# ECCAIRS Aviation
# 1.3.0.12
# Data Definition Standard

English

## Attribute Values

**Aerodrome generally (Aerodrome generally)** 40000000

*Aerodrome generally: The part played by aerodrome factors in the occurrence.*

**Aerodrome as a structure (Aerodrome as a structure)** 41000000

**Apron/ramp as an entity (Apron/ramp as an entity)** 41300000

*N.B. Apron and ramp are synonymous for a defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.(Annex 14)*

**Aircraft parking position/gate (Aircraft parking position/gate)** 100000118

**Apron/ramp congestion (Apron/ramp congestion)** 41300200

**Apron/ramp obstruction (Apron/ramp obstruction)** 41300100

**Apron/ramp surface condition (Apron/ramp surface condition)** 41300400

**Apron/ramp braking action (Apron/ramp braking action)** 41300500

**Apron/ramp surface state (Apron/ramp surface state)** 41300300

**Runway as an entity (Runway as an entity)** 41100000

*Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft. Annex 14.*

**Runway approach obstructions (Approach obstructions)** 41100500

*All fixed (whether temporary or permanent) and mobile objects that extend above a defined surface intended to protect aircraft in flight.*

**Runway arresting gear (Runway arresting gear)** 41100900

*Any equipment installed on or after the runway intended to arrest / stop the aircraft.*

**Engineered materials arrestor system (EMAS) (Engineered materials arrestor system (EMAS))** 100000120

*An engineered bed of lightweight, crushable concrete built at the end of a runway.*

**Runway safety net (Runway safety net)** 100000119

**Runway clearway (Runway clearway)** 100000056

*A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.*

**Runway damage (Runway damage)** 41100400

*Any damage to the runway*

**Runway hold position (Runway hold position)** 100000058

*A designated position intended to protect a runway, obstacle limitation surface or ground aid from taxiing aircraft or vehicle.*

**Runway length (Runway length)** 41100100

**Runway lip (Runway lip)** 41100700

**Runway obstruction (Runway obstruction)** 41100300

*Obstruction/obstacle: All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.*

**Runway overrun area (Runway overrun area)** 100000215

*includes stopway and runway end safety area (RESA)*

**Runway End Safety Area (RESA) (Runway End Safety Area (RESA))** 100000057

*Runway end safety area (RESA). An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.*

**Runway stopway area (Runway stopway)** 41100800

*A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.*

**Runway shoulder (Runway shoulder)** 41100600

**Runway slope (Runway slope)** 41100200

**Runway turn pad (Runway turn pad)** 100000059

**Runway surface condition generally (Runway surface condition)** 41200000

**Runway aquaplaning potential (Runway aquaplaning potential)** 41200100

*Runway aquaplaning potential: Dynamic aquaplaning occurs when the force that a liquid produces under a tyre is sufficient to raise the tyre completely off the ground. Viscous aquaplaning - resulting from the normal slipperiness or lubricating action of water.*

**Runway braking action (Runway braking action)** 41200200

**Runway braking strength (Runway braking strength)** 41200300

**Taxiway as an entity (Taxiway as an entity)** 41500000

*Taxiway. A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:*

*a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.*

*b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.*

*c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.*
*ICAO Annex 14*

**Taxiway surface condition (Taxiway surface condition)** 41500100

*Taxiway: A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:*

*a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.*

*b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.*

*c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.*
*ICAO Annex 14*

**Taxiway braking action (Taxiway braking action)** 41500200

*Taxiway: A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:*

*a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.*

*b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.*

*c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.*
*ICAO Annex 14*

**Vehicle parking area (Vehicle parking area)** 100000050

*Vehicle parking area*

**Vehicle movement areas / lanes (Vehicle movement areas)** 100000049

*Vehicle movement areas / lanes*

**Vehicle movement area surface condition (Vehicle movement area surface condition)** 100000061

**Other aerodrome structures (Other aerodrome structures)** 41400000

**Blast fence (Blast fence)** 100000062

*A structure aimed at mitigating the effect of jet blast on other aircraft or buildings.*

**Drainage system (Drainage system)** 100000065

*Includes all parts of the system dedicated to the drainage of the aerodrome paved areas (e.g. drain ditch, storage and disposal).*

**Engine run-up rig (Engine run-up rig)** 100000064

*A facility used for engine run-up testing.*

**Wildlife aerodrome fence (Wildlife aerodrome fence)** 100000063

*A fence built for the purpose of protecting aerodrome areas from wildlife incursion.*

**Aerodrome emergency services generally (Aerodrome emergency services)** 47000000

**Rescue fire fighting service equipment (RFFS equipment)** 47200000

**Fire extinguishing system - fixed (Fire extinguishing system - fixed)** 100000114

*A fixed fire extinguishing system (e.g. fire hydrant).*

**Fire extinguishing system - portable (Fire extinguishing system - portable)** 100000113

*A portable fire extinguishing system (e.g. portable fire extinguisher).*

**Fire fighting agent (Fire fighting agent )** 100000111

*A liquid or powder used to supress a fire.*

**Fire fighting tender vehicle (Fire fighting tender vehicle)** 100000112

*A vehicle used to combat fire at an aerodrome.*

**Fire training simulator (Fire training simulator)** 100000110

**RFFS boat/vessel (RFFS boat/vessel)** 100000115

**Rescue fire fighting service response (RFFS response)** 47100000

**Rescue fire fighting service effectiveness (RFFS effectiveness)** 47100100

**Aerodrome equipment/facilities (Aerodrome equipment/facilities)** 44000000

*Aerodrome equipment/facilities*

**Aerodrome fuel facilities (Aerodrome fuel facilities)** 44020000

*Facilities used to store and supply fuel throughout the aerodrome.*

**Aerodrome fuel storage (fuel farm) (Aerodrome fuel storage (fuel farm))** 100000068

**Refueling equipment and fuel distribution facilities (Refueling equipment)** 44030000

*Refueling equipment and fuel distribution facilities - fuel lines, pumps, valves etc.*

**Fuel barrel (Fuel barrel)** 44030600

**Fuel hydrant (Fuel hydrant)** 100000067

**Fueling coupling (Fueling coupling)** 44030500

**Pumping equipment (Pumping equipment)** 44030300

**Refueling hose (Refueling hose)** 44030400

**Underground piping (Underground piping)** 44030200

**Aerodrome Information Technology (Aerodrome IT)** 100000102

**Aerodrome Information Display Systems (FIDB/BIDS) (Aerodrome Information Display Systems )** 100000104

**Aerodrome Operation Database (AODB) (Aerodrome Operation Database (AODB))** 100000103

*A database where all data is collected and disseminated to various aerodrome functions.*

**Observation camera (Observation camera)** 100000105

*A camera used for the observation of specific aerodrome areas for the purpose of safety or operations.*

**Aerodrome power supply (Aerodrome power supply)** 100000047

*The supply of electrical power to the aerodrome*

**Aerodrome backup power generators (Aerodrome backup power generators)** 100000048

*The alternate power system to supply the aerodrome in case the primary system failed.*

**Aerodrome weather observation equipment (Aerodrome weather observation equipment)** 100000096

**Automated weather observing system (AWOS) (Automated weather observing system (AWOS))** 100000098

**Visual Range Measurement (transmissometer) (Visual Range Measurement (transmissometer))** 100000099

**Windcone/windsock (Windcone/windsock)** 100000097

**Wind sensor (at glideslope) (Wind sensor (at glideslope))** 100000101

**Wind sensor (at tower) (Wind sensor (at tower))** 100000100

**Cargo loading/handling equipment (Cargo loading/handling equipment)** 44120000 *

**Cargo storage facilities (Cargo storage facilities)** 44060000

**De-icing facilities (De-icing facilities)** 44040000

*De-icing facilities: Facilities used to de-ice aircraft*

**De-icing fluids (De-icing fluids)** 44040200

*Fluids to assist in removing ice, snow, and frost from the exterior surfaces of aircraft.*

**De-icing vehicle/truck (De-icing vehicle)** 44040100

*Vehicles used to remove frost/ice/snow from the surfaces of an aircraft.*

**Facility maintenance equipment (Facility maintenance equipment)** 44080000

**Foreign object removal/control equipment (FOD) (Foreign object removal/control equipment)** 44090000

**FOD radar (FOD radar)** 100000066

*A radar used for the detection on aerodrome surfaces of foreign objects which may damage aircraft.*

**Sweeper (Sweeper)** 44090100

**The equipment used to measure friction (Friction measurement equipment)** 44010000

*The equipment used to measure friction on aircraft movement areas.*

**Passenger loading equipment (Passenger loading equipment)** 44110000 *

**Ramp service equipment and vehicles (Ramp service equipment and vehicles)** 44100000

**Ramp service equipment (Ramp service equipment)** 100000074

**Baggage cart (Baggage cart)** 100000075

*A cart or wagon on which baggage or bulk cargo can be transported to and from aircraft.*

**Baggage trolley (Baggage trolley)** 44100600

**Container (Container)** 100000077

*A box of specific dimensions in which baggage or cargo is loaded and which in turn is loaded on an aircraft. Such containers conform to specific requirements (LD-2, LD-3, etc.).*

**Dolley/ trailer for pallets or containers (Dolley/ trailer for pallets or containers)** 100000076

*A trailer (also known as dolley) on top of which containers or pallets are placed and transported to or from the aircraft.*

**Ground power unit (Ground power unit)** 100000080

**Moveable ladder/stairs (not for passengers) (Moveable ladder/stairs)** 44100300

**Net or other material for pallets (Net or other material for pallets)** 100000079

*A net or other material used to secure cargo on to pallets.*

**Pallet (Pallet)** 100000078

*A rectangular metal bed of specific dimensions on top of which cargo is loaded. The pallet is in turn loaded in the aircraft.*

**Passenger loading bridge (Passenger loading bridge)** 44110100

*Jet bridge, jetway, aero bridge, loading bridge or passenger boarding bridge.*

**Passenger stairs/steps (towed/unpowered) (Passenger stairs/steps (towed))** 44110200

*Passenger stairs/steps which require to be towed or pushed to and from the aircraft by a tracktor or by hand.*

**Passenger wheelchair (Passenger wheelchair)** 100000081

**Ramp service vehicle (Ramp service vehicle)** 100000084

**Air start unit (Air start unit)** 100000085

**Brakes (Brakes)** 100000121

**Clutch (Clutch)** 100000122

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000123

**Baggage loader (Baggage loader)** 44100500

**Brakes (Brakes)** 100000124

**Clutch (Clutch)** 100000125

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000126

**Baggage loading conveyor belt (Baggage loading conveyor belt)** 100000086

*A vehicle with a conveyor belt for loading baggage or bulk cargo.*

**Brakes (Brakes)** 100000127

**Clutch (Clutch)** 100000128

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000129

**Bus (Bus)** 44100400

**Brakes (Brakes)** 100000130

**Clutch (Clutch)** 100000131

**Navigation system (Navigation system)** 100000132

**Other (Other)** 100000133

**Car (Car)** 100000087

**Brakes (Brakes)** 100000134

**Clutch (Clutch)** 100000135

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Navigation system (Navigation system)** 100000136

**Other (Other)** 100000137

**Catering truck (Catering truck)** 44100100

**Brakes (Brakes)** 100000138

**Clutch (Clutch)** 100000139

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000140

**Forklift (lift truck) (Forklift)** 100000088

*A powered industrial truck used to lift and transport materials.*

**Brakes (Brakes)** 100000141

**Clutch (Clutch)** 100000142

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000143

**Ground guidance vehicle (Follow Me) (Ground guidance vehicle (Follow Me))** 100000089

**Brakes (Brakes)** 100000144

**Clutch (Clutch)** 100000145

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Navigation system (Navigation system)** 100000146

**Other (Other)** 100000147

**Lavatory service vehicle (Lavatory service vehicle)** 100000090

**Brakes (Brakes)** 100000148

**Clutch (Clutch)** 100000149

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000150

**Medical services vehicle (Medical services vehicle)** 100000091

**Brakes (Brakes)** 100000151

**Clutch (Clutch)** 100000152

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000153

**Pallet/container loading vehicle (Pallet/container loading vehicle)** 100000092

*A vehicle which can elevate and load (or unload) pallets and containers from aircraft.*

**Brakes (Brakes)** 100000154

**Clutch (Clutch)** 100000155

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Guard or handrail (Guard or handrail)** 100000156

**Other (Other)** 100000157

**High-loader or scissor-lift truck (excluding catering truck) (Passenger scissor-lift truck)** 100000093

*A truck of which the back cabin can be lifted to transport passengers or equipment into the aircraft (excluding catering truck). This vehicle is also used for disabled passengers.*

**Brakes (Brakes)** 100000158

**Clutch (Clutch)** 100000159

**Other (Other)** 100000160

**Passenger steps/stairs vehicle (Passenger steps/stairs vehicle)** 41400100

*A vehicle which has passenger steps/stairs used to alight or board passengers.*

**Brakes (Brakes)** 100000161

**Clutch (Clutch)** 100000162

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Guard or handrail (Guard or handrail)** 100000163

**Other (Other)** 100000164

**Refuelling Truck (Refuelling Truck)** 44030100

**Brakes (Brakes)** 100000165

**Clutch (Clutch)** 100000166

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000167

**Tracktor (Tracktor)** 100000094

*A vehicle used to tow ground service equipment or aircraft.*

**Brakes (Brakes)** 100000168

**Clutch (Clutch)** 100000169

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Coupling (Coupling)** 100000170

**Other (Other)** 100000171

**Truck (Truck)** 44100200

**Brakes (Brakes)** 100000172

**Clutch (Clutch)** 100000173

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Other (Other)** 100000174

**Tow truck (Tow truck)** 100000095

**Brakes (Brakes)** 100000175

**Clutch (Clutch)** 100000176

*A clutch is a mechanism for transmitting rotation, which can be engaged and disengaged.*

**Coupling (Coupling)** 100000177

**Tow barless/elevating tow vehicle (Tow barless/elevating tow vehicle)** 100000178

**Towing and parking equipment (Towing and parking equipment)** 44100700

**Aircraft parking equipment (chocks) (Aircraft parking equipment (chocks))** 100000072

**Aircraft tie down equipment (Aircraft tie down equipment)** 100000071

*Equipment used for securing aircraft parked on the ground (e.g. ropes, springs, hooks etc.).*

**Parking guidance equipment (fixed) (Parking guidance equipment (fixed))** 100000073

*Equipment used for the visual guidance of aircraft at a nose-in parking stand (e.g. AGNIS: Azimuth Guidance for Nose- In Stand).*

**Tow bar (Tow bar)** 44100701

*Tow bar*

**Tow bar pin (Tow bar pin)** 100000069

*A pin used to decure the tow bar to the aircraft nose wheel.*

**Tow vehicle/tractor (Tow vehicle/tractor)** 100000070

**Other ramp service equipment (Other ramp service equipment)** 44100800

**Traffic barrier (Traffic barrier)** 100000083

**Traffic cone (Traffic cone)** 100000082

**Runway/taxiway maintenance equipment (Runway/taxiway maintenance equipment)** 44130000

**Inspection vehicle (Inspection vehicle)** 44130200

**Sweeper (Sweeper)** 44130100

**Snow/ice/frost removal/ spilled fuel equipment (Snow/ice/frost removal/ spilled fuel equipment)** 44050000

*Snow/ice/frost removal/ spilled fuel equipment - plows, sweeps, blowers etc.*

**Runway de-icing equipment (Runway de-icing equipment)** 44050500

*Equipment used to de-ice the runway, e.g. by application of de-icing fluids.*

**Runway de-icing fluid (Runway de-icing fluid)** 44050501

*Deicing/anti-icing fluid is used typically on runways, taxiways, and other aircraft maneuvering areas for the prevention and removal of frozen deposits of frost and ice. Such fluids must not be used to deice/anti-ice aircraft. (See related AMS 1435 standard)*

**Snow blower (Snow blower)** 44050200

**Snow plow (Snow plow)** 44050100

**Snow removal truck (Snow removal truck)** 44050400

*A truck used during aerodrome snow removal.*

**Sweeper (Sweeper)** 44050300

*Vehicle used to sweed the surface of an aerodrome*

**Wildlife control equipment (animal and bird) (Wildlife control equipment)** 44070000

**Winch launching equipment (Winch launching equipment)** 44140000

*Winch launching equipment (gliders)*

**Winch (Winch )** 44140100

*Winch (including motor)*

**winch failure (winch failure)** 44140101

**Winch cable (Winch cable)** 44140200

**winch cable failure (winch cable failure)** 44140201

**Winch cable cutter (Winch cable cutter)** 44140300

**Aerodrome/heliport lighting and marking generally (Aerodrome lighting/marking)** 43000000

**Aerodrome/heliport aeronautical lighting (Aeronautical lighting)** 43100000

**Aerodrome/heliport approach lighting (Approach lighting)** 43010000

**Aerodrome/heliport VASI/PAPI (VASI/PAPI)** 43020000

*Aerodrome/heliport visual approach slope indicator [VASI]/precision approach path indicator [PAPI].*
*VASIS: An approach slope indicator system consisting of four light units situated on the left side of the runway in the form of two wing bars referred to as the upwind and downwind wing bars. The aircraft is on slope if the upwind bar shows red and the downwind bar shows white, too high if both bars show white, and too low if both bars show red. Some aerodromes serving large aircraft have three-bar visual approach slope indicator systems (VASIS), which provide two visual glide paths (GP) to the same runway. The visual approach slope indicator system can be situated so as to provide three types of eye-to-wheel height (EWH):*
*V1 (10 ft), V2 (25 ft) and V3 (25 ft and 45 ft).*

**Aerodrome/heliport obstruction lighting (Obstruction lighting)** 43090000

**Aerodrome/heliport parking lighting (Parking lighting)** 43080000

**Aerodrome runway lighting (Runway lighting)** 43030000

**Aerodrome/heliport sign lighting (Sign lighting)** 43070000

*Sign.*
*a) Fixed message sign. A sign presenting only one message.*
*b) Variable message sign. A sign capable of presenting several pre-determined messages or no message, as applicable.*
*ICAO Annex 14*

**Aerodrome/heliport stop bar lighting (Stop bar lighting)** 43040000

**Aerodrome/heliport stop way lighting (Stop way lighting)** 43050000

**Runway guard lights (Runway guard lights)** 100000108

*A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.*

**Aerodrome/heliport taxiway lighting (Taxiway lighting)** 43060000

*Taxiway. A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:*

*a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.*

*b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.*

*c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.*
*ICAO Annex 14*

**Other lighting (Other lighting)** 100000109

**Aerodrome/heliport marking (Marking)** 43110000

*Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.*

**Apron/ramp marking (Apron/ramp marking)** 43110200

*Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.*
*Apron. A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.*

**Runway/aerodrome obstruction marking (Obstruction marking)** 43110300

*Markings of obstructions on the surface*

**Runway marking (Runway marking)** 43110400

*Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.*

**Aerodrome taxiway marking (Taxiway marking)** 43110100

*Taxiway. A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:*

*a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.*

*b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.*

*c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.*
*ICAO Annex 14*
*Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.*

**Wire obstacle marking (Wire marking)** 100000184

*The marking of wires, in particular to alert helicopter crews to their presence.*

**Aerodrome medical emergency service (Aerodrome medical emergency service)** 49000000

**Aerodrome/heliport operations generally (Aerodrome operations)** 42000000

**Aircraft de-icing (Aircraft de-icing)** 100000051

*The removal of ice/snow/frost from the surface of an aircraft and/or the application of a protective coating.*

**Aircraft winch launch (Aircraft winch launch)** 42160000

**Operation of cable cutter (Operation of cable cutter)** 42160200

**Operation of winch (Operation of winch)** 42160100

**winch launch interrupted (winch launch interrupted)** 42160101

**other winch launch related event (other)** 42160102

**Aerodrome snow/ice removal (Aerodrome snow/ice removal)** 42070000

*Aerodrome snow/ice removal: the removal of snow/frost/ice from the surfaces of an aerodrome. Note: this includes heliport snow/ice removal.*

**Aerodrome/heliport facility maintenance (Facility maintenance)** 42050000

**Aerodrome/heliport foreign object removal (FOD) (Foreign object removal)** 42060000

**Aerodrome/heliport fuel storage maintenance (Fuel storage maintenance)** 42120000

**Aerodrome/heliport hazard warning/notification (Hazard notification)** 42030000

**Aerodrome/heliport marshalling services (Marshalling services)** 42150000

**Aerodrome/heliport ramp service (Ramp service)** 42110000

**Aerodrome/heliport refuelling service (Refuelling service)** 42100000

**Aerodrome runway friction measurement (Runway friction measurement)** 42040000

**Aerodrome/heliport runway maintenance (Runway maintenance)** 42130000

**Aerodrome/heliport vehicles control (Vehicles control)** 42080000

*The control of vehicles on the aerodrome.*

**Vehicle/equipment operations - general (Vehicle/equipment operations )** 42140000

*Vehicle/equipment operations*

**Clearance from obstacles / objects (Clearance from obstacles/objects)** 42140200

*Clearance of vehicles from obstacles/objects, e.g. clearance not maintained*

**Control of vehicle (Control of vehicle)** 42140300

*Control of an individual by the driver vehicle, e.g. control not maintained*

**Operation of vehicle (Operation of vehicle)** 42140400

*Operation of vehicle, e.g. improper use of brakes, lifting devices etc*

**Vehicle/equipment speed (Vehicle/equipment speed)** 42140100

*Vehicle/equipment speed, e.g. speed excessive*

**Aerodrome/heliport wildlife control operations (Wildlife control)** 100000117

**Aerodrome/heliport animal control operations (Animal control)** 42010000

**Aerodrome/heliport bird control operations (Bird control)** 42020000

**Other aerodrome/heliport operations (Other operations)** 42090000

**Aerodrome procedures generally (Aerodrome procedures)** 100000001

**Aerodrome emergency procedures (Aerodrome emergency procedures)** 100000106

**Aerodrome environmental procedures (Aerodrome environmental procedures)** 100000107

*Procedures for the reduction of pollution in and around the aerodrome (e.g. fuel spill, waste management etc.). Not to be used for noise abatement procedures.*

