most often used for testing large numbers of persons It eliminates the need for a technician except to begin the test The subject controls the presentation of sound and records his response

BAND PRESSURE LEVEL of a sound for a specified frequency band is the sound pressure level for the sound contained within the restricted band The reference pressure must be specified

BANDWIDTH When applied to a bandpass filter, bandwidth is determined by the interval of transmitted waves between the low and high cutoff frequencies

BAROTRAUMA An injury to the ear caused by a sudden alteration in barometric pressure

BONE CONDUCTION TEST A special test conducted by placing an oscillator on the mastoid process to determine the nerve-carrying capacity of the cochlea and the eighth cranial (auditory) nerve

CALIBRATE To check an audiometer for uniformity or accuracy It may be done biologically, electronically, or acoustically

CERUMEN Ear wax

COCHLEA The auditory part of the internal ear, shaped like a snail shell It contains the basilar membrane on which the end organs of the auditory nerve are distributed

CONDUCTION DEAFNESS An impairment of hearing due to the failure of vibrations to be transmitted to the cochlea This type of deafness can often be corrected medically or surgically

DAMAGE RISK CRITERION The suggested base line of noise tolerance, which if not exceeded, should result in no hearing loss due to noise A damage risk criterion may include in its statement a specification of such factors as time of exposure, noise level, and frequency, amount of hearing loss that is considered significant, percentage of the population to be protected, and method of measuring the noise

DEAF The term used to describe a person who has lost his hearing before the speech patterns were established

DEAFENED Refers to a person who has lost his ability to hear after normal speech patterns were established

DECIBEL A dimensionless unit expressing the logarithmic ratio of two amounts of pressure, power, or intensity, between a measured quantity and a reference quantity

DIFFUSE SOUND FIELD One in which the time average of the mean-square sound pressure is everywhere the same and the flow of energy in all directions is equally probable

DISPLACEMENT A vector quantity that specifies the change of position of a body or particle and is usually measured from the mean position or position of rest In general it can be represented by a rotation vector or translation vector, or both

EAR DEFENDERS Plugs or muffs designed to keep noxious noise from the ear to preserve hearing acuity

EUSTACHIAN TUBE A structure about $2\frac{1}{2}$ in long leading from the back of the throat to middle ear It equalizes the pressure of air in the middle ear with that outside the eardrum

FILTER A device for separating components of a signal on the basis of their frequency It allows components in one or more frequency bands to pass relatively unattenuated, and it attenuates greatly components in other frequency bands

FREE SOUND FIELD (FREE FIELD) A field in a homogeneous, isotropic medium free from boundaries In practice it is a field in which the effects of the boundaries are negligible over the region of interest

FREQUENCY (IN CYCLES PER SECOND, OR CPS, HERTZ OR Hz) The time rate of repetition of a periodic phenomenon The frequency is the reciprocal of the period It is sometimes called pitch or the highness or lowness of sound High frequencies damage more easily than low frequencies in noise-induced hearing loss

HEARING CONSERVATION The prevention or minimizing of noise-induced deafness through the use of hearing protection devices and the control of noise through engineering methods

HEARING LEVEL Formerly called "hearing loss," is the deviation in decibels of an in-