



**INTERNATIONAL STANDARD FOR AIRCRAFT
MAKE, MODEL, AND SERIES GROUPINGS**

**BUSINESS RULES
February 2006**

Version 1.1.1

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Record of Revisions

| Date | Version | Section | Revision |
|--------|---------|---------------------------------------|---|
| 2/2006 | 1.1.1 | Executive Overview | Replaces the ICAO co-chair with Yuri Fattah |
| 5/2005 | 1.1 | Executive Overview | Adds Corey Stephens as the CAST co-chair |
| 5/2005 | 1.1 | Executive Overview | Replaces “Engine Make/Model/Series” with “Engine Make/Model/Sub Model.” |
| 5/2004 | 1.1 | 2.0 Scope | Replaces “accident/incident database” and “accident database” with “aviation safety database.” |
| 5/2005 | 1.1 | 2.1 Aircraft in Aircraft Valid Values | Deletes title |
| 5/2005 | 1.1 | 2.2 Aircraft | Moved to Section 3.1 |
| 5/2005 | 1.1 | 2.3 Aircraft Manufacturer | Moved to Section 3.2 |
| 5/2005 | 1.1 | 2.4 Aeronautical Product | Moved to Section 3.13 |
| 5/2005 | 1.1 | 2.5 Amateur Construction | Moved to Section 3.3 |
| 5/2005 | 1.1 | 3.0 Data Elements-Aircraft | Moved from Section 4.0 |
| 5/2005 | 1.1 | 3.1 Aircraft | Moved from Section 2.2 Added the term “An aircraft is...” to the beginning of the definition. |
| 5/2005 | 1.1 | 3.2 Aircraft Manufacturer | Moved from Section 2.3 |
| 5/2005 | 1.1 | 3.3 Amateur Construction | Moved from Section 2.5 |
| 5/2005 | 1.1 | 3.4 Aircraft Make | First sentence of the definition of Aircraft Make revised to include the term “aircraft make”. |
| 5/2005 | 1.1 | 3.5 Aircraft Master Model | In the examples moved the Make column from the left to the center position. |
| 5/2005 | 1.1 | 3.6 Aircraft Model | Fifth bullet: Replaces “may” with “must”. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Second bullet: Replaces CESSNA-172 examples with BELL-47G examples; replaces “undesignated series” with “undesignated master series”; and replaces “other series” with “other master series.” |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Third bullet: New. Applies to using the term “no master series assigned” when an aircraft model has no identifiable master series. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Fourth bullet (was third bullet): Replaces “no series exists” with “no master series assigned” and replaces “Cessna-550” with “SOCATA-TB20”. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Fifth bullet (was fourth bullet): Replaces “no series exists” with “no master series assigned” and replaces “undesignated series” with “undesignated master series”. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Sixth bullet (was fifth bullet): Replaces “may” with “must”. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Seventh bullet: Was sixth bullet. |
| 5/2005 | 1.1 | 3.7 Aircraft Master Series | Examples: Replaces “undesignated series” with “undesignated master series”; replaces “no series exists” with “no master series assigned”; adds BELL-47G; and replaces “CESSNA-550” with “SOCATA-TB20”. |
| 5/2005 | 1.1 | 3.8 Aircraft Series | Second bullet: Replaces CESSNA-172 examples with BELL-47G examples. |
| 5/2005 | 1.1 | 3.8 Aircraft Series | Third bullet: Replaces the CESSNA-550 example with SOCATA-TB20 example. |
| 5/2005 | 1.1 | 3.8 Aircraft Series | Fifth bullet: Replaces “may” with “must”. |
| 5/2005 | 1.1 | 3.8 Aircraft Series | Sixth bullet: Replaces “The aircraft series is listed in the aircraft type certificate.” with “The aircraft series is listed in the aircraft type certificate, is the designation used by the aircraft manufacturer to distinguish a particular aircraft, or is the designation used by a national military or armed force to distinguish a particular aircraft.” |
| 5/2005 | 1.1 | 3.8 Aircraft Series | Examples: Replaces “undesignated series” with “undesignated master series”; replaces “no series |