**Aerodrome refueling procedures (Aerodrome refueling procedures)** 100000009

**Aircraft de-icing procedures (Aircraft de-icing procedures)** 100000052

*Procedures applied for the de-icing of aircraft*

**Dangerous goods handling procedures (Dangerous goods handling procedures)** 100000011

**Facility maintenance procedures (Facility maintenance procedures)** 100000005

**Foreign object removal/control procedures (FOD) (Foreign object removal/control procedures)** 100000006

**Friction measurement procedures (Friction measurement procedures)** 100000004

**Hazard notification procedures (Hazard notification procedures)** 100000003

**Low visibility procedure (LVP) (Low visibility procedure)** 100000045

*Low Visibility Procedures (LVP) are procedures applied at an aerodrome for the purpose of ensuring safe operations during Category II and III approaches and Low Visibility Take-offs. (JAR-OPS 1, paragraph 1.435 (a) (2))*

*A low visibility take-off (LVTO) is a take-off where the RVR is less than 400 m. (JAR-OPS 1, paragraph 1.435 (a) (3)) .*

*Low visibility procedures have been devised to allow aircraft to operate safely from and into aerodromes when the weather conditions do not permit normal operations.*

**Movement area management procedures (Movement area management procedures)** 100000013

**Runway maintenance procedures (Runway maintenance procedures)** 100000010

**Snow/ice/frost removal procedures (Snow/ice/frost removal procedures)** 100000007

*Procedures to remove frost/snow/ice from the aircraft movement areas.*

**Traffic area management procedures (Traffic area management procedures)** 100000012

**Vehicle control procedures (Vehicle control procedures)** 100000008

**Wildlife control procedures (Wildlife control procedures)** 100000002

**Animal control procedures (Animal control procedures)** 100000014

**Bird control procedures (Bird control procedures)** 100000015

**Aerodrome security services generally (Aerodrome security services)** 48000000

**Security equipment in general (Security equipment)** 48200000

**Security explosives sniffer (Explosives sniffer)** 48200400

**Security hand held metal detector (Hand held metal detector)** 48200200

**Security passenger scanner equipment (Passenger scanner)** 48200100

**Perimeter security fence (Perimeter security fence)** 48200500

**Security x-ray equipment (X-ray equipment)** 48200300

**Security camera (Security camera)** 100000116

**Other security equipment (Other)** 48200600

**Security operations (Security operations)** 48100000

**Aircraft security check (Aircraft security check)** 48100400

**Airport security (Airport security)** 48100100

**Cargo security check (Cargo security check)** 48100200

*Screening. The application of technical or other means which are intended to detect weapons, explosives or other dangerous devices which may be used to commit an act of unlawful interference.*

**Passenger baggage check (Passenger baggage check)** 48100600

**Passenger security check (Passenger security check)** 48100300

*Screening. The application of technical or other means which are intended to detect weapons, explosives or other dangerous devices which may be used to commit an act of unlawful interference.*

**Other security operations (Other security operations)** 48100500

*Security operations other than those mentioned above.*

**Non aerodrome/heliport landing area (Non aerodrome landing area)** 46000000

*An area which is not designated for the landing of aircraft.*

**Other aerodrome/heliport aids (Other aerodrome aids)** 45000000

**Aerodrome/heliport charts (Charts)** 45030000

**Aerodrome/heliport landing direction indicator (Landing direction indicator)** 45010000

*Landing direction indicator. A device to indicate visually the direction currently designated for landing and for take-off.*

**Aerodrome/heliport navigation charts/maps (Navigation maps)** 45020000

**Wind direction indicator (Wind direction indicator)** 45040000

*Wind direction indicator*

**Operation and maintenance of the aircraft, its components and systems (Aircraft and operations)** 10000000

*Operation and maintenance of the aircraft, its components and systems*

**The aircraft, its systems and components (Aircraft components and systems)** 11000000

*The aircraft, its systems and components.*

**TIME LIMITS/MAINTENANCE CHECKS (ATA Code 0500) (0500 TIME LIMITS/MAINTENANCE CHECKS)** 100000219

*(ATA Code 0500) Manufacturers' recommended time limits for inspections, maintenance checks and inspections (both scheduled and unscheduled).*

**Time Limits (ATA Code 0510) (0510 Time Limits)** 100000220

*(ATA Code 0510) Those manufacturer recommended time limits for inspections, maintenance and overhaul of the aircraft, its systems and units, and life of parts.*

*For engine manufacturers this will include the flight cycle lives of major rotating components and other items designated critical.*

**Scheduled Maintenance Checks (ATA Code 0520) (0520 Scheduled Maintenance Checks)** 100000221

*(ATA Code 0520) Those manufacturer recommended maintenance checks and inspections of the aircraft, its systems and units dictated by the time limits specified in -10 above. This section shall list in more detail the items which are outlined on the airline job forms (usually by title only), and shall cross-reference the detailed procedures included in the individual Maintenance Practices.*

**Unscheduled Maintenance checks (ATA Code 0550) (0550 Unscheduled Maintenance checks)** 100000222

*(ATA Code 0550) Those maintenance checks and inspections on the aircraft, its systems and units which are dictated by special or unusual conditions which are not related to the time limits specified in -10 above. Includes inspections and checks such as hard landing, overweight landing, bird strike, turbulent air, lightning strike, slush ingestion, radioactive contamination, maintenance checks prior to engine-out ferry, etc.*

**DIMENSIONS AND AREAS (ATA Code 0600) (0600 DIMENSIONS AND AREAS)** 100000223

*(ATA Code 0600) Those charts, diagrams, and text which show the area, dimensions, stations, access doors/zoning and physical locations, of the major structural members of the aircraft. Includes an explanation of the system of zoning and measurement used.*

**Lifting and shoring (ATA Code:0700) (0700 Lifting and shoring)** 11070000

*(ATA Code:0700) This chapter shall include the necessary procedures to lift & shore aircraft in any of the conditions to which it may be subjected. Includes lifting and shoring procedures that may be employed during aircraft maintenance and repair.*

**Jacking (ATA Code:0710) (0710 Jacking)** 11071000

*(ATA Code:0710) Provides information relative to jack points, adapters, tail supports, balance weights, jacks and jacking procedures utilized during aircraft maintenance and repair.*

**Shoring (ATA Code:0720) (0720 Shoring)** 11072000

*(ATA Code:0720) Data necessary to support the aircraft during maintenance and repair. Includes information on shoring materials and equipment, contour dimensions, shoring locations, etc.*

**Leveling and weighting (ATA Code:0800) (0800 Leveling and weighting)** 11080000

*(ATA Code:0800) Data to properly level the aircraft for any of the various maintenance, overhaul or major repairs which might become necessary during the life of the aircraft. It shall also include those units or components which are specifically dedicated to record, store or compute weight and balance data. Includes those maintenance practices necessary to prepare the aircraft for weighing.*

**Weighing and Balancing (ATA Code:0810) (0810 Weighing and Balancing)** 11081000

*(ATA Code:0810) Those units or components dedicated to the specific function of recording, storing or computing weight and balance data.*

**Leveling (ATA Code:0820) (0820 Leveling)** 11082000

*(ATA Code:0820) Those units or components dedicated to the specific function of leveling the aircraft.*

**Towing and taxiing (ATA Code:0900) (0900 Towing and taxiing)** 11090000

*(ATA Code:0900) Those instructions necessary to tow and taxi the aircraft. Charts showing location of attachment points, turning radius, etc., shall be included. Includes those maintenance practices necessary to prepare the aircraft for towing and taxiing.*

**Towing (ATA Code:0910) (0910 Towing)** 11091000

*(ATA Code:0910) Equipment and materials required such as towing vehicles, tow bars, towing cables, etc.*

**Tow cable (Tow cable)** 11130100

**Taxiing (ATA Code:0920) (0920 Taxiing)** 11092000

*(ATA Code:0920) Those instructions necessary to taxi the aircraft in normal or abnormal conditions such as adverse weather conditions, etc. Shall include procedures to be used such as use of engines, interphone and brakes, ground turning techniques, etc.; precautions and limitations such as jet intake and exhaust danger areas, minimum turning radius, friction coefficients for various ground conditions, etc.*

**0930 Air towing (0930 Air towing)** 100000181

*The equipment used for air tow (hooks, cable)*

**Air tow cable (Air tow cable)** 100000182

**Parking, mooring, storage and return to service (ATA Code:1000) (1000 Parking, mooring, storage and return to service)** 11100000

*(ATA Code:1000) Those instructions necessary to park, store, moor and prepare the aircraft for service in any of the conditions to which it may be subjected. Charts showing location of landing gear and control surface locks, blanking plugs and covers, mooring points, etc., shall be included. Includes those maintenance practices necessary to prepare the aircraft for parking, mooring, or storage.*

**Parking/Storage (ATA Code:1010) (1010 Parking/Storage)** 11101000

*(ATA Code:1010) Those instructions necessary to park, store, moor and prepare the aircraft for service in any of the conditions to which it may be subjected. Charts showing location of landing gear and control surface locks, blanking plugs and covers, mooring points, etc., shall be included. Includes those maintenance practices necessary to prepare the aircraft for parking, mooring, or storage.*

**Mooring (ATA Code:1020) (1020 Mooring)** 11102000

*(ATA Code:1020) Those instructions necessary to moor or picket the aircraft in normal or abnormal conditions or with engines removed, etc.; for short or long terms in extremes of weather conditions. Shall include equipment and materials required such as wheel chocks, mooring blocks, mooring cables, etc.; procedures such as ballasting, etc.; precautions and limitations such as control in high wind conditions, etc.*

**Return to Service (ATA Code:1030) (1030 Return to Service)** 11103000

*(ATA Code:1030) Those instructions necessary to prepare the aircraft for operation following mooring, parking, or a period of storage.*

**Placards and markings (ATA Code:1100) (1100 Placards and markings)** 11110000

*(ATA Code:1100) Placards and markings: Those installed by the manufacturer including those required by government regulations.*

**Exterior Color Schemes and Markings (ATA Code:1110) (1110 Exterior Color Schemes and Markings)** 11111000

*(ATA Code:1110) Exterior Color Schemes and Markings*

**Exterior Placards and Markings (ATA Code:1120) (1120 Exterior Placards and Markings)** 11112000

*(ATA Code:1120) Those placards, markings, self-illuminating signs, etc. required for interior general and emergency information, instructions, cautions, warnings, etc.*

**Interior Placards (ATA Code:1130) (1130 Interior Placards)** 11113000

*(ATA Code:1130) Those placards, markings, self-illuminating signs, etc. required for interior general and emergency information, instructions, cautions, warnings, etc.*

**Servicing of the aircraft with liquids (ATA Code:1200) (1200 Liquid servicing)** 11120000

*(ATA Code:1200) Servicing of the aircraft with liquids*

**Servicing the aircraft with any type of aviation fuel (ATA Code:1210) (1210 Fuel servicing)** 11121000

*(ATA Code:1210) Servicing the aircraft with any type of aviation fuel*

**Servicing the aircraft with aviation lubricating oil (ATA Code:1220) (1220 Oil servicing)** 11122000

*(ATA Code:1220) Servicing the aircraft with aviation lubricating oil*

**Servicing the aircraft with any type of hydraulic fluid (ATA Code:1230) (1230 Hydraulic fluid servicing)** 11123000

*(ATA Code:1230) Servicing the aircraft with any type of hydraulic fluid*

**Coolant servicing (ATA Code:1240) (1240 Coolant servicing)** 11124000

*(ATA Code:1240) Coolant servicing: servicing the aircraft with any type of engine coolant used in aircraft.*

**Miscellaneous hardware (ATA Code:1400) (1400 Miscellaneous hardware)** 11140000

*(ATA Code:1400) For miscellaneous parts that are not associated with an installed aircraft component or system.*

**Hoses and tubes (ATA Code:1410) (1410 Hoses and tubes)** 11141000

*(ATA Code:1410) Any aircraft or engine hose or that are not associated a specific aircraft system.*

**Electrical Connectors (ATA Code:1420) (1420 Electrical Connectors)** 11142000

*(ATA Code:1420) Any aircraft or engine electrical connector that is not associated a specific aircraft system.*

**Fasteners (ATA Code:1430) (1430 Fasteners)** 11143000

*(ATA Code:1430) Any aircraft or engine fastener that are not associated a specific aircraft system. Typical parts are generic AN bolts, nuts, rivets. etc.*

**Miscellaneous Wiring (ATA Code:1497) (1497 Miscellaneous Wiring)** 11149700

*(ATA Code:1497) Any aircraft or engine wiring that is not associated a specific aircraft system.*

**Helicopter vibration analysis (ATA Code:1800) (1800 Helicopter vibration analysis)** 11180000

*(ATA Code:1800) Helicopter vibration analysis: Monitoring, measuring, diagnosing and locating sources of noise and vibration in a helicopter in order to identify imbalance, damage or misalignment in helicopter components.*

**Helicopter vibration analysis (ATA Code:1810) (1810 Helicopter vibration analysis)** 11181000

*(ATA Code:1810) Helicopter vibration analysis: Monitoring, measuring, diagnosing and locating sources of vibration in dynamic and structural components of a helicopter.*

**Helicopter noise analysis (ATA Code:1820) (1820 Helicopter noise analysis)** 11182000

*(ATA Code:1820) Helicopter noise analysis: Monitoring, measuring, diagnosing and locating sources of noise in dynamic and structural components.*

**Helicopter Vibration System Wiring (ATA Code:1897) (1897 Helicopter Vibration System Wiring)** 11189700

*(ATA Code:1897) Wiring used on equipment necessary to monitor, measure, diagnose and locate sources of noise in dynamic and structural components.*

**STANDARD PRACTICES-AIRFRAME (ATA Code 2000) (2000 STANDARD PRACTICES-AIRFRAME )** 100000224

*(ATA Code 2000) STANDARD PRACTICES-AIRFRAME*

**Air conditioning system (ATA Code:2100) (2100 Air conditioning system)** 11210000

*(ATA Code:2100) Air conditioning system: Examples are lines and hoses with no reference to the specific using system and those units and components furnishing a means of pressurizing, heating, cooling, moisture controlling, filtering, and treating the air used to ventilate areas of the fuselage within the pressure vessel.*

**Cabin compressor system (ATA Code:2110) (2110 Cabin compressor system)** 11211000

*(ATA Code:2110) Cabin compressor system: Includes items such as controls and indicating systems related to the compressors and wiring, but does not include the pressure control and indicating system for the cabin pressurization.*

**Air distribution system (ATA Code:2120) (2120 Distribution system)** 11212000

*(ATA Code:2120) That portion of the system used to induct and distribute air. Includes equipment rack cooling systems and items such as blowers, scoops, ducting, inlets, check valves, wiring, etc. Does not include valves which are part of pressurization and temperature control.*

**2126 Avionics ventilation (2126 Avionics ventilation)** 11211100

*includes Avionics Equipment Ventilation Computer (AEVC)*

**Air distribution fan (ATA Code:2121) (2121 Air distribution fan)** 11212100

*(ATA Code:2121) Air distribution fan: Includes associated motor which distributes air within the confines for comfort or equipment cooling. Typical parts are bearings, bushings and motors.*

**Air conditioning duct (Air conditioning duct)** 11212001

*Air conditioning pneumatic ducts.*

**Pressurization control system (ATA Code:2130) (2130 Pressurization control)** 11213000

*(ATA Code:2130) Pressurization control system: The miscellaneous system components or parts other than the controller, indicator, sensor, regulator, or outflow valves. Typical parts are the amplifier, switches and electrical connectors.*

**Cabin pressure control system (ATA Code:2131) (2131 Cabin pressure control)** 11213100

*(ATA Code:2131) Cabin pressure control system: The miscellaneous system components or parts of the cabin pressure control system other than the controller, indicator, sensor, regulator and outflow valves. Typical parts are amplifier, switch and electrical connectors.*

**Cabin pressure controller (Cabin pressure controller)** 11213101

*The cabin pressure controller units only and not the system.*

**Pressurization system - duct (Pressurization system - duct)** 11213105

*Pressurization system - duct.*

**Pressure indicator (ATA Code:2132) (2132 Pressure indicator)** 11213200

*(ATA Code:2132) Pressure indicator: The cabin pressurization system, pressure indicators and associated system parts.*

**Pressure regulator, outflow valve (ATA Code:2133) (2133 Pressure regulator valve)** 11213300

*(ATA Code:2133) Pressure regulator, outflow valve: The pressure regulating outflow/dump valves and associated parts such as linkage, filter and diaphragm.*

**Pressure sensor (ATA Code:2134) (2134 Pressure sensor)** 11213400

*(ATA Code:2134) Pressure sensor: The units and systems which measure differential pressure and transmit a signal. Typical parts are pressure switch and transducer.*

**Heating system (ATA Code:2140) (2140 Heating system)** 11214000

*(ATA Code:2140) Heating system: The units and systems supplying heated air to the cockpit or cabin. Includes the heat source (heater), controlling aspects and temperature sensors/indicators. Typical parts are fuel pump, filter, plumbing, circuitry, relay, heat exchanger and igniter.*

**Cabin cooling system (ATA Code:2150) (2150 Cabin cooling system)** 11215000

*(ATA Code:2150) Cabin cooling system: The units and systems supplying cooled air to the cockpit or cabin. Does not include the temperature control and indicating system. Typical parts are flow valve, relay, condenser, ram air sensor, heat exchanger, cooling turbine and air cycle machine.*

**Equipment cooling system (Equipment cooling system)** 100000217

**Temperature control system (ATA Code:2160) (2160 Temperature control system)** 11216000

*(ATA Code:2160) Temperature control system: The units and circuitry other than the control unit which are used for controlling the temperature of the air in the cockpit and cabin. Typical parts are control valves, thermal sensing devices, switches, amplifiers and wiring.*

**Cabin temperature control system (ATA Code:2161) (2161 Cabin temperature control system)** 11216100

*(ATA Code:2161) Cabin temperature control system: The units and circuitry other than the control unit which are used for controlling the temperature of the air in the cockpit and cabin. Typical parts are control valves, thermal sensing devices, switches, amplifiers and wiring.*

**Cabin temperature controller (Controller)** 11216101

*The cabin temperature controller and components within the cabin temperature control unit.*

**Cabin temperature indicator (ATA Code:2162) (2162 Cabin temperature indicator)** 11216200

*(ATA Code:2162) The cabin temperature indicators, lamps and associated circuitry which indicate the air temperature in the cabin.*

**Cabin temperature sensor (ATA Code:2163) (2163 Cabin temperature sensor)** 11216300

*(ATA Code:2163) The cabin temperature sensors and associated circuitry which sense the temperature of the air in the cabin and relay a signal to the indicator.*

**Moisture/Air Contaminant Control (ATA Code:2170) (2170 Moisture/Air Contaminant Control)** 11217000

*(ATA Code:2170) That portion of the system used to control moisture in the air, to control ozone concentrations, to filter radioactive debris from conditioned air, and to treat the air with deodorizers, insecticides, etc.*

**Air Conditioning System Wiring (ATA Code:2197) (2197 Air Conditioning System Wiring)** 11219700

*(ATA Code:2197) Wiring specific to the Air Conditioning System.*

**Autoflight system (ATA Code:2200) (2200 Autoflight system)** 11220000

*(ATA Code:2200) Autoflight system: The units and components that furnish a means of automatically controlling the flight of the aircraft. Includes those units and components controlling direction, heading, attitude, altitude and speed.*

**2200 Autoflight system - general (2200 Autoflight system - general)** 100000186

**Alpha Protection (Alpha Protection)** 100000187

*Alpha protection - (Airbus mode of the flight control system) High angle of attack protection: When alpha exceeds alpha prot, elevator control switches to alpha protection mode in which the angle of attack is proportional to the sidestick deflection. Alpha max will not be exceeded even if the pilot applies full aft deflection.*

**Auto Flight control panel (Auto Flight control panel)** 100000244

*Auto Flight control panel*

**Autopilot system (ATA Code:2210) (2210 Autopilot system)** 11221000

*(ATA Code:2210) That portion of the system that uses radio/radar signals, directional and vertical references, air data pitot-static, computed flight path data, or manually induced inputs to the system to automatically control the flight path of the aircraft through adjustment to the pitch/roll/yaw axis or wing lift characteristics and provide visual cues for flight path guidance, i.e.: Integrated Flight Director. This includes power source devices, interlocking devices and amplifying, computing, integrating, controlling, actuating, indicating and warning devices such as computers, servos, control panels, indicators, warning lights, etc.*

