

Method of Enhancing Information Security of Requesting Cooperative Surveillance Systems

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Abstract—The presented document describes a method for enhancing information security of requestings Cooperative Surveillance Systems (CSS). In it, by optimizing the request signal flows of individual request CSS members of the information network, the probability of interaction of individual request signals in an aircraft responder of an air object is reduced. This leads to a decrease in the likelihood of excluding the service of the considered request signal by the aircraft responder of the air object, and as a result, it increases information security by reducing the probability of violating the integrity of the request CSS data included to the considering information network.

Keywords—Cooperative Surveillance Systems; Secondary Surveillance Radar; Identification Friend or Foe; Request Signal.

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