| Date | Version | Section | Revision |
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| | | | exists ” with “no master series assigned”; replaces CESSNA-172 examples with BELL-47G examples; and replaces “CESSNA-550” with “SOCATA-TB20”. |
| 5/2005 | 1.1 | 3.9 Aircraft Popular Name | Examples: Deleted a reference to “Piper-PA34-220T.” |
| 5/2005 | 1.1 | 3.10 Aircraft Category | Revises the definition to begin with “An Aircraft Category is the means...” |
| 5/2005 | 1.1 | 3.11 Aircraft Sub Category | Revises the definition to begin with “An Aircraft Sub Category is the means...” |
| 5/2005 | 1.1 | 3.12 Type Certificate | Third bullet: Adds “BCAR AR-1”. |
| 5/2005 | 1.1 | 3.12 Type Certificate | Fourth bullet: Replaces “aircraft” with “aeronautical product.” |
| 5/2005 | 1.1 | 3.12 Type Certificate | Sixth bullet: New |
| 5/2005 | 1.1 | 3.12 Type Certificate | Seventh bullet (was sixth bullet): Replaces “COUNTRY NAME” with “COUNTRY OF CERTIFYING AUTHORITY.” |
| 5/2005 | 1.1 | 3.12 Type Certificate | Examples: Replaces “COUNTRY NAME” with “COUNTRY OF CERTIFYING AUTHORITY” and adds examples for the EUROPEAN UNION. |
| 5/2005 | 1.1 | 3.13 Aeronautical Product | Moved from Section 2.4 |
| 5/2005 | 1.1 | 3.14 Country of Certifying Authority | New |
| 5/2005 | 1.1 | 3.16 Military Aircraft Indicator | New |
| 5/2005 | 1.1 | 3.17 Maximum Certificated Number Passengers | New |
| 5/2005 | 1.1 | 3.18 Maximum Certificated Takeoff Weight | New |
| 5/2005 | 1.1 | 3.19 Landing Gear Category | New |
| 5/2005 | 1.1 | 3.20 Begin Date | Revises the definition by replacing “The date” with “The begin date.” |
| 5/2005 | 1.1 | 3.20 Begin Date | Fourth bullet: Replaces “Year/Month/Day (YYYY/MM/DD) with “YearMonthDay”. |
| 5/2005 | 1.1 | 3.21 End Date | Revises the definition by replacing “The date” with “The end date.” |
| 5/2005 | 1.1 | 3.21 End Date | Fourth bullet: Replaces “Year/Month/Day (YYYY/MM/DD) with “YearMonthDay”. |
| 5/2005 | 1.1 | 4.0 Data Elements-Organization | Moved from Section 3.0 |
| 5/2005 | 1.1 | 4.2 Organisation Full Name | Adds “The organisation full name is” to the definition. |
| 5/2005 | 1.1 | 4.3 Organisation Common Name | Adds “The organisation common name is” to the definition and replaces “ORG_COMMON_NAME” with “Organisation Common Name.” |
| 5/2005 | 1.1 | 4.5 Organisation Role | Adds “The organisation” is to the definition. |
| 5/2005 | 1.1 | 4.5 Organisation Role | First bullet: Updates the definition of Aircraft Manufacturer to match the definition in Section 3.2 |
| 5/2005 | 1.1 | 4.5 Organisation Role | Second bullet: Updates the definition of Engine Manufacturer to match the definition in the Aircraft Engine Business Rules. |
| 5/2005 | 1.1 | 4.6 Country | Definition: Deletes “and related codes as represented in the International Organisation for Standardisation (ISO) 3166, Official Country Codes.” |
| 5/2005 | 1.1 | 4.6 Country | First bullet: Replaces example from Dornier to Aero Vodochody |
| 5/2005 | 1.1 | 4.6 Country | Third bullet: New. |

1 Executive Overview

The International Civil Aviation Organisation (ICAO) and the Commercial Aviation Safety Team (CAST), which includes Government officials and aviation industry leaders, have jointly chartered the CAST/ICAO Common Taxonomy Team (CICTT). CICTT includes experts from several air carriers, aircraft manufacturers, engine manufacturers, pilot associations, regulatory authorities, transportation safety boards, ICAO, and members from Canada, the European Union, France, Italy, Japan, the Netherlands, the United Kingdom, and the United States. CICTT is co-chaired by a representative from ICAO and CAST.

The team is charged with developing common taxonomies and definitions for aviation accident and incident reporting systems. Common taxonomies and definitions establish a standard industry language thereby improving the quality of information and communication. With this common language the aviation community's capacity to focus on common safety issues is greatly enhanced.

To accomplish its objectives, CICTT plans the development of the following common taxonomies and definitions in the following categories: Phase of Flight; Occurrence Categories; Aircraft Make/Model/Series tables; and Engine Make/Model/Sub Model tables.

Many aviation organisations use the terms Make/Model/Series to identify or group aircraft; however, the systems in which an aircraft is identified or grouped with similar aircraft vary. For example, ICAO Document 8643, *Aircraft Type Designators*, lists aircraft type designators used by air traffic control systems throughout the world. The Federal Aviation Administration (FAA) lists approved aircraft type designators in FAA Order 7110.65, *Air Traffic Control*. National civil aviation authorities (NCAAs) register aircraft; however, these aircraft registries do not use the same identification systems. Aircraft accident investigators also identify aircraft involved in aircraft accidents. The aircraft identification system used by an aircraft accident investigation organisation is not necessarily the same as the aircraft identification system used by that country's NCAA. This has resulted in same information being identified or referenced in different ways, thereby inhibiting organisations' abilities to share common and critical information.