**Autopilot computer (ATA Code:2211) (2211 Autopilot computer)** 11221100

*(ATA Code:2211) Autopilot computer: Typical parts are resistors, circuit board, capacitor and power supply.*

**Altitude controller (ATA Code:2212) (2212 Altitude controller)** 11221200

*(ATA Code:2212) Altitude controller: The units transmitting output information signals to maintain a predetermined altitude, rate of climb or descent automatically. Does not include the connecting system parts such as the sensor switch.*

**Flight controller (ATA Code:2213) (2213 Flight controller)** 11221300

*(ATA Code:2213) Flight controller: The command unit of an autopilot system. The unit is manually operated to generate signals which cause the aircraft to climb, dive or perform coordinated turns.*

**Autopilot trim indicator (ATA Code:2214) (2214 Autopilot trim indicator)** 11221400

*(ATA Code:2214) Autopilot trim indicator: The instrument [or indicator] and associated circuitry that indicates the trim position selected by the pilot.*

**Autopilot main servo (ATA Code:2215) (2215 Autopilot main servo)** 11221500

*(ATA Code:2215) Autopilot main servo: The units connected to primary flight control actuating mechanisms which are used to reposition control surfaces mechanically in accordance with electrical or pneumatic signals from a controller.*

**Autopilot trim servo (ATA Code:2216) (2216 Autopilot trim servo)** 11221600

*(ATA Code:2216) Autopilot trim servo: The units that are mechanically connected to flight control cables for making minor corrections in aircraft attitude or direction.*

**Approach coupler (Approach coupler)** 11221014

*The approach coupler associated with the autopilot system used for auto landings.*

**Auto flare (Auto flare)** 11221010

*The auto flare associated with the autopilot system used for auto landings.*

**Autoflight yaw damper (Autoflight yaw damper)** 11221001

*Autoflight yaw damper: The yaw damper associated with the autopilot system used for controlling direction.*

**Speed-attitude correction system (ATA Code:2220) (2220 Speed-attitude correction)** 11222000

*(ATA Code:2220) Speed-attitude correction: The system which automatically maintains safe flight conditions by correcting for effects of speed and out-of-trim conditions using means such as automatic trim, Mach trim, or speed stability and Mach feel. This includes sensing, computing, actuating, indicating, internal monitoring and warning devices.*

**Auto throttle system (ATA Code:2230) (2230 Auto throttle system)** 11223000

*(ATA Code:2230) Auto throttle system: The system that automatically controls the position of the throttles to manage engine power properly during all phases of flight/attitude. This includes engaging, sensing, computing, amplifying, controlling, actuating and warning devices. Typical parts are amplifiers, computers, servos, limit switches, clutches, gearboxes and warning lights.*

**Alpha floor (Alpha floor)** 100000188

*Airbus: A mode of the auto thrust system that commands TOGA power when the aircraft approaches stall conditions. The thrust is commanded irrespective of the position of the thrust levers.*

**System monitor (ATA Code:2240) (2240 System monitor)** 11224000

*(ATA Code:2240) System monitor: The unit which provides separate or external monitoring/remote readout (for maintenance or other purposes) not directly related to the internal system monitoring (for system integrity flight crew warning). This includes sensing, computing, indicating and warning devices and control panels.*

**Aerodynamic load alleviation (ATA Code:2250) (2250 Aerodynamic load alleviation)** 11225000

*(ATA Code:2250) Aerodynamic load alleviation: The system that corrects and provides for gust loading/upset, aerodynamic augmentation, alleviation, suppression and ride control automatically. This includes sensing, computing, actuating, indicating, internal monitoring and warning devices.*

**The wiring specific to the Autoflight/Auto Pilot System (ATA Code:2297) (2297 Auto Flight System Wiring)** 11221700

*(ATA Code:2297) The wiring specific to the Autoflight/Auto Pilot System*

**2297 Auto Flight System Wiring (2297 Auto Flight System Wiring)** 11229700 *

*Wiring specific to the Autoflight/Auto Pilot System*

**Communications system (ATA Code:2300) (2300 Communications system)** 11230000

*(ATA Code:2300) Communications system: The units and components furnishing a means of communicating from one part of the aircraft to another and between the aircraft and ground stations, includes voice, data, continuous wave communicating components and passenger announcement systems, intercom, in-flight telephones, tape reproducers and record player. Factors relating to the also for reports of units or parts common to more than one communication system.*

**Speech communications (ATA Code:2310) (2310 Speech communications)** 11231000 *

*(ATA Code:2310) Speech communications: That portion of the system which utilizes voice modulated electromagnetic waves to transmit and/or receive messages from air to air, or between air and ground installations. Includes HF, VHF and UHF in-flight radio telephone, communication transmitting and receiving equipment.*

**Speech Communications (ATA Code:2310) (2310 Speech Communications)** 100000054

*(ATA Code:2310) That portion of the system which utilizes voice modulated electromagnetic waves to transmit and/or receive messages from air to air, or air to ground installations. Includes H.F., VHF., UHF., etc., inflight telephone, communication transmitting & receiving equipment.*

**Ultra high frequency communication system (ATA Code:2311) (2311 UHF communication system)** 11231100

*(ATA Code:2311) UHF communication system: The system parts and circuitry including the receiver, transmitter and antenna used exclusively for ultra high frequency communications.*

**Very high frequency communication system (ATA Code:2312) (2312 VHF communication system)** 11231200

*(ATA Code:2312) VHF communication system: The system parts and circuitry including the receiver, transmitter and antenna used exclusively for very high frequency communications.*

**Satcom (ATA Code:2315) (2315 Satcom)** 11231500

*(ATA Code:2315) Satcom: That portion of the system which utilizes satellite communication systems (Satcom).*

**High frequency communication system (ATA Code:2316) (2316 HF communication system)** 11231600

*(ATA Code:2316) HF communication system: The system parts and circuitry including the receiver, transmitter and antenna used exclusively in the high frequency communications.*

**SATCOM (ATA Code 2315) (2315 SATCOM)** 100000225

*That portion of the system which utilizes satellite communication systems (SATCOM).*

**Data transmission automatic call (ATA Code:2320) (2320 Data transmission automatic call)** 11232000

*(ATA Code:2320) Data transmission automatic call: That portion of the system which presents information derived from pulse coded transmissions. Includes teleprinter, Selcal, Calsel and ACARS.*

**Selcal (ATA Code:2321) (2321 Selcal)** 11232100

*(ATA Code:2321) Selcal: That portion of the system which permits the selective calling of individual aircraft over radiotelephone channels linking a ground station with the aircraft. ICAO Annex 10.*
*A system that provides an automatic and selective method of calling any aircraft. Voice calling is replaced by the transmission of code tones to the aircraft over the international radiotelephony channels.*

**Passenger Address, Entertainment and Comfort (ATA Code:2330) (2330 Passenger Address, Entertainment and Comfort)** 11233000

*(ATA Code:2330) Passenger entertainment system or components such as amplifier, cassette recorder player, control panel, speaker, video equipment, etc.*

**Interphone system (ATA Code:2340) (2340 Interphone system)** 11234000

*(ATA Code:2340) Interphone system*

**Audio integrating system (ATA Code:2350) (2350 Audio integrating system)** 11235000

*(ATA Code:2350) Audio integrating system: The system components and parts including the control panel and amplifier which controls output of communications and navigation receivers into flight crew headphones and speakers. Also includes output from microphones into communications transmitters. Typical parts are microphones, cockpit speakers and headphones.*

**Cockpit Loudspeaker (Cockpit Loudspeaker)** 100000258

*Cockpit Loudspeaker*

**Hand microphone (Hand microphone)** 11235003

**Headset microphone (Headset microphone)** 11235002

**Headset phones (Headset phones)** 11235001

**Static discharge system (ATA Code:2360) (2360 Static discharge system)** 11236000

*(ATA Code:2360) Static discharge system: That portion of the system which dissipates static electricity. Does not include bonding straps on engine or airframe used to assure paths for DC current. Typical parts are wicks and bonding straps.*

**Audio/video monitoring (ATA Code:2370) (2370 Audio/video monitoring)** 11237000

*(ATA Code:2370) Audio/video monitoring: Those installations that record, or monitor crew or passenger conversation or movement or provide external monitoring for security or safety purposes. Includes externally mounted cameras, voice and video recorders used for aircraft operations.*

**Cockpit voice recorder (Cockpit voice recorder)** 11237001

*Cockpit voice recorder: The cockpit voice recorder in which the recording medium is protected from impact and fire damage.*

**Cockpit voice recorder area microphone (CVR area microphone)** 11237003

*CVR area microphone: The microphone, commonly located in an upper panel on the flight deck, which records all ambient noises.*

**Cockpit voice recorder independent power supply (CVR independent power)** 11237005

*CVR independent power: That portion of the electrical system which provides an independent power supply for the cockpit voice recorder.*

**Integrated automatic tuning (ATA Code:2380) (2380 Integrated auto tuning)** 11238000

*(ATA Code:2380) Integrated auto tuning: That portion of the system which maintains integrated control of the operating frequencies of communication and navigation transmitter/receivers after either a manually inserted command or a pre-programmed integrated flight system command. Includes such items as integrated frequency selector panels, digital frequency control computers and integrated frequency display panels.*

**Communications System Wiring (ATA Code:2397) (2397 Communications System Wiring)** 11239700

*(ATA Code:2397) Wiring specific to the Communications Systems*

**2397 Communications systems wiring (2397 Communications systems wiring)** 100000016 *

*Wiring specific to the Communications Systems*

**Electrical power system (ATA Code:2400) (2400 Electrical power system)** 11240000

*(ATA Code:2400) Electrical power system: The electrical units and components that generate, control and supply AC/DC electrical power for other systems through the secondary busses. Includes electric power generating system parts and circuitry other than major components. Typical parts are circuit breaker, relay, connector, resister, wire bundles and switches.*

**Alternator-generator drive (ATA Code:2410) (2410 Alternator-generator drive)** 11241000

*(ATA Code:2410) Alternator-generator drive: The alternator and generator drives mounted on reciprocating engines. Does not include alternator cases. Typical parts are bracket, pulley, belt, link, idler pulley, bolt, drive shaft and gears that stay with the alternator. Includes constant speed drive unit mounted on turbine engines to drive alternating current producing alternators at a predetermined and constant RPM. Typical parts are shaft seal and shafts.*

**Constant speed drive (CSD) - oil pressure indicators (Constant speed drive - oil pressure indicators)** 11241007

*Constant speed drive (CSD) - oil pressure indicators: That portion of the constant speed drive system which provides indications of its oil pressure.*

**Constant speed drive (CSD) - oil temperature indicators (Constant speed drive - oil temperature indicators)** 11241008

*Constant speed drive (CSD) - oil temperature indicators: That portion of the constant speed drive system which provides indications of its oil temperature.*

**Generator constant speed drive (CSD) (Generator constant speed drive)** 11241001

*Generator constant speed drive (CSD): The drive which ensure the generator will be driven at a constant speed. Includes items such as oil system, connecting devices and indicating and warning systems for the drive.*

**Wiring specific to the electrical power system not part of the power distribution systems (ATA Code:2411) (2411 Electrical Power System wiring)** 11241100 *

*(ATA Code:2411) Wiring specific to the electrical power system not part of the power distribution systems*

**Alternating current generation system (ATA Code:2420) (2420 AC generation system)** 11242000

*(ATA Code:2420) Alternating current generation system: The systems used to generate, regulate, control and indicate alternating current electrical power. Includes items such as inverters, alternating current generators/alternators, control and regulating components, indicating systems and all wiring to but not including main busses.*

**Alternating current generator - alternator (ATA Code:2421) (2421 AC generator-alternator)** 11242100

*(ATA Code:2421) Alternating current generator - alternator: The engine driven component that generates alternating current for aircraft with alternating current electrical systems. Does not include alternating current alternators on light piston-engine power aircraft with direct current electrical systems.*

**Alternating current inverter (ATA Code:2422) (2422 AC inverter)** 11242200

*(ATA Code:2422) Alternating current inverter: The component which converts direct current to alternating current.*

**Alternating current circuit breaker/fuse (AC circuit breaker/fuse)** 11242225

*Alternating current circuit breaker/fuse: The device installed in an alternating current circuit to interrupt the electrical current flow if it exceeds the desired level.*

**Direct current circuit breaker/fuse (DC circuit breaker/fuse)** 11242224

*Direct current circuit breaker/fuse: The device installed in a direct current circuit to interrupt the electrical current flow if it exceeds the desired level.*

**Direct current ram air turbine (DC ram air turbine)** 11242204

*Direct current ram air turbine: The aircraft's emergency generator which is lowered into the air stream in an emergency to generate direct current power.*

**Phase adapter (ATA Code:2423) (2423 Phase adapter)** 11242300

*(ATA Code:2423) Phase adapter: The component used to change the alternating current phase of output for specific equipment.*

**Alternating current voltage regulator (ATA Code:2424) (2424 AC voltage regulator)** 11242400

*(ATA Code:2424) Alternating current voltage regulator: The component that regulates the alternating current voltage from the alternator-generator to maintain a set voltage output for the using systems i.e. generator control unit.*

**Alternating current indicating system (ATA Code:2425) (2425 AC indicating system)** 11242500

*(ATA Code:2425) Alternating current indicating system: The equipment indicating, voltage, current flow and system faults in the alternating current power systems.*

**Direct current generating system (ATA Code:2430) (2430 DC generating system)** 11243000

*(ATA Code:2430) Direct current generating system: The system parts and circuitry other than the generator/alternator and direct current generation system regulator used to generate a direct current; or from an alternator, the output of which is rectified to direct current. Typical parts are relay, switch, connector, terminal, sensor and reverse current relay. Such systems are more prevalent on light single and twin engine aircraft.*

**Battery overheat warning system (ATA Code:2431) (2431 Battery overheat warning system)** 11243100

*(ATA Code:2431) Battery overheat warning system: the system components that sense and indicate, or warn of, a battery over-temperature condition. Typical parts are sensor, lamp and gauge.*

**Battery/charger system (ATA Code:2432) (2432 Battery/charger system)** 11243200

*(ATA Code:2432) Battery/charger system: The component providing a source of direct current voltage and current flow independent of rotating generators and alternators. Typical parts are battery charger, cell, case and post.*

**Battery Hot Bus (Battery Hot Bus)** 100000262

*Power supply to various systems independant of cockpit switch positions. This means a power system that is made available even when power is off.*

**DC Battery (DC Battery)** 11243201

*DC Battery*

**Direct current rectifier-converter (ATA Code:2433) (2433 DC rectifier-converter)** 11243300

*(ATA Code:2433) Direct current rectifier-converter: The component which converts alternating current to direct current for the using system(s).*

**Direct current generator-alternator (ATA Code:2434) (2434 DC generator-alternator)** 11243400

*(ATA Code:2434) Direct current generator-alternator: The engine driven component generating a direct current or a rectified alternating current for aircraft with direct current electrical systems. Does not include mounting brackets, drive belts and pulleys external to the unit. Typical parts are bearing, housing, coupling, fan, capacitor, drive, brush, seal, clutch, armature and bell, shaft, field winding, case bolt and ground stud.*

**Starter-generator (ATA Code:2435) (2435 Starter-generator)** 11243500

*(ATA Code:2435) Starter-generator: The single component used for both engine starting and direct current generation on turbine engines. Typical parts are bearing, shaft, brush, fan, retainer ring, armature, brush, housing, end bell and terminals.*

**Direct current voltage regulator (ATA Code:2436) (2436 DC voltage regulator)** 11243600

*(ATA Code:2436) Direct current voltage regulator: The component that regulates direct current voltage supplied from a generator or alternator.*

**Direct current indicating system (ATA Code:2437) (2437 DC indicating system)** 11243700

*(ATA Code:2437) Direct current indicating system: The system which indicates voltage, current flow and system faults in the direct current power system.*

**External electrical power system connection (ATA Code:2440) (2440 External Power)** 11244000

*(ATA Code:2440) That portion of the system within the aircraft which connects external electrical power to the aircraft's electrical system. Includes items such as receptacles, relays, switches, wiring, warning lights, etc.*

**Alternating current power distribution system (ATA Code:2450) (2450 AC distribution system)** 11245000

*(ATA Code:2450) Alternating current power distribution system: The electrical system which provides for connection of alternating current to using systems. Does not include the using system. Typical parts are main and secondary system bus, circuit breaker, limiter, jumper and load meter switch.*

**AC Circuit Breaker (AC Circuit Breaker)** 100000253

*Alternating current electrical distribution circuit breaker: The device installed in an electric distribution circuit to interrupt the electrical current flow if it exceeds the desired level.*

**AC Circuitry switch (AC Circuitry switch)** 100000254

*Circuitry switch: Any lever, plug, or other device for making or breaking contact, or altering the connexions of an electrical circuit.*

**AC Distribution bus bar (AC Distribution bus bar)** 100000255

*Alternating current electrical distribution bus bar: A conductor on which electrical power is collected for distribution or, in a receiving station, on which the power from the generator[s] is received for distribution.*

**AC Distribution relay (AC Distribution relay)** 100000256

*Alternating current electrical distribution relay: Any electrical device, usually incorporating an electromagnet, whereby a current or signal in one circuit can open or close another circuit.*

**AC Wiring (AC Wiring)** 100000257

*Direct current electrical wiring: The conductors which distribute the electricity supply to the aircraft systems.*

**Direct current distribution system (ATA Code:2460) (2460 DC distribution system)** 11246000

*(ATA Code:2460) Direct current distribution system: The electrical system which provides for connection of direct current to using systems. Does not include using system. Typical parts are main and secondary system busses, circuit breaker, bus tie breaker, limiter, jumper and load motor switch.*

**Direct current electrical distribution circuit breaker (DC Circuit breaker)** 11246004

*Direct current electrical distribution circuit breaker: The device installed in an electric distribution circuit to interrupt the electrical current flow if it exceeds the desired level.*

**DC Circuitry switch (DC Circuitry switch)** 11246016

*Circuitry switch: Any lever, plug, or other device for making or breaking contact, or altering the connexions of an electrical circuit.*

**Direct current electrical distribution bus bar (DC Distribution bus bar)** 11246002

*Direct current electrical distribution bus bar: A conductor on which electrical power is collected for distribution or, in a receiving station, on which the power from the generator[s] is received for distribution.*

**Direct current electrical distribution relay (DC Distribution relay)** 11246010

*Direct current electrical distribution relay: Any electrical device, usually incorporating an electromagnet, whereby a current or signal in one circuit can open or close another circuit.*

**Direct current electrical wiring (DC Wiring)** 11246025

*Direct current electrical wiring: The conductors which distribute the electricity supply to the aircraft systems.*

**Primary and Secondary Power (ATA Code:2470) (2470 Primary and Secondary Power)** 11247000

*(ATA Code:2470) That portion of the system which provides for connection of AC and DC power to using systems. Includes items such as main and secondary busses, main system circuit breakers, power system devices, specific interface for computer-aided maintenance action etc.*

**Electrical Power System Wiring (ATA Code:2497) (2497 Electrical Power System Wiring)** 11249700

*(ATA Code:2497) Wiring specific to the Electrical Power Systems not reportable in the Power Distribution Systems.*

**Cabin equipment/furnishings (ATA Code:2500) (2500 Cabin equipment/furnishings )** 11250000

*(ATA Code:2500) Cabin equipment/furnishings: The removable items of equipment and furnishings mounted or contained in the flight, passenger, cargo, accessory compartments.*

**Flight compartment equipment (ATA Code:2510) (2510 Flight compartment equipment)** 11251000

*(ATA Code:2510) Flight compartment equipment: The removable equipment and furnishings within the cockpit or crew station of a general nature. Typical parts are seats, shoulder harnesses, take-up harness reels, seat belts, sun visors, panels, map case, attach brackets and hardware.*

**Flight crew documentation (ATA Code:2511) (2511 Flight crew documentation)** 11251100

*(ATA Code:2511) Flight crew documentation: The documentation used by the flight crew for reference during the operation of the aircraft, includes maps, charts, manuals and checklists.*
*e.g.:*
*Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.*

*Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.*

**Approach charts/plates (Approach charts/plates)** 11251102

*Approach charts/plates: The flight planning documents relevant to a specific aerodrome giving details of minimum heights, safe headings, weather minima, on a horizontal map and vertical profile for a specific runway approach.*

**Checklists (Checklists)** 11251103

*Checklists: A readily accessible list of actions to be taken by flight crew members during the operation of an aircraft normal, abnormal and emergency situations.*

**Company operations manual (Company operations manual)** 11251106

*Company operations manual: The manual provided in the aircraft by the operator as authoritative references for the flight crew on the aircraft and its operation.*

**Emergency checklists (Emergency checklists)** 11251104

*Emergency checklists: The lists of actions to be taken by each crew member in the event of an emergency.*

**Flight manuals (Flight manuals)** 11251105

*Flight manual: A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft. (Annex 6)*

**Maps (Maps)** 11251101

*The maps which are used to conduct the flight but not including approach charts/plates.*

**Other flight crew seat (Other flight crew seat)** 11251002

*Other flight crew seat: The aircraft seat or seats installed specifically for occupation by a flight crew member, other than a pilot, when performing as part of the aircraft flight crew.*

