insertion Loss	**0.8**	**1.4**	**1.6**	**2.1**	**3.4**	**6.1**	**5.4**	**8.9**	**10.3**	**12.3**	**14.0**	**20.2**	**23.7**

Right	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
Unoccluded													
Test 1	85.1	87.8	83.4	86.9	88.3	89.2	86.7	91.6	89.1	90.7	92.6	92.6	94.9
Test 2	85.0	87.7	83.3	87.0	88.1	89.7	86.7	92.0	89.2	90.7	92.3	92.4	95.2
Test 3	85.1	87.6	83.1	86.7	88.1	89.4	86.7	91.9	89.1	91.0	92.5	92.5	95.1
Mean	85.1	87.7	83.3	86.9	88.2	89.4	86.7	91.8	89.1	90.8	92.5	92.5	95.1
Occluded													
Test 1	83.9	86.2	81.0	83.6	83.6	84.2	81.0	80.5	79.5	79.2	78.3	73.3	69.5
Test 2	85.1	85.0	79.0	81.2	82.2	81.2	80.7	81.3	80.2	80.7	78.0	71.5	68.1
Test 3	83.5	85.6	80.5	83.5	83.8	84.9	81.1	81.4	79.3	79.5	78.3	72.9	70.0
Mean	84.2	85.6	80.2	82.8	83.2	83.4	80.9	81.0	79.6	79.8	78.2	72.6	69.2
Right Insertion Loss	**0.9**	**2.1**	**3.1**	**4.1**	**5.0**	**6.0**	**5.8**	**10.8**	**9.5**	**11.0**	**14.3**	**19.9**	**25.9**
Insertion Loss	**0.8**	**1.8**	**2.4**	**3.1**	**4.2**	**6.0**	**5.6**	**9.9**	**9.9**	**11.6**	**14.2**	**20.0**	**24.8**

Table C-100. Raw data for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ using tight-fitting instructions – Subject 20.

Left	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	93.0	94.5	96.7	97.8	96.9	98.5	97.8	94.9	90.2	91.5	88.5	79.2	108	108
Test 2	93.3	95.5	97.3	98.2	98.2	99.9	96.7	93.7	89.2	90.7	88.3	78.8	108	108
Test 3	93.7	95.0	96.9	98.2	97.8	99.5	96.9	94.1	89.5	91.3	88.6	78.5	108	108
Mean	93.3	95.0	97.0	98.1	97.6	99.3	97.1	94.2	89.6	91.2	88.5	78.8		
Occluded														
Test 1	62.1	59.1	58.8	59.2	54.3	49.2	45.4	40.9	40.8	41.3	43.2	45.1	94	85
Test 2	62.3	60.5	59.7	58.6	54.6	53.0	47.2	43.9	42.3	42.3	43.4	45.1	95	86
Test 3	62.2	61.8	61.8	59.6	54.3	51.4	48.1	45.9	46.0	45.2	43.8	45.1	95	86
Mean	62.2	60.5	60.1	59.1	54.4	51.2	46.9	43.6	43.0	42.9	43.5	45.1		
Left Insertion Loss	**31.1**	**34.5**	**36.9**	**38.9**	**43.3**	**48.1**	**50.2**	**50.6**	**46.6**	**48.2**	**45.0**	**33.8**		
Right	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**	**LIN**	**Awt**
Unoccluded														
Test 1	90.5	93.9	95.5	96.3	96.9	98.0	96.2	95.7	96.5	95.0	90.0	83.8	107	107
Test 2	92.0	93.6	95.6	96.1	96.3	98.1	97.4	95.9	97.0	94.1	90.2	83.6	107	107
Test 3	91.6	93.4	95.5	96.0	96.0	98.4	97.8	96.3	96.8	95.2	90.4	83.2	107	107
Mean	91.4	93.6	95.5	96.1	96.4	98.2	97.1	96.0	96.8	94.8	90.2	83.5		
Occluded														
Test 1	59.2	57.3	58.6	59.6	54.7	49.1	44.5	45.3	47.8	50.4	53.2	55.6	93	84
Test 2	58.5	57.9	61.8	62.6	57.5	51.2	48.9	50.1	51.3	51.4	53.2	55.7	92	83
Test 3	59.9	59.3	60.6	62.5	57.9	54.2	51.7	51.9	52.9	53.8	53.6	55.7	93	84
Mean	59.2	58.2	60.3	61.6	56.7	51.5	48.4	49.1	50.7	51.9	53.3	55.7		
Right Insertion Loss	**32.2**	**35.5**	**35.2**	**34.6**	**39.7**	**46.7**	**48.8**	**46.8**	**46.1**	**42.9**	**36.9**	**27.9**		
Insertion Loss	**31.6**	**35.0**	**36.0**	**36.7**	**41.5**	**47.4**	**49.5**	**48.7**	**46.9**	**45.5**	**40.9**	**30.8**		

Appendix D.

Microphone-in-Real-Ear summary tables.

Table D-1. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions.

Table D-2. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™.

Table D-3. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™.

Table D-4. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™.

Table D-5. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions.

Table D-6. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions.

Table D-7. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ with tight-fitting instructions.

Table D-8. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ with tight-fitting instructions.

Table D-9. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ (without HushKit™) with tight-fitting instructions.

Table D-10. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ (replacement ear cups with HushKit™) with tight-fitting instructions.