It is understood that recognizing aircraft by grouping key identification characteristics, such as aircraft make, model, series, or category (for example, fixed wing), assists in the air traffic control, aircraft registration, aircraft certification, accident and incident investigation, safety analysis, and other functions. Establishing a standard nomenclature facilitates efficient and effective communications throughout the industry and throughout the world.

Additionally, uniform standard aircraft groupings and individual aircraft identifiers will:

- Overcome difficulties in merging data from diverse information systems (for example, international and domestic sources or public and private sources).
- Reduce costs to merge and transform aircraft data.
- Enlarge the range and depth of aircraft information available for analysis.
- Reduce duplicate or multiple identifiers for the same aircraft, which increases the integrity of information available.
- Establish more useful and meaningful data that is defined and managed consistently.

It is important to note that CICTT does not expect governments, international organisations and corporations to immediately change existing data systems or existing definitions. The intent is to provide ‘target’ taxonomies and definitions so that as organisations make plans for, and implement new safety systems, these new taxonomies and definitions are adopted.

The purpose of this paper is to provide a brief set of key definitions to be used in providing an international data standard for uniquely identifying groupings of aircraft. An aircraft grouping includes those groupings of aircraft by one manufacturer, an aircraft model, an aircraft series, aircraft type certificate, or aircraft type designator. This document is supplemented by technical documents further elaborating on the design of the system to support this international data standard.

This document contains the results of the CICTT International Aircraft Categorisation and Identification Standard (IACIS) regarding common taxonomies and definition of Aircraft Make/Model/Series. The IACIS is a subcommittee of the CICTT and is co-chaired by Robert Ferris of the U.K. Civil Aviation Authority (CAA) and Reinhard Menzel of ICAO with the support of Diana Young and Deborah Kane from the U.S. Federal Aviation Administration (FAA). Additional organisations involved in the sub-team include Airclaims Limited; Bureau d’Enquêtes et d’Analyses pour la Sécurité de l’Aviation Civile of France (BEA); Bureau Veritas; Eurocontrol; General Aviation Manufacturers Association (GAMA); Transport Canada; and the Transportation Safety Board of Canada.

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2 Scope

To support the international standard for aircraft make, model, and series groupings, the IACIS created a list of aircraft valid values for aviation organizations. The aircraft valid values are a comprehensive list of aircraft that currently appear in aircraft registries, accident/incident reports, and other repositories. Most aircraft are non-military; however, the aircraft valid values do include some military aircraft. The sub-team decided to include military aircraft under the following conditions: (1) recorded in civilian aircraft registries; (2) recorded in aviation safety databases; or (3) for which a given military organization chooses to provide all required information.

The IACIS adds new aircraft valid values as information is provided or researches aircraft valid values with the following priority:

1. Large civilian airplanes/helicopters (current use)
2. Large civilian airplanes/helicopters in current aviation safety database(s)
3. Small civilian airplanes/helicopters in current use
4. Small civilian airplanes/helicopters in current aviation safety database(s)
5. Military aircraft that have a civilian equivalent
6. Powered/non-powered gliders in current use
7. Balloons/airships in current use
8. Military airplanes/helicopters in current use (ICAO aircraft type designators)
9. Gyroplanes in current use
10. Military airplanes/helicopters in current aviation safety database(s)
11. Other aircraft in current aviation safety database(s)
12. Ultralights/microlights

3 Data Elements—Aircraft

3.1 Aircraft

An aircraft is any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

3.2 Aircraft Manufacturer

An Aircraft Manufacturer is the organization that has been recognized by its certifying authority as having manufactured the aircraft, at the time of completion.

- An Aircraft Manufacturer designation of a specific aircraft entry is not superseded by any changes in the Aircraft Manufacturer's name. (For example the Aircraft Manufacturer of those PA28 aircraft that were built before 1995 remains PIPER; those PA28 aircraft built after 1995 is NEW PIPER.)
- An aircraft model can be manufactured by more than one Aircraft Manufacturer. (For example the BELL-212 was built by Bell Helicopter in the United States and Bell Helicopter in Canada. The Aircraft Manufacturer permissible value is either BELL HELICOPTER UNITED STATES or BELL HELICOPTER CANADA, depending on which organization built the helicopter.)

3.3 Amateur Construction

An aircraft assembled and/or constructed by individual(s) or a group for education, recreation, or as identified by the certifying authority. The primary business of the individual(s) or group cannot be aircraft manufacturing.

