

MICROPHONE TECHNIQUE

When using aircraft-type noise-canceling microphones, proper “mic technique” is critical to dependable radio communications.

Noise-canceling microphones are highly sensitive to the distance between the microphone and the speaker’s mouth. This distance should be 1/4 to 1/2 inch—no more! In addition, it is important that the speaker enunciate clearly and speak with an even and moderately loud voice, neither shouting nor speaking too softly.

The importance of microphone technique is heavily stressed in Document DO-170, published by the Radio Technical Commission for Aeronautics (RTCA). Quoting from this document: “Training and supervisory efforts directed to speaking properly into the microphone at the proper distance should be stressed.”

DO-170 also encourages the use of dynamic (transistor type) microphones rather than carbon microphones. Not only do the dynamic types sound better when new, but they show considerably less aging and therefore have longer effective lives. Thus, although dynamic microphones cost more initially, their cost-per-year of use is usually less, while at the same time providing better clarity.