Table D-1. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	-0.54	-0.11	0.27	0.98	2.95	4.12	6.91	11.80	16.65	17.72	20.14	24.44	29.09
02	-1.03	-0.87	-0.67	-1.32	-4.21	-3.67	-11.40	-6.65	-1.69	3.11	5.31	10.06	13.11
03	-2.87	-2.17	-2.98	-4.07	-5.75	-2.42	-1.14	5.25	10.48	12.29	12.96	18.87	23.74
04	0.00	0.52	0.58	1.48	2.17	1.94	1.63	5.59	10.37	13.77	12.99	16.80	20.96
05	0.46	-0.56	-1.51	-1.97	-2.08	-4.29	-1.66	3.26	6.27	10.74	10.51	14.54	19.06
06	1.01	0.41	-0.10	-0.98	-1.14	-1.15	2.18	8.31	13.31	15.48	15.14	19.93	26.70
07	2.22	2.25	1.30	0.36	0.17	-0.52	1.43	7.18	12.14	16.54	16.38	20.21	26.19
08	-0.32	-1.53	-2.42	-3.05	-2.56	-2.79	2.59	9.27	13.54	15.94	15.03	17.50	20.64
09	0.17	-0.75	-2.07	-3.31	-3.14	-3.77	1.26	8.89	13.58	14.48	16.02	21.62	26.52
10	1.66	-0.82	-2.84	-4.58	-4.11	-5.76	-4.74	1.11	4.45	8.29	9.64	13.65	13.50
Mean	0.08	-0.36	-1.05	-1.65	-1.77	-1.83	-0.29	5.40	9.91	12.84	13.41	17.76	21.95
s	1.44	1.23	1.53	2.12	2.83	3.01	4.96	5.25	5.44	4.44	4.15	4.20	5.54
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	35.45	40.44	40.61	39.66	40.15	41.90	41.65	44.44	43.08	43.12	39.30	27.58
02	19.27	23.76	22.44	24.21	27.15	29.00	33.36	30.70	27.16	26.55	26.30	21.91
03	27.25	29.18	28.52	30.73	35.16	37.95	39.40	42.00	36.67	36.74	34.67	25.27
04	25.98	32.51	34.75	36.75	37.15	39.24	42.19	44.73	40.05	38.64	37.22	27.43
05	23.63	24.21	24.88	27.19	30.31	34.62	37.65	39.42	36.51	36.99	36.79	26.98
06	24.55	24.10	25.73	29.08	32.20	37.00	40.28	33.98	38.16	39.79	37.17	27.15
07	33.47	37.17	35.72	37.74	39.14	43.96	45.79	42.04	39.66	42.72	39.56	26.48
08	27.57	30.16	31.80	34.85	36.47	38.17	42.53	43.76	38.98	34.96	37.68	26.42
09	32.47	37.37	36.73	38.27	38.08	39.71	41.30	42.28	44.28	41.23	39.90	27.46
10	14.76	21.50	25.51	27.06	30.17	29.24	28.17	25.63	26.03	27.23	29.31	23.91
Mean	26.44	30.04	30.67	32.55	34.60	37.08	39.23	38.90	37.06	36.80	35.79	26.06
s	6.40	6.68	6.11	5.55	4.39	4.91	5.09	6.56	6.05	5.84	4.54	1.86
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-1. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	-2.38	-1.80	-1.16	0.28	2.55	4.96	7.08	10.95	15.51	17.86	19.67	21.74	25.80
02	-0.89	-0.47	-0.57	-1.52	-4.06	-4.15	-11.46	-9.78	-3.91	3.72	4.45	10.41	14.41
03	-3.11	-2.31	-3.16	-4.25	-5.63	-0.65	1.96	6.41	12.16	14.14	12.77	17.54	20.49
04	1.59	2.50	3.89	6.92	9.74	10.22	9.38	13.60	18.44	20.32	16.57	18.80	20.03
05	0.98	0.22	-0.14	0.30	1.51	1.03	5.25	12.25	15.94	18.45	15.67	18.76	19.14
06	-0.16	-1.16	-2.59	-4.25	-6.51	-7.33	-5.33	2.24	8.35	11.44	13.51	20.40	25.35
07	-1.00	-1.54	-2.93	-4.52	-7.42	-9.07	-8.82	-2.42	4.80	12.85	13.64	21.17	26.46
08	0.37	-0.78	-1.16	-1.36	-1.10	-1.24	3.46	11.03	15.24	16.78	16.16	15.98	14.68
09	-0.68	-1.76	-3.18	-4.95	-6.47	-6.70	-3.11	5.38	10.66	13.36	17.31	20.71	22.12
10	1.61	-0.67	-2.33	-4.18	-4.60	-6.25	-4.68	0.76	6.27	10.16	11.40	18.09	17.21
Mean	-0.37	-0.78	-1.33	-1.75	-2.20	-1.92	-0.63	5.04	10.35	13.91	14.11	18.36	20.57
s	1.58	1.37	2.14	3.65	5.43	6.08	7.05	7.45	6.71	4.84	4.18	3.32	4.39
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	34.28	39.33	40.95	37.19	40.46	42.13	39.69	44.15	41.53	46.41	42.86	31.02
02	19.14	25.02	23.96	23.33	25.99	29.27	33.21	30.49	27.56	28.12	26.56	24.28
03	24.56	28.29	27.12	30.29	36.87	39.32	38.63	43.63	41.88	40.35	38.51	30.52
04	26.18	34.83	36.62	39.63	43.76	44.04	46.53	47.29	43.97	43.24	41.73	31.65
05	24.02	23.80	22.96	23.55	26.72	31.13	34.72	37.95	37.05	39.15	40.08	32.50
06	26.13	23.83	24.71	28.92	30.21	32.20	36.58	38.35	40.62	40.09	38.85	31.73
07	31.45	34.05	33.19	34.94	36.52	39.22	44.09	37.63	36.77	42.80	42.07	29.87
08	23.55	27.90	29.02	32.97	37.56	37.83	41.45	42.59	40.27	38.67	41.24	30.76
09	30.70	33.82	34.67	35.68	36.30	37.72	37.42	39.19	43.90	42.22	40.54	30.58
10	17.88	27.32	30.32	29.40	31.09	29.80	28.47	26.38	24.77	24.43	27.57	23.72
Mean	25.79	29.82	30.35	31.59	34.55	36.27	38.08	38.77	37.83	38.55	38.00	29.66
s	5.22	5.34	5.94	5.50	5.84	5.28	5.29	6.36	6.63	6.91	5.92	3.08
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-1. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using normal-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	1.30	1.58	1.69	1.67	3.35	3.28	6.73	12.66	17.78	17.59	20.61	27.15	32.39
02	-1.16	-1.27	-0.78	-1.11	-4.36	-3.19	-11.33	-3.52	0.53	2.50	6.17	9.72	11.82
03	-2.62	-2.02	-2.81	-3.88	-5.88	-4.18	-4.23	4.09	8.81	10.44	13.15	20.20	26.99
04	-1.58	-1.46	-2.74	-3.95	-5.40	-6.34	-6.13	-2.42	2.30	7.23	9.40	14.81	21.90
05	-0.06	-1.35	-2.89	-4.23	-5.66	-9.60	-8.58	-5.73	-3.40	3.02	5.36	10.31	18.97
06	2.18	1.97	2.39	2.29	4.22	5.04	9.69	14.39	18.27	19.52	16.77	19.46	28.06
07	5.43	6.05	5.52	5.25	7.77	8.03	11.68	16.79	19.48	20.23	19.12	19.25	25.91
08	-1.00	-2.27	-3.68	-4.73	-4.03	-4.35	1.72	7.50	11.83	15.10	13.90	19.02	26.60
09	1.03	0.25	-0.96	-1.67	0.19	-0.85	5.63	12.41	16.50	15.61	14.72	22.54	30.93
10	1.71	-0.96	-3.35	-4.98	-3.63	-5.28	-4.79	1.46	2.63	6.43	7.89	9.20	9.79
Mean	0.52	0.05	-0.76	-1.54	-1.34	-1.74	0.04	5.76	9.47	11.77	12.71	17.17	23.34
s	2.33	2.55	3.04	3.53	4.89	5.56	8.10	8.15	8.47	6.71	5.34	5.98	7.67
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	36.63	41.56	40.26	42.14	39.85	41.67	43.61	44.74	44.63	39.84	35.74	24.15
02	19.39	22.50	20.92	25.09	28.32	28.73	33.51	30.91	26.77	24.97	26.04	19.54
03	29.93	30.08	29.93	31.17	33.45	36.59	40.17	40.37	31.47	33.14	30.82	20.02
04	25.78	30.19	32.89	33.88	30.54	34.44	37.86	42.16	36.13	34.04	32.70	23.22
05	23.24	24.62	26.80	30.82	33.91	38.11	40.58	40.89	35.96	34.82	33.50	21.46
06	22.96	24.37	26.75	29.25	34.19	41.79	43.99	29.60	35.70	39.48	35.48	22.58
07	35.50	40.30	38.24	40.54	41.76	48.71	47.48	46.45	42.56	42.64	37.05	23.09
08	31.60	32.42	34.59	36.74	35.38	38.51	43.61	44.92	37.69	31.24	34.12	22.09
09	34.25	40.93	38.79	40.86	39.85	41.70	45.19	45.38	44.67	40.24	39.26	24.33
10	11.64	15.68	20.70	24.72	29.25	28.67	27.88	24.88	27.28	30.03	31.06	24.10
Mean	27.09	30.26	30.99	33.52	34.65	37.89	40.39	39.03	36.29	35.05	33.58	22.46
s	7.98	8.73	7.15	6.39	4.64	6.18	5.94	7.69	6.47	5.51	3.72	1.69
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-2. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	0.86	0.50	0.07	0.68	1.71	2.20	4.96	9.33	12.64	13.42	17.26	21.73	25.75
02	0.13	-0.65	-0.93	-1.68	-3.26	-3.77	-8.91	-4.85	-1.19	0.74	2.54	6.56	9.28
03	0.51	-0.37	-1.34	-2.32	-2.62	-3.59	-4.16	-2.33	-0.58	0.31	1.01	4.69	8.52
04	-0.61	-0.66	-1.58	-2.07	-2.69	-2.78	-3.61	-1.93	1.62	3.12	2.97	7.42	13.42
05	-1.31	-0.78	-1.47	-1.86	-2.96	-2.59	-5.07	-1.71	-0.33	-0.01	-1.62	2.42	7.31
06	-1.18	-1.02	-2.09	-2.68	-2.72	-0.38	1.07	7.05	11.22	13.94	14.72	20.22	25.45
07	-1.74	-1.75	-2.91	-4.15	-5.71	-6.36	-3.86	0.61	3.17	6.20	9.36	12.38	17.37
08	0.25	-0.62	-1.68	-2.01	-1.43	-1.94	-2.22	3.29	7.82	8.91	9.97	12.37	17.61
09	6.90	5.97	5.39	5.59	7.32	6.93	9.22	15.80	19.00	17.42	19.85	25.50	27.68
10	-0.27	-0.52	-1.78	-2.67	-3.77	-4.45	-7.57	-0.94	0.75	3.44	4.79	7.94	12.58
Mean	0.35	0.01	-0.83	-1.32	-1.61	-1.67	-2.01	2.43	5.41	6.75	8.08	12.12	16.50
s	2.45	2.17	2.32	2.71	3.65	3.81	5.60	6.45	6.91	6.35	7.33	7.87	7.58
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	32.80	39.76	42.01	43.66	44.54	47.47	48.20	49.27	43.26	41.92	39.78	26.65
02	14.87	22.02	22.92	21.96	24.77	29.36	29.82	25.50	26.07	25.61	25.92	21.85
03	15.06	22.34	23.05	24.07	23.38	26.21	29.67	27.50	23.54	24.95	21.04	19.64
04	20.09	26.83	27.59	30.02	31.23	32.23	33.67	36.41	31.54	30.02	31.15	25.52
05	11.43	17.20	19.47	23.18	25.45	28.58	29.59	30.60	32.89	31.46	29.75	22.19
06	29.80	32.54	32.50	35.42	42.01	40.91	40.38	38.01	41.02	39.46	34.55	27.09
07	25.50	32.63	32.81	35.46	37.80	39.67	39.06	37.23	37.12	39.21	36.80	27.58
08	21.52	27.17	27.54	30.58	34.47	34.43	34.64	32.89	24.96	27.13	28.77	26.38
09	32.17	38.23	38.24	42.51	44.14	45.23	46.38	45.29	45.22	42.50	40.40	27.23
10	18.12	23.81	27.63	29.93	32.02	31.39	28.07	25.03	27.02	26.46	28.24	23.78
Mean	22.14	28.25	29.38	31.68	33.98	35.55	35.95	34.77	33.26	32.87	31.64	24.79
s	7.62	7.37	7.07	7.61	8.00	7.34	7.26	8.13	7.99	7.13	6.21	2.76
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-2. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	2.61	2.47	2.93	4.75	6.14	6.99	9.13	10.58	13.33	13.63	17.87	21.94	25.01
02	0.07	-0.38	-0.45	-1.35	-3.28	-4.47	-8.60	-6.95	-2.10	0.09	0.87	5.48	9.30
03	0.34	-0.37	-0.85	-1.60	-2.81	-3.52	-4.07	-3.46	0.04	1.04	0.44	5.24	8.96
04	-0.81	-0.69	-1.19	-1.49	-2.84	-1.80	-3.31	-1.98	2.94	4.52	3.77	8.10	11.96
05	-1.24	-0.47	-0.87	-1.17	-2.49	-0.99	-4.00	-0.87	1.69	1.26	-0.59	5.11	6.21
06	-0.38	-0.19	-0.66	-0.92	-0.97	1.79	1.72	7.27	11.47	14.16	15.16	20.70	24.20
07	-2.01	-1.92	-2.78	-4.13	-6.92	-5.17	-3.61	2.57	6.35	11.44	14.87	19.66	25.23
08	-0.09	-0.78	-1.43	-1.38	-0.42	-0.16	2.14	8.52	15.43	16.24	17.14	19.63	23.99
09	7.19	5.80	5.07	5.23	7.60	7.61	11.65	17.51	20.02	19.21	21.48	27.21	25.70
10	-0.31	-0.36	-1.33	-2.28	-3.96	-4.17	-7.03	-1.48	1.53	3.28	4.61	9.06	13.49
Mean	0.54	0.31	-0.16	-0.43	-1.00	-0.39	-0.60	3.17	7.07	8.49	9.56	14.21	17.40
s	2.63	2.22	2.34	3.00	4.51	4.58	6.69	7.58	7.51	7.18	8.48	8.39	8.06
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	30.18	37.49	42.87	45.32	47.14	51.77	51.88	51.15	46.49	44.11	41.89	29.55
02	14.84	23.17	22.82	22.41	23.24	27.61	30.98	27.05	26.98	28.48	26.55	24.42
03	13.74	20.02	19.13	19.96	21.44	23.84	27.81	28.90	26.48	26.70	23.54	24.89
04	17.86	25.68	24.94	26.39	29.53	30.82	34.21	37.42	36.19	34.38	32.10	28.58
05	11.90	15.16	16.93	19.87	23.08	28.03	31.15	28.19	27.03	23.93	27.28	24.20
06	28.50	29.73	32.45	35.68	42.94	38.26	35.69	33.69	40.47	40.38	34.69	30.39
07	33.83	39.02	38.96	39.47	41.12	40.10	38.26	36.97	37.99	41.59	37.18	30.30
08	27.52	34.93	35.70	36.88	40.81	39.07	39.47	37.12	33.61	37.52	37.18	29.01
09	30.53	39.89	40.45	42.46	46.18	45.20	47.36	44.05	46.69	45.97	43.40	30.93
10	19.62	24.58	28.44	32.72	34.50	34.23	31.03	26.50	25.36	25.29	28.74	23.37
Mean	22.85	28.97	30.27	32.12	35.00	35.89	36.78	35.10	34.73	34.83	33.25	27.57
s	8.09	8.59	9.20	9.40	10.00	8.67	7.72	8.01	8.19	8.24	6.73	2.98
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-2. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	-0.89	-1.47	-2.79	-3.39	-2.72	-2.58	0.79	8.08	11.96	13.21	16.65	21.51	26.49
02	0.20	-0.92	-1.41	-2.02	-3.24	-3.08	-9.22	-2.74	-0.27	1.39	4.22	7.64	9.25
03	0.67	-0.37	-1.83	-3.04	-2.43	-3.65	-4.24	-1.20	-1.20	-0.42	1.57	4.15	8.07
04	-0.42	-0.64	-1.98	-2.64	-2.53	-3.77	-3.90	-1.88	0.31	1.71	2.17	6.73	14.88
05	-1.37	-1.09	-2.08	-2.54	-3.42	-4.19	-6.13	-2.55	-2.34	-1.28	-2.65	-0.27	8.41
06	-1.98	-1.85	-3.52	-4.44	-4.47	-2.55	0.41	6.84	10.97	13.73	14.28	19.75	26.70
07	-1.47	-1.59	-3.03	-4.18	-4.51	-7.54	-4.10	-1.35	-0.01	0.96	3.86	5.09	9.51
08	0.59	-0.45	-1.93	-2.65	-2.45	-3.72	-6.58	-1.94	0.20	1.58	2.80	5.11	11.23
09	6.61	6.14	5.70	5.95	7.03	6.25	6.79	14.09	17.99	15.62	18.22	23.79	29.65
10	-0.24	-0.68	-2.23	-3.05	-3.59	-4.73	-8.10	-0.39	-0.02	3.59	4.97	6.81	11.68
Mean	0.17	-0.29	-1.51	-2.20	-2.23	-2.96	-3.43	1.69	3.76	5.01	6.61	10.03	15.59
s	2.43	2.32	2.61	2.96	3.34	3.53	4.84	5.84	7.09	6.49	7.12	8.38	8.56
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	35.41	42.04	41.16	42.01	41.94	43.18	44.52	47.39	40.02	39.72	37.68	23.74
02	14.91	20.87	23.01	21.50	26.31	31.12	28.65	23.95	25.15	22.73	25.30	19.29
03	16.37	24.66	26.96	28.18	25.32	28.57	31.52	26.09	20.60	23.20	18.54	14.39
04	22.32	27.98	30.25	33.64	32.92	33.63	33.13	35.40	26.90	25.67	30.19	22.46
05	10.96	19.24	22.01	26.48	27.82	29.13	28.03	33.01	38.75	38.99	32.21	20.17
06	31.09	35.35	32.56	35.16	41.09	43.55	45.06	42.33	41.57	38.54	34.40	23.78
07	17.17	26.24	26.66	31.44	34.47	39.23	39.87	37.49	36.25	36.83	36.43	24.85
08	15.51	19.42	19.38	24.29	28.14	29.79	29.81	28.66	16.32	16.75	20.35	23.75
09	33.82	36.57	36.03	42.55	42.10	45.27	45.39	46.53	43.75	39.02	37.40	23.52
10	16.62	23.04	26.83	27.15	29.54	28.54	25.11	23.57	28.68	27.63	27.74	24.20
Mean	21.42	27.54	28.49	31.24	32.97	35.20	35.11	34.44	31.80	30.91	30.02	22.02
s	8.80	7.91	6.67	7.12	6.64	6.87	7.84	8.94	9.53	8.61	6.92	3.22
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-3. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	2.61	1.68	1.56	2.61	4.20	3.78	7.93	12.19	15.47	15.71	19.13	23.81	27.38
02	-1.13	-0.40	0.19	0.61	0.47	1.88	4.17	10.21	13.20	14.82	17.10	22.22	26.17
03	2.37	1.39	1.28	1.70	3.58	3.59	5.27	6.78	9.31	10.79	11.83	14.92	16.21
04	0.75	0.55	0.36	1.15	3.09	3.01	6.29	9.00	13.12	15.99	15.23	18.85	22.38
05	-0.25	-1.12	-2.07	-2.66	-2.66	-3.62	-1.22	1.92	5.99	9.35	9.32	14.18	17.16
06	0.04	-0.24	-0.87	-1.16	0.06	1.40	3.91	9.03	12.90	15.62	16.05	20.51	26.79
07	-1.51	-0.35	-0.49	-0.47	-0.47	1.96	0.73	5.61	9.49	12.39	16.37	19.49	23.25
08	0.28	-0.59	-1.28	-1.48	-1.29	-1.20	-1.40	4.23	10.48	13.30	13.18	16.29	21.00
09	0.24	-0.82	-1.82	-2.68	-2.40	-3.36	-1.17	5.49	9.00	11.07	13.12	17.77	19.52
10	-1.41	-1.05	-1.89	-2.95	-4.30	-3.16	-7.83	-2.84	-0.04	5.61	6.65	8.55	12.33
Mean	0.20	-0.10	-0.50	-0.53	0.03	0.43	1.67	6.16	9.89	12.46	13.80	17.66	21.22
s	1.43	0.98	1.31	1.98	2.86	2.97	4.73	4.38	4.44	3.34	3.78	4.42	4.97
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	34.37	41.52	42.48	44.76	44.19	46.46	48.90	51.55	43.88	41.21	39.24	26.03
02	30.36	33.95	37.20	39.58	42.80	46.03	46.38	45.67	44.19	44.78	40.32	29.14
03	22.55	28.82	31.69	35.49	39.52	44.53	47.37	45.33	40.95	35.67	30.66	22.96
04	27.12	34.89	35.88	37.26	41.39	44.71	48.86	50.98	47.33	40.28	36.15	26.13
05	21.97	27.93	29.22	33.30	36.84	40.07	37.28	36.47	31.02	30.44	23.80	17.41
06	32.91	38.38	37.47	42.34	45.16	49.36	50.29	45.01	45.20	44.37	38.18	27.40
07	28.11	35.37	37.90	43.75	46.39	48.34	47.46	46.18	45.46	44.28	39.25	28.81
08	25.52	31.61	34.32	39.71	44.73	45.51	46.29	44.38	40.13	38.94	36.98	27.31
09	26.23	30.23	31.37	36.88	42.42	45.91	42.36	39.53	37.65	37.69	35.44	26.16
10	18.61	25.58	27.06	31.67	34.50	35.06	30.94	28.01	33.08	32.89	31.87	25.50
Mean	26.77	32.83	34.46	38.47	41.80	44.60	44.61	43.31	40.89	39.06	35.19	25.69
s	4.94	4.94	4.65	4.36	3.82	4.17	6.11	7.02	5.48	4.94	5.09	3.39
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-3. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	5.56	5.06	5.66	7.68	9.23	8.29	12.34	12.88	15.43	15.78	18.68	23.59	27.20
02	-0.16	0.91	1.70	1.85	0.69	2.39	3.72	8.98	12.71	14.34	16.67	22.54	26.19
03	4.44	3.36	4.08	5.82	8.41	8.64	10.57	12.41	15.21	16.01	14.95	19.27	20.11
04	1.39	1.14	1.48	3.16	5.35	6.47	8.75	11.25	14.80	17.81	16.06	19.44	22.04
05	-0.25	-1.06	-1.93	-2.54	-3.14	-3.90	-2.58	0.84	4.71	6.02	5.59	12.18	13.34
06	-0.83	-1.29	-2.47	-3.18	-2.67	-1.13	1.14	7.22	12.03	15.65	16.54	21.20	24.31
07	-0.96	0.05	0.05	0.02	-1.15	2.20	-1.43	2.44	5.84	10.51	14.11	16.84	21.72
08	-0.24	-1.16	-1.86	-1.91	-1.48	-2.53	-0.55	4.01	11.42	16.64	15.49	17.02	20.97
09	0.18	-0.75	-1.19	-1.41	-0.85	-0.34	3.20	10.31	14.06	17.62	18.04	21.98	18.80
10	-1.60	-1.04	-1.64	-2.83	-4.88	-2.28	-8.27	-2.67	2.75	8.89	9.50	12.77	14.19
Mean	0.75	0.52	0.39	0.67	0.95	1.78	2.69	6.77	10.90	13.93	14.56	18.68	20.89
s	2.39	2.16	2.78	3.83	4.96	4.62	6.42	5.35	4.71	4.03	4.04	3.95	4.58
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	36.19	43.25	44.96	46.39	46.50	49.93	51.05	52.77	46.88	43.61	41.57	29.08
02	31.24	31.99	35.97	40.68	42.64	44.99	44.83	45.11	44.79	45.53	41.80	31.86
03	25.54	31.92	34.41	37.61	41.37	45.63	47.55	49.98	47.71	41.13	34.32	28.61
04	25.55	35.58	38.16	38.98	43.46	47.22	51.00	52.32	50.97	43.15	39.36	29.13
05	17.18	23.98	27.28	32.26	35.09	38.66	37.42	34.61	30.02	31.45	24.29	19.55
06	32.15	39.01	37.92	40.53	44.29	48.55	49.60	46.92	49.54	48.21	41.34	30.74
07	27.34	32.37	33.63	43.24	44.77	45.72	44.91	46.44	45.15	45.09	40.44	31.84
08	25.57	32.86	35.70	40.48	45.82	46.15	48.25	49.04	48.27	47.78	42.55	30.70
09	23.97	28.50	27.93	34.79	41.25	46.13	40.50	36.53	35.37	35.66	36.07	29.42
10	19.05	23.55	25.60	31.33	33.92	30.46	26.21	26.53	32.28	31.87	30.84	27.45
Mean	26.38	32.30	34.15	38.63	41.91	44.34	44.13	44.02	43.10	41.35	37.26	28.84
s	5.78	6.11	5.89	4.74	4.27	5.70	7.70	8.64	7.61	6.22	5.94	3.56
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-3. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	-0.34	-1.71	-2.54	-2.47	-0.84	-0.73	3.52	11.50	15.51	15.64	19.58	24.03	27.55
02	-2.10	-1.71	-1.31	-0.64	0.24	1.37	4.61	11.45	13.69	15.29	17.52	21.91	26.15
03	0.30	-0.58	-1.52	-2.42	-1.26	-1.46	-0.03	1.14	3.40	5.57	8.71	10.58	12.31
04	0.11	-0.04	-0.76	-0.86	0.84	-0.46	3.82	6.76	11.44	14.17	14.40	18.25	22.71
05	-0.24	-1.18	-2.20	-2.77	-2.19	-3.35	0.14	3.00	7.27	12.68	13.05	16.18	20.99
06	0.91	0.81	0.74	0.85	2.79	3.93	6.67	10.84	13.78	15.59	15.56	19.82	29.26
07	-2.06	-0.75	-1.03	-0.97	0.22	1.71	2.90	8.77	13.14	14.28	18.64	22.13	24.78
08	0.81	-0.03	-0.70	-1.04	-1.11	0.13	-2.25	4.44	9.55	9.96	10.87	15.56	21.04
09	0.30	-0.89	-2.45	-3.96	-3.95	-6.38	-5.55	0.67	3.94	4.51	8.21	13.57	20.24
10	-1.22	-1.06	-2.15	-3.07	-3.72	-4.04	-7.39	-3.02	-2.83	2.33	3.80	4.32	10.47
Mean	-0.35	-0.71	-1.39	-1.73	-0.90	-0.93	0.65	5.55	8.89	11.00	13.03	16.64	21.55
s	1.09	0.79	1.01	1.44	2.06	3.03	4.57	5.10	5.87	5.08	5.10	6.00	6.14
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	32.56	39.80	40.01	43.13	41.89	42.98	46.74	50.32	40.87	38.81	36.92	22.99
02	29.47	35.91	38.43	38.47	42.95	47.07	47.93	46.23	43.58	44.03	38.85	26.41
03	19.56	25.72	28.98	33.38	37.68	43.44	47.18	40.69	34.18	30.21	27.00	17.31
04	28.69	34.20	33.61	35.54	39.33	42.20	46.73	49.65	43.68	37.41	32.94	23.13
05	26.76	31.89	31.16	34.34	38.59	41.48	37.15	38.33	32.03	29.43	23.32	15.28
06	33.67	37.75	37.02	44.15	46.04	50.18	50.99	43.10	40.87	40.53	35.02	24.07
07	28.89	38.38	42.16	44.26	48.01	50.95	50.02	45.92	45.77	43.47	38.06	25.78
08	25.47	30.36	32.95	38.95	43.64	44.88	44.32	39.71	31.99	30.11	31.40	23.92
09	28.48	31.95	34.81	38.97	43.58	45.69	44.21	42.54	39.93	39.72	34.81	22.90
10	18.16	27.62	28.51	32.01	35.08	39.65	35.66	29.48	33.88	33.91	32.90	23.56
Mean	27.17	33.36	34.76	38.32	41.68	44.85	45.09	42.60	38.68	36.76	33.12	22.53
s	5.01	4.69	4.61	4.48	3.98	3.68	5.06	6.11	5.19	5.52	4.88	3.52
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-4. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	2.91	2.10	1.90	1.81	1.66	1.26	3.23	8.73	10.57	10.47	14.09	19.40	22.86
02	4.13	3.93	3.73	3.76	3.88	4.01	3.02	8.26	10.66	11.77	12.45	15.88	17.46
03	2.78	3.54	4.06	4.57	4.43	5.25	1.74	5.05	8.55	11.02	11.28	15.94	16.51
04	1.29	2.12	2.28	2.66	2.17	3.33	1.02	3.34	7.78	10.45	10.86	14.06	18.39
05	2.36	2.37	2.56	3.04	3.21	2.86	1.08	4.19	7.75	11.63	11.58	16.25	17.89
06	3.24	1.97	1.95	1.21	1.66	0.68	5.16	8.46	10.79	12.63	15.81	19.20	22.27
07	3.05	2.55	2.32	2.04	2.31	0.65	2.92	6.44	10.11	12.70	15.08	19.91	24.49
08	0.60	1.44	1.46	1.63	0.83	2.27	-0.28	4.40	8.57	10.76	13.21	17.24	21.00
09	-1.96	-1.84	-2.51	-3.22	-4.02	-3.09	-3.08	2.99	5.59	7.24	9.31	15.08	16.70
10	0.02	-0.75	-1.88	-2.93	-3.53	-3.85	-6.51	-0.71	2.05	5.05	6.00	8.73	10.84
Mean	1.84	1.74	1.59	1.46	1.26	1.34	0.83	5.11	8.24	10.37	11.97	16.17	18.84
s	1.84	1.78	2.15	2.60	2.87	2.93	3.41	2.96	2.73	2.42	2.89	3.27	3.97
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	26.52	31.46	33.93	36.40	42.26	46.15	45.84	49.36	44.51	39.80	38.48	26.08
02	24.01	30.95	32.98	37.53	43.21	45.49	47.50	50.98	50.11	43.56	34.34	21.92
03	20.85	28.38	32.15	36.60	40.08	45.22	47.10	50.17	46.59	46.88	39.43	25.60
04	21.78	27.37	30.25	34.85	38.70	43.93	46.94	47.54	43.89	39.35	36.93	26.73
05	21.54	25.16	25.87	30.33	36.27	39.56	38.93	38.24	36.10	34.79	29.03	20.48
06	25.48	28.00	30.98	34.65	39.73	43.18	44.06	43.44	41.05	41.86	39.63	28.83
07	27.73	31.62	34.48	38.91	40.01	43.15	47.43	48.21	47.63	46.30	41.79	29.56
08	21.71	25.82	28.76	34.47	40.29	43.13	44.06	39.78	36.91	34.96	34.70	26.76
09	23.70	30.23	31.79	36.90	40.68	42.23	42.04	40.52	41.70	39.66	37.68	26.59
10	16.95	21.95	24.63	30.09	32.87	33.71	30.30	25.39	24.54	22.64	21.81	22.60
Mean	23.03	28.09	30.58	35.07	39.41	42.57	43.42	43.36	41.30	38.98	35.38	25.51
s	3.14	3.14	3.29	2.91	2.96	3.64	5.37	7.83	7.38	7.05	5.95	2.96
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-4. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
01	4.00	3.18	3.33	3.66	3.05	2.99	4.65	9.62	11.27	11.61	14.62	19.92	21.91
02	4.19	4.04	4.14	4.57	4.58	4.23	3.60	7.40	10.46	12.85	11.08	13.79	16.24
03	2.32	3.45	4.39	5.19	5.53	6.28	3.54	3.74	7.54	10.89	10.11	14.58	14.59
04	3.06	4.02	4.56	5.71	4.92	6.12	2.50	3.43	8.75	13.34	12.69	15.43	18.13
05	4.81	4.39	4.60	5.40	5.54	5.45	3.43	5.79	9.25	12.31	13.63	18.17	19.94
06	2.88	1.44	1.59	1.17	1.48	1.05	5.84	7.99	11.05	13.38	16.81	19.85	22.83
07	2.00	1.28	1.47	1.63	1.75	1.77	3.65	7.13	10.32	12.93	14.64	20.79	25.14
08	-1.00	-0.31	-0.54	-0.42	-1.35	0.27	-2.24	2.22	7.25	9.82	12.34	17.28	19.94
09	-2.16	-1.82	-2.19	-2.97	-4.71	-2.62	-3.47	0.75	4.42	8.19	8.65	13.49	13.23
10	0.04	-0.55	-1.37	-2.44	-3.68	-2.90	-6.47	-0.73	3.22	6.24	5.00	9.67	9.32
Mean	2.01	1.91	2.00	2.15	1.71	2.27	1.50	4.73	8.35	11.15	11.96	16.30	18.13
s	2.33	2.23	2.61	3.26	3.79	3.36	4.07	3.39	2.76	2.41	3.41	3.53	4.83
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
01	26.03	29.08	34.20	37.56	42.91	48.10	46.18	48.15	46.96	41.90	40.71	28.97
02	21.79	28.87	31.48	35.41	42.06	44.09	45.32	50.48	51.47	43.75	40.10	27.81
03	18.84	25.83	31.61	36.33	38.40	43.55	45.16	49.17	47.45	49.05	42.61	30.58
04	21.50	27.08	29.67	34.83	38.71	44.51	47.66	50.57	49.77	43.64	40.19	30.45
05	21.67	24.60	26.06	30.85	38.19	44.20	43.31	40.96	35.51	34.48	29.70	24.04
06	24.46	27.18	30.91	36.54	40.86	42.63	42.32	44.71	45.05	45.73	42.37	31.76
07	28.45	29.42	33.88	41.23	40.15	40.86	46.32	48.96	49.26	47.90	44.54	33.12
08	20.07	25.30	28.51	33.89	40.95	41.56	41.13	35.15	33.43	31.39	32.53	28.33
09	22.90	27.94	30.82	38.14	42.62	42.82	41.64	38.73	41.03	38.74	38.17	28.61
10	14.92	19.16	21.78	25.00	27.74	27.04	22.47	17.51	19.74	15.79	16.61	22.05
Mean	22.06	26.45	29.89	34.98	39.26	41.94	42.15	42.44	41.97	39.24	36.75	28.57
s	3.78	3.04	3.72	4.45	4.39	5.59	7.25	10.26	9.88	9.97	8.44	3.37
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-4. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ – right ear only.