3.4 Aircraft Make

The aircraft make is the name assigned to the aircraft by the aircraft manufacturer when each aircraft was produced. In most cases aircraft make is the organisation common name of the aircraft manufacturer. If the organisation that holds rights to an aircraft design permits another organisation to build that aircraft, in most cases the aircraft make would be the aircraft name assigned by the organisation that holds rights to an aircraft design. If an aircraft manufacturer is amateur construction, in most cases the aircraft make would be the name of the organisation responsible for design.

Examples:

| AIRCRAFT MANUFACTURER | AIRCRAFT MAKE |
|-------------------------------|-----------------|
| AGUSTA | BELL |
| BELL HELICOPTER UNITED STATES | BELL |
| CESSNA | CESSNA |
| AMATEUR CONSTRUCTION | EVANS |
| AMATEUR CONSTRUCTION | LANCAIR |
| BRITISH AEROSPACE | HAWKER SIDDELEY |
| HAWKER SIDDELEY | HAWKER SIDDELEY |
| HINDUSTAN | HAWKER SIDDELEY |

3.5 Aircraft Master Model

An aircraft master model creates a grouping of similar aircraft models for analytical purposes and to identify aircraft models that share airworthiness properties. The master model is derived by combining the original aircraft make and original aircraft model.

- If the aircraft has both civilian and military versions, the civilian version is the master model. (For example, as illustrated in the table below, the master model for the Sikorsky S55 applies to civilian Sikorsky-S55 models and the military models.)
- If an aircraft make and aircraft model have associated aircraft models, the associated aircraft master model is the first aircraft make and model.

Examples:

| Master Model | Make | Model |
|--------------------|----------------|-------|
| SIKORSKY-S55 | SIKORSKY | CH19 |
| SIKORSKY-S55 | SIKORSKY | HRS1 |
| SIKORSKY-S55 | SIKORSKY | S55 |
| SIKORSKY-S55 | SIKORSKY | UH19 |
| MITSUBISHI-MU300 | MITSUBISHI | MU300 |
| MITSUBISHI-MU300 | BEECH | 400 |
| AERO COMMANDER-500 | AERO COMMANDER | 520 |
| AERO COMMANDER-500 | AERO COMMANDER | 560 |
| CESSNA-500 | CESSNA | 501 |
| CESSNA-500 | CESSNA | 550 |

3.6 Aircraft Model

An aircraft model is an aircraft manufacturer’s designation for an aircraft grouping with similar design or style of structure.

- The aircraft model is listed in the aircraft type certificate, is the designation used by the aircraft manufacturer to distinguish a particular aircraft, or is the designation used by a national military or armed force to distinguish a particular aircraft.
- If an aircraft manufacturer is amateur construction, in most cases the aircraft model would be the name designated by the organisation responsible for design.
- The aircraft model must contain a space between separate terms or words (for example, use “FANJET FALCON”, not “FANJETFALCON”; “L1011 385”, not “L1011385”; or “CL600 1A11” not “CL6001A11”).
- The aircraft model must not contain a space as a separator between alphabetic and numeric characters (for example, use “269A”, not “269 A”).
- The aircraft model must not contain a dash (-), slash (/), or other special character.
- The aircraft model when concatenated with the aircraft make must be unique in order to identify that aircraft grouping.
- The aircraft model when concatenated with the aircraft manufacturer and aircraft serial number must be unique.

Examples:

| Make | Model |
|------------|---------------|
| BEECH | 400 |
| DASSAULT | FALCON900 |
| DASSAULT | FANJET FALCON |
| HUGHES | 269B |
| MITSUBISHI | MU300 |
| SIKORSKY | CH19 |
| SIKORSKY | HRS1 |
| SIKORSKY | S55 |
| SIKORSKY | UH19 |
| LANCAIR | ES |
| VANS | RV6 |
| VANS | RV8 |

3.7 Aircraft Master Series

An aircraft master series creates a grouping of similar aircraft series for analytical purposes and to identify aircraft series that share airworthiness properties. A master series contains aircraft series from within one aircraft model.

- If an aircraft model has more than one aircraft series, the master series reflects a common series for that aircraft model/series. (For example, the DE HAVILLAND-DHC8 has a 311, 314, and 315 series. The master series is the common 300.)
- Where one series of an aircraft model, typically the earliest one, is known by the model designation (for example, BELL-47G), the master series has the value “UNDESIGNATED MASTER SERIES” provided that the aircraft model also has other master series designators, for example BELL-47G-3, BELL-47G-4, *et al.*
- Where an aircraft model has no identifiable master series, the master series has the value “NO MASTER SERIES ASSIGNED.” For example the master series “NO MASTER SERIES ASSIGNED” applies to each CESSNA-172 aircraft series.
- Where an aircraft model has no series designation, for example SOCATA-TB20, the master series will have the value “NO MASTER SERIES ASSIGNED.”
- If an aircraft model has the master series “NO MASTER SERIES ASSIGNED” and the aircraft manufacturer subsequently produces an aircraft master series for the same aircraft model, the master series is replaced with the value “UNDESIGNATED MASTER SERIES.”
- The master series must not contain a dash (-), slash (/), or other special character.
- The aircraft master series must contain a space between separate terms or words (for example, use “CLUB ASTIR”, not “CLUBASTIR” and use “B4 600,” not “B4600”).

