



Country

Producer

UAS Designation/Name

<b>Usage (professional)</b>	<input type="radio"/> Aerial Work <input type="radio"/> Cargo Transport <input type="radio"/> Passenger Transport <input type="radio"/> Military
<b>Status</b>	<input type="radio"/> Conceptual <input type="radio"/> In Development <input type="radio"/> Experimental <input type="radio"/> Prototype <input type="radio"/> Market Ready / In Production
<b>Airframe Type</b>	<input type="radio"/> Fixed Wing ( <i>aircraft capable of flight using the aerodynamic lift generated by its wings</i> ) <input type="radio"/> Fixed Wing with Lift Rotors ( <i>positioned on its wings, tail or rotor booms</i> ) <input type="radio"/> Lighter-than-Air ( <i>dirigibles, airships</i> ) <input type="radio"/> No Wings / No Rotors ( <i>e.g. fuselage with integrated ducted fans or vectoring jet nozzles</i> ) <input type="radio"/> Ornithopter ( <i>flapping wings</i> ) <input type="radio"/> Rotorcraft ( <i>derives it's source of lift from rotor blades rotating around a mast</i> ) <input type="radio"/> Transwing ( <i>folds &amp; tilts - in-flight transitioning</i> ) <input type="radio"/> Tilt Wing ( <i>wing is horizontal for conventional forward flight and rotates up for VTOL</i> )
<b>VTOL</b>	Vertical take-off & landing capable <input type="radio"/> Yes <input type="radio"/> No
<b>Rotorcraft Class</b>	<i>(See page 2 for explanation of terms)</i> <input type="radio"/> Bicopter <input type="radio"/> Birotor <input type="radio"/> Birotor Coaxial <input type="radio"/> Birotor Intermeshing <input type="radio"/> Gyroplane <input type="radio"/> Monocopter  <input type="radio"/> Multicopter (>2 & <10 lift rotors) <input type="radio"/> Pluricopter (10 lift rotors & more) <input type="text"/> Quantity lift rotors <input type="text"/> Quantity lift rotors <input type="text"/> Quantity puller rotors <input type="text"/> Quantity puller rotors <input type="text"/> Quantity pusher rotors <input type="text"/> Quantity pusher rotors  <input type="radio"/> Tandem Rotor <input type="radio"/> Tailsitter <b>Tether is</b> <input type="checkbox"/> Standard <input type="checkbox"/> Optional
<b>Propulsion</b>	<input type="radio"/> Electric <input type="radio"/> Hybrid <input type="radio"/> Jet/Turbine <input type="radio"/> Piston <input type="radio"/> Other
<b>Fuel / Energy</b>	<input type="radio"/> Avgas <input type="radio"/> Battery <input type="radio"/> Fuel Cell <input type="radio"/> Gasoline <input type="radio"/> Heavy Fuel <input type="radio"/> Nitrogen <input type="radio"/> Solar Panel <input type="radio"/> 2-Stroke <input type="radio"/> 4-Stroke <input type="radio"/> Other Note: Heavy Fuel = Diesel, Jet Fuel ( <i>Jet A1, JP5, JP8</i> ), Kerosene
<b>Command &amp; Control</b>	<input type="radio"/> Manual <input type="radio"/> Programmed / Automatic <input type="checkbox"/> SatCom enabled Note: Due to regulatory matters / technological acceptance, autonomous UAS are not considered.
<b>Control Range</b>	<input type="radio"/> <0,2 km <input type="radio"/> 2 km <input type="radio"/> 25 km <input type="radio"/> 50 km <input type="radio"/> 75 km <input type="radio"/> 150 km <input type="radio"/> >150 km
<b>Flight Endurance</b>	<input type="text"/> minutes <input type="text"/> km    Note: Please fill in <b>both</b> boxes
<b>Max. Cruise Speed</b>	<input type="text"/> km/h
<b>MTOW</b>	<input type="text"/> kg
<b>Mission Payload</b>	<input type="radio"/> Imaging <input type="radio"/> Sensing & Measurement <input type="radio"/> Other (non-military) <i>(See page 3 for explanation of terms &amp; examples)</i> <input type="radio"/> Other (military)
<b>Payload Capacity</b>	<input type="text"/> kg    Total weight of the payload [(Imaging, Sensing & Measurement, Other), cargo, passengers + luggage], that can be accommodated.  Principal payload is aircraft specific & factory-integrated <input type="radio"/> Yes <input type="radio"/> No  <input type="text"/> Quantity of passengers that can be transported ( <i>in addition to pilot</i> )
<b>Submission</b>	Date <input type="text"/>
<b>Submitter</b> <input type="radio"/> Mr <input type="radio"/> Ms	First Name <input type="text"/> Family Name <input type="text"/>
	Email <input type="text"/> Tel. <input type="text"/>
<b>Comment</b>	<input type="text"/>

