Remotely Piloted Aircraft Systems (RPAS) Symposium, 23 – 25 March 2015, ICAO Headquarters, Montréal, Canada
Pilot responsibility

• Remote pilots are fundamental to the safe operation of RPAS
• They have the same basic responsibilities as pilots of manned aircraft
• Under no circumstances will the pilot-responsibility be replaced by technologies in the foreseeable future
Article 32 Chicago Convention

“The pilot of every aircraft and the other members ...... shall be provided with certificates of competency and licenses...”

– Remote pilots and other members of the remote crew are not subject to Article 32
– Appendix 4 to Annex 2 contains a Standard requiring remote pilots to be licensed in a manner consisted with Annex 1
ONE single remote pilot licence (RPL)

• In Annex 1 for traditional manned pilot licensing, there are multiple types of licenses.

• The remote pilot is a new category of aviation professional, for which ONE single RPL is introduced which covers all types of scenarios.

• This RPL will be annotated with ratings, limitations and endorsements.
Culmination

• The guidelines for the RPL is a culmination of best practices and procedures
• Each application for RPL should be assessed by the Regulator on its own technical merits and may require unique authorizations which are based on the specific needs or capabilities of the RPAS in question
Scope and continues review

- **Not** applicable for flying toys or model aircraft when these systems are used exclusively for sport or recreational purposes.
- Licensing of ATC will **not** be affected by the introduction of RPAS.
- This licensing guidance material will be subject to **continuous review** and will be updated when appropriate.
Fundamentals

• There are many categories of aircraft. Aircraft from each of these categories can potentially be remotely piloted

• For unmanned aircraft, class ratings must also address the RPS and its interaction with the RPA. These considerations require a new approach for licensing
Licensing Authority

The RPL should be issued or rendered valid by the licensing authority of the State in which the RPS is located, even if the RPS is only temporarily located in the State

– This facilitates oversight of the remote pilot by the licensing authority

– Again: Article 32 of the Chicago Convention does not apply to RPL → No State of Registration of aircraft
Guidance for the Regulator I

A person should not act:

• either as remote PIC or as a remote co-pilot of an RPA unless that person is the holder of an RPL, containing the ratings suitable for the purpose of executing the operation

• as an RPA observer unless that person has undergone a competency-based training on visual observer duties concerning RPA VLOS operations
Guidance for the Regulator II

- **Human performance:**
  Integration of human performance issues within a competency-based training and assessment approach for all stakeholders

- **Obligation for personnel to carry documents:**
  - a remote pilot must hold a current medical assessment and valid RPL
  - an RPA observer should possess proof of RPA observer competency issued by the RPAS operator or an ATO
Guidance for the Regulator III

• **Language proficiency**: ability to speak and understand the language used for ATS communications

• **Rendering remote pilot licences valid**: from another MS, instead own RPL → establish validity by suitable authorization

• **Credit for RPL**: obtained in manned aviation or military service
RPL requirements I

• **Minimum age:** 18 year

• **Privileges and conditions:**
  - To act as remote pilot of an RPAS for the type of operation being conducted, within the appropriate RPA category and RPS type
  - To act as an RPA observer, if appropriately trained

• **Theoretical knowledge examinations:** recommend by the authorized instructor or ATO

• **Pass standards and validity period:** established by licensing authority
RPL requirements II

- **Subjects of knowledge:** i.e. air law
- **Practical skill test:** able to demonstrate to perform, as remote PIC of the appropriate RPA category and associated RPS, the relevant procedures and manoeuvres
- **Experience requirement:** in actual or simulated flight in an ATO course
- **RPAS instruction:** from an authorized RPAS instructor in the appropriate RPA category and associated RPS
RPL requirements III

- **Crediting of flight time**: acquired in RPAS operations
- **Crediting of theoretical knowledge**: acquired in another category of RPA or type of RPS
- **Recording of RPA flight time**: done by remote pilot
- **Class and type ratings**: remote pilot only act with valid an appropriate class or type rating
- **Night operations**: when exercising at night, required in training and testing of the remote pilot
- **Medical fitness**: Class 3
RPAS instructor authorization

- **General prerequisites and requirements:** hold an RPL; have sufficient training and experience; and entitled to act as remote PIC of the RPAS during such RPAS instruction

- **Competencies:** Training programmes should focus on development of the competencies

- **Assessment of competence:** in the relevant type or class of RPA and type of RPS
RPA observer competency

- **Minimum age:** 18 year
- **Prerequisite:**
  - possession of RPL not necessary
  - assigned by the operator
- **Training course:** competency-based training course
WG 4 Proposals to amend Annex 1

Develop general rules:

- RPL
- Flight crew members others than remote pilot
- Personnel other than flight crew members
- Flight instructor
- Competency framework
- Additional guidance not already covered in Manual

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