Examples:

| Make | Model | Master Series | Series |
|--------------|-------|-------------------------------|------------------------|
| DE HAVILLAND | DHC8 | 300 | 311 |
| DE HAVILLAND | DHC8 | 300 | 314 |
| DE HAVILLAND | DHC8 | 300 | 315 |
| BELL | 47G | UNDESIGNATED MASTER SERIES | UNDESIGNATED SERIES |
| BELL | 47G | 2 | 2 |
| BELL | 47G | 3 | 3 |
| BELL | 47G | 4 | 4 |

| Make | Model | Master Series | Series |
|--------|-------|---------------------------|---------------------|
| CESSNA | 172 | NO MASTER SERIES ASSIGNED | UNDESIGNATED SERIES |
| CESSNA | 172 | NO MASTER SERIES ASSIGNED | A |
| CESSNA | 172 | NO MASTER SERIES ASSIGNED | B |
| CESSNA | 172 | NO MASTER SERIES ASSIGNED | C |
| CESSNA | 172 | NO MASTER SERIES ASSIGNED | D |
| SOCATA | TB20 | NO MASTER SERIES ASSIGNED | NO SERIES EXISTS |

3.8 Aircraft Series

An aircraft series is an aircraft manufacturer’s designation to identify differences within an aircraft model grouping.

- The aircraft series reflects the lowest level description of an aircraft without uniquely identifying one aircraft. (For example, the BOEING-777-232 cannot be described at a lower level without uniquely identifying that airplane.)
- Where one series of an aircraft model, typically the earliest one, is known by the model designation (for example, BELL-47G), the series has the value “UNDESIGNATED SERIES” provided that the aircraft model also has other series designators, for example BELL-47G-3, BELL-47G-4, *et al.*
- Where an aircraft model has no series designation, for example SOCATA-TB20, the series will have the value “NO SERIES EXISTS”.
- If an aircraft model has the series “NO SERIES EXISTS” and the aircraft manufacturer subsequently produces an aircraft series for the same aircraft model, the series is replaced with the value “UNDESIGNATED SERIES.”
- The aircraft series must not contain a dash (-), slash (/), or other special character.
- The aircraft series is listed in the aircraft type certificate, is the designation used by the aircraft manufacturer to distinguish a particular aircraft, or is the designation used by a national military or armed force to distinguish a particular aircraft.
- The aircraft series must contain a space between separate terms or words (for example, use “ASTIR CS”, not “ASTIRCS” and use “SHERPA VARIANT100,” not “SHERPAVARIANT100.”).

Examples:

| Make | Model | Master Series | Series |
|--------|-------|-------------------------------|------------------------|
| BOEING | 777 | 200 | 232 |
| BELL | 47G | UNDESIGNATED MASTER SERIES | UNDESIGNATED SERIES |
| BELL | 47G | 2 | 2 |
| BELL | 47G | 3 | 3 |
| BELL | 47G | 4 | 4 |
| BELL | 47G | 5 | 5 |
| SOCATA | TB20 | NO MASTER SERIES ASSIGNED | NO SERIES EXISTS |

3.9 Aircraft Popular Name

Aircraft popular name is the name used by the aircraft manufacturer to market or otherwise distinguish a particular aircraft model and/or series or the name used by a national military or armed forces to distinguish a particular aircraft model and/or series.

- An aircraft model and/or series may have more than one popular name.

Examples:

| Make | Model | Series | Popular Name |
|--------------------|-------|--------|----------------|
| MORANE SAULNIER | MS880 | B | RALLYE CLUB |
| PIPER | PA34 | 220T | SENECA III |
| PIPER | PA34 | 220T | SENECA IV |
| PIPER | PA34 | 220T | SENECA V |
| PZL MIELEC | M24 | W | DROMADER SUPER |
| SWEARINGEN | SA226 | TC | METRO II |

3.10 Aircraft Category

An aircraft category is the means by which aircraft are grouped based on how the aircraft is supported in flight.

