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Komunikasi Radio High Frequency Jarak Dekat

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Abstrak

Short-range HF radio communication (NVIS: Near Vertical Incidence) is often forgotten because of the many other means of communication that can easily be used. When there is a natural disaster or in emergency situations where regular communication is not functioning, this type of communications are used as the alternative means to overcome the problems. As other HF radio communication, the short distance HF communications also utilizes the reflection of radio waves by the ionosphere. The combination of frequency, radio waves elevation angle and the appropriate transmit power will make this communication work well. This paper discusses the NVIS communications working frequencies selection by using the ionosphere observation data. Ionospheric observations result at Tanjungsari (6,54° S, 107,55â° E) shows that for NVIS communication at the daytime (between 8:00 to 17:00 LT) around Tanjungsari in March, a good frequency to use is 4.7 to 10.1 MHz at a low level of solar activity and 9,1 to 14.4 MHz at high solar activity, while for June are 4.9 to 7.9 MHz and 10 to 13 MHz respectively.