Comparative analysis of signal processing methods secondary surveillance radar

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DOI: 10.1109/UkrMiCo43733.2018.9047593

Abstract—In the paper, based on a comparative analysis of the methods of processing time-interval codes used as secondary surveillance radar information signals consisting of a different sequence of performing joint decoding operations, selecting signals by duration and time position, it is shown that the most effective is the signal processing method in which first the signals are decoded, then the signals are selected in accordance with the duration and in the future with the selection according to the time position, which provides the lowest probability of a false alarm of the first kind.

Keywords—secondary security radar; time-interval codes, processing of information signals; the probability of a false alarm of the first kind.

REFERENCES