Valid Values:

FIXED WING
ROTORCRAFT
LIGHTER-THAN-AIR
HYBRID LIFT
OTHER

- **FIXED WING** denotes a heavier-than-air aircraft that is supported in all phases of flight by the dynamic reaction of the air against its wings.
- **ROTORCRAFT** denotes a heavier-than-air aircraft that is supported in flight by the dynamic reaction of the air against its rotors on a substantially vertical axis.
- **LIGHTER-THAN-AIR** denotes an aircraft that can rise and remain suspended by using contained gas weighing less than the air that is displaced by the gas.
- **HYBRID LIFT** denotes a heavier-than-air aircraft that is supported at vertical takeoff, vertical landing, and low speed flight by the dynamic reaction of the air against its rotors or thrust and in horizontal flight by the dynamic reactions of air against its wings (for example, the tilt-rotor aircraft).
- **OTHER** denotes a unique configuration that is not specifically a fixed wing, rotorcraft, lighter-than-air, or hybrid lift.

3.11 Aircraft Sub Category

An aircraft sub category is the means by which an aircraft category is subdivided based on similar characteristics of propulsion.

Valid Values:

AIRPLANE
 NON-POWERED GLIDER
 POWERED GLIDER
 HELICOPTER
 GYROPLANE
 BALLOON
 AIRSHIP
 NOT APPLICABLE

- **AIRPLANE** denotes a fixed wing aircraft that contains at least one engine and whose primary function is sustained powered flight.
- **NON-POWERED GLIDER** denotes a fixed wing aircraft that does not contain an engine and whose primary function is sustained non-powered flight.
- **POWERED GLIDER** denotes a fixed wing aircraft that contains at least one engine and whose primary function is sustained non-powered flight.
- **HELICOPTER** denotes a rotorcraft that primarily depends on engine-driven rotors for motion.

- GYROPLANE denotes a rotorcraft that primarily depends on rotors that rotate by action of the air.
- BALLOON denotes a non-power-driven lighter-than-air aircraft.
- AIRSHIP denotes a power-driven lighter-than-air aircraft.
- HYBRID LIFT and OTHER have the sub category value NOT APPLICABLE.

Valid combinations of Aircraft Category and Aircraft Sub-Category:

| AIRCRAFT CATEGORY | AIRCRAFT SUB CATEGORY |
|-------------------|-----------------------|
| FIXED WING | AIRPLANE |
| FIXED WING | POWERED GLIDER |
| FIXED WING | NON-POWERED GLIDER |
| ROTORCRAFT | HELICOPTER |
| ROTORCRAFT | GYROPLANE |
| LIGHTER-THAN-AIR | BALLOON |
| LIGHTER-THAN-AIR | AIRSHIP |
| HYBRID LIFT | NOT APPLICABLE |
| OTHER | NOT APPLICABLE |

3.12 Type Certificate

The type certificate is the document issued by the certifying authority to the organization that holds design responsibility. The type certificate may cover one or more groupings of aeronautical products having similar design, performance, and safety characteristics.

- A type certificate and its associated data sheets detail the type design, basis of certification, and applicable standards and limitations of an aeronautical product, as specified by the certifying authority.
- The type certificate recorded is the document issued by the certifying authority to the organization that currently holds design responsibility.
- If a certifying authority did not issue a type certificate for an aeronautical product, the permissible value is the equivalent document issued by the certifying authority. For example AIRWORTHINESS NOTICE 26 and BCAR AR-1 are the value to those aeronautical products under the design responsibility of the United Kingdom that do not have a type certificate.
- The term “NOT IDENTIFIED” is the value if a type certificate exists for the aeronautical product but is not currently included in the list of permissible values.

- The term “NOT CERTIFICATED” is the value if a type certificate or similar document does not exist for the aeronautical product.
- If a type certificate is issued by the European Aviation Safety Agency (EASA), the name of the country of certifying authority is EUROPEAN UNION.
- If responsibility for design is transferred from one certifying authority to another certifying authority, the TYPE CERTIFICATE and COUNTRY OF CERTIFYING AUTHORITY are updated to reflect the transfer. (For example, the design responsibility for specific helicopters was transferred from Bell Helicopter Textron and the Federal Aviation Administration to Bell Helicopter Textron Canada and Transport Canada. In this circumstance the type certificate value changed from H9SW to H-88 and the country of certifying authority value from the United States to Canada.)

Examples:

| TYPE CERTIFICATE IDENTIFIER | COUNTRY OF CERTIFYING AUTHORITY |
|------------------------------------|--|
| BA28 | UNITED KINGDOM |
| BAS3 | UNITED KINGDOM |
| BAS5 | UNITED KINGDOM |
| A.004 | EUROPEAN UNION |
| A.022 | EUROPEAN UNION |
| 6 | FRANCE |
| 95 | FRANCE |
| 56 | FRANCE |
| 50 | GERMANY |
| 154 | GERMANY |
| 209 | GERMANY |
| A1/71 | SWEDEN |
| A1/84 | SWEDEN |
| A1/94 | SWEDEN |
| 1A6 | UNITED STATES |
| 1G10 | UNITED STATES |
| 1H11 | UNITED STATES |

3.13 Aeronautical Product

An aeronautical product is an aircraft, an aircraft engine, a propeller, or appliance.

