



Republic of the Philippines
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

MEMORANDUM CIRCULAR NO.: 34-18

TO : ALL CONCERNED
FROM : THE DIRECTOR GENERAL
SUBJECT : AMENDMENT TO PHILIPPINE CIVIL AVIATION REGULATIONS – AIR NAVIGATION SERVICES (CAR-ANS) PART 9 INCORPORATING AMENDMENT 90 TO ICAO ANNEX 10 VOL IV (SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMS)

REFERENCE:

1. Philippine Civil Aviation Regulations-Air Navigation Services Part 9 Aeronautical Telecommunications Governing Surveillance Radar Systems
2. ICAO Annex 10 Volume IV – Aeronautical Telecommunications Annex 10 Volume IV (Surveillance and Collision Avoidance Systems)
3. Regulations Amendment Procedures
4. Board Resolution No. 2012-054 dated 28 September 2012

Pursuant to the powers vested in me under the Republic Act 9497, otherwise known as the Civil Aviation Authority Act of 2008 and in accordance with the Board Resolution No. 2012-054 dated 28 September 2012, I hereby approve the incorporation of ICAO Annex 10 Volume IV Amendment No. 90 to the Philippine Civil Aviation Regulations-Air Navigation Services (CAR-ANS) Part 9.

ORIGINAL REGULATIONS SUBJECT FOR REVIEW AND REVISION:

CAR-ANS Part 9

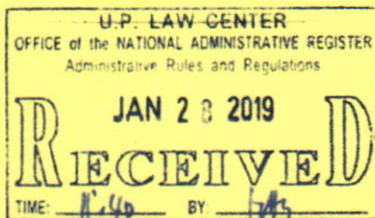
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CHAPTER 9.1. DEFINITIONS

Transponder occupancy. A state of unavailability of the transponder from the time it detects an incoming signal that appears to cause some action or from the time of a self-initiated transmission, to the time that it is capable of replying to another interrogation.

Note.— Signals from various systems that contribute to transponder occupancy are described in the Aeronautical Surveillance Manual (Doc 9924), Appendix M.

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CHAPTER 9.2 GENERAL

9.2.1 SECONDARY SURVEILLANCE RADAR (SSR)



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Miguel
MIGUELA C. LAPIAD 1-22-19
Records Officer III
Records and Archives Division

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9.2.1.7 Transponder occupancy

Note.— See Appendix M of the Aeronautical Surveillance Manual (Doc 9924) for guidance on consistent modelling of transponder occupancy

CHAPTER 9.3 SURVEILLANCE SYSTEMS

9.3.1 SECONDARY SURVEILLANCE RADAR (SSR) SYSTEM CHARACTERISTICS

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9.3.1.1 Systems having only Mode A and Mode C capabilities

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9.3.1.1.6 REPLY TRANSMISSION CHARACTERISTICS (SIGNALS-IN-SPACE)

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9.3.1.1.6.2 INFORMATION PULSES

9.3.1.1.6.2.1 *Information pulses.* Information pulses shall be spaced in increments of 1.45 microseconds from the first framing pulse. The designation and position of these information pulses shall be as follows:

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Note.— The Standard relating to the use of these pulses is given in 9.2.1.4.1. However, the position of Information on the "X" pulse is not used in replies to Mode A or Mode C interrogations and is contained in the Aeronautical Surveillance Manual (Doc 9924) specified only as a technical standard to safeguard possible future expansion of the system. It has nevertheless been decided that such expansion should be achieved using Mode S. The presence of a pulse in the X pulse position is used in some States to invalidate replies.

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9.3.1.1.6.2.2 The position of the X pulse shall not be used in replies to Mode A or Mode C interrogations if the safe operation of surveillance systems cannot be maintained

9.3.1.2 Systems having Mode S capabilities

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9.3.1.2.5 INTERMODE AND MODE S ALL-CALL TRANSACTIONS

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9.3.1.2.5.2.1.4.3 *Field content for a selectively addressed interrogation used by an interrogator without an assigned interrogator code.* An interrogator that has not been assigned with a unique discrete interrogator code and is authorized to transmit shall use the I1 code 0 to perform the selective interrogations. In this case, selectively addressed interrogations used in connection with acquisition using lockout override shall have interrogation field contents restricted as follows:

UF = 4, 5, 20 or 21

PC = 0

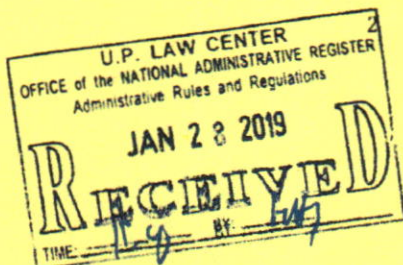
RR ≠ 16 if RRS = 0

DI = 7

IIS = 0

LOS = 0 except as specified in 9.3.1.2.5.2.1.5

TMS = 0



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