**Pilot's seat (Pilot's seat)** 11251001

*Pilot's seat: The aircraft seat or seats installed specifically for occupation by a pilot when in control of the aircraft.*

**Shoulder harness flight crew (Shoulder harness)** 11251003

*Shoulder harness flight crew: The component of the individual flight crew restraint system provided for their use when occupying a flight crew seat.*

**Passenger compartment equipment (ATA Code:2520) (2520 Passenger compartment equipment)** 11252000

*(ATA Code:2520) Passenger compartment equipment: The removable general equipment and furnishings within the cabin. Typical parts are seats, seat belts, hat rack, coat closet, panels and passenger comfort items such as personal blankets and pillows.*

**Cabin crew seatbelt/harness (Cabin crew harness)** 11252008

*Cabin crew harness: The cabin crew seat restraint system provided for each cabin crew seat.*

**Cabin crew seat (Cabin crew seat)** 11252007

*Cabin crew seat: The seats provided specifically for the cabin crew to use during take-off and landing.*

**Cabin passenger service unit (Cabin passenger service unit)** 100000261

*Overhead service unit to provide passengers with facilities for cabin crew call, lighting and ventilation. May also include passenger oxygen mask deployment and recall components.*

**Ceiling panel (Ceiling panel)** 100000193

**Movable Class Divider (Movable Class Divider)** 100000251

*Movable Class Divider*

**Passenger seat (Passenger seat)** 11252001

*Passenger seat: The aircraft seats other than those provided for the flight crew to use while operating the aircraft.*

**Passenger seatbelt (Passenger seatbelt)** 11252002

*Passenger seatbelt: The passenger restraint lap strap fastened to each passenger seat.*

**Buffet/galleys (ATA Code:2530) (2530 Buffet/galleys)** 11253000

*(ATA Code:2530) The buffet/galley equipment. Typical components are hot plates, coffee pots, food carts, ovens, trays, relays, switches, connectors and dispensers.*

**Coffee maker (Coffee maker)** 11253007

*Any of the galley coffee makers.*

**Galley oven/heater (Galley oven/heater)** 11253001

*The galley ovens or food preparation heaters.*

**Latch (Latch)** 100000192

*Latch to secure trolleys ets in the galley.*

**Lift (Lift)** 100000252

*Lift between decks on multi-deck aircraft.*

**Trolley/food cart (Trolley/food cart)** 100000191

**Water heater/boiler (Water heater/boiler)** 11253003

*Any of the galley water heaters.*

**Lavatories (ATA Code:2540) (2540 Lavatories)** 11254000

*(ATA Code:2540) Lavatories: The units and associated systems and parts located in lavatories. Does not include wash basins and other waste disposal items [Code 11383000]. Typical parts are trash containers and dispensers.*

**2550 Cargo compartments (2550 Cargo compartments)** 100000189

*The compartments for the storage of baggage and cargo including external mounted pods. Does not include the exterior door, hinges and latches which are found in 5230. Typical parts are tie downs, restraint nets, and equipment for loading and unloading cargo (includes external load handling equipment).*

**Emergency equipment (ATA Code:2560) (2560 Emergency equipment)** 11256000

*(ATA Code:2560) Emergency equipment: The components, parts and systems carried for emergency use. Does not include fire extinguishers, oxygen equipment and flashlight. Flashlights [Code 11335000]. Includes escape slide girt bars.*

**Life-jacket (ATA Code:2561) (2561 Life-jacket)** 11256100

*(ATA Code:2561) Life-jacket: The buoyant jackets used to float incapacitated individuals in a face up attitude.*

**Emergency locator beacon (ATA Code:2562) (2562 Emergency locator beacon)** 11256200

*(ATA Code:2562) Emergency locator beacon: The components transmitting an electronic signal on an emergency frequency to assist in locating an aircraft which has been involved in an accident. Typical parts are impact switch, antenna and battery pack.*
*ELT: A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:*
*Automatic fixed ELT (ELT(AF)). An automatically activated ELT which is permanently attached to an aircraft.*
*Automatic portable ELT (ELT(AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.*
*Automatic deployable ELT (ELT(AD)). An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided.*
*Survival ELT (ELT(S)). An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.*
*(An 6/I, An 6/II, An 6/III, PANS-ABC)*

**Parachute (ATA Code:2563) (2563 Parachute)** 11256300

*(ATA Code:2563) The parachutes used for aircraft occupants to escape from the aircraft while it is airborne.*

**Life-raft (ATA Code:2564) (2564 Life-raft)** 11256400

*(ATA Code:2564) Life-raft: The inflatable raft which provides emergency flotation for one or more persons in event of an aircraft ditching. Typical parts are the gas bottle, valve and manual pump.*

**Escape slide (ATA Code:2565) (2565 Escape slide)** 11256500

*(ATA Code:2565) Escape slide: The inflatable component which enables rapid evacuation from an aircraft cabin to ground level during emergencies on the ground. Typical parts are valves and the gas bottle.*

**Aircraft parachute (Aircraft parachute)** 11256010

**Crash axe (Crash axe)** 11256012

*Crash axe: The axe provided to enable a survivor to cut an exit path from the aircraft after the aircraft has sustained damage which obstructs the normal exits.*

**Drag chute/tail chute (Drag/tail chute)** 11256011

*Drag/tail chute: The retarding devices such as tail chutes and drag chutes which can be deployed by a pilot during the aircraft's landing run.*

**Emergency radio (Emergency radio)** 11256013

*Emergency radio: The portable radio powered by an independent power supply for use when the aircraft's built-in radios are disabled.*

**Escape rope (Escape rope)** 11256008

*Escape rope: Those ropes carried for use in emergency procedures for escaping from elevated areas such as the flight deck.*

**First aid equipment/medical kit (First aid/medical kit)** 11256009

*First aid/medical kit: Those items of equipment carried for use in providing first aid in emergency situations.*

**Personal parachute (Personal parachute)** 11256007

**Portable emergency light (Portable emergency light)** 100000194

**Smoke hoods/goggles/masks (Smoke hoods/goggles/masks)** 11256006

*Those smoke hoods/goggles/masks carried for use in emergency procedures.*

**Underwater sonar beacon (Underwater sonar beacon)** 11256014

*Underwater sonar beacon: The beacon intended to aid in the recovery of submerged flight data recorders and cockpit voice recorders.*

**Accessory compartments (ATA Code:2570) (2570 Accessory compartments)** 11257000

*(ATA Code:2570) Accessory compartments: The compartments for housing various components or accessories.*

**Battery box structure (ATA Code:2571) (2571 Battery box structure)** 11257100

*(ATA Code:2571) Battery box structure: The supporting structure, vents and overboard drains for aircraft batteries. Typical parts are vent cap, drain tube, insulator and cover.*

**Electronic shelf section (ATA Code:2572) (2572 Electronic shelf section)** 11257200

*(ATA Code:2572) Electronic shelf section: The shelves and attaching parts supporting the electronic equipment within the fuselage. Does not include the equipment used for equipment cooling such as fans and blower motors.*

**Insulation blankets (ATA Code:2580) (2580 Insulation blankets)** 11258000

*(ATA Code:2580) The insulation blankets which are used for heat and sound insulation. Includes flight crew compartments, passenger compartment and additional compartment insulation.*

**Emergency clothing (ATA Code:2590) (2590 Emergency clothing)** 11259000

*(ATA Code:2590) Emergency clothing: The clothing stored permanently in the aircraft for use in an emergency.*

**Helicopter emergency immersion suit (Helicopter immersion suit)** 11259001

*Helicopter emergency immersion suit: The specially designed buoyant, insulating, full body garments for protection against hypothermia for occupants forced to abandon a helicopter in the water.*

**Agricultural equipment (ATA Code:2591) (2591 Agricultural equipment)** 11259100 *

*(ATA Code:2591) Agricultural equipment: The additional special equipment attached to an aircraft to equip it for specific agricultural work.*

**Emergency jettison system (Emergency jettison system)** 11259104 *

*Emergency jettison system: The system fitted to an aircraft to enable the flight crew to jettison fuel or cargo while in flight.*

**Spray boom (Spray boom)** 11259101 *

*Spray boom*

**Equipment/Furnishings Wiring (ATA Code:2597) (2597 Equipment/Furnishings Wiring)** 11259700

*(ATA Code:2597) Wiring specific to the Equipment/Furnishing Systems.*

**Fire protection system (ATA Code:2600) (2600 Fire protection system)** 11260000

*(ATA Code:2600) Fire protection system: The fixed and portable units and components which detect and indicate fire or smoke and store and distribute fire extinguishing agent to all protected areas of the aircraft.*

**Fire/smoke/overheat detection system (ATA Code:2610) (2610 Overheat/smoke, detection)** 11261000

*(ATA Code:2610) Fire/smoke/overheat detection system: The system used to sense and indicate the presence of overheat or fire in any of the protected areas.*

**Smoke detection system (ATA Code:2611) (2611 Smoke detection)** 11261100

*(ATA Code:2611) Smoke detection system: The system used to sense and indicate the presence of smoke in any of the protected areas of the aircraft. Typical parts are detector, sensor, wiring, relay, amplifier and test circuit.*

**Fire detection system (ATA Code:2612) (2612 Fire detection)** 11261200

*(ATA Code:2612) Fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**APU fire detection system (APU fire detection)** 11261202

*APU fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**Cargo compartment fire detection (Cargo compartment fire detection)** 100000267

*Cargo compartment fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**IFE fire detection (IFE fire detection)** 100000260

*IFE fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**Powerplant fire detection system (Powerplant fire detection)** 11261201

*Powerplant fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**Toilet fire detection (Toilet fire detection )** 100000268

*Toilet fire detection system: The system used to sense and indicate the presence of fire in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and the test circuit.*

**Overheat detection system (ATA Code:2613) (2613 Overheat detection)** 11261300

*(ATA Code:2613) Overheat detection system: The system used to sense and indicate the presence of an overheat condition in any of the protected areas of the aircraft. Typical parts are detectors, sensors, wiring, relays, amplifiers and test circuits.*

**Auxiliary power unit fire detection system (Auxiliary power unit overheat detection)** 11261307

*Auxiliary power unit fire detection system: The system used to sense and indicate the presence of a fire in an auxiliary power unit.*

**Cargo compartment overheat warning system (Cargo compartment overheat detection)** 11261301

*Cargo compartment overheat warning system: The system used to sense and indicate the presence of overheat or fire in any of the protected cargo areas.*

**Galley overheat warning system (Galley overheat detection)** 11261302

*Galley overheat warning system: The system used to sense and indicate the presence of overheat or fire in any of the protected galleys.*

**Heater overheat warning system (Heater overheat detection)** 11261303

*Heater overheat warning system: The system used to sense and indicate the presence of overheat or fire in any of the protected heaters.*

**Pneumatic duct overheat warning (Pneumatic duct overheat detection)** 11261304

*Pneumatic duct overheat warning: The system used to sense and indicate the presence of overheat or fire in any of the protected pneumatic ducts.*

**Smoke detection system (Smoke detection)** 11261306 *

*Smoke detection system: The system used to sense and indicate the presence of smoke in any of the protected areas of the aircraft. Typical parts are detector, sensor, wiring, relay, amplifier and test circuit.*

**Toilet overheat warning system (Toilet overheat detection)** 11261305

*Toilet overheat warning system: The system used to sense and indicate the presence of overheat or fire in any of the protected toilet areas.*

**Fire extinguishing system (ATA Code:2620) (2620 Extinguishing system)** 11262000

*(ATA Code:2620) Fire extinguishing system: The components and parts other than the fixed or portable bottles used to extinguish any fire in the aircraft. Typical parts are valve, squib, control module, switch and tubing.*

**Fire bottle, fixed (ATA Code:2621) (2621 Fire bottle, fixed)** 11262100

*(ATA Code:2621) Fire bottle, fixed: The fixed fire bottle and associated parts that store extinguishing agent under pressure. Typical parts are bottle, cartridge and brackets.*

**Fire bottle, portable (ATA Code:2622) (2622 Fire bottle, portable)** 11262200

*(ATA Code:2622) Fire bottle, portable: The portable fire extinguishes mounted within the flight compartment and cabin.*

**Auxiliary power unit fire extinguishing system (Auxiliary power unit)** 11262002 *

*Auxiliary power unit fire extinguishing system: The system in the aircraft designed to extinguish any fire in the auxiliary power unit on the ground or at any stage of the flight.*

**Fire extinguishing system indicators (Indicators)** 11262009 *

*Fire extinguishing system indicators: The indicators which display the serviceability state or operation of the aircraft fire extinguishing systems.*

**Powerplant fire extinguishing system (Powerplant)** 11262001 *

*Powerplant fire extinguishing system: The system in the aircraft designed to extinguish any fire in the power plant on the ground or at any stage of the flight.*

**Other fire extinguishing system (Other)** 11262003 *

*Other fire extinguishing system: The system in the aircraft designed to extinguish any fire in a specific area, other than the power plant or APU, on the ground or at any stage of the flight.*

**Explosion suppression system (ATA Code:2630) (2630 Explosion suppression system)** 11263000

*(ATA Code:2630) Explosion suppression system: The system installed to extinguish a flame propagating into the fuel vent or scoop to prevent an explosion in the fuel system.*

**Fire extinguishing indication system (ATA Code:2640) (2640 Fire extinguishing indication system)** 11264000

*(ATA Code:2640) Fire extinguishing indication system*

**Fire Protection System Wiring (ATA Code:2697) (2697 Fire Protection System Wiring)** 11269700

*(ATA Code:2697) Wiring specific to the Fire Protection System.*

**Flight control system (ATA Code:2700) (2700 Flight control system)** 11270000

*(ATA Code:2700) Flight control system: The units and components furnishing a means of manually controlling the flight attitude characteristics of the aircraft. Also includes the functioning and maintenance aspects of the flaps, spoilers and other control surfaces, but does not include the structure. Typical parts are hydraulic boost system, controls and mounting brackets. Includes flight control problems of a general nature involving two or more systems. Does not include rotorcraft flight controls. Typical parts are hydraulic boost system, controls and mounting brackets.*

**Control column section (ATA Code:2701) (2701 Control column section)** 11270100

*(ATA Code:2701) Control column section: The component and associated parts mounted onto the control which transmit pilot input from the cockpit to connecting cables and pushrods, to actuate the ailerons, elevators, stabilator, ruddervator and similar control surfaces. Includes control sticks in aircraft not equipped with control wheels. Typical parts are bearing, socket, guide, bushing, pulley bracket, sprocket, chain and stops.*

**Side-stick (Side-stick)** 11270101

*Side-stick: The component and associated parts mounted onto the control, which is offset to the side of the pilot, that transmits pilot input from the cockpit to actuate the ailerons, elevators, stabilator, ruddervator and similar control surfaces.*

**Aileron & Tab control system (ATA Code:2710) (2710 Aileron & Tab control system)** 11271000

*(ATA Code:2710) Aileron control system: The portion of the systems which controls the position and movement of the aileron. Includes items such as the control column, tab control wheel, cables, boosters, linkages, control surfaces and position indicators.*
*Aileron: A control surface on fixed-wing aircraft, usually mounted on the aft edge of wings, that controls roll, and is controlled by the wheel*

**Aileron tab control system (ATA Code:2711) (2711 Aileron tab control system)** 11271100

*(ATA Code:2711) Aileron tab control system: The system components and parts controlling movement and position of the trim tab on the aileron. Includes the cockpit control. Typical parts are jackscrew, cable, pulley, turnbuckle and stops.*

**Aileron trim system (ATA Code:2712) (2712 Aileron trim system)** 11271200

*(ATA Code:2712) Aileron trim system: The system components and parts controlling movement and position of the trim tab on the aileron. Includes the cockpit control. Typical parts are jackscrew, cable, pulley, turnbuckle and stops.*

**Aileron actuator (Aileron actuator)** 100000195

**Aileron control cable (Aileron control cable)** 11271002

*Aileron control cable: The cables of the aileron control system which connects the control wheel or column to the aileron control surface.*

**Aileron control column (Aileron control column)** 11271001

*Aileron control column*

**Rudder & Tab control system (ATA Code:2720) (2720 Rudder & Tab control system)** 11272000

*(ATA Code:2720) Rudder control system: The system components and parts from the cockpit pedals to the rudder surface which cause movement. Includes manual and power assisted systems other than the actuator and autopilot actuating mechanism. Also includes brackets for the support or attachment of pulleys, pushrods, and bellcranks. Does not include control surface hinges or structure [Code 11554000] or the yaw dampers [Code 11221000]. Typical parts are cable, rod end, turnbuckle, bolt, pedal, spring, torque tube, control valve and stops.*

**Rudder tab control system (ATA Code:2721) (2721 Rudder tab control system)** 11272100

*(ATA Code:2721) Rudder tab control system: The system components and parts of the rudder trim control system, from the cockpit control to the rudder tab that causes an aerodynamic bias to the direct input from the pilot or autopilot. Does not include hinges or structure [Code 11554300] nor the yaw dampers [Code 1122100]. Typical parts are actuator, actuator bracket, cable, pulley, chain, rod end and bellcrank.*

**Rudder actuator (ATA Code:2722) (2722 Rudder actuator)** 11272200

*(ATA Code:2722) Rudder actuator: The system components and parts which actuate the rudder. Typical parts are motor, actuator, actuator bracket, jackscrew, rod-end and seals.*

**Rudder feel system (ATA Code:2723) (2723 Rudder feel system)** 11272300

*(ATA Code:2723) Rudder feel system: The system incorporated in the rudder control system which provides artificial resistance to the pilot's input to the rudder pedals.*

**Yaw damper system (ATA Code:2724) (2724 Yaw damper system)** 11272400

*(ATA Code:2724) The yaw damper system associated with the autopilot system used for controlling direction.*

**Rudder pedal (Rudder pedal)** 11272002

*Rudder pedal: A set of two pedals which transfer motion from the pilot's foot to a connecting linkage which moves the rudder in the appropriate direction to yaw the aircraft in the direction of the input from the pilot.*

**Elevator & Tab control system (ATA Code:2730) (2730 Elevator & Tab control system)** 11273000

*(ATA Code:2730) Elevator control system: The system components and parts including actuator from the control column to the elevators that cause movement. Includes control actuating mechanism for "ruddervators" installed on "V" tail aircraft. Does not include hinges, structure and balance weights [Code 11552000], or the auto-pilot servo [Code 11221600]. Typical parts are torque tube, cable, rod end, stops, actuator, feel computer, bracket and control valve.*

**Elevator tab control system (ATA Code:2731) (2731 Elevator tab control system)** 11273100

*(ATA Code:2731) Elevator tab control system: The system components and parts from the cockpit trim control to the elevator, ruddervator or stabilator tab, which controls position and movement of the tab. Includes the manual and electrical trim system parts. Does not include the hinges or structure [Code 11552000] or the balance weights [Code 11552000] or the auto pilot servo [Code 11221600]. Typical parts are jackscrew, cable, actuator, sensor, motor, chain, sprocket and indicator.*

**Elevator trim system (ATA Code:2732) (2732 Elevator trim system)** 11273200

*(ATA Code:2732) Elevator trim system: The system components and parts from the cockpit trim control to the elevator, ruddervator or stabilator tab, which control position and movement of the trim tab. Includes the manual and electrical trim system parts. Does not include the hinges.*

**Elevator feel system (ATA Code:2733) (2733 Elevator feel system)** 11273300

*(ATA Code:2733) Elevator feel system: The system incorporated in the elevator control system which provides artificial resistance to the pilot's input to the elevators.*

**Stall protection system (ATA Code:2734) (2734 Stall protection system)** 11273400

*(ATA Code:2734) Stall protection system: The system installed to provide an automatic reduction in the angle of attack if the aircraft approaches a stall.*

**Mach trim (ATA Code:2736) (2736 Mach trim)** 11273600

*(ATA Code:2736) Mach trim: The electronic/mechanical system for relieving the pilot of task of correcting progressive deficiency in aircraft pitch trim and longitudinal stability at high Mach numbers. Sensitive to Mach number and vertical acceleration and automatically feeds primary pitch-trim demand to keep aircraft level or in desired attitude while leaving pilot authority to feed manual trim.*

**Elevator control column (Elevator control column)** 11273003

*Elevator control column: The pilot's control column or wheel which provides input from the pilot to move the elevator or elevons and ailerons.*

**Horizontal stabilizer control system (ATA Code:2740) (2740 Horizontal stabilizer control)** 11274000

*(ATA Code:2740) Horizontal stabilizer control system: The system components and parts from the cockpit control to the stabilizer, except the actuator which controls position of the horizontal stabilizer for pitch trim (usually found on high performance turbine powered aircraft). Also for stabilator control systems on aircraft utilizing a single horizontal tail surface for both the stabilizer and elevator. Typical parts are cable, bellcrank, pulley, control valve and indicator.*

**Stabilizer position indicating system (ATA Code:2741) (2741 Stabilizer position indicating system)** 11274100

*(ATA Code:2741) Stabilizer position indicating system: The system components and parts that sense, transmit and indicate relative position of movable stabilizers for purpose of pitch trim. Typical parts are indicators and transmitters.*

**Horizontal stabilizer actuator (ATA Code:2742) (2742 Horizontal stabilizer actuator)** 11274200

*(ATA Code:2742) Horizontal stabilizer actuator: The component which actuates the horizontal stabilizer to finite angles of incidence to provide pitch trim. Includes both manual and power assist types. Typical parts are actuator, actuator bracket, clutch, motor and seals.*