Subject	63	80	100	125	160	200	250	315	400	500	630	800	1000
01	1.82	1.03	0.47	-0.03	0.27	-0.48	1.82	7.83	9.86	9.34	13.56	18.88	23.81
02	4.08	3.82	3.33	2.96	3.17	3.78	2.44	9.11	10.85	10.70	13.81	17.97	18.67
03	3.23	3.64	3.73	3.96	3.33	4.22	-0.06	6.36	9.56	11.15	12.45	17.30	18.43
04	-0.47	0.22	0.01	-0.38	-0.58	0.55	-0.46	3.26	6.80	7.56	9.02	12.69	18.65
05	-0.08	0.35	0.52	0.68	0.88	0.27	-1.26	2.59	6.26	10.96	9.52	14.34	15.83
06	3.59	2.50	2.31	1.25	1.85	0.32	4.47	8.92	10.54	11.87	14.81	18.56	21.71
07	4.09	3.82	3.16	2.45	2.88	-0.47	2.18	5.76	9.90	12.47	15.52	19.03	23.84
08	2.19	3.18	3.47	3.68	3.02	4.28	1.68	6.58	9.89	11.71	14.07	17.19	22.06
09	-1.76	-1.85	-2.82	-3.47	-3.33	-3.57	-2.69	5.22	6.77	6.30	9.98	16.68	20.18
10	0.01	-0.94	-2.38	-3.41	-3.38	-4.79	-6.54	-0.68	0.88	3.85	6.99	7.78	12.35
Mean	1.67	1.58	1.18	0.77	0.81	0.41	0.16	5.50	8.13	9.59	11.97	16.04	19.55
s	2.12	2.10	2.42	2.66	2.56	3.08	3.13	3.05	3.06	2.82	2.88	3.54	3.60
n	10	10	10	10	10	10	10	10	10	10	10	10	10

Third-octave band center frequency (Hz)