## Definitions

The following terms and explanations are indicated in ICAO Circular 326.

**Unmanned aircraft system (UAS)** is an aircraft and its associated elements which is operated with no pilot on board.

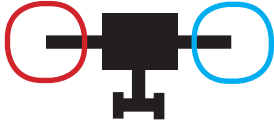

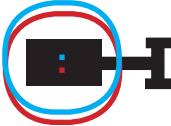



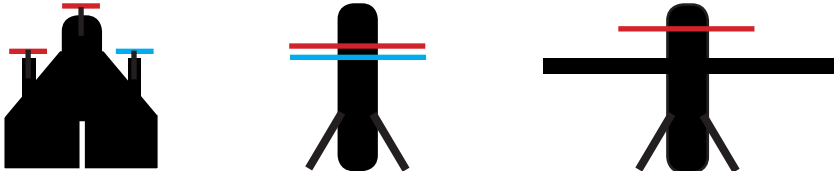
**Unmanned aircraft (UA)** is any aircraft intended to be flown without a pilot on board. They can be remotely and fully controlled from another place (ground, another aircraft, space) or pre-programmed to conduct its flight without intervention (automatic).

**Remotely-piloted aircraft system (RPAS)** is a set of configurable elements consisting of a remotely-piloted aircraft (RPA), its associated remote pilot station(s), the required command and control links and any other system elements as may be required at any point during flight operation (e.g. launch & recovery systems).

**Remotely piloted aircraft (RPA)** is an aircraft where the flying pilot is not on board the aircraft. (Note: RPA is a subcategory of unmanned aircraft). It is piloted from a Remote Pilot Station and is expected to be integrated into the air traffic management system equally as manned aircraft [and,] real-time piloting control is provided by a licensed Remote Pilot.

**Note:** *The abbreviations UAS, RPAS, UA and RPA are invariable (singular and plural are identical).*

## Rotorcraft Classes

<b>Bicopter</b>		Pod with 2 arms, each equipped with 1 rotor - No tail rotor.
<b>Birotor</b>	<b>Birotor Coaxial</b> 	Fuselage or pod with 2 super-imposed coaxial rotors - No tail rotor.
	<b>Birotor Intermeshing</b> 	Fuselage or pod with 2 rotors side-by-side - No tail rotor.
<b>Gyroplane</b>		Fuselage or pod with unpowered lift rotor and horizontal forward propulsion rotors on aft of fuselage, on side arms, or on (stub) wings - No tail rotor.
<b>Monocopter</b>		Fuselage or pod with powered lift & tail rotor. May have horizontal propulsion rotors on side arms or (stub) wings.
<b>Multicopter</b>	<b>&gt;2 &amp; &lt;10 rotors</b>	Fuselage or pod with >2 & <10 lift rotors positioned on the wings, tail booms, arms, or rotor booms.
<b>Pluricopter</b>	<b>10 rotors &amp; more</b>	Fuselage or pod with 10 or more lift rotors positioned on the wings, tail booms, arms, or rotor booms.
<b>Tandem Rotor</b>		A type of VTOL aircraft with two main rotor systems and no tail rotor. The rear rotor is usually mounted in a higher position than the front rotor, in order to avoid the blades from colliding. No tail rotor.
<b>Tailsitter</b>		A type of VTOL aircraft that takes off and lands on its tail, and, after take-off, tilts horizontally for forward flight.