**Horizontal stabilizer trim (Horizontal stabilizer trim)** 11274001

*Horizontal stabilizer trim: The system components and parts controlling the trim of the horizontal stabilizer. Includes the cockpit control. Typical parts are jackscrew, cable, pulley, turnbuckle and stops.*

**Trailing edge flap control system (ATA Code:2750) (2750 Trailing edge flap control system)** 11275000

*(ATA Code:2750) Trailing edge flap control system: The system components and parts, except the actuator and position indicator which control position and movement of wing trailing edge flaps. Does not include the structure, carriage, fittings, tracks and rollers [Code 11575300]; or the motor or actuator which causes movement of the flaps [Code 11275200]. Typical parts are control valve, switch, flow limiter, cable, torque tube, transmission, jackscrew, bypass valve, limit switch, return spring and bus cable.*

**Trailing edge flap position indicating system (ATA Code:2751) (2751 Trailing edge flap position)** 11275100

*(ATA Code:2751) Trailing edge flap position indicating system: The system components and parts that sense, transmit and indicate trailing edge flap position relative to the wing surface. Typical parts are indicator, transmitter, position module, asymmetry switch and comparator.*

**Trailing edge flap actuator (ATA Code:2752) (2752 Trailing edge flap actuator)** 11275200

*(ATA Code:2752) Trailing edge flap actuator: The components which actuate the trailing edge flaps. Typical parts are motor, actuator, seal, jackscrew, rod end, actuator and support fittings.*

**Drag control system (ATA Code:2760) (2760 Drag control system)** 11276000

*(ATA Code:2760) Drag control system: The system components, other than actuator, which control position and movement and indicates relative position of drag devices and variable aerodynamic surfaces on the wing including speed brake systems. Does not include structure and hinges [Code 11575500]. Typical parts are valve, hose, push rod, line, cable and indicator.*

**Drag control actuator (ATA Code:2761) (2761 Drag control actuator)** 11276100

*(ATA Code:2761) Drag control actuator: The components that actuate spoiler and speed brake surfaces on the wing for speed and lift reducing purposes. Typical parts are seal, rod end bearing and rod end.*

**Spoiler system (ATA Code:2762) (2762 Spoiler system)** 11276200

*(ATA Code:2762) Spoiler system: The components that actuate the aerodynamic spoiler surfaces on the wing for lift reducing purposes. Typical parts are seal, rod end bearing and rod end.*

**Gust lock and damper system (ATA Code:2770) (2770 Gust lock and damper system)** 11277000

*(ATA Code:2770) Gust lock and damper system: The system and components protecting flight control surfaces from movement and damage by wind gusts while the aircraft is on the ground. Includes cockpit controlled surface locks common in light aircraft and independent hydraulic gust damper units mounted at each flight control surface on large jet powered aircraft. Does not include the damping feature of the flight control power boost systems. Typical parts are damper, cylinder, seal, rod end and lock pin cable.*

**Lift Augmenting - Leading edge slat control system (ATA Code:2780) (2780 Lift Augmenting)** 11278000

*(ATA Code:2780) Leading edge flap control system: That portion of the systems which controls the position and movement of variable opening wings slots, leading edge wing flaps, and other similar auxiliary devices used for increasing aerodynamic lift. Includes items such as control handles, cables, actuators, linkages, warning systems, control surfaces, position indicators, etc. Does not include trailing edge flaps.*

**Leading edge flap position indicating system (ATA Code:2781) (2781 Leading edge flap position)** 11278100

*(ATA Code:2781) Leading edge flap position indicating system: The transmitter, indicator, warning lamps and associated circuitry providing relative position information of wing leading edge devices to the flight crew.*

**Leading edge flap actuator (ATA Code:2782) (2782 Leading edge flap actuator)** 11278200

*(ATA Code:2782) Leading edge flap actuator: The components which cause movement of the wing leading edge device control surfaces. Does not include related system or position indicating. Typical parts are actuator, actuator bracket and seal.*

**Flight Control System Wiring (ATA Code:2797) (2797 Flight Control System Wiring)** 11279700

*(ATA Code:2797) Wiring specific to the Flight Control Systems.*

**Aircraft fuel system (ATA Code:2800) (2800 Aircraft fuel system)** 11280000

*(ATA Code:2800) Aircraft fuel system: The units and components storing and delivering fuel to the engine. Includes the integral tank leak detection and sealing. Does not include the structure of integral, tip fuel tanks, fuel cell backing boards, or the fuel flow rate sensing, transmitting, or indicating systems.*

**Aircraft fuels and any additives in the fuel (ATA Code:2805) (2805 Fuel and additives)** 11280500 *

*(ATA Code:2805) The aircraft fuels and any additives contained in the fuel.*

**Fuel storage system (ATA Code:2810) (2810 Fuel storage system)** 11281000

*(ATA Code:2810) Fuel storage system: The portion of the fuel system used for the storage of fuel. Does not include defects in the wing primary structure of integral tanks. Typical parts are removable metal tank, tip tank, header tank, bladder fuel cell, tank interconnect lines, vent line, vent valve, drain valve, filler cap, filler neck, check valve, vent tube, cap seal, filler adapter, outlet fitting, screen, fuelling panel, tank strap and sealant.*

**Fuel crossfeed (Fuel crossfeed)** 11281007

*Fuel crossfeed: The system which allows the transfer of fuel between tanks or to alter which tank feeds an engine or group of engines.*

**Fuel filter/strainer (Fuel filter/strainer)** 11281010

*Fuel filter/strainer: extraction of contaminants from the fuel supplied to the engines.*

**Fuel system vent (Fuel system vent)** 11281002

*Fuel system vent: The orifice installed to prevent any change of pressure within the tank from reaching a level which will affect the normal fuel flow or threaten the integrity of the fuel tank.*

**Fuel tank (Fuel tank)** 11281001

*Fuel tank: The sealed space within or attached to the aircraft for the storage of fuel.*

**Fuel tank cap (Fuel tank cap)** 11281003

*Fuel tank cap: The sealing device for the opening through which fuel is added to the aircraft's fuel tanks.*

**Fuel tank drain (Fuel tank drain)** 11281009

*Fuel tank drain: The outlet from the lowest point on a fuel tank to permit fluid to be drained from the tank. Commonly used for testing for the presence of water.*

**Fuel distribution system (ATA Code:2820) (2820 Fuel distribution system)** 11282000

*(ATA Code:2820) Fuel distribution system: The portion of the aircraft fuel system other than selector valves, transfer valves, electric motor driven pumps used to distribute fuel from the tank outlet to the powerplant quick disconnect or up to the strainer unit. Includes the engine primer equipment, the switch that senses failure of a system pump and the switch that automatically activates the boost pump. Typical parts are line, fitting, primer, nozzle, primer pump and actuating linkage for the fuel selector/shutoff valve.*

**Fuel filter/strainer (ATA Code:2821) (2821 Fuel filter/strainer)** 11282100

*(ATA Code:2821) Fuel filter/strainer: The component that filters unmetered fuel upstream of the engine fuel control/carburetor. Does not include the engine fuel metered control system filters [Code 11730000]. Typical parts are screen, housing, bowl, gasket, plunger and stand pipe.*

**Fuel filter indication (Fuel filter indication)** 11282102

*Fuel filter indication: An indicating system provided to indicate excessive back pressure caused by contaminants collected in the fuel filter.*

**Fuel filter/screen (Fuel filter/screen)** 11282101

*Fuel filter/screen: Any filter/screen fitted in the aircraft's fuel system for the extraction of contaminants from the fuel supplied to the engines.*

**Fuel pumps (ATA Code:2822) (2822 Fuel pumps)** 11282200

*(ATA Code:2822) Fuel pumps*

**Fuel boost pump (Fuel boost pump)** 11282201

*Fuel boost pump: The electric motor/engine driven pumps providing fuel under pressure to the engine fuel control/carburetor for starting and emergency use. Includes parts of the pump, associated motor and electrical circuitry/switch. Does not include pressure switch indicating system. Typical parts are housing, seal, motor, brush, bearing, connector and fuel transfer pump.*

**Fuel trim pump (Fuel trim pump)** 11282202

*Fuel trim pump: The pump in the fuel system provided specifically for adjusting the relative quantities of fuel in the available storage tanks.*

**Fuel selector/shutoff valve (ATA Code:2823) (2823 Fuel select/shutoff valve)** 11282300

*(ATA Code:2823) Fuel selector/shutoff valve: The component and associated controls and position indication units which provides for specific tank selection or shutting off of flow to the engine. Typical parts are housing, rotor, handle, guard, seat, seal, selector valve, shutoff valve and springs.*

**Fuel transfer valve (ATA Code:2824) (2824 Fuel transfer valve)** 11282400

*(ATA Code:2824) Fuel transfer valve: The component and associated control linkage which provides for the transfer of fuel between tanks for crossfeeding to alternate engine fuel systems. Typical parts are seal, housing, rotor, handle and transfer valves.*

**Fuel distribution pipe (Fuel distribution pipe)** 11282002

*Fuel distribution pipe: The pipes used in the distribution of fuel in the aircraft systems.*

**Fuel drain (Fuel drain)** 11282010

*Fuel drain: The outlet from the fuel system that permits fluid to be drained from the system.*

**Fuel system water drain (Fuel system water drain)** 11282011

*Fuel system water drain: An outlet from the lowest point on a section of the fuel system to permit fluid to be drained to test it for the presence of water.*

**Fuel dump system (ATA Code:2830) (2830 Fuel dump system)** 11283000

*(ATA Code:2830) Fuel dump system: The system and components which provide for the jettison of fuel during flight. Typical parts are valve, switch and dump chutes.*
*Fuel dumping: The intentional airborne release of usable fuel. This does not include the dropping of fuel tanks.*

**Fuel indicating system (ATA Code:2840) (2840 Fuel indicating system)** 11284000

*(ATA Code:2840) Fuel indicating system: The portion of the system which is used to indicate the quantity, temperature and pressure of the fuel. Includes pressure warning systems for pumping systems within the tank. Does not include engine fuel pressure reports [Code 11733200] or flow indication system [Code 11733100]. Typical parts are circuit breaker, connector, pressure switch, indicator lights and dipstick.*

**Fuel quantity indicator (ATA Code:2841) (2841 Fuel quantity indicator)** 11284100

*(ATA Code:2841) Fuel quantity indicator: The indicator and low level warning system used to indicate the quantity of fuel in the tanks. Typical parts are indicator, lamp and bulbs.*

**Fuel quantity sensor (ATA Code:2842) (2842 Fuel quantity sensor)** 11284200

*(ATA Code:2842) Fuel quantity sensor: The tank unit which measures and transmits a signal to the cockpit indicator. Typical parts are transmitter, float switch, probe, sensor, totalizer, tank unit float and gaskets.*

**Fuel temperature indicating (ATA Code:2843) (2843 Fuel temperature indicating)** 11284300

*(ATA Code:2843) Fuel temperature indicating: The system which measures the temperature of fuel in each tank and indicates that temperature on a gauge located on the flight deck.*

**Fuel pressure indicator (ATA Code:2844) (2844 Fuel pressure indicator)** 11284400

*(ATA Code:2844) Fuel pressure indicator: The tank unit which measures the pressure of fuel in that tank and indicates it on a gauge on the flight deck. Typical parts are the pressure switch and indicator lights.*

**Fuel System Wiring (ATA Code:2897) (2897 Fuel System Wiring)** 11289700

*(ATA Code:2897) Wiring specific to the Fuel System.*

**Fuel (Fuel)** 11280506

*Fuel: The liquid carried in the aircraft which, by its combustion with air in its engines, provides power.*

**Fuel system anti-ice additive (Fuel anti-ice additive)** 11280510

*Fuel system anti-ice additive: The additive for the aircraft's fuel to prevent any water entrained in the fuel from freezing.*

**Hydraulic power system (ATA Code:2900) (2900 Hydraulic power system)** 11290000

*(ATA Code:2900) Hydraulic power system: The units and components which furnish hydraulic fluid under pressure to a common point (manifold) for re-distribution to other defined systems.*

**Hydraulic, main system (ATA Code:2910) (2910 Hydraulic main system)** 11291000

*(ATA Code:2910) Hydraulic, main system: The portion of the system which is used to store and deliver hydraulic fluid to using systems. Includes all hydraulic systems other than those designated emergency or standby. Does not include the supply valves to the using systems. Typical parts are tanks, accumulators, valves, pumps, levers, cables, line, hose, relief, shutoff valves, check valves, wiring, switches and external connectors.*

**Hydraulic power accumulator, main system (ATA Code:2911) (2911 Power accumulator, main system)** 11291100

*(ATA Code:2911) Hydraulic power accumulator, main system: The component that absorbs pressure surges to maintain a constant pressure in the system. Typical parts are accumulator, seal, end cap and air valve.*

**Hydraulic main system filter (ATA Code: 2912) (2912 Main system filter)** 11291002

*Hydraulic main system filter: The component which filters sediment from the hydraulic fluid in the main system. Typical parts are seal, gasket, housing, element and packing.*

**Main system electric or engine driven hydraulic pump (ATA Code:2913) (2913 Electric/engine driven pump)** 11291300

*(ATA Code:2913) Main system electric or engine driven hydraulic pump: The component which provides hydraulic fluid pressure to using systems, but does not include the using systems. Includes power packs incorporating integral pumps, electric motors and solenoids used in certain light aircraft models. Also includes pumps such as those used in flight control systems on large aircraft. Typical parts are pump, motor, shaft, brush, solenoid, case, power pack, seals and switches.*

**Hand pump, main system (ATA Code:2914) (2914 Hand pump, main system)** 11291400

*(ATA Code:2914) and pump, main system: Any manually actuated pump for emergency system pressure. Typical parts are handle, lever and seals.*

**Hydraulic pressure relief valve-main system (ATA Code:2915) (2915 Pressure relief valve- main system)** 11291500

*(ATA Code:2915) Hydraulic pressure relief valve-main system: The unit which relieves main hydraulic system pressure to prevent it exceeding a preset pressure. Typical parts are seal, spring, housing and relief valve.*

**Hydraulic reservoir-main (ATA Code:2916) (2916 Reservoir-main)** 11291600

*(ATA Code:2916) Hydraulic reservoir-main: The component which stores hydraulic fluid. Typical parts are reservoir, filler cap, filler neck, sight gauge and seal.*

**Hydraulic pressure regulator - system (ATA Code:2917) (2917 Pressure regulator system)** 11291700

*(ATA Code:2917) Hydraulic pressure regulator - system: The unit which maintains a preset operating system pressure to the using systems. Typical parts are regulator, seals and the case.*

**Hydraulic pressure regulator - main system (Pressure regulator, main system)** 11291701

*Hydraulic pressure regulator - main system: The unit which maintains a preset operating pressure in the main hydraulic system. Typical parts are regulator, seals and the case.*

**Hydraulic main system line/fitting (Hydraulic main system line/fitting)** 11291004

*Hydraulic main system line/fitting: The pipes and fittings used in the distribution of hydraulic fluid in the aircraft systems. Does not include valves.*

**Hydraulic system by-pass valve (Hydraulic system by-pass valve)** 11291047

*Hydraulic system by-pass valve: A valve in the hydraulic system which acts to maintain a constant pressure in the system by allowing oil to return to the storage tank when the output of the pump exceeds the pressure required.*

**Hydraulic system seal (Hydraulic system seal)** 11291045

*Hydraulic system seal: Any gasket used in the hydraulic system to ensure an oil-tight seal.*

**Hydraulic system valve (Hydraulic system valve)** 11291005

*Hydraulic system valve: The valves used in the plumbing system for the distribution of hydraulic fluid in the aircraft systems.*

**Hydraulic auxiliary system (ATA Code:2920) (2920 Hydraulic auxiliary system)** 11292000

*(ATA Code:2920) Hydraulic auxiliary system: The portion of the main hydraulic system which is classified as auxiliary, emergency or standby and which is used to supplement or take the place of the main hydraulic fluid to the using system. Does not include the supply valves to the using systems. Typical parts are tank, accumulator, valve, pump, lever, cables, switch, plumbing, wiring, external connectors and miscellaneous auxiliary system parts.*

**Hydraulic accumulator, auxiliary (ATA Code:2921) (2921 Accumulator, auxiliary)** 11292100

*(ATA Code:2921) Hydraulic accumulator, auxiliary: The component which absorbs pressure surges to maintain a constant pressure in the auxiliary hydraulic system. Typical parts are accumulator, seal, end cap and air valves.*

**Hydraulic filter, auxiliary (ATA Code:2922) (2922 Filter, auxiliary)** 11292200

*(ATA Code:2922) Hydraulic filter, auxiliary: The component which filters sediment from the hydraulic fluid in the auxiliary system. Typical parts are seal, gasket, housing, element and packings.*

**Hydraulic pump, auxiliary (ATA Code:2923) (2923 Pump, auxiliary)** 11292300

*(ATA Code:2923) Hydraulic pump, auxiliary: The component which provides hydraulic fluid pressure to the using auxiliary system. Typical parts are pump, motor, shaft, brushes, case, seal and switches.*

**Hydraulic hand pump, auxiliary (ATA Code:2924) (2924 Hand pump, auxiliary)** 11292400

*(ATA Code:2924) Hydraulic hand pump, auxiliary: The manually actuated pump for emergency system pressure. Typical parts are handle, lever and seals.*

**Hydraulic pressure relief, auxiliary (ATA Code:2925) (2925 Pressure relief- auxiliary)** 11292500

*(ATA Code:2925) Hydraulic pressure relief, auxiliary: The unit which prevents auxiliary system pressure from exceeding a maximum specified pressure. Typical parts are seal, spring, housing and relief valves.*

**Hydraulic reservoir, auxiliary (ATA Code:2926) (2926 Reservoir, auxiliary)** 11292600

*(ATA Code:2926) Hydraulic reservoir, auxiliary: The unit which stores hydraulic fluid for the auxiliary system. Typical parts are reservoir, filler cap, filler neck and sight gauge.*

**Hydraulic pressure regulator, auxiliary (ATA Code:2927) (2927 Pressure regulator, auxiliary)** 11292700

*(ATA Code:2927) Hydraulic pressure regulator, auxiliary: The unit which maintains a preset operating system pressure to the using auxiliary hydraulic system. Typical parts are regulator, seal and case.*

**Hydraulic auxiliary system ram air turbine (ATA Code:2928) (2928 Ram air turbine)** 11292800

*(ATA Code:2928) Hydraulic auxiliary system ram air turbine: The emergency air driven hydraulic pump which is lowered into the air stream in an emergency to generate pressure in the aircraft's hydraulic system.*

**Hydraulic system indicating system (ATA Code:2930) (2930 Indicating system)** 11293000

*(ATA Code:2930) Hydraulic system indicating system: The hydraulic pressure and quantity indicating system parts other than the indicator or sensor or for parts common to both pressure and quantity systems.*

**Hydraulic pressure indicator (ATA Code:2931) (2931 Pressure indicator)** 11293100

*(ATA Code:2931) Hydraulic pressure indicator: The instrument and associated low pressure warning system which registers system pressure. Typical parts are indicator, warning lamp and bulb.*

**Hydraulic pressure sensor (ATA Code:2932) (2932 Pressure sensor)** 11293200

*(ATA Code:2932) Hydraulic pressure sensor: The components which sense system pressure and transmit a signal to the cockpit indicator or low pressure warning lamp. Typical parts are transmitter, pressure switch and sensor.*

**Hydraulic system - quantity indicator (ATA Code:2933) (2933 Hydraulic System-quantity indicator)** 11293300

*(ATA Code:2933) Hydraulic system - quantity indicator: The instrument and associated low level warning system which registers reservoir fluid quantity. Typical parts are indicator, lamp, bulb and sight gauge.*

**Hydraulic system - quantity sensor (ATA Code:2934) (2934 Hydraulic system-quantity sensor)** 11293400

*(ATA Code:2934) Hydraulic system - quantity sensor: The components which sense the fluid level and low level warning and transmit a signal to the quantity indicator. Typical parts are transmitter, sensor and float switch.*

**Hydraulic Power System Wiring (ATA Code:2997) (2997 Hydraulic Power System Wiring)** 11299700

*(ATA Code:2997) Wiring specific to the Hydraulic Power System.*

**Hydraulic fluid (Fluid)** 11291008

*Hydraulic fluid: The authorised fluid for use in aircraft hydraulic systems.*

**Ice/rain protection systems (ATA Code:3000) (3000 Ice/rain protection sys)** 11300000

*(ATA Code:3000) Ice/rain protection systems: Those units and components which provide a means of preventing or disposing of formation of ice and rain on various parts of the aircraft other than turbine power plants. Includes alcohol pump, valves, tanks, propeller/rotor anti-icing system, wing heaters, water line heaters, pitot heaters, scoop heaters, windshield wipers and the electrical and heated air portion of windshield ice control. Does not include the basic windshield panel.*

**Aerofoil anti/de-ice system (ATA Code:3010) (3010 Aerofoil anti/de-ice)** 11301000

*(ATA Code:3010) Aerofoil anti/de-ice system: The system components and parts including the boots which provide for wing and empennage leading edge ice prevention or removal. Does not include ducts upstream of the aerofoil control/selector valves. Typical parts are timer, valve, switch, hose, flow valve, duct, duct coupling and thermostat.*