Subject	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000
01	27.01	33.85	33.67	35.23	41.61	44.20	45.49	50.57	42.07	37.69	36.26	23.18
02	26.23	33.02	34.47	39.65	44.37	46.89	49.68	51.48	48.75	43.37	28.57	16.02
03	22.87	30.92	32.68	36.88	41.76	46.89	49.04	51.16	45.73	44.72	36.25	20.61
04	22.06	27.65	30.83	34.87	38.68	43.35	46.22	44.51	38.02	35.06	33.68	23.00
05	21.40	25.72	25.68	29.81	34.35	34.91	34.55	35.52	36.70	35.10	28.37	16.91
06	26.50	28.82	31.05	32.75	38.61	43.72	45.79	42.17	37.04	37.99	36.90	25.90
07	27.02	33.81	35.08	36.58	39.87	45.45	48.53	47.47	46.00	44.70	39.04	26.01
08	23.36	26.34	29.02	35.05	39.64	44.70	47.00	44.41	40.39	38.53	36.87	25.20
09	24.49	32.53	32.75	35.66	38.74	41.63	42.45	42.30	42.37	40.57	37.19	24.57
10	18.97	24.75	27.48	35.17	38.00	40.37	38.12	33.28	29.34	29.50	27.02	23.15
Mean	23.99	29.74	31.27	35.17	39.56	43.21	44.69	44.29	40.64	38.72	34.02	22.46
s	2.73	3.52	3.08	2.58	2.67	3.58	4.94	6.28	5.66	4.83	4.38	3.55
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-5. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-3.25	-2.31	-3.17	-4.39	-6.99	-3.84	-3.84	1.16	6.90	11.89	14.38	19.64	22.38
12	-1.80	-1.63	-2.70	-2.98	-3.17	-2.46	-4.40	3.47	8.79	11.75	14.77	18.96	23.05
13	-0.73	-2.12	-3.67	-5.08	-4.57	-5.18	-1.54	4.05	9.96	12.76	16.41	20.05	24.60
14	-1.58	-1.28	-2.28	-3.42	-5.72	-5.27	-8.71	-1.74	1.78	7.64	10.72	16.34	21.16
15	-1.55	-2.19	-3.62	-3.76	-1.43	0.25	1.22	5.97	11.34	14.66	17.80	21.15	24.73
16	-1.83	-1.60	-2.47	-2.90	-3.37	-2.24	-2.79	4.98	10.05	12.85	16.20	21.14	25.24
17	-0.56	-1.78	-3.70	-4.68	-2.79	-2.14	0.52	7.02	12.79	15.92	17.94	19.98	23.98
18	-1.18	-1.67	-3.19	-4.38	-3.40	-3.04	-2.75	3.04	8.12	11.21	16.47	21.66	25.18
19	-1.10	-1.87	-3.47	-3.66	-2.18	-1.29	-1.25	3.04	7.67	12.39	15.47	20.59	25.30
20	-0.34	-1.60	-3.06	-3.68	-2.55	-2.80	-1.17	6.03	9.25	13.00	16.47	20.66	24.91
Mean	-1.39	-1.81	-3.14	-3.89	-3.62	-2.80	-2.47	3.70	8.67	12.41	15.66	20.02	24.05
s	0.83	0.32	0.51	0.72	1.69	1.68	2.82	2.59	2.98	2.19	2.08	1.52	1.41
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	28.58	34.87	36.86	37.91	43.39	46.02	47.84	46.60	48.96	45.89	41.25	29.67
12	27.64	31.54	30.41	34.48	36.93	36.44	36.30	35.48	28.04	28.88	31.15	26.48
13	29.09	33.38	32.27	36.09	40.84	43.84	44.32	44.63	43.48	42.79	39.84	28.02
14	22.68	26.28	29.74	33.19	35.32	36.84	35.63	37.86	37.20	36.50	34.83	26.49
15	30.90	37.71	35.83	38.50	43.77	49.03	52.51	53.16	49.57	44.92	40.20	26.41
16	30.97	31.48	33.45	33.76	35.50	37.45	36.21	39.62	40.66	37.01	36.51	27.73
17	30.51	33.71	34.37	37.07	39.07	47.48	48.47	44.49	43.31	41.95	38.06	25.83
18	28.11	32.62	37.10	40.16	46.99	50.64	43.75	41.57	43.88	43.28	39.16	28.95
19	30.70	35.24	36.25	39.92	42.02	42.33	42.47	46.65	46.51	44.89	40.99	30.85
20	29.27	31.62	34.71	37.73	40.15	39.81	40.30	39.79	40.88	42.35	38.67	29.16
Mean	28.85	32.84	34.10	36.88	40.40	42.99	42.78	42.98	42.25	40.85	38.07	27.96
s	2.48	3.03	2.60	2.45	3.80	5.24	5.76	5.18	6.27	5.26	3.14	1.67
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-5. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-3.18	-2.23	-3.07	-4.25	-7.34	-3.93	-3.62	-0.17	6.52	12.22	13.96	18.74	21.05
12	-2.22	-2.19	-3.47	-3.16	-1.21	1.20	1.85	8.85	13.43	16.70	17.70	21.66	24.88
13	-0.80	-2.20	-3.82	-5.14	-4.26	-5.72	0.24	3.72	10.47	14.08	16.92	18.53	22.88
14	-1.66	-1.19	-2.16	-3.58	-6.32	-5.78	-8.81	-3.70	2.77	11.05	13.04	18.82	22.63
15	-1.24	-1.93	-3.34	-2.93	1.02	1.99	3.67	6.59	12.88	17.43	18.90	21.55	26.00
16	-1.98	-1.87	-2.77	-2.63	-1.60	0.41	0.14	7.08	11.65	15.70	18.73	22.33	25.74
17	-0.48	-1.92	-3.57	-4.73	-4.50	-5.47	-0.23	4.78	11.94	16.79	16.64	18.43	25.33
18	-1.25	-1.73	-3.32	-4.02	-0.90	0.79	1.81	6.32	11.42	15.06	19.68	23.86	27.92
19	-1.03	-1.71	-3.15	-4.30	-4.33	-4.08	-2.43	1.74	6.59	11.78	15.41	20.14	26.24
20	-0.16	-1.42	-2.64	-3.03	-0.87	-0.58	2.20	8.28	13.04	16.63	18.06	23.40	28.36
Mean	-1.40	-1.84	-3.13	-3.78	-3.03	-2.12	-0.52	4.35	10.07	14.74	16.91	20.75	25.10
s	0.89	0.34	0.49	0.84	2.70	3.16	3.64	4.01	3.56	2.34	2.18	2.08	2.32
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	25.71	32.91	34.51	35.60	43.07	49.49	47.60	46.90	50.09	47.24	44.41	32.22
12	31.63	35.06	32.15	33.62	36.95	38.57	39.20	43.50	37.42	38.57	37.12	29.72
13	26.21	30.10	32.02	36.24	40.00	43.52	46.52	46.34	45.92	45.36	42.27	30.70
14	23.01	27.58	30.51	35.27	38.71	41.72	41.10	44.24	43.23	44.83	39.60	29.29
15	32.18	41.06	35.53	38.44	45.21	49.10	50.96	52.33	50.00	45.52	41.17	28.98
16	32.75	33.64	38.03	36.95	36.20	39.27	41.23	45.15	43.84	41.43	40.74	30.97
17	31.66	32.89	33.83	35.44	35.36	43.07	43.48	41.38	40.98	40.17	39.24	27.15
18	32.26	34.19	38.18	41.85	49.23	55.35	49.59	48.62	49.70	48.19	43.42	31.53
19	31.83	35.55	35.99	35.67	38.30	39.25	40.12	46.31	45.39	45.73	44.25	34.72
20	32.75	32.10	35.90	38.81	42.66	42.11	43.85	42.80	43.16	45.55	42.47	32.13
Mean	30.00	33.51	34.66	36.79	40.57	44.14	44.36	45.76	44.97	44.26	41.47	30.74
s	3.58	3.55	2.56	2.35	4.41	5.47	4.11	3.15	4.16	3.13	2.35	2.10
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-5. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System using tight-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-3.31	-2.40	-3.27	-4.52	-6.64	-3.74	-4.07	2.49	7.29	11.56	14.80	20.53	23.70
12	-1.37	-1.07	-1.94	-2.81	-5.14	-6.11	-10.66	-1.91	4.14	6.80	11.84	16.26	21.22
13	-0.66	-2.03	-3.53	-5.03	-4.88	-4.65	-3.32	4.39	9.45	11.43	15.90	21.57	26.32
14	-1.49	-1.37	-2.41	-3.25	-5.11	-4.76	-8.62	0.22	0.80	4.22	8.41	13.86	19.69
15	-1.85	-2.46	-3.90	-4.60	-3.88	-1.50	-1.22	5.34	9.81	11.89	16.70	20.74	23.45
16	-1.68	-1.34	-2.17	-3.17	-5.14	-4.90	-5.71	2.89	8.45	10.00	13.67	19.95	24.74
17	-0.63	-1.64	-3.83	-4.63	-1.07	1.20	1.28	9.26	13.63	15.05	19.25	21.53	22.62
18	-1.12	-1.61	-3.07	-4.75	-5.89	-6.88	-7.32	-0.24	4.83	7.36	13.27	19.46	22.45
19	-1.17	-2.03	-3.80	-3.03	-0.02	1.49	-0.07	4.33	8.75	13.01	15.53	21.03	24.36
20	-0.51	-1.78	-3.49	-4.34	-4.23	-5.01	-4.54	3.79	5.45	9.36	14.88	17.93	21.46
Mean	-1.38	-1.77	-3.14	-4.01	-4.20	-3.49	-4.42	3.06	7.26	10.07	14.42	19.29	23.00
s	0.82	0.46	0.72	0.84	2.09	2.91	3.79	3.19	3.59	3.22	2.92	2.54	1.93
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	31.46	36.83	39.22	40.21	43.71	42.54	48.09	46.29	47.84	44.54	38.09	27.11
12	23.66	28.02	28.67	35.34	36.92	34.31	33.40	27.46	18.67	19.18	25.19	23.24
13	31.98	36.66	32.52	35.94	41.68	44.17	42.13	42.93	41.04	40.22	37.40	25.34
14	22.34	24.97	28.97	31.10	31.93	31.96	30.17	31.48	31.17	28.17	30.06	23.69
15	29.63	34.36	36.13	38.56	42.34	48.95	54.07	54.00	49.15	44.33	39.23	23.84
16	29.18	29.31	28.87	30.56	34.80	35.62	31.19	34.09	37.47	32.58	32.29	24.50
17	29.36	34.52	34.91	38.71	42.78	51.88	53.46	47.61	45.64	43.74	36.88	24.51
18	23.97	31.04	36.02	38.47	44.75	45.94	37.92	34.52	38.06	38.37	34.91	26.36
19	29.57	34.94	36.51	44.17	45.74	45.41	44.83	46.99	47.63	44.06	37.73	26.99
20	25.78	31.14	33.52	36.66	37.65	37.51	36.75	36.77	38.60	39.16	34.86	26.19
Mean	27.69	32.18	33.53	36.97	40.23	41.83	41.20	40.21	39.53	37.43	34.66	25.18
s	3.45	3.94	3.70	4.07	4.62	6.66	8.76	8.53	9.30	8.40	4.36	1.42
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-6. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	0.49	0.38	0.23	0.05	2.15	3.22	5.19	9.80	15.53	15.56	15.98	19.66	23.08
12	-1.85	-1.34	-1.73	-1.54	-1.47	0.06	0.52	7.83	11.75	13.50	16.03	19.47	23.09
13	4.03	2.91	1.56	0.98	2.43	1.49	6.15	8.93	14.09	14.76	16.62	20.11	25.49
14	-0.85	-2.34	-3.82	-5.05	-4.59	-3.91	-0.80	3.40	6.37	8.75	9.70	12.92	16.04
15	0.98	2.89	3.59	4.65	5.21	8.24	5.77	11.33	15.16	16.06	18.85	24.32	30.23
16	2.12	2.27	2.02	1.83	1.56	2.39	1.81	7.91	12.43	13.53	13.72	16.99	20.37
17	-0.41	-0.22	0.01	0.42	2.11	3.61	5.00	11.66	17.04	18.49	22.55	28.19	33.07
18	0.17	-0.21	-0.08	0.01	1.42	2.55	4.07	10.82	16.28	17.24	20.03	24.06	29.57
19	5.44	4.61	3.95	4.74	5.90	5.25	7.17	11.53	15.29	18.28	18.62	23.36	27.82
20	-0.75	-1.06	-1.38	-1.68	-1.86	-1.26	1.04	7.77	9.90	12.07	13.70	19.32	23.52
Mean	0.94	0.79	0.43	0.44	1.29	2.16	3.59	9.10	13.38	14.82	16.58	20.84	25.23
s	2.30	2.25	2.42	2.93	3.19	3.39	2.73	2.54	3.31	3.00	3.67	4.30	5.08
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	27.45	30.99	34.57	37.89	41.92	46.18	49.06	48.67	47.09	44.49	40.67	29.59
12	26.17	31.69	33.23	38.13	42.30	45.05	43.99	40.79	36.84	35.20	34.66	27.09
13	30.00	35.19	35.76	39.59	46.40	51.90	51.85	49.09	47.02	44.11	40.64	29.47
14	20.98	28.63	31.40	34.84	40.00	42.16	44.02	40.69	41.13	37.61	34.46	26.76
15	33.93	38.56	39.92	43.39	46.92	49.29	52.52	53.65	50.24	46.84	42.12	27.94
16	25.84	28.23	31.28	33.37	38.39	42.15	42.89	43.02	43.62	41.10	39.19	28.39
17	33.17	35.21	34.94	37.54	39.69	40.97	42.25	44.40	42.34	41.18	39.15	26.84
18	35.90	40.03	40.53	43.20	47.66	52.41	50.59	51.52	49.79	47.01	42.38	32.34
19	34.35	38.00	40.02	44.56	48.38	50.59	51.42	51.59	47.91	45.59	41.69	30.55
20	27.18	29.13	32.79	34.32	38.94	41.29	42.32	42.30	43.76	44.08	39.74	30.74
Mean	29.50	33.57	35.44	38.68	43.06	46.20	47.09	46.57	44.97	42.72	39.47	28.97
s	4.77	4.40	3.55	3.97	3.90	4.54	4.34	4.88	4.21	3.92	2.82	1.88
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-6. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	0.17	-0.31	-0.22	0.53	2.98	2.88	6.30	9.76	16.51	17.76	17.17	19.57	23.48
12	-2.05	-1.29	-0.99	0.80	2.02	5.05	5.02	11.95	15.20	16.88	17.40	21.93	25.17
13	6.52	5.96	5.05	4.71	5.53	2.42	8.11	9.42	15.48	16.73	17.18	19.68	24.95
14	-0.77	-2.10	-3.33	-4.75	-5.02	-4.02	0.01	2.41	8.22	12.39	12.43	15.58	17.79
15	4.92	6.76	7.13	8.70	9.65	12.26	8.99	11.73	15.27	16.25	17.76	23.36	31.13
16	5.09	5.42	5.47	6.32	6.90	7.67	7.33	13.08	17.02	17.35	16.12	18.50	21.10
17	-0.41	-0.43	0.18	1.32	3.25	4.65	6.26	11.59	17.33	18.32	20.46	24.79	33.89
18	0.46	-0.18	0.09	0.77	1.72	2.47	4.15	9.91	15.94	16.71	20.01	23.62	27.85
19	1.30	1.05	1.72	3.28	4.55	3.51	5.66	10.31	14.53	17.44	17.76	22.68	27.57
20	-0.96	-1.23	-1.29	-1.76	-2.42	-1.05	0.56	6.69	10.79	12.09	14.02	20.21	24.23
Mean	1.43	1.37	1.38	1.99	2.92	3.58	5.24	9.68	14.63	16.19	17.03	20.99	25.72
s	2.98	3.35	3.40	3.91	4.27	4.44	2.97	3.11	2.90	2.17	2.42	2.80	4.67
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	28.00	30.45	33.15	36.68	43.05	47.74	48.98	48.59	46.99	46.22	44.11	32.38
12	29.09	34.87	37.52	41.81	46.99	50.83	49.82	48.11	44.36	40.17	39.12	31.09
13	28.55	36.60	37.37	41.50	46.80	50.93	50.16	48.27	48.40	47.47	43.67	32.89
14	21.05	28.52	32.86	36.44	42.42	44.64	45.50	41.92	40.89	37.22	33.30	27.74
15	33.33	37.42	39.07	41.42	43.30	45.93	49.79	53.37	51.17	47.52	43.39	31.25
16	27.35	29.79	33.95	36.43	43.01	47.11	45.80	46.64	48.09	47.53	46.00	32.36
17	35.13	35.30	34.38	36.68	40.41	44.36	46.85	48.40	44.81	42.68	42.52	29.40
18	34.72	40.88	42.07	43.60	47.42	51.19	47.95	51.56	51.68	50.40	46.43	35.77
19	32.79	36.52	38.92	42.71	47.94	49.14	47.56	49.79	49.22	48.40	46.09	33.42
20	29.19	28.89	32.46	36.01	39.76	41.74	43.56	43.45	43.63	46.66	43.92	34.19
Mean	29.92	33.92	36.17	39.33	44.11	47.36	47.60	48.01	46.93	45.43	42.86	32.05
s	4.24	4.23	3.27	3.10	2.98	3.21	2.18	3.41	3.46	4.10	3.97	2.32
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-6. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero HushKit™ using tight-fitting instructions - right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	0.80	1.08	0.67	-0.43	1.31	3.56	4.08	9.85	14.55	13.37	14.79	19.74	22.67
12	-1.64	-1.40	-2.46	-3.88	-4.97	-4.92	-3.98	3.72	8.30	10.11	14.66	17.01	21.01
13	1.54	-0.13	-1.93	-2.75	-0.68	0.55	4.19	8.44	12.70	12.79	16.06	20.55	26.03
14	-0.93	-2.59	-4.31	-5.35	-4.15	-3.81	-1.61	4.38	4.53	5.11	6.97	10.25	14.29
15	-2.96	-0.98	0.04	0.60	0.78	4.22	2.55	10.93	15.05	15.86	19.93	25.27	29.33
16	-0.85	-0.88	-1.44	-2.65	-3.78	-2.88	-3.72	2.75	7.84	9.72	11.31	15.48	19.64
17	-0.41	-0.02	-0.15	-0.48	0.96	2.57	3.74	11.73	16.76	18.65	24.64	31.59	32.24
18	-0.11	-0.24	-0.25	-0.75	1.13	2.63	3.98	11.73	16.63	17.77	20.06	24.49	31.29
19	9.57	8.16	6.17	6.19	7.25	6.99	8.68	12.76	16.05	19.12	19.49	24.04	28.07
20	-0.53	-0.88	-1.46	-1.61	-1.30	-1.47	1.52	8.85	9.01	12.06	13.37	18.42	22.80
Mean	0.45	0.21	-0.51	-1.11	-0.34	0.74	1.94	8.51	12.14	13.46	16.13	20.68	24.74
s	3.43	2.95	2.76	3.13	3.56	3.90	3.98	3.65	4.38	4.48	5.08	5.97	5.68
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	26.89	31.52	35.98	39.11	40.78	44.61	49.14	48.75	47.18	42.75	37.23	26.80
12	23.25	28.51	28.95	34.44	37.60	39.28	38.15	33.47	29.31	30.24	30.20	23.09
13	31.45	33.78	34.15	37.69	46.00	52.87	53.55	49.91	45.64	40.76	37.61	26.06
14	20.92	28.75	29.95	33.24	37.59	39.68	42.54	39.46	41.38	38.00	35.63	25.78
15	34.53	39.70	40.77	45.37	50.54	52.66	55.26	53.93	49.31	46.15	40.85	24.62
16	24.33	26.68	28.61	30.31	33.76	37.20	39.98	39.40	39.15	34.68	32.38	24.43
17	31.22	35.12	35.51	38.39	38.97	37.57	37.65	40.41	39.86	39.68	35.79	24.29
18	37.09	39.18	39.00	42.80	47.90	53.63	53.22	51.48	47.89	43.62	38.33	28.90
19	35.90	39.47	41.12	46.40	48.81	52.03	55.28	53.39	46.59	42.79	37.29	27.68
20	25.17	29.37	33.12	32.62	38.13	40.84	41.09	41.15	43.89	41.50	35.55	27.28
Mean	29.07	33.21	34.71	38.04	42.01	45.04	46.59	45.13	43.02	40.02	36.09	25.89
s	5.71	4.98	4.65	5.50	5.80	6.98	7.38	7.16	5.93	4.68	3.01	1.80
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-7. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ with tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	3.65	4.36	4.51	4.48	5.29	7.05	7.78	11.42	16.44	17.79	19.95	23.38	25.95
12	0.81	-0.30	-0.55	-0.03	1.40	1.74	4.53	10.88	15.99	17.88	19.77	23.11	24.37
13	0.05	-0.85	-1.93	-2.60	-2.06	-2.93	1.31	6.35	11.28	13.24	15.89	19.88	25.41
14	0.07	-0.88	-1.62	-2.20	-2.52	-2.79	-0.56	6.69	12.29	15.44	16.82	20.67	25.52
15	4.53	4.72	4.75	5.00	5.32	6.77	5.96	10.24	14.16	16.43	19.39	23.30	28.41
16	4.84	4.40	4.08	3.96	5.06	5.20	6.10	10.82	16.15	19.51	20.83	25.24	26.69
17	-0.47	-0.28	-0.44	-0.38	0.25	0.93	0.54	5.48	10.66	12.32	14.30	17.88	19.77
18	-2.43	-0.23	0.29	0.77	1.33	5.60	3.28	9.44	12.91	14.26	19.67	24.15	26.89
19	-1.93	-0.44	-0.28	-0.33	-0.73	2.86	1.14	5.45	9.37	13.33	13.43	17.53	21.81
20	-0.50	-0.51	-0.19	0.53	1.27	2.47	5.20	11.94	13.85	15.81	18.15	22.32	26.28
Mean	0.86	1.00	0.86	0.92	1.46	2.69	3.53	8.87	13.31	15.60	17.82	21.75	25.11
s	2.60	2.42	2.56	2.69	2.93	3.59	2.80	2.59	2.45	2.34	2.58	2.64	2.56
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	31.77	34.44	35.05	39.18	45.45	48.56	50.53	51.02	49.11	46.36	41.25	29.59
12	31.64	38.26	39.30	42.60	46.06	48.74	49.36	50.94	44.92	42.44	38.98	28.43
13	30.48	35.74	37.79	40.26	44.49	50.23	50.99	48.87	47.28	44.74	41.06	30.16
14	27.91	33.24	37.07	41.39	46.90	48.37	48.94	49.49	47.07	44.70	37.83	26.81
15	35.36	40.36	40.11	45.81	49.79	51.73	53.72	53.57	50.00	48.06	42.80	29.21
16	28.95	29.95	34.10	39.18	41.00	46.44	48.87	45.09	43.27	42.82	40.04	28.39
17	19.69	23.28	26.02	31.65	34.88	41.09	46.35	45.88	42.22	38.51	39.51	28.64
18	32.35	36.41	37.18	41.96	49.43	52.48	52.23	51.05	49.63	46.23	41.23	30.75
19	28.84	35.58	36.94	39.35	45.46	46.88	45.96	47.15	48.04	46.89	41.98	30.87
20	29.25	33.24	35.56	37.22	42.01	46.84	48.41	47.16	47.01	47.40	41.04	30.51
Mean	29.62	34.05	35.91	39.86	44.55	48.14	49.54	49.02	46.85	44.82	40.57	29.34
s	4.12	4.75	3.93	3.73	4.39	3.21	2.42	2.69	2.63	2.89	1.48	1.29
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-7. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ with tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	7.41	8.09	8.46	8.67	8.87	9.99	10.56	13.18	18.14	19.44	20.57	24.04	27.08
12	0.50	-0.79	-0.88	-0.07	1.20	0.82	3.93	9.51	15.33	17.69	17.82	21.34	22.66
13	-0.23	-1.26	-2.47	-3.64	-4.19	-6.72	-1.18	1.75	8.33	11.79	13.75	17.45	22.94
14	0.30	-0.45	-0.71	-1.21	-1.28	-1.38	2.88	8.28	15.40	18.79	20.75	23.97	26.58
15	10.41	10.63	10.35	10.37	10.19	10.87	9.48	12.22	16.50	18.70	21.99	25.28	30.25
16	8.99	8.46	8.29	8.40	8.61	8.21	8.06	12.94	18.86	22.72	25.39	31.20	29.07
17	-0.30	-0.15	0.25	1.01	2.67	3.54	4.56	7.99	13.98	16.22	17.83	23.14	28.57
18	-2.45	-0.20	0.54	1.21	1.44	6.74	2.86	7.62	11.73	12.68	16.11	20.17	23.76
19	-2.42	-1.12	-1.18	-1.35	-2.50	1.56	-0.46	2.87	8.39	13.25	12.71	17.80	21.80
20	0.06	0.23	0.76	1.39	1.76	3.41	5.70	12.60	15.74	17.53	19.26	23.89	25.57
Mean	2.23	2.34	2.34	2.48	2.68	3.70	4.64	8.90	14.24	16.88	18.62	22.83	25.83
s	4.79	4.70	4.74	4.86	4.99	5.46	3.92	4.08	3.68	3.43	3.83	3.99	2.96
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	31.91	33.82	34.76	38.09	47.49	52.20	51.82	51.41	49.13	49.11	44.98	32.00
12	30.53	37.02	39.59	42.02	45.84	48.30	47.36	50.49	44.06	44.98	43.88	32.77
13	27.08	33.58	37.55	40.38	44.12	49.17	49.51	47.36	48.03	48.40	44.38	34.08
14	26.85	32.58	36.89	39.88	45.41	48.58	48.69	49.03	47.05	47.83	40.81	28.99
15	35.99	41.75	41.39	46.88	50.16	52.19	53.00	53.35	51.41	48.50	45.42	33.66
16	28.76	30.32	33.66	38.76	43.42	46.98	49.71	42.85	41.22	45.38	44.33	32.43
17	27.49	28.11	30.09	35.46	37.14	41.18	45.13	50.65	47.86	45.04	43.98	32.05
18	29.76	35.16	38.48	43.05	49.33	51.18	51.54	51.63	51.91	50.52	45.87	33.81
19	27.51	32.52	36.15	39.49	47.21	49.12	47.15	46.67	48.35	49.31	46.04	34.07
20	29.31	34.18	38.98	42.74	45.69	50.29	50.88	50.26	48.68	50.39	44.95	33.74
Mean	29.52	33.90	36.75	40.67	45.58	48.92	49.48	49.37	47.77	47.94	44.46	32.76
s	2.80	3.70	3.27	3.16	3.64	3.21	2.44	3.03	3.17	2.11	1.49	1.55
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-7. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ and HushKit™ with tight-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-0.12	0.63	0.57	0.29	1.70	4.10	5.00	9.66	14.73	16.15	19.32	22.72	24.81
12	1.12	0.19	-0.22	0.02	1.60	2.67	5.12	12.24	16.64	18.07	21.72	24.87	26.09
13	0.34	-0.44	-1.39	-1.56	0.06	0.87	3.81	10.96	14.22	14.69	18.02	22.31	27.88
14	-0.17	-1.31	-2.53	-3.18	-3.77	-4.20	-4.00	5.10	9.17	12.09	12.89	17.36	24.46
15	-1.35	-1.19	-0.85	-0.36	0.46	2.67	2.44	8.27	11.82	14.15	16.79	21.31	26.56
16	0.69	0.33	-0.13	-0.48	1.51	2.18	4.15	8.69	13.44	16.30	16.28	19.28	24.30
17	-0.63	-0.41	-1.13	-1.77	-2.17	-1.68	-3.47	2.97	7.34	8.43	10.77	12.62	10.97
