

SPECIAL CONDITION
**RPAS Required Communications, Navigation
and Surveillance**

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SUBJECT	:	RPAS Required Communications, Navigation and Surveillance
CERTIFICATION SPECIFICATION	:	CS-VLA.1301, CS-VLA.1309
PRIMARY GROUP / PANEL	:	Panel 6 (Avionic Systems)
SECONDARY GROUPE / PANEL	:	Panel 1 (Flight & Human Factors) Panel 5 (Electrical) Panel 10 (Software) Panel 12 (Development Assurance and Safety Assessment)
NATURE	:	Special Condition

SPECIAL CONDITION
RPAS Required Communications, Navigation and Surveillance

This Special Condition and the related AMC are applicable to any RPAS:

- for which a type certification is requested,
- for which the kinetic energy assessment in accordance with section 6 of the EASA policy E.Y013-01 results in an initial certification basis according to CS-VLA, and
- with no occupant on board.

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(a) The RPAS shall be equipped with navigation equipment that will enable to proceed in accordance with:

- (1) the flight plan, if applicable; and
- (2) the applicable airspace requirements.

(b) Such navigation equipment shall be adequate to fly over routes navigated without reference to visual landmarks.

(c) The RPAS shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in accordance with (a), or an appropriate contingency action to be completed safely.

(d) The RPAS shall be equipped with suitable equipment capable of providing guidance to a point where it can be landed and braking can be performed, either automatically or by the remote pilot..

(e) The RPAS shall be equipped with communication equipment, as required for the kind of operation for which certification is requested.

(f) The RPAS shall be equipped with surveillance equipment, as required for the kind of operation for which certification is requested

Appendix 1

Guidance Material to SC-RPAS.CNS-01

1. Definitions

Remotely Piloted Aircraft System (RPAS): A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.

Remotely Piloted Aircraft (RPA): An unmanned aircraft which is piloted from a remote pilot station. (Note this is a subcategory of Unmanned Aircraft).

Ground Control Station (GCS): The component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft. It is noted that at ICAO/JARUS is named RPS (Remote Pilot Station).

2. Communication equipment

In case that the RPAS is operated by more than 1 crew member, communications means (crew interphone, radio, ...) should be provided to allow crew coordination when any of the crew members are not located inside the Ground Control Station.

3. Radio communication equipment

Where required by the airspace being flown the RPAS should be equipped with radio communication equipment capable of conducting two-way voice communication with those aeronautical stations or those frequencies to meet airspace requirements.

Radio communication equipment, if required, should provide for communication on the aeronautical emergency frequency 121.5 MHz.

Note: radio communication equipment is intended to allow voice communications between the remote pilot and the Air Traffic Services.

4. Transponder

If required by the airspace being flown, the RPAS should be equipped with a secondary surveillance radar (SSR) transponder with all the required capabilities. Guidance for certification of secondary surveillance radar transponders may be found in CS-ACNS-issue 1 Subpart D (as applicable), if operational credit of the transponder capability is included in the Type Certificate.