**Air intake anti/de-ice system (ATA Code:3020) (3020 Air intake anti/de-ice)** 11302000

*(ATA Code:3020) Air intake anti/de-ice system: The system and components which eliminate or prevent the formation of ice in or around air intakes such as turbine engine cowling. Does not include engine anti-icing reports [Code 11751000]. Includes the electrically heated boot at the air intake lips.*

**Pitot/static anti-ice system (ATA Code:3030) (3030 Pitot/static anti-ice )** 11303000

*(ATA Code:3030) Pitot/static anti-ice system: The heating elements in the pitot-static heads installed to remove or prevent the formation of ice. Typical parts are element, switch and wiring.*

**Windshield/door rain/ice removal (ATA Code:3040) (3040 Windshield/door rain/ice removal)** 11304000

*(ATA Code:3040) Windshield/door rain/ice removal: The system and components which is used to clear, eliminate or prevent the formation of rain, ice or frost on the windshield or windows. Excludes reports of glass panel cracking [Code 11561000]. Typical parts are motor, actuator, wiper blade, hydraulic converter, shaft, line, switch, the electrical heating portion of heated glass panels, control units, alcohol de-ice system lines, tanks, pumps and valves.*

**Rain repellent system (ATA Code:3041) (3041 Rain repellent system)** 11304100

*(ATA Code:3041) Rain repellent system: The system and components used to prevent the build up of rain on the aircraft windshield. Typical parts are motor, actuator and storage tank.*

**Windshield washer system (ATA Code:3042) (3042 Windshield washer system)** 11304200

*(ATA Code:3042) Windshield washer system: The system and components used to remove any build up of rain and contaminants on the aircraft windshield. Typical parts are motor, actuator and storage tank.*

**Windshield wiper system (ATA Code:3043) (3043 Windshield wiper system)** 11304300

*(ATA Code:3043) Windshield wiper system: The system and components used to remove any build up of rain and contaminants on the aircraft windshield. Typical parts are motor, actuator and wipers.*

**Antenna/radome anti-ice/de-ice system (ATA Code:3050) (3050 Antenna/radome anti-ice/de-ice)** 11305000

*(ATA Code:3050) Antenna/radome anti-ice/de-ice system: The system which is used to remove ice from, or prevent the formation of ice on, antennas and radomes.*

**Propeller / rotor anti-ice/de-ice system (ATA Code:3060) (3060 Propeller/rotor anti-ice/de-ice)** 11306000

*(ATA Code:3060) Propeller / rotor anti-ice/de-ice system: The system components and parts which are used to eliminate or prevent the formation of ice on propellers and rotors. Includes electrically heated systems, and alcohol spray systems. Does not include the system parts on the rotating portion of the propeller [Code 11611200] or the heating mats on the rotating portion of the rotor [Code 11621000 or code 11641000]. Typical parts are brush block, timer, switch, relay, harness and terminal block.*

**Water line anti-ice system (ATA Code:3070) (3070 Water line anti-ice system)** 11307000

*(ATA Code:3070) Water line anti-ice system: The system which is used for prevention of ice in water supply and drain lines.*

**Ice detection system (ATA Code:3080) (3080 Ice detection system)** 11308000

*(ATA Code:3080) Ice detection system: The system which is used to detect and indicate the formation of ice. Typical parts are panels and detectors.*

**Ice/rain protection system indication (ATA Code:3090) (3090 Ice protection indication)** 11309000

*(ATA Code:3090) Ice/rain protection system indication: The system which is used to detect and indicate the presence of rain or the formation of ice. Typical parts are panels and detectors.*

**Ice/Rain Protection System Wiring (ATA Code:3097) (3097 Ice/Rain Protection System Wiring)** 11309700

*(ATA Code:3097) Wiring specific to the Ice/Rain Protection System*

**De-icing fluid (De-icing fluid)** 11300500

*De-icing fluid: The fluid stored in the aircraft for removing accumulations of ice on selected exterior surfaces of the aircraft.*

**Indicating/recording system (ATA Code:3100) (3100 Indicating/recording system)** 11310000

*(ATA Code:3100) Indicating/recording system: The pictorial coverage of all instrument panels and controls. Procedural coverage of those systems which give visual or aural warning of conditions in systems which record, store, or compute data from unrelated systems. Includes the system or units which integrate indicating instruments into a central display system not related to any specific system.*

**Instrument & Control panels (ATA Code:3110) (3110 Instrument & Control panels)** 11311000

*(ATA Code:3110) Coverage of all panels fixed or movable with their replaceable components such as instruments, switches, circuit breakers, fuses, etc. Also includes general coverage of instrument panel vibrators and other panel accessories.*

**Independent instruments (ATA Code:3120) (3120 Independent instruments)** 11312000

*(ATA Code:3120) Independent instruments: The units which measure time, log elapsed time of operation, or measures acceleration or deceleration forces. Typical parts are hour meter, pressure switch and lines.*

**Flight recording (ATA Code:3130) (3130 Flight recording)** 11313000

*(ATA Code:3130) flight data recorder: The unit which continuously records critical flight, aircraft and powerplant system data, such as attitude, air speed, altitude and engine power, to be used in the investigation of an accident/incident or for maintenance. Includes the system and parts which provide a source of power and inputs, from various sources critical to flight, to flight data recorder. Typical parts are spool rod and magazine.*

**Flight data recorder (Fligh Data recorder)** 11313001

*The flight data recording system in which the recorded data is protected from impact forces and high temperatures.*

**Health and useage monitoring system (HUMS)** 100000180

*The system deployed to acquire, analyze communicate and store data gathered from sensors and accelerometers that monitor the essential components in flight.*

**Maintenance/quick access recorder (QAR) (Quick access recorder)** 11313010

*Maintenance/quick access recorder (QAR): The maintenance data recorders in which the recording medium is not protected against impact forces or fire.*

**Central computers (ATA Code:3140) (3140 Central computers)** 11314000

*(ATA Code:3140) Central computers: The systems and components used for computing data from a number of different sources without a preponderance of functions in any one system, for call up on a display. Includes integrated instrument systems such as engine, aeroplane power and central warning indicators when combined into a central display. Typical parts are "digital core avionic system" (DCAS), "engine indication and crew alerting system" (EICAS), stored checklist, emergency procedures and company regulations.*

**Weight-Balance System (Weight-Balance System)** 100000196

*A system to calculate the weight and balance of the aircraft*

**Central warning systems (ATA Code:3150) (3150 Central warning system)** 11315000

*(ATA Code:3150) Central warning systems: The panels and associated circuitry which warn of potential problems in two or more independent or related systems. Warnings can be either audible or visual. Typical parts are annunciator panel, relay, lamp, PC board, diode and throttle microswitch.*

**Flap configuration warning system (Flap configuration warning system)** 100000246

*Flap configuration warning system*

**Gear configuration warning system (Gear configuration warning system)** 100000247

*Gear configuration warning system*

**Speedbrake configuration warning system (Speedbrake configuration warning system)** 100000249

*Speedbrake configuration warning system*

**Take-off configuration warning system (Take-off configuration warning system)** 100000185

*A system that provides a warning to the crew in case the appropriate configuration of the aircraft for take-off has not been achieved.*

**Trim configuration warning system (Trim configuration warning system)** 100000250

*Trim configuration warning system*

**Other configuration warning system (Other configuration warning system)** 100000248

*Other configuration warning system*

**Central display system (ATA Code:3160) (3160 Central display system)** 11316000

*(ATA Code:3160) Central display system: The systems and components which give visual display of conditions in unrelated systems.*

**Automatic data reporting system (ATA Code:3170) (3170 Automatic data report system)** 11317000

*(ATA Code:3170) Automatic data reporting system: The systems and components used for collating and computing data from unrelated systems and transmitting the same automatically. Includes 'aircraft to satellite data relay' (ASDAR) system and components.*

**Instrument System Wiring (ATA Code:3197) (3197 Instrument System Wiring)** 11319700

*(ATA Code:3197) Wiring specific to the Instrument Systems.*

**Landing gear system (ATA Code:3200) (3200 Landing gear system)** 11320000

*(ATA Code:3200) Landing gear system: The units and components which furnish a means of supporting and steering the aircraft on the ground or water and make it possible to retract and store the landing gear in flight. Includes the functioning and maintenance aspects of the landing gear doors, but does not include the door structure.*

**Landing gear wheel fairing (ATA Code:3201) (3201 Landing fairing)** 11320100

*(ATA Code:3201) Landing gear wheel fairing: The wheel fairings and attaching parts. Typical parts are bracket, fender and fairing.*

**Main landing gear (ATA Code:3210) (3210 Main landing gear)** 11321000

*(ATA Code:3210) Main landing gear: The miscellaneous parts of the main landing gear system which cannot be directly associated with a specific main gear code, such as attachment, emergency flotation, strut, axle or truck. Does not include the retraction/extension system or the doors.*

**Main landing gear attachment section (ATA Code:3211) (3211 Main attachment section)** 11321100

*(ATA Code:3211) Main landing gear attachment section: The parts and assemblies which attach the main landing gear to the airframe structure. Typical parts are fittings, bolt, U-bolt, casting, supports and attaching hardware.*

**Emergency flotation system (ATA Code:3212) (3212 Emergency flotation system)** 11321200

*(ATA Code:3212) Emergency flotation system: The helicopter inflatable floats and attaching parts which permit emergency landings on water. Typical parts are float valve, hose, bracket and cylinder.*

**Main landing gear strut/axle/truck (ATA Code:3213) (3213 Main strut/axle/truck)** 11321300

*(ATA Code:3213) Main landing gear strut/axle/truck: The main landing gear components and parts such as struts, axles and trucks which support the aircraft on the ground or water. Typical parts are shock device, torque link, beam and skid/shock device on rotorcraft.*

**Nose/tail landing gear (ATA Code:3220) (3220 Nose/tail landing gear)** 11322000

*(ATA Code:3220) Nose/tail landing gear: The miscellaneous parts of the nose or tail gear system which cannot be directly associated with a specific nose/tail gear code such as attachment, struts or axles. Does not include extension/retraction mechanism, steering/damping system, or doors.*

**Nose/tail landing gear attach section (ATA Code:3221) (3221 Nose/tail gear attach section)** 11322100

*(ATA Code:3221) Nose/tail landing gear attach section: The parts and assemblies which attach the nose/tail gear to the airframe structure. Applicable to fixed or retractable type landing gear.*

**Nose/tail landing gear strut/axle (ATA Code:3222) (3222 Nose/tail gear strut/axle)** 11322200

*(ATA Code:3222) Nose/tail landing gear strut/axle: The nose gear component parts such as shock struts and axles which support the aircraft on the ground. Torque links are included but not steering or shimmy damping systems and units.*

**Landing gear retract/extension system (ATA Code:3230) (3230 Retract/extension system)** 11323000

*(ATA Code:3230) Landing gear retract/extension system: The miscellaneous parts of the retraction system other than actuators and door actuating mechanism. Typical parts are levelling cylinders, centring system, actuator brackets, bungees, emergency extension system parts, uplocks/downlocks, uplock/downlock actuator and drag braces.*

**Landing gear door retraction section (ATA Code:3231) (3231 Landing gear door retraction section)** 11323100

*(ATA Code:3231) Landing gear door retraction section: The nose and main landing gear door actuating system parts other than the actuator. Does not include door structure and hinges [Code 11528000]. Typical parts are bellcrank, rod, sequence valve, latch, lines and hoses.*

**Landing gear door actuator (ATA Code:3232) (3232 Door actuator)** 11323200

*(ATA Code:3232) Landing gear door actuator: The actuating units which open and close the landing gear doors during gear extension and retraction.*

**Landing gear actuator (ATA Code:3233) (3233 Landing gear actuator)** 11323300

*(ATA Code:3233) Landing gear actuator: The actuating units which retract and extend the nose or main gear. This includes electric motors, hydraulic cylinders but not self contained electric motor driven hydraulic pumps such as power packs [Code 2913].*

**Landing gear selector (ATA Code:3234) (3234 Landing gear selector)** 11323400

*(ATA Code:3234) Landing gear selector: The selector valves, switches, or control levers used to direct a power source to actuators for gear retraction and extension.*

**Landing gear down lock (Down lock)** 11323002

*Landing gear down lock: A mechanical or geometric lock which retains the landing gear in the "Down" position without the assistance of the retraction motive power, e.g. hydraulics.*

**Landing gear emergency extension system (Emergency extension system)** 11323021

*Landing gear emergency extension system: A system by which the landing gear can be extended in the event of it failing to lower properly by selection of the primary extension system.*

**Landing gear up lock (Up lock)** 11323001

*Landing gear up lock: A mechanical or geometric lock which retains the landing gear in the "Up" position without the assistance of the retraction motive power, e.g. hydraulics.*

**Landing Gear System Wiring (ATA Code:3297) (3297 Landing Gear System Wiring)** 11329700

*(ATA Code:3297) Wiring specific to the Landing Gear System*

**Landing gear Wheels and Brakes (ATA Code:3240) (3240 Wheels and Brakes)** 11324000

*(ATA Code:3240) That portion of the system which provides for rolling and stopping the aircraft while on the ground and stopping wheel rotation after retraction. Includes items such as bearings, tires, valves, de-boosters, swivel glands, anti-skid devices, pressure indicators, plumbing, etc.*

**Brake anti-skid section (ATA Code:3241) (3241 Brake anti-skid section)** 11324100

*(ATA Code:3241) Brake anti-skid section: The system units and parts which automatically control brake pressure during landing roll to prevent tyre skidding. Typical parts are transducer, control box and valves.*

**Landing gear brake (ATA Code:3242) (3242 Landing gear brake)** 11324200

*(ATA Code:3242) Landing gear brake: The parts of the brake unit mounted at the wheels only. Typical parts are disc, cylinder, lining, seal, rotor and housing.*

**Auto brake system (Auto brake system)** 100000245

*Auto brake system*

**Landing gear emergency brake system (Emergency brake system)** 11324214

*Landing gear emergency brake system: The independent braking system intended to bring the aircraft to a stop in the event of the failure of the main braking system.*

**Parking brake system (Parking brake system)** 11324211

*Parking brake system: The independent braking system intended to keep the wheel from rotating after the aircraft has been brought to rest. This system is designed to continue to be effective after the other aircraft systems are shut down.*

**Master cylinder/brake valve (ATA Code:3243) (3243 Master cylinder/brake valve)** 11324300

*(ATA Code:3243) Master cylinder/brake valve: The units which provide a power source for cylinder-power brake actuation. Does not include connecting lines to brake units [Code 11324000]. Typical parts are seal, piston and housing.*

**Landing gear tyres (ATA Code:3244) (3244 Landing gear tyres)** 11324400

*(ATA Code:3244) Landing gear tyres: The tyre defects and failures.*

**Landing gear wheel inner tube (ATA Code:3245) (3245 Wheel inner tube)** 11324500 *

*(ATA Code:3245) Landing gear wheel inner tube.*

**Main landing gear tyre (Main tyre)** 11324401

*Main landing gear tyre: The inflated rubber cushions around the hubs of the aircraft's main landing wheels.*

**Main tyre pressure (Main tyre pressure)** 100000202

**Nose landing gear tyre (Nose tyre)** 11324402

*Nose landing gear tyre: The inflated rubber cushions around the hubs of the aircraft's nose wheels.*

**Nose tyre pressure (Nose tyre pressure)** 100000203

**Tail landing gear tyre (Tail landing gear tyre)** 100000200

**Tyre pressure indications (Tyre pressure indications)** 100000201

**Tyre tube (ATA Code:3245) (3245 Tyre tube)** 100000017

*(ATA Code:3245) For issues with wheel tire tubes.*

**Landing gear wheel/ski/float (ATA Code:3246) (3246 Wheel/ski/float)** 11324600

*(ATA Code:3246) Landing gear wheel/ski/float: Defective wheels, skis or seaplane floats and associated parts such as bearings, dust seals, bolts.*

**Landing gear float (Float)** 11324604

*Landing gear float: The buoyant hull like chambers designed to support a floatplane while resting on a water surface.*

**Landing gear main wheel (Main wheel)** 11324601

*Landing gear main wheel: The main gear wheels and associated parts such as bearings, dust seals and bolts.*

**Main wheel bearing (Main wheel bearing)** 100000198

**Landing gear nose wheel (Nose wheel)** 11324602

*Landing gear nose wheel: The nose gear wheels and associated parts such as bearings, dust seals and bolts.*

**Nose wheel bearing (Nose wheel bearing)** 100000199

**Landing gear ski (Ski)** 11324606

*Landing gear ski: The ski-like bearers designed to support a ski plane while resting on a surface of ice and snow and the associated parts such as bearings, dust seals and bolts.*

**Landing gear tail wheel (Tail wheel)** 11324603

*Landing gear tail wheel: The tail wheels, associated parts such as bearings, dust seals and bolts.*

**Landing gear steering system (ATA Code:3250) (3250 Steering system)** 11325000

*(ATA Code:3250) Landing gear steering system: The miscellaneous system parts other than the actuator which provide for aircraft directional control on the ground. Includes main gear steering systems. Does not include wheel braking systems. Typical parts are, cable, rod end, collar, line, valve and accumulator.*

**Landing gear steering unit (ATA Code:3251) (3251 Steering unit)** 11325100

*(ATA Code:3251) Landing gear steering unit: The powered actuator which turns the wheel(s) for controlling direction of movement on the ground. Typical parts are cylinders and seals.*

**Landing gear shimmy damper (ATA Code:3252) (3252 Shimmy damper)** 11325200

*(ATA Code:3252) Landing gear shimmy damper: The devices mounted on steerable and castoring wheel forks to reduce shimmy. Typical parts are seal, springs and housing.*

**Landing gear position and warning (ATA Code:3260) (3260 Landing gear position/warning)** 11326000

*(ATA Code:3260) Landing gear position and warning: The system parts which provides indication and warning of the landing gear position. Includes gear safety switches which prevent inadvertent actuation such as squat or air/ground sensor. Typical parts are relay, switch bracket, lamp, horn, up lock switch, down lock switch and in transit switch.*

**Brake temperature indication system (Brake temperature indication system)** 11326001

*Brake temperature indication system*

**Weight-on-wheels switch (Weight-on-wheels switch)** 11323004

*Weight-on-wheels switch: An isolating switch which operates when the aircraft weight is taken by its wheels, which prevents certain systems being activated, e.g. gear retraction.*

**Auxiliary landing gear (ATA Code:3270) (3270 Auxiliary landing gear)** 11327000

*(ATA Code:3270) Auxiliary landing gear: The devices such as tail skids on tricycle gear aircraft used to stabilize the aircraft on the ground and to prevent ground contact damage. Includes supplementary wheels on rotorcraft, skids for ground handling but not for skids or amphibian/seaplane floats, hull or associated retractable landing gear. Does not include auxiliary or emergency landing gear extension systems [Code 11323000].*

**Helicopter emergency floatation gear/floats (Helicopter emergency floatation gear/floats)** 11327002

**Landing gear skid (Landing gear skid)** 11327001

*Landing gear skid.*

**Lighting system (ATA Code:3300) (3300 Lighting system)** 11330000

*(ATA Code:3300) Lighting system: The units and components which provide for external and internal illumination. Includes light fixtures, switches and wiring. Does not include warning lights for individual systems.*

**Flight compartment lighting (ATA Code:3310) (3310 Flight compartment lighting)** 11331000

*(ATA Code:3310) Flight compartment lighting: The lighting systems and equipment including panel illumination other than inside individual instruments, master warning light systems such as annunciator panels and associated dimming systems located in the flight compartment only. Typical parts are bulb, socket, switch, lamp, lens, relay, rheostat, resistor and ballast.*

**Passenger compartment lighting (ATA Code:3320) (3320 Passenger compartment lighting)** 11332000

*(ATA Code:3320) Passenger compartment lighting: The lighting systems in the passenger seating compartment, lavatories, buffet/galley compartments and cabin carry-on baggage/coat areas. Includes lamps for illumination of cabin, reading lamps, seat belt/no-smoking signs and passenger call systems. Does not include emergency lighting [Code 11335000]. Typical parts are ballast, switch, transformer and lamps.*

**Ballast Resistor (Ballast Resistor)** 100000197

**Seat belt sign (Seat belt sign)** 11332001

*Seat belt sign: The flight crew operated warning sign used to indicate to the passengers and cabin crew that seat belts are to be worn.*

**Cargo/servicing compartment lighting (ATA Code:3330) (3330 Cargo/service compartment lighting)** 11333000

*(ATA Code:3330) Cargo/servicing compartment lighting: The lighting systems in the compartments used for storage of cargo, baggage, or aircraft system components which require servicing. Does not include electrical systems, fire or smoke sensing. Typical parts are circuit breaker, lamp, lens and switch.*

**Exterior lighting (ATA Code:3340) (3340 Exterior lighting)** 11334000

*(ATA Code:3340) Exterior lighting: The lighting systems for illumination outside the aircraft such as landing, taxi, position, wing illumination including the rotating beacon and strobe. Typical parts are switch, lamp, power supply, lens, circuit breaker, flasher unit, relay, wheel-well lights, brackets and motors.*