18	-2.42	-0.26	0.05	0.32	1.22	4.46	3.71	11.26	14.09	15.84	23.23	28.12	30.03
19	-1.45	0.25	0.62	0.70	1.05	4.16	2.73	8.03	10.34	13.41	14.16	17.27	21.82
20	-1.06	-1.25	-1.14	-0.32	0.78	1.52	4.70	11.29	11.97	14.09	17.04	20.76	26.98
Mean	-0.50	-0.35	-0.62	-0.63	0.24	1.67	2.42	8.85	12.38	14.32	17.02	20.66	24.39
s	1.09	0.71	0.98	1.19	1.81	2.76	3.36	2.94	2.82	2.67	3.83	4.34	5.22
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	31.63	35.06	35.33	40.27	43.42	44.92	49.25	50.62	49.09	43.61	37.52	27.17
12	32.76	39.50	39.01	43.18	46.28	49.18	51.36	51.40	45.78	39.91	34.08	24.10
13	33.88	37.91	38.03	40.15	44.85	51.29	52.46	50.37	46.53	41.08	37.75	26.25
14	28.96	33.90	37.26	42.90	48.39	48.16	49.19	49.95	47.09	41.56	34.85	24.62
15	34.72	38.98	38.83	44.73	49.42	51.27	54.44	53.79	48.59	47.63	40.18	24.76
16	29.14	29.57	34.54	39.60	38.58	45.90	48.03	47.32	45.31	40.26	35.75	24.35
17	11.90	18.45	21.95	27.84	32.62	41.00	47.58	41.10	36.58	31.98	35.04	25.23
18	34.93	37.65	35.87	40.87	49.53	53.78	52.92	50.47	47.36	41.94	36.60	27.69
19	30.17	38.63	37.72	39.21	43.70	44.63	44.78	47.64	47.73	44.48	37.91	27.67
20	29.19	32.30	32.14	31.70	38.33	43.39	45.94	44.05	45.35	44.41	37.12	27.27
Mean	29.73	34.20	35.07	39.04	43.51	47.35	49.59	48.67	45.94	41.69	36.68	25.91
s	6.68	6.41	5.08	5.27	5.52	4.05	3.15	3.75	3.53	4.14	1.81	1.45
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-8. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ with tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	1.33	1.87	1.80	1.40	0.30	1.29	-0.47	2.88	7.25	7.82	9.66	14.25	18.09
12	2.25	1.65	1.43	1.72	1.89	1.21	2.01	7.65	10.09	10.08	12.70	15.15	18.04
13	1.30	1.26	1.09	1.08	1.48	1.45	2.86	7.92	9.40	10.51	14.10	18.01	21.03
14	-1.90	-1.49	-2.20	-2.82	-4.61	-3.33	-4.81	1.34	4.31	7.61	8.36	13.41	17.63
15	-5.16	-5.02	-4.35	-4.59	-4.69	-4.49	-5.67	-1.73	1.55	1.59	4.52	7.06	9.56
16	0.88	1.14	1.40	1.28	0.55	1.78	-0.34	3.43	6.47	8.57	10.38	13.41	15.76
17	3.88	2.95	2.75	2.76	3.00	2.14	3.27	7.96	11.25	10.68	12.64	15.25	17.13
18	3.28	3.54	2.98	2.72	3.38	3.77	2.92	8.11	9.77	10.49	13.78	17.48	20.37
19	0.81	0.92	1.22	1.35	1.33	1.88	2.00	5.83	9.17	9.55	11.84	15.01	18.01
20	1.42	2.49	3.05	3.76	4.30	6.12	5.08	10.71	11.91	13.57	15.20	19.66	22.96
Mean	0.81	0.93	0.92	0.86	0.69	1.18	0.68	5.41	8.12	9.05	11.32	14.87	17.86
s	2.61	2.50	2.38	2.59	3.08	3.08	3.53	3.82	3.24	3.13	3.19	3.42	3.60
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	23.69	29.86	32.10	33.55	37.98	43.07	45.82	44.76	43.48	42.37	39.70	29.61
12	24.51	29.88	31.61	34.39	40.26	44.22	47.27	50.08	47.88	43.98	40.17	27.06
13	26.40	32.25	32.82	35.23	43.76	49.83	48.17	47.78	46.94	44.50	40.89	29.46
14	20.89	26.65	29.76	33.45	37.57	40.12	40.70	41.03	40.21	41.05	38.04	28.08
15	16.06	18.93	20.02	24.58	31.68	35.82	41.18	41.80	39.02	37.28	32.66	21.10
16	19.07	22.17	25.37	28.46	31.49	39.75	38.28	40.49	42.08	43.47	40.19	27.93
17	20.61	21.08	22.73	29.10	32.57	37.06	36.99	36.35	32.90	34.11	34.99	26.43
18	27.64	33.85	35.60	38.35	45.97	52.19	49.34	48.93	49.84	46.85	42.04	31.68
19	25.64	30.27	31.67	35.83	42.91	47.01	48.92	49.21	44.54	43.92	40.95	28.13
20	27.15	27.77	29.11	32.71	39.32	45.49	47.66	45.80	45.27	46.46	40.54	30.27
Mean	23.16	27.27	29.08	32.57	38.35	43.46	44.43	44.62	43.21	42.40	39.02	27.97
s	3.85	5.00	4.89	4.07	5.15	5.36	4.67	4.56	4.94	3.99	2.97	2.87
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-8. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ with tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-1.29	-1.09	-1.24	-1.93	-3.95	-3.08	-4.79	-2.62	2.58	4.56	5.42	8.74	13.06
12	4.81	4.61	4.84	5.83	6.32	5.22	6.27	9.60	12.12	11.78	13.77	16.79	17.78
13	2.89	3.12	3.38	3.61	3.73	2.86	4.28	6.33	7.65	9.96	13.45	17.27	19.44
14	-1.95	-1.36	-1.94	-2.83	-5.04	-3.19	-4.39	0.03	5.07	10.82	9.86	16.18	18.30
15	-5.08	-5.37	-4.38	-4.09	-3.98	-4.04	-5.11	-2.82	1.06	1.76	3.68	6.20	9.26
16	3.20	3.68	4.18	4.83	4.70	5.26	3.33	6.62	10.50	13.16	15.29	17.58	19.38
17	4.50	3.42	3.46	3.82	3.82	1.17	4.22	7.28	11.39	11.33	12.96	17.47	21.20
18	3.53	3.64	3.29	3.63	4.37	4.38	3.36	7.41	9.86	11.58	14.17	18.40	20.44
19	2.19	2.65	3.40	3.95	4.09	4.56	4.47	6.37	9.58	10.34	11.33	13.71	16.75
20	0.98	1.66	2.09	2.79	3.32	5.80	4.28	8.86	11.21	13.27	14.30	19.95	22.68
Mean	1.38	1.50	1.71	1.96	1.74	1.89	1.59	4.71	8.10	9.86	11.42	15.23	17.83
s	3.21	3.14	3.10	3.52	4.27	3.92	4.46	4.67	3.90	3.74	3.96	4.43	4.00
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	19.06	26.20	27.54	28.11	35.40	40.12	40.03	40.28	37.59	39.57	40.56	31.87
12	23.52	30.86	34.00	34.78	40.97	43.78	47.14	51.95	49.38	48.01	45.14	31.11
13	23.19	31.63	33.35	36.68	43.58	48.85	46.71	47.11	48.70	48.17	43.67	32.81
14	20.31	25.88	30.51	35.82	38.62	40.48	40.55	42.05	41.90	41.48	40.05	30.81
15	12.82	17.35	19.07	24.40	32.22	37.43	40.17	40.68	38.64	37.46	33.81	24.51
16	23.27	27.68	30.71	32.09	34.80	43.21	44.93	47.26	48.98	47.80	44.95	31.86
17	24.81	25.12	25.86	29.79	35.66	43.81	47.49	51.97	45.29	43.91	42.56	30.51
18	25.58	30.05	31.83	34.82	41.57	50.08	47.05	47.26	52.05	51.07	45.99	35.29
19	24.48	29.83	33.61	35.87	42.65	46.99	48.79	49.64	49.07	46.97	44.05	30.50
20	26.42	26.45	28.60	33.75	41.25	47.87	50.54	48.14	46.80	49.37	43.98	33.33
Mean	22.35	27.10	29.51	32.61	38.67	44.26	45.34	46.63	45.84	45.38	42.48	31.26
s	4.03	4.12	4.55	4.00	3.90	4.15	3.80	4.29	4.90	4.54	3.60	2.80
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-8. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal/HushKit Combo™ with tight-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	3.94	4.84	4.84	4.72	4.55	5.67	3.85	8.38	11.91	11.07	13.91	19.76	23.12
12	-0.31	-1.30	-1.97	-2.39	-2.54	-2.80	-2.25	5.69	8.06	8.37	11.63	13.51	18.29
13	-0.28	-0.60	-1.19	-1.46	-0.77	0.04	1.44	9.51	11.15	11.05	14.75	18.75	22.62
14	-1.85	-1.62	-2.46	-2.82	-4.18	-3.47	-5.24	2.65	3.56	4.40	6.87	10.63	16.96
15	-5.23	-4.67	-4.32	-5.08	-5.40	-4.94	-6.24	-0.64	2.04	1.43	5.35	7.93	9.85
16	-1.45	-1.41	-1.38	-2.28	-3.60	-1.70	-4.01	0.24	2.43	3.98	5.48	9.24	12.14
17	3.27	2.48	2.04	1.69	2.19	3.10	2.33	8.64	11.11	10.03	12.32	13.03	13.06
18	3.03	3.44	2.66	1.82	2.40	3.15	2.47	8.81	9.68	9.39	13.38	16.56	20.30
19	-0.57	-0.81	-0.96	-1.26	-1.42	-0.80	-0.47	5.29	8.77	8.75	12.35	16.31	19.28
20	1.86	3.31	4.00	4.73	5.27	6.43	5.88	12.55	12.62	13.87	16.10	19.36	23.25
Mean	0.24	0.37	0.13	-0.23	-0.35	0.47	-0.22	6.11	8.13	8.23	11.21	14.51	17.89
s	2.82	2.98	3.04	3.31	3.75	3.93	4.09	4.28	4.02	3.82	3.90	4.29	4.81
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	28.31	33.52	36.65	38.99	40.56	46.03	51.61	49.25	49.38	45.18	38.83	27.35
12	25.50	28.89	29.22	34.01	39.55	44.67	47.41	48.21	46.37	39.96	35.20	23.00
13	29.61	32.88	32.29	33.79	43.94	50.80	49.62	48.45	45.17	40.82	38.10	26.10
14	21.47	27.42	29.02	31.07	36.52	39.76	40.86	40.00	38.52	40.63	36.02	25.35
15	19.30	20.51	20.97	24.76	31.14	34.20	42.20	42.91	39.41	37.10	31.52	17.69
16	14.86	16.65	20.03	24.83	28.18	36.30	31.64	33.72	35.19	39.14	35.42	24.00
17	16.40	17.05	19.61	28.42	29.48	30.31	26.48	20.73	20.50	24.30	27.42	22.35
18	29.69	37.65	39.38	41.88	50.36	54.29	51.63	50.61	47.63	42.63	38.10	28.06
19	26.79	30.72	29.74	35.78	43.16	47.03	49.05	48.78	40.00	40.88	37.86	25.76
20	27.89	29.08	29.61	31.67	37.38	43.11	44.79	43.46	43.74	43.55	37.10	27.20
Mean	23.98	27.44	28.65	32.52	38.03	42.65	43.53	42.61	40.59	39.42	35.56	24.69
s	5.55	7.14	6.75	5.61	7.01	7.52	8.54	9.29	8.37	5.78	3.56	3.09
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-9. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ (without HushKit™) with tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-2.79	-2.55	-3.30	-4.18	-5.34	-2.44	-2.31	2.65	8.07	12.53	15.00	20.70	23.16
12	-1.41	-1.92	-3.30	-4.65	-6.09	-5.69	-4.81	2.17	6.94	11.44	14.85	18.40	21.62
13	-0.18	-1.66	-4.07	-5.89	-6.10	-8.32	-4.15	2.48	8.54	12.00	16.95	18.88	22.31
14	-2.10	-2.04	-3.11	-4.44	-6.56	-5.65	-7.09	-0.28	5.33	11.55	14.12	19.28	23.07
15	-2.04	-1.74	-2.65	-3.56	-5.32	-3.62	-4.29	1.25	5.95	9.02	12.45	17.23	21.77
16	-0.65	-1.66	-2.68	-3.88	-5.76	-6.12	-6.05	0.29	6.11	11.31	13.36	16.59	19.62
17	-1.16	-1.66	-2.98	-3.58	-2.55	-1.59	-0.08	5.61	11.27	14.35	17.27	21.23	24.82
18	0.29	-1.71	-3.77	-5.43	-5.25	-6.58	-1.40	4.40	9.74	13.48	17.83	21.26	26.67
19	-1.58	-1.40	-2.46	-2.61	-2.76	-1.97	-1.70	3.51	8.26	13.01	14.35	17.57	19.83
20	-1.54	-2.20	-3.24	-3.68	-2.79	-1.23	0.65	8.13	11.26	13.84	17.12	21.00	24.95
Mean	-1.32	-1.85	-3.16	-4.19	-4.85	-4.32	-3.12	3.02	8.15	12.25	15.33	19.21	22.78
s	0.93	0.33	0.50	0.96	1.54	2.46	2.55	2.53	2.12	1.55	1.85	1.76	2.25
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	28.78	33.65	36.22	38.83	43.78	46.51	48.56	48.84	48.26	45.92	40.84	29.62
12	25.60	30.25	32.81	39.27	42.71	46.83	46.37	46.76	41.33	41.14	40.57	28.95
13	28.51	34.03	34.01	36.11	40.15	45.35	47.18	45.88	45.62	44.29	40.39	29.65
14	26.28	32.46	37.07	42.48	43.69	43.63	45.73	43.94	43.65	43.63	39.54	28.22
15	27.97	33.68	34.56	39.58	44.90	46.43	51.61	52.83	49.36	46.75	42.03	28.21
16	26.45	28.80	31.22	33.21	36.25	39.31	40.28	40.11	41.54	41.13	39.49	28.21
17	28.80	32.24	32.98	35.14	40.00	42.99	46.92	46.39	43.64	42.06	39.46	26.68
18	32.10	35.19	34.09	37.14	42.38	47.35	48.13	49.17	47.26	45.55	41.56	31.02
19	25.14	31.41	33.53	35.60	40.89	44.14	43.04	43.67	47.11	46.38	41.76	31.04
20	29.71	31.27	33.44	36.23	38.81	42.88	46.52	43.86	44.07	45.84	39.93	30.18
Mean	27.93	32.30	33.99	37.36	41.35	44.54	46.43	46.14	45.18	44.27	40.56	29.18
s	2.12	1.93	1.68	2.69	2.64	2.47	3.07	3.56	2.77	2.17	0.97	1.39
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-9. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ (without HushKit™) with tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-2.33	-1.94	-2.49	-3.52	-6.17	-4.21	-4.99	-1.31	5.66	11.65	13.12	17.90	20.45
12	-1.11	-1.48	-2.85	-4.00	-5.12	-4.10	-2.77	3.35	7.99	13.05	16.28	19.24	20.92
13	0.11	-1.30	-3.61	-5.32	-5.52	-9.56	-3.88	0.01	6.92	11.86	16.67	17.10	20.28
14	-2.16	-2.02	-3.01	-4.57	-7.12	-5.40	-5.48	-0.34	6.70	14.72	15.91	21.25	22.78
15	-2.05	-1.61	-2.46	-3.20	-4.22	-2.12	-2.62	1.31	6.92	10.37	12.12	16.79	23.14
16	-0.61	-1.49	-2.27	-3.42	-5.89	-6.49	-7.21	-1.48	5.34	11.56	12.72	15.42	17.42
17	-1.16	-1.86	-3.37	-4.23	-3.88	-4.20	-0.82	3.69	10.14	14.63	16.96	20.83	25.15
18	0.54	-1.36	-3.09	-4.80	-5.68	-7.89	-3.92	2.31	8.21	12.36	17.34	21.60	24.63
19	-1.46	-1.18	-2.21	-1.86	-1.20	0.13	0.42	3.88	9.25	15.19	14.94	17.94	20.73
20	-1.19	-1.77	-2.64	-2.93	-1.17	1.03	3.01	9.05	12.59	15.96	18.03	22.15	26.84
Mean	-1.14	-1.60	-2.80	-3.78	-4.60	-4.28	-2.83	2.05	7.97	13.14	15.41	19.02	22.23
s	0.95	0.29	0.47	1.01	2.02	3.32	3.02	3.18	2.21	1.87	2.08	2.33	2.80
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	26.25	31.45	33.01	33.34	40.25	44.07	46.05	47.02	47.64	47.65	44.26	32.43
12	26.25	29.45	29.63	35.10	40.31	47.81	46.10	51.79	44.57	44.68	46.73	33.95
13	24.93	30.67	33.06	37.25	40.42	45.78	48.38	45.31	45.73	47.73	43.59	33.29
14	22.40	30.04	36.11	41.74	42.04	42.45	42.54	42.95	44.86	47.42	42.53	30.12
15	27.95	33.46	34.68	36.85	42.97	43.46	48.79	50.77	49.17	46.86	43.13	31.25
16	22.45	27.89	31.76	34.59	36.45	42.23	42.96	41.46	42.99	45.25	44.61	32.06
17	29.44	32.01	32.40	33.76	37.95	39.88	48.05	49.87	48.13	44.82	42.28	28.26
18	28.53	29.14	32.41	36.53	41.57	46.47	47.27	48.75	48.31	48.68	45.56	34.43
19	25.74	33.21	35.54	35.12	44.29	44.06	41.67	41.07	47.50	49.44	45.85	34.57
20	33.61	31.44	34.06	36.58	39.32	43.53	48.61	46.54	44.50	47.75	43.08	33.21
Mean	26.76	30.88	33.27	36.09	40.56	43.98	46.04	46.55	46.34	47.03	44.16	32.36
s	3.35	1.79	1.91	2.39	2.32	2.28	2.71	3.83	2.07	1.62	1.51	2.01
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-9. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero SoftSeal™ (without HushKit™) with tight-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-3.24	-3.17	-4.11	-4.84	-4.52	-0.66	0.38	6.62	10.48	13.41	16.87	23.50	25.87
12	-1.72	-2.35	-3.76	-5.31	-7.06	-7.28	-6.85	0.99	5.89	9.84	13.42	17.56	22.32
13	-0.48	-2.02	-4.52	-6.46	-6.68	-7.09	-4.41	4.96	10.16	12.15	17.23	20.65	24.34
14	-2.05	-2.05	-3.22	-4.31	-6.01	-5.89	-8.69	-0.22	3.95	8.37	12.33	17.31	23.35
15	-2.03	-1.86	-2.85	-3.92	-6.43	-5.12	-5.96	1.19	4.99	7.67	12.78	17.67	20.41
16	-0.70	-1.83	-3.10	-4.34	-5.63	-5.76	-4.89	2.05	6.88	11.06	14.00	17.76	21.82
17	-1.15	-1.46	-2.59	-2.92	-1.23	1.02	0.65	7.53	12.39	14.07	17.58	21.63	24.49
18	0.03	-2.06	-4.44	-6.07	-4.81	-5.28	1.13	6.48	11.26	14.60	18.31	20.92	28.72
19	-1.71	-1.62	-2.72	-3.36	-4.32	-4.07	-3.82	3.13	7.26	10.82	13.77	17.19	18.93
20	-1.89	-2.63	-3.84	-4.42	-4.40	-3.48	-1.70	7.21	9.92	11.72	16.20	19.86	23.06
Mean	-1.49	-2.10	-3.51	-4.60	-5.11	-4.36	-3.42	3.99	8.32	11.37	15.25	19.40	23.33
s	0.94	0.50	0.71	1.11	1.69	2.69	3.40	2.90	2.89	2.31	2.21	2.22	2.77
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	31.31	35.85	39.43	44.32	47.31	48.94	51.08	50.66	48.88	44.19	37.42	26.82
12	24.95	31.04	35.99	43.45	45.12	45.84	46.64	41.73	38.08	37.60	34.40	23.95
13	32.08	37.39	34.96	34.96	39.88	44.92	45.98	46.46	45.50	40.86	37.19	26.00
14	30.16	34.88	38.02	43.23	45.34	44.82	48.93	44.93	42.43	39.84	36.56	26.31
15	27.99	33.90	34.45	42.30	46.84	49.39	54.43	54.89	49.55	46.63	40.94	25.17
16	30.45	29.70	30.68	31.82	36.04	36.38	37.60	38.76	40.09	37.01	34.37	24.36
17	28.15	32.47	33.57	36.51	42.05	46.09	45.79	42.91	39.16	39.30	36.65	25.10
18	35.68	41.24	35.76	37.76	43.18	48.23	48.99	49.60	46.21	42.42	37.56	27.61
19	24.54	29.60	31.53	36.09	37.49	44.21	44.40	46.27	46.71	43.32	37.66	27.52
20	25.81	31.10	32.82	35.88	38.29	42.23	44.43	41.18	43.63	43.93	36.78	27.14
Mean	29.11	33.72	34.72	38.63	42.15	45.10	46.83	45.74	44.02	41.51	36.95	26.00
s	3.51	3.72	2.73	4.34	4.05	3.79	4.52	4.92	4.02	3.11	1.84	1.31
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-10. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ (replacement ear cups with HushKit™) with tight-fitting instructions.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-0.30	-1.07	-1.39	-2.05	-3.19	-2.50	-2.79	1.21	4.32	5.10	7.15	9.67	11.41
12	0.33	1.23	1.13	1.58	1.69	2.91	1.26	5.40	7.42	8.56	12.33	15.61	17.54
13	-1.13	-1.80	-2.88	-4.15	-4.44	-4.77	-4.22	0.00	3.08	5.25	8.99	12.23	15.67
14	-1.94	-2.06	-3.58	-3.66	-0.95	-0.61	-2.30	4.42	7.07	10.09	11.23	15.11	19.06
15	2.19	3.42	3.90	4.27	4.31	5.64	3.54	6.39	8.58	9.22	12.60	14.92	17.25
16	-1.97	-1.17	-1.12	-1.49	-3.13	-0.84	-3.55	0.78	2.83	4.16	6.48	9.15	10.89
17	2.63	3.34	3.64	3.54	4.31	4.90	5.04	8.50	9.07	8.96	12.24	15.15	17.06
18	2.27	3.28	3.20	3.28	3.29	4.11	4.15	8.22	9.36	10.61	13.99	16.87	19.63
19	-0.02	-0.77	-1.58	-1.88	-2.42	-2.73	-2.52	3.21	6.25	5.59	8.22	11.01	11.85
20	0.83	1.77	2.36	3.11	4.20	6.05	5.57	9.87	9.89	11.64	14.15	20.04	24.81
Mean	0.29	0.62	0.37	0.26	0.37	1.22	0.42	4.80	6.79	7.92	10.74	13.98	16.52
s	1.69	2.24	2.81	3.22	3.55	3.95	3.89	3.48	2.60	2.66	2.81	3.42	4.31
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	15.67	20.40	24.21	29.45	37.78	38.91	34.31	31.72	31.99	30.48	33.51	28.54
12	23.03	27.95	30.84	30.23	31.38	34.84	38.81	32.11	29.58	31.08	31.34	26.74
13	20.25	26.04	31.04	35.04	41.82	44.09	41.08	40.79	42.33	41.71	39.12	29.97
14	24.86	32.12	37.42	39.03	41.26	44.75	45.55	44.89	44.68	42.43	39.19	28.05
15	25.27	30.34	31.59	35.46	40.59	44.59	47.38	46.66	47.58	47.01	42.79	30.04
16	15.17	18.39	22.38	26.94	31.88	29.86	27.18	30.48	32.35	30.97	30.79	25.79
17	23.90	26.43	28.13	29.63	33.74	38.14	37.97	36.19	31.96	33.25	34.42	25.85
18	27.27	33.69	35.35	40.00	46.38	50.50	50.27	49.91	48.92	46.18	41.39	31.56
19	18.30	26.63	30.74	34.45	35.81	35.84	32.08	31.07	22.97	24.34	26.39	20.46
20	31.65	34.99	36.02	36.75	41.51	47.36	49.50	48.73	46.36	45.54	40.93	30.81
Mean	22.54	27.70	30.77	33.70	38.21	40.89	40.41	39.26	37.87	37.30	35.99	27.78
s	5.21	5.38	4.88	4.41	4.92	6.40	7.78	7.84	9.10	8.14	5.47	3.27
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-10. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ (replacement ear cups with HushKit™) with tight-fitting instructions – left ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-0.07	-0.86	-1.34	-1.57	-2.15	-2.33	-1.49	1.15	4.42	5.54	7.50	9.46	11.81
12	1.81	2.81	3.49	5.13	5.96	7.95	6.02	9.49	10.69	11.13	13.63	17.66	19.09
13	-1.04	-1.55	-2.41	-3.56	-3.86	-5.07	-1.95	-1.43	2.70	7.00	10.02	13.07	16.63
14	-1.75	-1.77	-3.18	-3.76	-2.01	-1.30	-2.92	0.83	5.52	12.22	12.53	17.51	20.78
15	1.33	1.93	2.76	3.91	4.25	5.93	3.19	4.95	7.88	9.62	12.40	14.42	16.57
16	-1.79	-0.91	-0.90	-0.98	-2.45	-0.03	-3.10	0.79	2.93	4.69	6.51	8.51	10.17
17	2.80	2.79	3.32	3.91	4.72	5.09	6.17	7.97	7.85	8.04	11.17	14.97	16.69
18	2.06	2.88	3.01	3.43	3.10	4.05	2.22	6.14	8.15	10.50	13.74	18.08	19.76
19	0.46	-0.48	-1.80	-2.40	-2.89	-4.17	-2.74	1.54	3.73	3.90	6.64	9.44	10.66
20	0.77	1.42	1.63	2.14	3.44	6.11	5.36	8.93	10.29	12.31	14.03	20.15	23.73
Mean	0.46	0.63	0.46	0.62	0.81	1.62	1.08	4.04	6.42	8.49	10.82	14.33	16.59
s	1.61	1.92	2.63	3.42	3.78	4.74	3.92	3.94	2.95	3.12	2.98	4.12	4.52
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	16.28	21.30	23.39	30.24	37.74	38.06	34.34	40.07	38.61	36.87	35.97	30.03
12	24.96	31.33	37.15	40.37	44.36	49.23	49.21	45.45	38.41	40.77	39.77	31.81
13	21.17	26.97	31.34	34.14	40.02	43.72	43.36	41.30	42.76	43.49	41.91	33.38
14	24.46	29.41	34.02	35.39	36.68	39.36	39.25	41.34	43.04	42.78	41.27	30.79
15	21.86	28.43	29.92	32.78	37.55	41.02	40.30	39.33	45.78	46.97	43.67	33.28
16	15.20	19.15	22.38	27.49	32.87	29.04	25.05	30.91	31.61	31.76	32.54	28.47
17	23.43	26.96	29.58	32.34	39.37	44.87	45.18	44.95	41.86	42.27	42.99	30.06
18	25.03	32.92	36.49	40.46	47.23	49.83	48.24	50.73	51.26	50.33	45.30	35.05
19	15.50	23.17	28.34	32.76	35.10	33.50	30.20	27.63	20.80	20.56	21.44	15.30
20	31.12	34.50	36.86	38.94	43.28	48.07	50.23	50.63	46.60	48.22	44.98	33.75
Mean	21.90	27.41	30.95	34.49	39.42	41.67	40.54	41.23	40.07	40.40	38.99	30.19
s	5.07	5.00	5.31	4.33	4.42	6.86	8.47	7.50	8.61	8.83	7.35	5.61
n	10	10	10	10	10	10	10	10	10	10	10	10

