

IMPROVING AUDIO QUALITY IN PRIVATE MODE OF VHF  
TACTICAL RADIOCOMMUNICATION (TRC)

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**IMPROVING AUDIO QUALITY IN PRIVATE MODE OF VHF TACTICAL  
RADIOCOMMUNICATION (TRC)**

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## **ABSTRACT**

This paper presents solutions on how to improve an audio quality in Private Mode of VHF Tactical Radiocommunication (TRC). Basically in Private Mode, a 3.333 kHz residual tone carrier was heard at 8 ohms speaker for all the time with or without the presence of voice. This scenario will degrade the voice quality. In order to solve this problem, a Notch Filter was designed. A simulation process for the Notch Filter was done by using Switcher CAD III software. The Notch Filter was fabricated on the PCB board and the measurement in real TRC application was carried out. The results are compared between before and after implementation of Notch Filter. The proposed solution will eliminate the 3.333 kHz residual tone carrier.

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