**Aircraft logo light (Aircraft logo light)** 11334011

*Aircraft logo light: The set of lights designed to illuminate the tail fin where the operating company's logo is displayed to attract the attention of persons outside the aircraft to its presence.*

**Anti-collision light (Anti-collision light)** 11334006

*Anti-collision light: The set of lights designed to attract the attention of persons outside the aircraft to its presence.*

**Ice inspection light (Ice inspection light)** 11334004

*Ice inspection light: The set of lights designed to illuminate the leading edge of the wing or other exterior surface to enable the flight crew to detect the extent of any icing.*

**Landing light (Landing light)** 11334002

*Landing light: The set of lights designed to illuminate the landing path for the benefit of the pilot flying.*

**Navigation light (Navigation light)** 11334001

*Navigation light: The set of lights shown by an aircraft at night to publicise its presence and direction of travel.*

**Strobe light (Strobe light)** 11334007

*Strobe light: The set of lights designed to flash on and off rapidly and automatically to attract the attention of persons outside the aircraft to its presence.*

**Taxiing light (Taxiing light)** 11334003

*Taxiing light: The set of lights designed to illuminate the taxi path for the benefit of the pilot flying.*

**Emergency lighting (ATA Code:3350) (3350 Emergency lighting)** 11335000

*(ATA Code:3350) Emergency lighting: The cabin, flight compartment and exterior emergency lighting systems, which furnish illumination in event of electrical power failure. Includes items such as inertia flashlights and lanterns.*

**Lighting System Wiring (ATA Code:3397) (3397 Lighting System Wiring)** 11339700

*(ATA Code:3397) Wiring specific to the Lighting Systems*

**Navigation system (ATA Code:3400) (3400 Navigation system)** 11340000

*(ATA Code:3400) Navigation system: The units and components which provide aircraft navigational information.*

**Flight environment data system (ATA Code:3410) (3410 Environment data system)** 11341000

*(ATA Code:3410) Flight environment data system: The system which senses environmental conditions and uses the data to influence navigation.*

**Pitot/static system (ATA Code:3411) (3411 Pitot/static system)** 11341100

*(ATA Code:3411) Pitot/static system: The system which provides a source of ram or static air for distribution to using instruments and pressure differential units such as automatic landing gear extender, altimeter, airspeed and rate of climb indicator. Does not include the using units, instruments, the anti-ice heating elements, or the associated circuitry and switches [Code 11303000]. Typical parts are air pick up heads, lines, fittings, drain valves, static port and selector valves.*

**Stand-by altimeter (Stand-by altimeter)** 100000204

*The system that provides stand-by altitude information. It is usually connected to the alternate static ports*

**Outside air temperature indicator/sensor (ATA Code:3412) (3412 OAT indicator/sensor)** 11341200

*(ATA Code:3412) Outside air temperature indicator/sensor: The unit mounted in the engine induction air intake to sense and transmit temperature to the cockpit indicator. Also for the sensors and instruments which measure and indicate the temperature of ambient air outside the aircraft. Includes associated circuitry and related parts. Typical parts are sensor, indicator and case.*

**Rate of climb indication (ATA Code:3413) (3413 Rate of climb indication)** 11341300

*(ATA Code:3413) Rate of climb indicator: The instrument which senses and indicates the rate of climb or descent of an aircraft. Does not include the associated static system. Includes the instantaneous vertical speed indicator (IVSI).*

**Rate of climb indicator (Rate of climb indicator)** 11341301

*Rate of climb indicator: The instrument which displays the rate of climb of the aircraft from a dedicated sensor.*

**Airspeed/Mach indication (ATA Code:3414) (3414 Airspeed/Mach indication)** 11341400

*(ATA Code:3414) Airspeed/Mach indication: The instrument which measures and indicates speed of the aircraft. Does not include the doppler indicator [Code 11344300].*

**Airspeed/Mach indicator (Airspeed/Mach indicator)** 11341401

*Airspeed/Mach indicator: The instrument that indicates speed of the aircraft. Does not include the doppler indicator.*

**Standby airspeed indicator (Standby airspeed indicator)** 11341402

*Standby airspeed indicator: The airspeed indicator which displays information derived independent of the aircraft's main flight instrument system.*

**High speed warning system (ATA Code:3415) (3415 High speed warning system)** 11341500

*(ATA Code:3415) High speed warning system: The system components, including the computer, which sense, transmit and provide warning when operating air speed limits are exceeded. Typical parts are transducer, stall warning detector, switch, vane, horn, lamp, warning unit computer and module.*

**Barometric altimeter/encoder (ATA Code:3416) (3416 Altimeter/encoder)** 11341600

*(ATA Code:3416) The altimeters and barometric encoders used to measure and indicate altitude. Also includes the unit which senses and provides an alert of a change in a pre-selected altitude. Does not include the ground proximity systems. [Code 11344400.] Typical parts are dial, case, pointer and springs.*

**Altimeter (Altimeter)** 11341601

*Altimeter: The instrument designed to indicate the aircraft's altitude.*

**Altitude alert (Altitude alert)** 11341605

*Altitude alert: The warning system to alert the flight crew to the aircraft's approach to a certain altitude.*

**Air data computer (ATA Code:3417) (3417 Air data computer)** 11341700

*(ATA Code:3417) Air data computer: The computer and its integral parts which receives data from various environmental sensing systems, computes this data and makes it available to the various navigation systems. Does not include external hardware such as cables, mounting racks and remote switches. [Code 11341000].*
*Air data computer: A primary navigation data source. A navigation sensor based on atmospheric data sensors; usually measures static pressure, dynamic pressure, and outside air temperature; sometimes computes other atmospheric data, such as indicated airspeed, Mach number, calibrated airspeed*

**Stall warning system (ATA Code:3418) (3418 Stall warning system)** 11341800

*(ATA Code:3418) Stall warning system: The system components and parts, including the computer, which sense, transmit and provide aural, visual and stick shaker warning of an aircraft in an impending flight stall condition. Typical parts are transducer, stall warning detector, switch, vane, horn, lamp, stick shaker, heater element, warning unit computer and module.*

**Attitude and direction data system (ATA Code:3420) (3420 Attitude and direction data)** 11342000

*(ATA Code:3420) Attitude and direction data system: The system components and parts which use magnetic, gyroscopic and inertia forces to indicate an aircraft's attitude and direction. Includes such items as the inertial reference system.*

**Attitude gyro and indicating system (ATA Code:3421) (3421 Attitude gyro system)** 11342100

*(ATA Code:3421) Attitude gyro and indicating system: The gyroscopic unit which supplies attitude information to the necessary systems; e.g. vertical reference outputs for use as roll and pitch data to the autopilot computer. Includes the instruments relying on a gyroscope to display their information. Typical parts are vertical gyro and the gyro horizon.*

**Attitude gyro (Attitude gyro)** 11342102

*The gyroscopic unit which supplies attitude information to the necessary systems*

**Attitude indicator/horizon/ADI (Attitude indicator/horizon/ADI)** 11342101

**Directional gyro and indicating system (ATA Code:3422) (3422 Directional gyro and indicating system)** 11342200

*(ATA Code:3422) Directional gyro and indicating system: The unit operating by gyroscopic principle and driven by airflow or an electric motor, which provides heading (direction) references relative to a preset heading in degrees of the compass. Also for the flux unit detector which senses the earth's magnetic field and uses this data to correct for gyro drift. Typical parts are gyro, rotor and bearings.*

**Compass rose (Compass rose)** 11342201

*Compass rose: The unit which supplies compass rose reference outputs for instrument displays e.g. compass in the horizontal situation indicator.*

**Stand-by compass (Stand-by compass)** 100000205

**Magnetic compass (ATA Code:3423) (3423 Magnetic compass)** 11342300

*(ATA Code:3423) Magnetic compass: The instrument which indicates the magnetic heading of an aircraft by self contained magnetized needles. Typical parts are compensator, adjusting screw, gasket, float and case.*

**Turn and bank/rate of turn indicator (ATA Code:3424) (3424 Turn and bank/rate of turn)** 11342400

*(ATA Code:3424) Turn and bank/rate of turn indicator: The instrument actuated by gyroscopic forces and driven by air flow or electric motor to indicate both rate of turn and angle of bank.*

**Integrated flight director system (ATA Code:3425) (3425 Integrated flight director)** 11342500

*(ATA Code:3425) Integrated flight director system: The system which computes, interrogates, and continuously displays basic attitude, position and steering information in order to maintain a particular course, heading or attitude. Does not include flight management system components [Code 11346000]. Typical parts are integrated flight annunciator, integrated flight comparator, integrated flight computer/amplifier, integrated flight control and integrated flight indicators (i.e. horizontal situation indicator, attitude and direction indicator, attitude direction unit, heading and direction indicator, radio direction indicator, course direction indicator, flight director indicator, pictorial navigation indicator, flight command indicator, steering computer utilized in the integrated flight instrument systems and other components such as cables and connectors.*

**Landing and taxi aids (ATA Code:3430) (3430 Landing and taxi aids)** 11343000

*(ATA Code:3430) Landing and taxi aids: The system providing guidance during approach, landing and taxiing. Includes such items as, ILS, paravisual director, ground guidance systems and markers.*

**Localizer/very high frequency omni directional radio range system (ATA Code:3431) (3431 Localizer/VOR system)** 11343100

*(ATA Code:3431) Localizer/very high frequency omni directional radio range system: The electronic portion of an instrument landing system that indicates the centreline of the runway to the pilot. Includes localizer/very high frequency omni directional radio range systems. Typical parts are receiver, antenna, indicator, circuit breaker, switch and antenna coaxial cable.*

**Glide slope system (ATA Code:3432) (3432 Glide slope system)** 11343200

*(ATA Code:3432) Glide slope system: The system which provides an instrument needle reference from an electronic signal radiated from a ground transmitter to enable the pilot to fly the proper glide path for landing under instrument meteorological conditions. Typical parts are circuit breaker, switch, receiver, antenna and indicator.*

**Microwave landing system (ATA Code:3433) (3433 Microwave landing system)** 11343300

*(ATA Code:3433) Microwave landing system: The instrument landing system operating in the microwave spectrum which provides lateral and vertical guidance to pilots flying aircraft that have compatible avionics equipment. Typical parts are receiver, antenna and control panel.*

**Marker beacon system (ATA Code:3434) (3434 Marker beacon system)** 11343400

*(ATA Code:3434) Marker beacon system: The system which provides an aural and visual indication of passage over specified points on the glide path for landing under instrument meteorological conditions. Does not includes control panel when it is an integral portion of the audio control panel [Code 11235000]. Typical parts are marker beacon antenna, receivers, visual/aural indication units, marker light and control panel.*

**Head up display system (ATA Code:3435) (3435 Head up display system)** 11343500

*(ATA Code:3435) Head up display system: The flight instrument system that allows the pilot of an aircraft to watch the flight instruments while looking ahead of the aircraft. Includes the display screen which allows information to be visually presented to the pilot while looking through the windscreen or at the control panel.*

**Wind shear detection system (ATA Code:3436) (3436 Wind shear detection system)** 11343600

*(ATA Code:3436) Wind shear detection system: The flight instrument system that allows the pilot to detect a change in wind speed and/or direction in space, including updrafts and downdrafts. Includes the outboard sensors, indicators and the warning system which notifies the pilot of the appropriate corrective action manoeuvre to take.*

**Enhanced Vision Systems (EVS) (Enhanced Vision Systems (EVS))** 100000269

**Independent position determining system (ATA Code:3440) (3440 Independent positioning)** 11344000

*(ATA Code:3440) Independent position determining system: The system which provides information to determine position and is primarily independent of ground installations. Typical parts are star tracker and sextants/octants.*

**Inertial guidance system (ATA Code:3441) (3441 Inertial guidance system)** 11344100

*(ATA Code:3441) Inertial guidance system: The navigation system which relies upon gyro platforms and accelerometers for its operation. Includes the control panel for the inertial navigation system; the instruments which receives their signal from the inertial navigation unit and the unit containing the inertial platform and digital computer portion of the system. Typical parts are mode selector unit, control display unit and remote display unit.*

**Weather radar system (ATA Code:3442) (3442 Weather radar system)** 11344200

*(ATA Code:3442) Weather radar system: The system components and parts which transmit and receive signals independent of ground facilities to determine the relative position of adverse weather cells. Typical parts are transceiver, antenna, the control panel for the weather avoidance radar system, accessory synchronizers, servo amplifier and scope.*

**Doppler system (ATA Code:3443) (3443 Doppler system)** 11344300

*(ATA Code:3443) Doppler system: The airborne radar system which utilizes the doppler effect to measure and display ground speed, drift angle and cross track error.*

**Ground proximity warning system/terrain avoidance warning system (ATA Code:3444) (3444 GPWS/TAWS)** 11344400

*(ATA Code:3444) Ground proximity warning system/terrain avoidance warning system: The system which detects and alerts flight crew to potential terrain hazards. Includes the antenna which transmits and receives an electronic signal for the radio altimeter equipment used for terrain-to-aircraft distance. Also includes the component which interprets a radio signal reflected back to a receiver to determine distance from the nearest terrain and the component which process the warning computer input signals from various sources in order to determine if and when the crew should be alerted to a terrain hazard.*

**Radio altimeter (Radio altimeter)** 11344401

*Radio altimeter: The system which measures the aircraft's height [not altitude] above the surface below.*

**Traffic alert and collision avoidance system/Airborne collision avoidance system (ATA Code:3445) (3445 TCAS/ACAS)** 11344500

*(ATA Code:3445) Traffic alert and collision avoidance system/Airborne collision avoidance system: The system which provides information to determine relative aircraft positions and provides guidance to the flight crew on collision avoidance action. The system is independent of ground installations. Typical parts are the collision avoidance monitoring units.*
*Airborne collision avoidance system (ACAS). An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders. (Annex 10, Vol 4, Chapter 1)*

*ACAS I. An ACAS which provides information as an aid to "see and avoid" action but does not include the capability for generating resolution advisories (RAs).*

*Note. ACAS I is not intended for international implementation and standardization by ICAO. Therefore, only ACAS I characteristics required to ensure compatible operation with other ACAS configurations and interference limiting are defined in 4.2.*

*ACAS II. An ACAS which provides vertical resolution advisories (RAs) in addition to traffic advisories (TAs).*

*ACAS III. An ACAS which provides vertical and horizontal resolution advisories (RAs) in addition to traffic advisories (TAs).*

**Non-radar weather system (ATA Code:3446) (3446 Non-radar weather system)** 11344600

*(ATA Code:3446) Non-radar weather system: The non-radar weather system and components which sense the electrostatic charges accumulated around a storm cell in order to "map out" that cell on an indicator.*

**Dependent position determining systems (ATA Code:3450) (3450 Dependent positioning system)** 11345000

*(ATA Code:3450) Dependent position determining systems: The system which provides information to determine position and is dependent on ground installations or orbital satellites.*

**Distance measuring equipment/ultra high frequency tactical air navigation aid (ATA Code:3451) (3451 DME/TACAN)** 11345100

*(ATA Code:3451) Distance measuring equipment/ultra high frequency tactical air navigation aid: The systems which measure time-to-station, ground speed and distance to a known transmitter location by transmitting and receiving electronic pulse signals e.g. distance measuring equipment; ultra high frequency tactical air navigational aid. Typical parts are antenna, control unit, transceiver and coaxial cables.*

**Air traffic control transponder system (ATA Code:3452) (3452 ATC transponder system)** 11345200

*(ATA Code:3452) Air traffic control transponder system: The air traffic control system which receives coded signals from a ground station and transmits a coded reply for altitude reporting and identification purposes. Typical parts are transponder, antenna, control unit, transceiver and coaxial connecting cable.*

**Long range navigation system (ATA Code:3453) (3453 Loran)** 11345300

*(ATA Code:3453) Long range navigation system: The radio navigation system and associated components and parts which provides for long range navigation en route when operating on signals from ground based master and slave transmitting stations. Typical parts are antenna, coupler, CPU and receiver.*

**Very high frequency omni-directional radio range system (ATA Code:3454) (3454 VOR system)** 11345400

*(ATA Code:3454) Very high frequency omni-directional radio range system: The radio navigation system in the very high frequency band used for determining a bearing relative to a ground transmitter and permits selection of one of 360 magnetic courses for navigation to a transmitter. Typical parts are receiver, antenna and control panel.*

**Instrument landing system/very high frequency omni-directional radio range system receiver (ILS/VOR receivers)** 11345401

*The instrument landing system and very high frequency omni-directional radio range system receivers. Typical parts are antenna, control unit, receiver and coaxial cable.*

**Automatic direction finder system (ATA Code:3455) (3455 ADF system)** 11345500

*(ATA Code:3455) Automatic direction finder system: The low frequency band system which receives a signal from a non-directional radio beacon to determine relative bearing from the beacon location [automatic direction finder system]. Typical parts are antenna, control unit, receiver and coaxial cable.*

**Omega navigation system (ATA Code:3456) (3456 Omega navigation system)** 11345600

*(ATA Code:3456) Omega navigation system: The navigation system which provides for geographical location of the aircraft down to sea level on a worldwide basis when operating on signals from eight ground-based OMEGA very low frequency transmitting stations. Typical parts are antenna, control unit or receiver, coaxial connecting cable, remote switches and connectors.*

**Global positioning system (ATA Code:3457) (3457 Global positioning system)** 11345700

*(ATA Code:3457) Global positioning system: The systems which are mainly dependent upon signals from ground transmitters or orbital satellites for their operations; systems such as VHF omni-directional radio range, automatic direction finding, and distance measuring equipment. Typical parts are antenna, control unit, receiver, remote switches, connectors and coaxial cable.*

**Flight management computing system (ATA Code:3460) (3460 Flight management computing system)** 11346000

*(ATA Code:3460) Flight management computing system: The system which combines navigational data to compute or manage the aircraft's geographical position or theoretical flight path. Includes items such as course computers, flight management computers, performance data computers and associated control display units and warning annunciators.*

**Position computing system (Position computing system)** 11346001

*Position computing system: The portion of the system which combines navigational data to compute the aircraft's geographical position or theoretical flight path.*

**Other navigation systems (ATA Code:3470) (3470 Other navigation system)** 11347000

*(ATA Code:3470) Other navigation systems: The navigation systems other than those mentioned above.*

**Navigation System Wiring (ATA Code:3497) (3497 Navigation System Wiring)** 11349700

*(ATA Code:3497) Wiring specific to the Navigation Systems.*

**Oxygen system (ATA Code:3500) (3500 Oxygen system)** 11350000

*(ATA Code:3500) Oxygen system: The units and components which store, regulate, and deliver breathing oxygen to the passengers and crew. Typical parts are bottles, relief valves, shut-off valves, outlets, regulators, masks and walk-around bottles.*

**Crew oxygen system (ATA Code:3510) (3510 Crew oxygen system)** 11351000

*(ATA Code:3510) Crew oxygen system: The portion of the main system which furnishes oxygen to the crew.*

**Passenger oxygen system (ATA Code:3520) (3520 Passenger oxygen system)** 11352000

*(ATA Code:3520) Passenger oxygen system: The portion of the main system which furnishes oxygen to the passengers.*

**Portable oxygen system (ATA Code:3530) (3530 Portable oxygen system)** 11353000

*(ATA Code:3530) Portable oxygen system: The equipment attached to the portable bottle to regulate and dispense breathing oxygen, including the storage bottle for the portable oxygen system.*

**Oxygen System Wiring (ATA Code:3597) (3597 Oxygen System Wiring)** 11359700

*(ATA Code:3597) Wiring specific to the Oxygen System.*

**Pneumatic system (ATA Code:3600) (3600 Pneumatic system)** 11360000

*(ATA Code:3600) Pneumatic system: The units and components which deliver large volumes of compressed air from a power source to connecting points for other systems such as air conditioning, pressurization and de-icing.*

**Pneumatic distribution system (ATA Code:3610) (3610 Distribution system)** 11361000

*(ATA Code:3610) Pneumatic distribution system: The components and parts other than the regulator and shut-off valves delivering large volumes of compressed air from a power source to the control valves of using systems such as conditioning and pressurization. Does not include engine and aerofoil anti-icing/de-icing. Typical parts are regulator valve, actuator, duct, ducts valves, manifold, clamp, flow venturi, bellows, "Y" duct and check valve.*

**Pneumatic indicating system (ATA Code:3620) (3620 Indicating system)** 11362000

*(ATA Code:3620) Pneumatic indicating system: The system components and parts which sense, transmit and indicate the temperature and pressure of air in the distribution system. Includes the instrument which indicates air pressure in the pneumatic distribution system. Does not include the using systems.*

**Pneumatic System Wiring (ATA Code:3697) (3697 Pneumatic System Wiring)** 11369700

*(ATA Code:3697) Wiring specific to the Pneumatic System.*

**Vacuum system (ATA Code:3700) (3700 Vacuum system)** 11370000

*(ATA Code:3700) Vacuum system: The units and components used to generate, deliver and regulate negative air pressure.*

**Vacuum distribution system (ATA Code:3710) (3710 Vacuum distribution system)** 11371000

*(ATA Code:3710) Vacuum distribution system: The system components and parts, other than the pump, regulator, oil separator or indication system, which are used to distribute low volume, negative pressure air (suction) to systems such as gyroscopic flight instruments and cabin rate controller and to distribute low volume, positive pressure air to systems such as air foil de-icer boots. Does not include the using systems. Typical parts are pump, filter, regulator, lines, manifold, check valves and element.*