3.14 Country of Certifying Authority

The country of certifying authority is the official name of a country or sovereignty; or regional association of two or more countries that issues type certificates.

- If responsibility for design is transferred from one certifying authority to another certifying authority, the TYPE CERTIFICATE and COUNTRY OF CERTIFYING AUTHORITY are updated to reflect the transfer. (For example, the design responsibility for specific helicopters was transferred from Bell Helicopter Textron and the Federal Aviation Administration to Bell Helicopter Textron Canada and Transport Canada. In this circumstance the type certificate value changed from H9SW to H-88 and the country of certifying authority value from the United States to Canada.)
- An example of a regional association is the EUROPEAN UNION.
- If the type certificate value is NOT IDENTIFIED or NOT CERTIFICATED the value of the country of certifying authority is NOT APPLICABLE.

3.15 ICAO Aircraft Type Designator

The ICAO Aircraft Type Designator is designed for use by air traffic service for identifying a type of aircraft and are recorded in ICAO Document 8643, Aircraft Type Designators, for those aircraft types most commonly provided with air traffic service.

Examples:

JS20

MD87

RX85

STRM

3.16 Military Aircraft Indicator

A military aircraft indicator is the unique identifier as to whether aircraft is used by a used national military or armed force.

3.17 Maximum Certificated Number Passengers

The maximum certificated number of passengers is the number of passengers permitted under the type certificate or equivalent document.

3.18 Maximum Certificated Takeoff Weight

The maximum certificated takeoff weight is the takeoff weight permitted under the type certificate or equivalent document.

3.19 Landing Gear Category

Landing Gear is the system that supports aircraft maneuvering on land or water and supports the weight of the aircraft when it lands.

Valid Values:

AMPHIBIOUS

HULL

FLOAT

MONO-WHEEL/SKID-FIXED

MONO-WHEEL-RETRACTABLE

QUADRICYCLE

SKI

SKID

TAILWHEEL/TAILSKID-FIXED

TAILWHEEL/TAILSKID-RETRACTABLE

TANDEM

TRICYCLE-FIXED

TRICYCLE-RETRACTABLE

OTHER

- AMPHIBIOUS is a landing gear that is designed to operate on water via the aircraft's airframe or floats attached to the airframe and to operate on land via wheeled landing gear.
- HULL is a landing gear that is designed to operate on water via the aircraft's airframe and does not include wheeled landing gear.

- FLOAT is a landing gear that is designed to operate on water via floats attached to the airframe and does not include wheeled landing gear.
- MONO-WHEEL/SKID-FIXED is a landing gear consisting of one centered wheel or skid. Additional supports may include smaller wheels or skids. The landing gear cannot be retracted.
- MONO-WHEEL-RETRACTABLE is a landing gear consisting of one retractable centered wheel. Additional supports may include smaller wheels or skids, which may be retractable.
- QUADRICYCLE is a landing gear that consists of four retractable wheel assemblies: two forward and two aft of the aircraft's centre of gravity.
- SKI is a landing gear designed to accommodate operations on snow and ice.
- SKID is a landing gear that consists of a set of beams supporting the aircraft on the ground. Skids are usually found on helicopters.
- TAILWHEEL/TAILSKID-FIXED is a landing gear consisting of two wheel assemblies forward of the aircraft's centre of gravity and a smaller wheel assembly or skid aft of the centre of gravity. The landing gear cannot be retracted.
- TAILWHEEL/TAILSKID-RETRACTABLE is a landing gear consisting of retractable two wheel assemblies forward of the aircraft's centre of gravity and a smaller wheel assembly or skid aft of the centre of gravity, which may be retractable.
- TANDEM is a landing gear that consists of retractable two wheel assemblies mounted on the aircraft centerline one behind the other. Additional supports may include smaller wheels or skids. Tandem landing gear is also known as bicycle landing gear.
- TRICYCLE-FIXED is a landing gear that consists of a forward (nose) and two or more wheel assemblies located aft of the aircraft's centre of gravity. The landing gear cannot be retracted.
- TRICYCLE-RETRACTABLE is a landing gear that consists of a forward (nose) wheel and two or more wheel assemblies located aft of the aircraft's centre of gravity. The landing gear can be retracted.
- OTHER is a landing gear that is not an amphibious, hull, float, mono-wheel-fixed, mono-wheel-retractable, quadricycle, ski, skid, tailwheel/tailskid-fixed, tailwheel/tailskid-retractable, tandem, tricycle-fixed, or tricycle-retractable.