Table D-10. Summary results for ANSI S12.42-1995 (R1999) Microphone-in-Real-Ear evaluations of the HGU-84/P Rotary Wing Helmet System with Oregon Aero custom SoftSeal/HushKit Combo™ (replacement ear cups with HushKit™) with tight-fitting instructions – right ear only.

	Third-octave band center frequency (Hz)												
Subject	**63**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**400**	**500**	**630**	**800**	**1000**
11	-0.52	-1.27	-1.45	-2.52	-4.22	-2.67	-4.10	1.27	4.23	4.66	6.79	9.87	11.01
12	-1.16	-0.36	-1.23	-1.96	-2.59	-2.13	-3.50	1.31	4.14	6.00	11.02	13.57	16.00
13	-1.22	-2.05	-3.35	-4.74	-5.03	-4.48	-6.49	1.42	3.47	3.51	7.96	11.38	14.70
14	-2.14	-2.36	-3.99	-3.57	0.11	0.09	-1.67	8.01	8.63	7.97	9.92	12.71	17.34
15	3.05	4.91	5.03	4.63	4.37	5.35	3.88	7.83	9.27	8.83	12.80	15.42	17.93
16	-2.14	-1.43	-1.35	-1.99	-3.81	-1.64	-4.00	0.78	2.73	3.64	6.45	9.80	11.60
17	2.45	3.89	3.95	3.17	3.90	4.71	3.91	9.04	10.30	9.87	13.31	15.33	17.43
18	2.48	3.68	3.39	3.12	3.47	4.17	6.08	10.30	10.58	10.73	14.24	15.65	19.50
19	-0.50	-1.06	-1.36	-1.36	-1.94	-1.30	-2.30	4.88	8.77	7.27	9.81	12.57	13.04
20	0.90	2.11	3.08	4.09	4.96	5.98	5.79	10.81	9.50	10.97	14.28	19.92	25.88
Mean	0.12	0.61	0.27	-0.11	-0.08	0.81	-0.24	5.57	7.16	7.34	10.66	13.62	16.44
s	1.96	2.75	3.26	3.48	3.93	3.85	4.66	4.08	3.11	2.81	2.96	3.08	4.35
n	10	10	10	10	10	10	10	10	10	10	10	10	10