## UAS Payloads

Payloads are elements installed on an unmanned aircraft (UA) that are **not necessary for flight**, but are carried for the purpose of achieving specific mission objectives.

3 Payload categories:

- ◆ **Imaging**
- ◆ **Sensing & Measurement**
- ◆ **Other:**
  - Non-military
  - Military

## Imaging Payloads

Elements on a UA that permit the capture of imagery (*in some cases with simultaneous tracking*) and the recording or transmission of such data. Imaging payloads (gimballed & non-gimballed) include, amongst others:

Corona Effect Imager  
Digital Photo Camera  
Digital Video Camera  
Electric-Optical (EO)  
Film Camera  
Flash LiDAR  
Forward-looking infra-red (FLIR)  
Hyperspectral  
Infrared (IR)  
Light Detection and Ranging (LiDAR)  
Laser Scanner  
Light Intensification  
Line Scanner  
Multi-Layer Laser  
Multispectral - Optical  
Multispectral - Thermal  
Near Infra-red  
Radar  
Radar - Ground Penetrating  
Radar - Maritime  
Solid State Photon Counter  
Synthetic Aperture Radar (SAR)

## Sensing & Measurement Payloads

Elements on an unmanned aircraft (UA) that permit the capture of non-imagery data and the recording or transmission of such data. They include, amongst others:

Aerial pollution measurement  
Anemometer  
Atmospheric measurement  
Atmospheric pollutant detection  
Bathymetric measurement  
Camera mounts & gimbals  
Data recording  
Electricmagnetic measurement  
Emergency beacon detection  
Frequency measurement  
Gas detection  
Geomagnetic measurement  
Gimbal mount  
Hydrography  
Interferometry  
Laser pointer / range finder  
Location definition:

- ◆ Flora & fauna
- ◆ Object (*moving & static*)
- ◆ Person (*moving & static*)
- ◆ Phenomena

Measurement probe / feeler

Metal detector  
Meteorological measurement  
Microwave radiometer  
Mineral detection  
Moving target indicator  
Odour detection  
Particle measurement  
Phenomena analysis  
Radiation meter  
Spectrometer  
Radio frequency spectrum analyser  
Ultrasonic analysis  
Ultraviolet sensor

## Other Payloads

Elements on an unmanned aircraft (UA) that permit to perform non-imagery and non-sensing mission specific activities. Their two categories, include, amongst others:

### Non-Military

Airborne data recorder  
Cable stringing grip  
Cargo net sling & hook  
Cargo storage rack (*internal & external*)  
Communication relay  
Dispensing system (*solids*):

- ◆ Bulk (*e.g. granulates, larvae capsules, pollination agents, seeds*)
- ◆ Other (*e.g. seedlings*)

Fire extinguishing system  
Flame thrower (*hornet & wasp nest eradication*)  
High pressure liquid dispenser (*roof / wall cleaning*)  
Hoisting & lowering winch (*cargo*)  
Life buoy carriage & delivery system  
Lighting (*floodlight, spotlight, strobe*)  
Loudspeaker / megaphone  
Manipulating / robotic arm  
Payload imposed antennae  
Perching grip (*on high power transmission cable*)  
Publicity banners (*UAS-towed*) & tow hook  
Tagg fixation system (*e.g. bird disruptor*)  
Spraying system (*liquids for various purposes*)  
Suction extractor (*hornet & wasp nest control*)  
Water bombing system (*large volume release*)

### Military

Acoustic detection & localisation system  
Airborne data recorder  
Artillery localisation system  
Cargo sling & grip / winch  
Communication relay  
Electronic warfare (EW) system  
Laser designator  
Lethal (*fuselage / pod with integrated warhead*)  
Mine detection system  
Missiles & carriage / launch pylon  
Net (*drone interception / disabler*) & net launcher  
Nuclear, biological & chemical (NBC) detection sensor  
Ordnance carriage & release system (*e.g. bombs, mortars*)  
Pod (*various purposes, incl. additional fuel*)  
Rockets & carriage / launch pylon, rack or pod  
Weapon (*e.g. machine gun*) & mount