3.20 Begin Date

The begin date is the date a specific valid value started in use.

- If only the year is known default to the first day of that year.
- If only the month and year is known, default to the first day of the month.
- The value must be a valid date.
- The date is recorded as YearMonthDay

3.21 End Date

The end date is the date a specific valid value ceased to be in use.

- If only the year is known this field, default to the last day of that year.
- If only the month and year is known, default to the last day of the month.
- If present, the value must be a valid date.
- The date is recorded as YearMonthDay

4 Data Elements—Organisation

4.1 Organisation

An organisation is a public or private entity and includes National Civil Aviation Authorities (NCAAs), aircraft manufacturers, and production facilities, maintenance facilities, and training facilities.

- An organisation may be an entity (for example, subsidiary or division) of another organisation. This is often the case if the parent company is a formal business entity involved in the aviation industry. For example Sikorsky Aircraft Corp. is the aircraft manufacturing subsidiary of United Technologies Corp.
- An organisation may be a consortium of multiple organisations.
- An organisation may be the name of a formal joint venture (for example, Avions de Transport Regional (ATR)).
- The term “AMATEUR CONSTRUCTION” listed as an organisation to identify an aircraft assembled and/or constructed by individual(s) or a group for education, recreation, or as identified by the certifying authority. The primary business of the individual(s) or group cannot be aircraft manufacturing.
- If no organisation start date is known, this field will default to 1901/01/01. This date was selected because the first known organisation was Short Brothers PLC, which was established in 1901.

4.2 Organisation Full Name

The organisation full name is the entire official or legal name of the organisation.

- The organisation full name associated with a unique organisation common name will normally be the most recent full name for that organisation.

Examples:

Construcciones Aeronauticas SA
Maule Aerospace Technology, Inc.
Raytheon Aircraft Co.
Schempp-Hirth Flugzeugbau GmbH

4.3 Organisation Common Name

The organisation common name is the abbreviated or shortened name to which an organisation is referred. For example the organisation common name for The Boeing Company is BOEING and the organization common name for Canadair Limited is CANADAIR.

- An organisation common name may contain a space (for example, MCDONNELL DOUGLAS).
- An organisation common name must not contain a dash (-), slash (/), or other special character.
- An organisation common name is the most succinct name possible that clearly defines an organisation and is usually the one to two words of the Organisation Full Name (for example, the organisation common name for Société Anonyme des Aeroplanes Morane-Saulnier is MORANE SAULNIER).
- An organisation common name may be an acronym if industry consistently uses the acronym. For example CASA is the organisation common name for Construcciones Aeronauticas Sociedad Anónima and SAAB is the organisation common name for Svenska Aeroplan Aktiebolag.
- The organisation common name does not change simply because the organisation has changed its full name if the aviation line of business within that organisation has not changed.
- The organisation common name only changes if an organisation undergoes a significant change (such as a merger with another manufacturer, the take over of a manufacturer, a change in country location).
- The organisation common name does not include a description of organization's legal form (for example, Limited, Sociedad Anónima, or die Gesellschaft mit beschraenkter Haftung).

Examples:

CASA
MAULE
RAYTHEON
SCHEMPP HIRTH

4.4 Organisation Acronym

The organisation acronym consists of the first letters of the components of the organization's full name. In most cases, description of organization's legal form (for example, Limited, Sociedad Anonima, or die Gesellschaft mit beschraenkter Haftung) is excluded. Examples of acronyms are BHT for Bell Helicopter Textron, Inc. and DHC for de Havilland of Canada.

Examples:

DH

DHC

MDC

NAMC

4.5 Organisation Role

An organisation role type distinguishes the function an organisation performs in regard to the aviation industry.

Examples:

AIRCRAFT MANUFACTURER

ENGINE MANUFACTURER

KIT PRODUCER

- An AIRCRAFT MANUFACTURER is the organisation that has been recognized by its certifying authority as having manufactured the aircraft, at the time of completion.
- An ENGINE MANUFACTURER is the organisation that has been recognized by its certifying authority as having manufactured the engine, at the time of completion.
- A KIT PRODUCER is the organisation that produces kits for amateur construction.

4.6 Country

The country is the official name of a country or sovereignty.

- If the organisation is a legal entity when the country in which the organisation is located changes its name, the COUNTRY will be modified to indicate the new country name. For example, when Aero Vodochody began is was located in

Czechoslovakia. The country for Aero Vodochody is now Czech Republic, the current name of the country where Aero Vodochody is located.

- If the organisation is no longer a legal entity when the country in which the organisation was located changes its name, the COUNTRY will not be modified to indicate the new country name.
- The International Organisation for Standardisation (ISO 3166), Official Country Codes, is the official source for a country name.