

# Study 1: Audiometric Tests

## Aim of the study

The use and benefits of the Variphone® in a primary or secondary prevention strategy. Investigation of the attenuation of the custom moulded hearing protector VARIPHONE.

## Date

November 1992

## Investigator

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## Summary

During a 2 year period audiometric test results of a group of military employees 'wearing' the Variphone® have been compared to a group of persons with the same activities but 'not' wearing the Variphone®. Conclusions are based on a total of 92 audiometric tests. The testpersons of both groups are active in the airforce, the marine or maintenance department and have similar activities, noise exposure levels and periods of exposure. The tests were performed according to the ISO standard 4869.

## Conclusions:

- The audiometric test results of the group 'not' wearing the Variphone® show a significant higher TTS (Temporary Threshold Shift) than the group 'wearing' the Variphone®. The time of recuperation of the group 'wearing' the Variphone® was much shorter than the group 'not' wearing the Variphone®.
- After the 2 year period some people of the group 'wearing' the Variphone even showed an improvement of their hearing capacity. This is to be explained by the absence of the detrimental effects of noise during a 2 year period while wearing their Variphone®.