	Third-octave band center frequency (Hz)											
Subject	**1250**	**1600**	**2000**	**2500**	**3150**	**4000**	**5000**	**6300**	**8000**	**10000**	**12500**	**16000**
11	15.07	19.51	25.04	28.65	37.82	39.75	34.29	23.36	25.37	24.10	31.05	27.06
12	21.11	24.57	24.53	20.09	18.40	20.44	28.40	18.78	20.76	21.40	22.92	21.66
13	19.34	25.10	30.75	35.95	43.63	44.46	38.80	40.28	41.89	39.93	36.33	26.56
14	25.26	34.83	40.82	42.68	45.84	50.13	51.84	48.43	46.33	42.09	37.11	25.31
15	28.67	32.24	33.25	38.15	43.64	48.17	54.46	53.98	49.37	47.05	41.92	26.81
16	15.15	17.63	22.38	26.39	30.89	30.68	29.30	30.05	33.09	30.19	29.05	23.10
17	24.38	25.89	26.67	26.91	28.12	31.41	30.77	27.43	22.05	24.23	25.85	21.64
18	29.50	34.45	34.21	39.54	45.52	51.18	52.30	49.10	46.58	42.04	37.48	28.06
19	21.11	30.10	33.14	36.14	36.51	38.17	33.96	34.52	25.14	28.11	31.34	25.62
20	32.17	35.47	35.17	34.56	39.74	46.66	48.77	46.84	46.12	42.86	36.88	27.87
Mean	23.18	27.98	30.59	32.91	37.01	40.10	40.29	37.28	35.67	34.20	32.99	25.37
s	5.87	6.42	5.80	7.07	8.88	10.03	10.44	12.18	11.55	9.52	5.94	2.42
n	10	10	10	10	10	10	10	10	10	10	10	10

Appendix E.

Analysis of variance and Duncan multiple range test summary tables (by ear).

Table E-1.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	322620.1	1	322620.1	170.8740	0.000000
Error	16992.5	9	1888.1		
Device	1495.7	1	1495.7	4.0665	0.074534
Error	3310.2	9	367.8		
Ear	361.6	1	361.6	2.8142	0.127746
Error	1156.5	9	128.5		
Frequency	227699.0	24	9487.5	355.4326	0.000000
Error	5765.6	216	26.7		
Device × Ear	232.0	1	232.0	0.9402	0.357559
Error	2221.1	9	246.8		
Device × Frequency	1132.1	24	47.2	5.1365	0.000000
Error	1983.6	216	9.2		
Ear × Frequency	681.8	24	28.4	2.2398	0.001267
Error	2739.5	216	12.7		
Device × Ear × Frequency	112.7	24	4.7	0.5426	0.961268
Error	1868.8	216	8.7		

Table E-2.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.5755	0.5123	0.4743	0.4231	0.4544	0.3585	0.9834	0.1986	0.0267
Right	0.8040	0.8153	0.6290	0.6683	0.5819	0.4402	0.0354	0.0049	0.0001

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0001	0.0016	0.0035	0.0216	0.0335	0.5456	0.9489	0.7079	0.7672
Right	0.0000	0.0000	0.0000	0.0000	0.0001	0.0782	0.1154	0.1394	0.2810

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.7764	0.3910	0.0194	0.0506	0.0189	0.0022	0.1481
Right	0.0781	0.0004	0.0033	0.0040	0.0084	0.0248	0.7368

Table E-3.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	485915.4	1	485915.4	833.0106	0.000000
Error	5249.9	9	583.3		
Device	1932.4	1	1932.4	33.5736	0.000261
Error	518.0	9	57.6		
Ear	1487.8	1	1487.8	8.5024	0.017146
Error	1574.9	9	175.0		
Frequency	311858.6	24	12994.1	857.2284	0.000000
Error	3274.2	216	15.2		
Device × Ear	0.4	1	0.4	0.0076	0.932361
Error	491.6	9	54.6		
Device × Frequency	647.7	24	27.0	3.8973	0.000000
Error	1495.8	216	6.9		
Ear × Frequency	801.5	24	33.4	5.6037	0.000000
Error	1287.3	216	6.0		
Device × Ear × Frequency	135.9	24	5.7	1.2401	0.209993
Error	986.2	216	4.6		

Table E-4.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.0116	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Right	0.1009	0.0772	0.0195	0.0093	0.0004	0.0001	0.0000	0.0000	0.0000

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.1535	0.8951	0.7978	0.5502	0.9328	0.6857	0.1520	0.0155	0.0007
Right	0.0007	0.1041	0.1434	0.0692	0.1479	0.2817	0.2789	0.2975	0.1051

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.0032	0.0028	0.0370	0.0782	0.2954	0.1888	0.1713
Right	0.0031	0.0000	0.0000	0.0012	0.0137	0.1782	0.4848

Table E-5.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	407773.7	1	407773.7	395.1762	0.000000
Error	9286.9	9	1031.9		
Device	1017.7	1	1017.7	3.0474	0.114822
Error	3005.6	9	334.0		
Ear	208.4	1	208.4	0.9175	0.363158
Error	2043.9	9	227.1		
Frequency	261726.9	24	10905.3	664.3969	0.000000
Error	3545.4	216	16.4		
Device × Ear	113.4	1	113.4	0.8881	0.370591
Error	1149.6	9	127.7		
Device × Frequency	1477.7	24	61.6	5.5978	0.000000
Error	2375.9	216	11.0		
Ear × Frequency	953.9	24	39.7	3.5749	0.000000
Error	2401.5	216	11.1		
Device × Ear × Frequency	77.7	24	3.2	0.4208	0.992863
Error	1662.8	216	7.7		

Table E-6.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.4649	0.3991	0.2654	0.1277	0.0451	0.0163	0.0265	0.2091	0.6576
Right	0.5413	0.5998	0.6706	0.8734	0.7490	0.5834	0.6789	0.8668	0.6386

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.9888	0.7189	0.7946	0.7971	0.6347	0.0803	0.0071	0.0000	0.0000
Right	0.5380	0.7934	0.6695	0.1929	0.9490	0.0288	0.0087	0.0007	0.0000

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.0000	0.0000	0.0001	0.0002	0.0500	0.5930	0.5057
Right	0.0000	0.0007	0.0095	0.1132	0.2112	0.7441	0.9506

