

Abstract

Communication in the world of aviation vulnerable to interference from FM broadcast radio frequency interference. In fact in Indonesia, especially in big cities like Bandung use of radio frequency spectrum for FM broadcast is already very crowded. Because of overcrowding sometimes cause interference among users of radio frequency spectrum radio one flight. In fact interference experienced by aviation communication radio very disturbing lines of communication. The impact will be very dangerous for the world of aviation communication becomes important. Where the flight path is set by air traffic controllers to be among the best not collide and it is done through radio communications.

By using the research methods of field research and literature studies this thesis resulted in a conclusion that low frequency 121.0 MHz used by Hussein Sastranegara ATC service to communicate with the aircraft is still not safe from the FM broadcast radio frequency interference which is spanned 87-108 MHz. Additionally obtained also evident that the field research conducted radio communication specification used by Hussein Sastranegara Airport not meet the specifications recommended by ICAO. After a literature study found also that one result of the reduction specifications do have an impact on the possibility of interference that will occur in the future.

With the method of calculation of D / U ATC on the radio FM broadcast is produced solutions that enable applied is the addition of power ATC became a 50 Watt on condition of supporting device is changed to newer devices and realignment of radio frequency broadcast immediately surrounding the ATC into the frequency more money 100 MHz because the calculation produces a value D / U were good enough to minimize interference in accordance with established ICAO with an average score of <-15dB.

Keywords: Flight Radio, FM Radio Broadcast, Pollution Interference.