Table E-7.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	503886.7	1	503886.7	1997.291	0.000000
Error	2270.6	9	252.3		
Device	3218.6	1	3218.6	18.959	0.001839
Error	1527.9	9	169.8		
Ear	1430.6	1	1430.6	17.413	0.002402
Error	739.4	9	82.2		
Frequency	322737.7	24	13447.4	991.087	0.000000
Error	2930.8	216	13.6		
Device × Ear	1.9	1	1.9	0.013	0.910188
Error	1299.8	9	144.4		
Device × Frequency	745.1	24	31.0	3.564	0.000000
Error	1881.7	216	8.7		
Ear × Frequency	794.8	24	33.1	5.351	0.000000
Error	1336.9	216	6.2		
Device × Ear × Frequency	278.1	24	11.6	2.119	0.002572
Error	1181.1	216	5.5		

Table E-8.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.0021	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
Right	0.4669	0.2556	0.0416	0.0052	0.0002	0.0000	0.0000	0.0000	0.0000

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0410	0.1223	0.0467	0.5180	0.6691	0.7238	0.0674	0.0008	0.0000
Right	0.0001	0.0244	0.1877	0.1841	0.0650	0.0928	0.2064	0.0602	0.0053

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.0000	0.0000	0.0018	0.0166	0.0017	0.0118	0.0673
Right	0.0000	0.0000	0.0000	0.0000	0.0002	0.0781	0.5125

Table E-9.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	389748.9	1	389748.9	442.8078	0.000000
Error	7921.6	9	880.2		
Device	310.8	1	310.8	0.8992	0.367766
Error	3110.4	9	345.6		
Ear	11.6	1	11.6	0.0607	0.810981
Error	1713.8	9	190.4		
Frequency	246492.5	24	10270.5	513.4210	0.000000
Error	4320.9	216	20.0		
Device × Ear	0.1	1	0.1	0.0012	0.972943
Error	1095.5	9	121.7		
Device × Frequency	1726.6	24	71.9	8.2302	0.000000
Error	1888.1	216	8.7		
Ear × Frequency	904.9	24	37.7	4.0567	0.000000
Error	2007.5	216	9.3		
Device × Ear × Frequency	129.6	24	5.4	0.7019	0.847251
Error	1662.5	216	7.7		

Table E-10.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.1259	0.0828	0.0295	0.0103	0.0097	0.0056	0.1610	0.8043	0.1450
Right	0.4381	0.3136	0.2036	0.1335	0.1623	0.1594	0.9288	0.8296	0.3117

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0505	0.1238	0.1307	0.0719	0.0065	0.0148	0.7299	0.0157	0.0010
Right	0.1104	0.5528	0.3975	0.0056	0.0204	0.7068	0.8182	0.2697	0.0006

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.0000	0.0047	0.0110	0.0044	0.6291	0.3662	0.3797
Right	0.0001	0.0020	0.0001	0.0025	0.0109	0.7232	0.9982

Table E-11.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	419909.1	1	419909.1	1375.622	0.000000
Error	2747.3	9	305.3		
Device	26.1	1	26.1	0.069	0.799182
Error	3426.0	9	380.7		
Ear	1128.1	1	1128.1	5.580	0.042447
Error	1819.4	9	202.2		
Frequency	299578.6	24	12482.4	932.433	0.000000
Error	2891.6	216	13.4		
Device × Ear	31.7	1	31.7	0.190	0.673467
Error	1504.8	9	167.2		
Device × Frequency	3126.7	24	130.3	13.921	0.000000
Error	2021.5	216	9.4		
Ear × Frequency	1064.8	24	44.4	7.799	0.000000
Error	1228.8	216	5.7		
Device × Ear × Frequency	154.2	24	6.4	0.941	0.546641
Error	1475.5	216	6.8		

Table E-12.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.0468	0.0169	0.0003	0.0000	0.0004	0.0038	0.1396	0.7591	0.1448
Right	0.2409	0.1303	0.0189	0.0057	0.0048	0.0041	0.0020	0.0150	0.4856

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0011	0.1608
Right	0.1393	0.0084	0.0001	0.0000	0.0043	0.0002	0.0001	0.0006	0.1010

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.9254	0.4356	0.4845	0.5185	0.4135	0.4199	0.6558
Right	0.5308	0.0867	0.0843	0.4286	0.1226	0.4756	0.6962

Table E-13.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ without HushKit™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	435567.9	1	435567.9	2291.053	0.000000
Error	1711.1	9	190.1		
Device	47.0	1	47.0	0.662	0.436725
Error	639.2	9	71.0		
Ear	536.3	1	536.3	5.569	0.042611
Error	866.7	9	96.3		
Frequency	345503.8	24	14396.0	1052.579	0.000000
Error	2954.2	216	13.7		
Device × Ear	257.9	1	257.9	4.220	0.070121
Error	550.0	9	61.1		
Device × Frequency	588.1	24	24.5	4.212	0.000000
Error	1256.6	216	5.8		
Ear × Frequency	1199.2	24	50.0	8.084	0.000000
Error	1335.1	216	6.2		
Device × Ear × Frequency	191.1	24	8.0	2.254	0.001164
Error	763.0	216	3.5		

Table E-14.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ without HushKit™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.7730	0.7925	0.7242	0.9918	0.1361	0.0333	0.0204	0.0106	0.0206
Right	0.8999	0.7134	0.6905	0.5563	0.3650	0.3895	0.3299	0.2645	0.2370

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0703	0.0755	0.0599	0.0012	0.0002	0.0038	0.1498	0.4037	0.9893
Right	0.1440	0.3580	0.8875	0.6941	0.0910	0.1120	0.2144	0.0614	0.0496

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.8522	0.0812	0.3966	0.1588	0.0040	0.0042	0.0788
Right	0.0004	0.0000	0.0000	0.0000	0.0000	0.0146	0.3286

Table E-15.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero Triangular HushKit/SoftSeal Combo™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	394429.9	1	394429.9	765.3440	0.000000
Error	4638.3	9	515.4		
Device	629.0	1	629.0	1.5503	0.244540
Error	3651.7	9	405.7		
Ear	919.7	1	919.7	4.1153	0.073096
Error	2011.3	9	223.5		
Frequency	283321.1	24	11805.0	594.3684	0.000000
Error	4290.1	216	19.9		
Device × Ear	79.1	1	79.1	0.5699	0.469610
Error	1248.6	9	138.7		
Device × Frequency	3103.0	24	129.3	9.4149	0.000000
Error	2966.3	216	13.7		
Ear × Frequency	983.0	24	41.0	6.2120	0.000000
Error	1424.2	216	6.6		
Device × Ear × Frequency	143.5	24	6.0	0.6447	0.898819
Error	2003.9	216	9.3		

Table E-16.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero Triangular HushKit/SoftSeal Combo™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
Left	0.2608	0.1483	0.0299	0.0072	0.0212	0.0261	0.3554	0.8190	0.0179
Right	0.3469	0.1565	0.0390	0.0165	0.0114	0.0093	0.0097	0.0930	0.9417

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
Left	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0194	0.1356	0.4959
Right	0.0579	0.0115	0.0001	0.0000	0.0024	0.0056	0.0656	0.0102	0.0464

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
Left	0.0858	0.0157	0.0032	0.0020	0.0149	0.1434	0.7070
Right	0.3102	0.5615	0.0659	0.0139	0.0452	0.2931	0.8875

Appendix F.

Analysis of variance and Duncan multiple range test summary tables (averaged across ears).

Table F-1.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	161310.0	1	161310.0	170.8740	0.000000
Error	8496.3	9	944.0		
Device	747.8	1	747.8	4.0665	0.074534
Error	1655.1	9	183.9		
Frequency	113849.5	24	4743.7	355.4326	0.000000
Error	2882.8	216	13.3		
Device × Frequency	566.0	24	23.6	5.1365	0.000000
Error	991.8	216	4.6		

Table F-2.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.7725	0.7172	0.8249	0.7499	0.8835	0.8781	0.1421	0.0019	0.0000

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0774	0.2051	0.3611	0.5203

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.1672	0.0016	0.0001	0.0003	0.0002	0.0001	0.1852

Table F-3.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	242957.7	1	242957.7	833.0106	0.000000
Error	2625.0	9	291.7		
Device	966.2	1	966.2	33.5736	0.000261
Error	259.0	9	28.8		
Frequency	155929.3	24	6497.1	857.2284	0.000000
Error	1637.1	216	7.6		
Device × Frequency	323.9	24	13.5	3.8973	0.000000
Error	747.9	216	3.5		

Table F-4.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.0105	0.0039	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0051	0.2713	0.3235	0.1582	0.4651	0.3856	0.1058	0.0395	0.0044

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.0002	0.0000	0.0000	0.0031	0.0318	0.1110	0.2544

Table F-5.
Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	203886.9	1	203886.9	395.1762	0.000000
Error	4643.5	9	515.9		
Device	508.8	1	508.8	3.0474	0.114822
Error	1502.8	9	167.0		
Frequency	130863.5	24	5452.6	664.3969	0.000000
Error	1772.7	216	8.2		
Device × Frequency	738.9	24	30.8	5.5978	0.000000
Error	1187.9	216	5.5		

Table F-6.
Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.9059	0.8127	0.6292	0.3210	0.1540	0.0787	0.1093	0.4695	0.9875

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.7218	0.7129	0.9216	0.4841	0.7498	0.0132	0.0006	0.0000	0.0000

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.0000	0.0000	0.0001	0.0008	0.0583	0.5683	0.7210

Table F-7.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	251943.4	1	251943.4	1997.291	0.000000
Error	1135.3	9	126.1		
Device	1609.3	1	1609.3	18.959	0.001839
Error	764.0	9	84.9		
Frequency	161368.8	24	6723.7	991.087	0.000000
Error	1465.4	216	6.8		
Device × Frequency	372.5	24	15.5	3.564	0.000000
Error	940.8	216	4.4		

Table F-8.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.0159	0.0064	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0009	0.0209	0.0640	0.2575	0.4362	0.1963	0.0522	0.0020	0.0000

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.0000	0.0000	0.0000	0.0000	0.0001	0.0123	0.1652

Table F-9.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Normal Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	194874.5	1	194874.5	442.8078	0.000000
Error	3960.8	9	440.1		
Device	155.4	1	155.4	0.8992	0.367766
Error	1555.2	9	172.8		
Frequency	123246.2	24	5135.3	513.4210	0.000000
Error	2160.4	216	10.0		
Device × Frequency	863.3	24	36.0	8.2302	0.000000
Error	944.0	216	4.4		

Table F-10.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Normal Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.1104	0.0564	0.0145	0.0032	0.0038	0.0027	0.2593	0.7586	0.0746

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0115	0.1450	0.0883	0.0009	0.0005	0.0373	0.9255	0.0098	0.0000

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.0000	0.0000	0.0000	0.0000	0.0352	0.6650	0.5590

Table F-11.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	209954.5	1	209954.5	1375.622	0.000000
Error	1373.6	9	152.6		
Device	13.1	1	13.1	0.069	0.799182
Error	1713.0	9	190.3		
Frequency	149789.3	24	6241.2	932.433	0.000000
Error	1445.8	216	6.7		
Device × Frequency	1563.3	24	65.1	13.921	0.000000
Error	1010.7	216	4.7		

Table F-12.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero HushKit/SoftSeal Combo™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.0359	0.0130	0.0001	0.0000	0.0000	0.0002	0.0020	0.0777	0.5715

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0441

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.6518	0.1389	0.1425	0.3945	0.1301	0.3577	0.9873

Table F-13.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ without HushKit™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	217783.9	1	217783.9	2291.053	0.000000
Error	855.5	9	95.1		
Device	23.5	1	23.5	0.662	0.436725
Error	319.6	9	35.5		
Frequency	172751.9	24	7198.0	1052.579	0.000000
Error	1477.1	216	6.8		
Device × Frequency	294.1	24	12.3	4.212	0.000000
Error	628.3	216	2.9		

Table F-14.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero SoftSeal™ without HushKit™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.9234	0.9509	0.9778	0.6985	0.1522	0.0910	0.4250	0.3716	0.4960

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.8429	0.6613	0.2926	0.0958	0.2627	0.4731	0.8901	0.5308	0.2586

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.0532	0.0000	0.0001	0.0004	0.0000	0.0016	0.1320

Table F-15.

Analysis of variance summary table for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero Triangular HushKit/SoftSeal Combo™ (Tight Fit).

Effect	*SS*	*df*	*MS*	*F*	*p*
Intercept	197215.0	1	197215.0	765.3440	0.000000
Error	2319.1	9	257.7		
Device	314.5	1	314.5	1.5503	0.244540
Error	1825.9	9	202.9		
Frequency	141660.5	24	5902.5	594.3684	0.000000
Error	2145.0	216	9.9		
Device × Frequency	1551.5	24	64.6	9.4149	0.000000
Error	1483.1	216	6.9		

Table F-16.

Probabilities of the Duncan multiple range post-hoc comparisons for insertion losses at each frequency and ear for the HGU-84/P Rotary Wing Helmet System in standard configuration and with the Oregon Aero Triangular HushKit/SoftSeal Combo™ (Tight Fit).

	Third-octave band center frequency (Hz)								
	63	80	100	125	160	200	250	315	400
p-Value	0.1776	0.0785	0.0083	0.0014	0.0027	0.0026	0.0333	0.3487	0.1310

	Third-octave band center frequency (Hz)								
	500	630	800	1000	1250	1600	2000	2500	3150
p-Value	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0079	0.0113	0.0777

	Third-octave band center frequency (Hz)						
	4000	5000	6300	8000	10000	12500	16000
p-Value	0.1121	0.0710	0.0046	0.0007	0.0074	0.1161	0.8789

Appendix G.

Subject head and ear measurement demographics and fitting notes.

Table.
Subject demographics and helmet fitting notes.

Subject	Gender	Bitragion width (mm)	Head height (mm)	Ear canal size	HGU-84/P size	Helmet Spacers
1	M	144	148	Lg R/L	XLG	1 PAD R/L
2	M	142	142	Lg R/L	XLG	1 PAD R/L
3	M	140	140	Med R/Lg L	LG	1 PAD R/L
4	M	138	138	Lg R/L	LG	0 PADS
5	M	140	140	Lg R/L	LG	0 PADS
6	F	135	137	Med R/L	Med	1 PAD R/2 PADS L
7	M	140	142	Med R/L	LG	0 PADS
8	M	142	144	Lg R/Med L	LG	0 PADS
9	M	144	148	Lg R/L	XLG	1 PAD R/L
10	M	142	144	Lg R/L	XLG	0 PADS
11	M	140	142	Lg R/L	LG	0 PADS
12	M	142	140	Lg R/L	LG	1 PAD R/L
13	M	140	144	Lg R/L	LG	1 PAD R/L
14	M	148	144	Med R/ Lg L	XLG	1 PAD R/L
15	M	143	144	Med R/L	LG	1 PAD R/L
16	M	142	148	Med R/ Lg L	LG	1 PAD R/2 PADS L
17	M	139	134	Med R/Lg L	LG	1 PAD R/L
18	M	138	140	Lg R/Med L	LG	1 PAD R
19	M	140	138	Lg R/L	LG	1 PAD R/L
20	F	136	136	Lg R/L	Med	2 PADS R/L