**Vacuum pump (Vacuum pump)** 11370500

*Vacuum pump: The components used to generate negative air pressure in the vacuum system.*

**Vacuum indicating system (ATA Code:3720) (3720 Vacuum indicating system)** 11372000

*(ATA Code:3720) Vacuum indicating system: The system components and parts including those which indicate negative air pressure in the vacuum lines. Includes the indicator and warning systems. Typical parts are the vacuum indicator and associated lines.*

**Vacuum System Wiring (ATA Code:3797) (3797 Vacuum System Wiring)** 11379700

*(ATA Code:3797) Wiring specific to the Vacuum System.*

**Water and waste system (ATA Code:3800) (3800 Water and waste system)** 11380000

*(ATA Code:3800) Water and waste system: The fixed units and components which store and deliver for use, fresh water and those fixed components which store and deliver waste water.*

**Potable water system (ATA Code:3810) (3810 Potable water system)** 11381000

*(ATA Code:3810) Water and waste system: The system which is used to store and deliver fresh drinking water.*

**Wash water system (ATA Code:3820) (3820 Wash water system)** 11382000

*(ATA Code:3820) Wash water system: The system which is used to store and deliver wash water.*

**Waste disposal system (ATA Code:3830) (3830 Waste disposal system)** 11383000

*(ATA Code:3830) Waste disposal system: The system and components used for the disposal of water and waste. Includes wash basins, water closets, flush systems and collection tanks. Typical parts are valve, flush motor, lines and timer.*

**Air supply (water pressure system) (ATA Code:3840) (3840 Air supply water pressure)** 11384000

*(ATA Code:3840) Air supply (water pressure system): The system which provides the pressure to distribute potable water to the lavatories. Typical parts are pump, motor and lines.*

**3850 Water systems indications (3850 Water systems indications)** 100000206

**Water/Waste System Wiring (ATA Code:3897) (3897 Water/Waste System Wiring)** 11389700

*(ATA Code:3897) Wiring specific to the Water/Waste System.*

**Water ballast (ATA Code:4100) (4100 Water ballast)** 11410000

*(ATA Code:4100) Water ballast: The units and components provided for the storage, balancing, control, filling, discharge and dumping of water ballast.*

**Water ballast storage (ATA Code:4110) (4110 Water ballast storage )** 11411000

*(ATA Code:4110) That portion of the system which stores water solely for the purpose of providing airship ballast. Includes removable tanks (bladder cells), interconnecting balance pipes, filler valves, etc.*

**Water ballast dump system (ATA Code:4120) (4120 Water ballast dump system )** 11412000

*(ATA Code:4120) That portion of the system used to dump water ballast during flight. Includes valves, remote/direct, manual/automatic controls, etc.*

**Water ballast indicating system (ATA Code:4130) (4130 Water ballast indicating system)** 11413000

*(ATA Code:4130) That portion of the system used to indicate quantity, condition and relative distribution of the water ballast.*

**Water ballast wiring (ATA Code:4197) (4197 Water ballast wiring)** 11419700

*(ATA Code:4197) Wiring of the water ballast system.*

**Integrated modular avionics (ATA Code:4200) (4200 Integrated modular avionics)** 11420000

*(ATA Code:4200) Generalize computing devices that can host software applications for system functions that had traditionally been implemented in dedicated hardware. The actual system functions are covered in their respective ATA chapters.*

**Shared Avionic Resources (ATA Code 4210) (4210 Shared Avionic Resources)** 100000226

*(ATA Code 4210) The resources, which provide processing, I/O, network and power supply conditioning capabilities necessary to host system functions. This sub-chapter describes the resources, the means of communication between these resources and their installation.*

**Core System (ATA Code 4220) (4220 Core System)** 100000227

*(ATA Code 4220) Contains information about the main computing devices of the system.*

**Communication Network (ATA Code 4230) (4230 Communication Network)** 100000228

*(ATA Code 4230) The data communication network used for operational communication between systems. This network may also be used for communication within systems and for data loading. This sub-chapter describes all components of the network and their installation in the aircraft.*

**Remote Shared Resources (ATA Code 4240) (4240 Remote Shared Resources)** 100000229

*(ATA Code 4240) The resources installed remotely from the main avionics that may be used by more than one system, e.g. Remote Data Concentrator (RDC).*

**Cabin systems (ATA Code:4400) (4400 Cabin systems)** 11440000

*(ATA Code:4400) Cabin systems: The units and components which furnish a means of entertaining the passengers and providing communication within the aircraft and between the aircraft cabin and ground stations. Includes voice, data, music and video transmissions.*

**Cabin core system (ATA Code:4410) (4410 Cabin core system)** 11441000

*(ATA Code:4410) Cabin core system: The portion of the cabin system used to accomplish the integrated functional control, operation, testing and monitoring of cabin systems and to increase cabin comfort (such as active noise control). Includes items such as controllers, cabin control panels, handsets, signs and loudspeakers.*

**In-flight entertainment system (ATA Code:4420) (4420 In-flight entertain system)** 11442000

*(ATA Code:4420) In-flight entertainment system: The portion of the cabin system used to entertain the passengers with music, video, information and games. Includes items such as controllers, cabin control panels, audio and video equipment.*

**Passenger address, entertainment and comfort systems (ATA Code:4430) (4430 Passenger address and entertainment system)** 11443000

*(ATA Code:4430) The passenger address, comfort and entertainment systems or components such as amplifier, cassette recorder player, control panel, speaker and video equipment.*

**Cabin address system (Cabin address system)** 11443001

*Cabin address system: The public announcement system by which the flight and cabin crew can broadcast messages to passengers.*

**Cabin mass memory system (ATA Code:4440) (4440 Cabin mass memory system)** 11444000

*(ATA Code:4440) Cabin mass memory system: That portion of the cabin mass memory system used to store and process cabin related data, such as systems configuration data and multimedia programs. Includes items such as controllers, terminals, keyboards, disk drives, printers and modems.*

**Cabin monitoring system (ATA Code:4450) (4450 Cabin monitoring system)** 11445000

*(ATA Code:4450) Cabin monitoring system: The portion of the cabin system used to monitor parts of the cabin area. Includes items such as surveillance cameras and monitors. Does not include external anti-hijack devices or external video monitoring.*

**Miscellaneous cabin system (ATA Code:4460) (4460 Miscellaneous cabin system)** 11446000

*(ATA Code:4460) Miscellaneous cabin system: The portion of the cabin system used to support miscellaneous cabin functions.*

**Cabin systems wiring (ATA Code:4497) (4497 Cabin systems wiring)** 11449700

*(ATA Code:4497) Wiring specific to the cabin systems.*

**Central maintenance computer (ATA Code:4500) (4500 Central maintenance computer)** 11450000

*(ATA Code:4500) Central maintenance computer: The unit, components and associated systems which interface with other airplane systems and provide a convenient way of communicating system problems to aircraft maintenance personnel. The system contains checkout and fault isolation procedures using a central computer to locate a single system or component malfunction. Typical parts are computer, storage devices, controls and display.*

**Central Maintenance System Wiring (ATA Code:4597) (4597 Central Maintenance System Wiring)** 11459700

*(ATA Code:4597) Wiring specific to the Central Maintenance System.*

**Information system (ATA Code:4600) (4600 Information system)** 11460000

*(ATA Code:4600) Information system: The units and components which furnish a means of storing, updating and retrieving digital information traditionally provided on paper, microfilm or microfiche. Includes units that are dedicated to the information storage and retrieval function such as the electronic library mass storage and controller. Does not include units or components installed for other uses and shared with other systems, such as flight deck printer or general use display.*

**Aircraft general information system (ATA Code:4610) (4610 Aircraft general)** 11461000

*(ATA Code:4610) Aircraft general information system: The units and components which furnish a means of storing, updating and retrieving digital information on the aircraft, that are traditionally provided on paper, microfilm, or microfiche. Includes units that are dedicated to the information storage and retrieval function such as the electronic library mass storage and controller.*

**Flight deck information systems (ATA Code:4620) (4620 Flight deck)** 11462000

*(ATA Code:4620) Flight deck information systems: The portion of the onboard information system that supports the flight deck systems, flight crew and flight operations.*

**E-Charts (E-Charts)** 100000266

*Systems solely for the viewing of eloectronic flight charts. If used as an application on an electronic flight bag the relevant EFB Class should also be used.*

**Electronic Flight Bag - Class 1 (EFB - Class 1)** 100000263

*Standard commercial-off-the-shelf (COTS) equipment such as laptops or handheld electronic devices. These devices are used as loose equipment and are typically stowed during critical phases of flight. A Class 1 EFB is considered a Portable Electronic Device (PED). Class 1 EFBs may be used to display Type B applications in critical phases of flight provided that they are 'secured and viewable'.*

**Electronic Flight Bag - Class 2 (EFB - Class 2)** 100000264

*Also Portable Electronic Devices, and range from modified COTS equipment to purpose-built devices. Mounting, power (ship's power as primary) or data connectivity of an EFB typically requires the application of an STC, Type Certificate or Amended Type Certificate.*

**Electronic Flight Bag - Class 3 (EFB - Class 3)** 100000265

*Considered "installed equipment" and subject to airworthiness requirements and, unlike PEDs, they must be under design control. The hardware is subject to a limited number of RTCA DO-160E requirements (for non-essential equipment—typical crash safety and Conducted and Radiated Emissions (EMC) testing). There may be DO-178B requirements for software, but this depends on the application-type defined in the Advisory Circular. Class 3 EFBs are typically installed under STC or other airworthiness approval.*

**Maintenance information system (ATA Code:4630) (4630 Maintenance)** 11463000

*(ATA Code:4630) Maintenance information system: The portion of the onboard flight information system that supports all onboard maintenance system functions, maintenance technicians, and any ground based maintenance activity.*
*Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.*
*(Annex 8)*

**Passenger cabin information system (ATA Code:4640) (4640 Passenger cabin)** 11464000

*(ATA Code:4640) Passenger cabin information system: The portion of the onboard information system that supports passenger cabin information systems.*

**Miscellaneous information system (ATA Code:4650) (4650 Miscellaneous)** 11465000

*(ATA Code:4650) Miscellaneous information system: The portion of the onboard information system that supports other functions, as defined by the user, that cannot be related to the flight deck, passenger cabin, or maintenance.*

**4700 Inert gas system (4700 Inert gas system)** 11470000

*Those units and components used to generate, store, deliver and regulate inert gas. Includes regulators, lines, manifolds, etc.*

**4710 Inert gas generation/storage (4710 Inert gas generation/storage)** 11471000

*That portion of the system which generates and/or stores inert gas. Includes tanks, cells, reservoirs, accumulators, etc. Does not include plumbing, pumps, valves, controls, etc.*

**4720 Inert gas distribution system (4720 Inert gas distribution system)** 11472000

*That portion of the system which is used to distribute inert gas to the using systems. Includes plumbing, pumps, valves, regulators, etc.*

**4730 Inert gas control system (4730 Inert gas control system)** 11473000

*The inert gas controls which meter the inert gas to the distribution components and into the using systems. Includes items such as levers, switches, cables, etc.*

**4740 Inert gas indicating system (4740 Inert gas indicating system)** 11474000

*That portion of the system which is used to indicate the flow rate, temperature and pressure of the inert gas. Includes items such as transmitters, indicators, etc.*

**Airborne auxiliary power unit system (ATA Code:4900) (4900 Airborne APU system)** 11490000

*(ATA Code:4900) The airborne auxiliary power units installed on aircraft for the purpose of generating and supplying a single type or combination of auxiliary electric, hydraulic, pneumatic or other power. Does not include generators, alternators or hydraulic pumps, or their connecting systems which supply and deliver power to their respective aircraft systems.*
*Auxiliary power-unit (APU). A self-contained power-unit on an aircraft providing electrical/pneumatic power to aircraft systems during ground operations.(ICAO Annex 16)*

**Auxiliary power unit cowling/containment (ATA Code:4910) (4910 APU cowling/containment)** 11491000

*(ATA Code:4910) Auxiliary power unit cowling/containment: The system of cowling and other components used to cover the auxiliary power unit and contain any broken parts in the event of an external failure.*
*JAR: 'Auxiliary Power Unit (APU)' means any gas turbine-powered unit delivering rotating shaft power, compressor air, or both which is not intended for direct propulsion of an aircraft.*

**Auxiliary power unit core engine (ATA Code:4920) (4920 APU core engine)** 11492000

*(ATA Code:4920) Auxiliary power unit core engine: The basic APU engine including the compressor, turbine, cases other than specific sub-systems such as fuel, ignition, exhaust, starting and controls. Typical parts are turbine, bearing, seal, impeller, blade, case and burner can.*

**Auxiliary power unit fuel and control (ATA Code:4930) (4930 APU fuel and control)** 11493000

*(ATA Code:4930) Auxiliary power unit fuel and control: The system and components which furnish fuel from the aircraft tanks to the APU fuel control and associated injector nozzles, including the unit which provides fuel at the proper pressure for fuel control operation and the unit controlling and injecting metered fuel to the engine burner can section. Typical parts are shutoff valve, line and fittings.*

**Auxiliary power unit start/ignition system (ATA Code:4940) (4940 APU start/ignition system)** 11494000

*(ATA Code:4940) Auxiliary power unit start/ignition system: The system units used to start the APU engine, including the unit which provides a power source to the igniter during the starting cycle. Typical parts are ignition unit, magneto, igniter and starter.*

**Auxiliary power unit bleed air system (ATA Code:4950) (4950 APU bleed air system)** 11495000

*(ATA Code:4950) Auxiliary power unit bleed air system: The system and components which provide and control a source of pressure and high volume of air for aircraft using systems such as engine starting and cabin air conditioning, prior to starting engines. Typical parts are duct, bleed valve, clamp and seal.*

**Auxiliary power unit controls (ATA Code:4960) (4960 APU controls)** 11496000

*(ATA Code:4960) Auxiliary power unit controls: The system components which electrically and manually control operation of the APU engine. Typical parts are relay and control box.*

**Auxiliary power unit indicating system (ATA Code:4970) (4970 APU indicating system)** 11497000

*(ATA Code:4970) Auxiliary power unit indicating system: The APU operation indicating system including the temperature indicator, tachometer generator or indicator (engine speed). Includes the instrument and associated warning system which sense, transmits and indicates APU engine speed and temperature.*

**Auxiliary power unit exhaust system (ATA Code:4980) (4980 APU exhaust system)** 11498000

*(ATA Code:4980) Auxiliary power unit exhaust system: The components and parts which collect and direct exhaust gasses from the APU turbine to the aircraft exterior. Includes the movable door fairing. Typical parts are nozzle, door, actuator, seal, clamp and shield.*

**Auxiliary power unit oil system (ATA Code:4990) (4990 APU oil system)** 11499000

*(ATA Code:4990) Auxiliary power unit oil system: The system and components used for APU engine lubrication. Typical parts are filter, pump, relief valve, hose and line.*

**APU System Wiring (ATA Code:4997) (4997 APU System Wiring)** 11499700

*(ATA Code:4997) Wiring specific to the APU System.*

**Cargo and accessory compartments (ATA Code:5000) (5000 Cargo and accessory compartments)** 11500000

*(ATA Code:5000) Cargo and accessory compartments: The compartments for storage of cargo and various components and accessories. Includes those systems used to load/unload cargo and other cargo related systems.*
*Cargo. Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage. ICAO Annex 9.*

**Cargo compartments (ATA Code:5010) (5010 Cargo compartments)** 11501000

*(ATA Code:5010) Cargo compartments: The compartments designed and designated for storage of cargo and baggage.*
*Cargo. Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage. ICAO Annex 9.*

**Agricultural spray system (ATA Code:5011) (5011 Agricultural spray system)** 11251200 *

*(ATA Code:5011) Agricultural spray system includes equipment such as hopper, tank, spray nozzle, boom, pump, bracket, valve.*

**Agricultural spray system (ATA Code:5011) (5011 Agricultural spray system)** 11501100

*(ATA Code:5011) Agricultural spray system: The aerial application equipment such as hopper, tank, spray nozzle, boom, pump, bracket and valves.*

**Emergency jettison system (Emergency jettison system)** 11251202

*Emergency jettison system: The system fitted to an aircraft to enable the flight crew to jettison fuel or cargo while in flight.*

**Spray boom (Spray boom)** 11251201

**Cargo loading system (ATA Code:5020) (5020 Cargo loading system)** 11502000

*(ATA Code:5020) Cargo loading system: The systems with components which are, or can be, mounted on the aircraft and used to load/unload, restrain or guide cargo. Includes drive systems, rollers, latches and restraint nets.*

**Cargo hook/strop (Cargo hook/strop)** 11502008

*Cargo hook/strop: The combination of a hook and strop that is used for hoisting cargo or passengers from a surface below the aircraft or securing cargo to the aircraft's cargo hook.*

**Cargo pallet locks (Cargo pallet locks)** 100000208

**Cargo pallet rails (Cargo pallet rails)** 100000207

**Cargo restraint/tie down (Cargo restraint/tie down)** 11502002

*Cargo restraint/tie down: The systems with components which are, or can be, mounted on the aircraft and used to restrain cargo.*

**Helicopter cargo winch (Helicopter cargo winch)** 11502007

*Helicopter cargo winch: The winch mounted externally above a designated opening in the helicopter fuselage that is used for hoisting cargo from a surface below the aircraft to the level of the helicopter floor.*

**Personnel carrying device / harness (Personnel carrying device / harness)** 100000209

*helicopters only*

**Sling cable/wire/rope (Sling cable/wire/rope)** 11255007

*for occurrences involving the rope/wire of a sling load, e.g. flutter, breaking or damaging other aircraft parts*

**Cargo related systems (ATA Code:5030) (5030 Cargo related system)** 11503000

*(ATA Code:5030) Cargo related systems: The systems which are related to loading/unloading of cargo. Includes aircraft levelling and loader alignment systems. Does not include cargo loading systems.*

**Not used (ATA Code:5040) (5040 Not used)** 11504000

*(ATA Code:5040) This group is not in use at present*

**Accessory compartments (ATA Code:5050) (5050 Accessory compartments)** 11505000

*(ATA Code:5050) Accessory compartments: The compartments used for the housing of various components and accessories. Includes wheel wells, tail-hydraulic-electrical/electronic equipment racks and main battery structure.*

**Cargo/accessory compartment insulation (ATA Code:5060) (5060 Compartment insulation)** 11506000

*(ATA Code:5060) Cargo/accessory compartment insulation: The insulation blankets which are used for heat and sound insulation. Includes cargo compartments, accessory compartments and insulation.*

**Cargo and accessory compartments wiring (ATA Code:5097) (5097 Cargo and accessory compartments wiring)** 11509700

*(ATA Code:5097) Wiring specific to the cargo and accessory compartments*

**Cargo hold baggage (Cargo hold baggage)** 11255003

*Cargo hold baggage: baggage in the cargo hold.*

**Cargo hold-cargo (Cargo hold-cargo)** 11255001

*Cargo in the caorgo hoild of the aircraft*

**External/sling load (External load)** 11255006

*External sling load (helicopters only)*

**Cargo and accessory compartments (ATA Code: 5000) (5000 Cargo and accessory compartments)** 11255000 *

*(ATA Code:2550) Cargo compartments: The compartments for the storage of baggage and cargo including external mounted pods. Does not include the exterior door, hinges and latches [Code 11523000]. Typical parts are tie downs, restraint nets and equipment for loading and unloading cargo (includes rotorcraft cargo handling equipment).*

**Cargo hook/strop (Cargo hook/strop)** 11255005 *

*Cargo hook/strop*

**Cargo restraint/tie down (Cargo restraint/tie down)** 11255002 *

*Cargo restraint/tie down: systems used to secure/tie-down cargo, includes netting etc.*

**Helicopter cargo winch (Helicopter cargo winch)** 11255004 *

*Helicopter cargo winch*

**STANDARD PRACTICES AND STRUCTURES - GENERAL (ATA Code:5100) (5100 STANDARD PRACTICES AND STRUCTURES - GENERAL)** 11510000

*(ATA Code:5100) Standard Practices, General Procedures and typical repairs applicable to more than one chapter and are not specifically covered under [Chapter (System) 52] thru [Chapter (System) 57] Sub-Sys/Sect breakdown.*

*Repair. The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the Type Certificate for the respective aircraft type, after it has been damaged or subjected to wear.*
*(Annex 8)*

**Aircraft structures (ATA Code:5101) (5101 Aircraft structures)** 11510100

*(ATA Code:5101) Aircraft structures: Repairs to aircraft structures of a general nature.*

**Balloon/dirigible components (ATA Code:5102) (5102 Balloon/dirigible components)** 11510200

*(ATA Code:5102) Balloon/dirigible components: All balloons, airships and dirigible components irrespective of location or component involved. Also includes reports for water ballast which are normally filed under water ballast.*

**Ballast (Ballast)** 11510204

**Basket or Gondola (Basket)** 11510201

*The bottom part of the balloon which carries the pilot, passengers and (hot air balloons) the propane cylinders.*

**Envelope (Envelope)** 11510203

*The fabric portion of the balloon that holds the hot air (hot air balloons)*

**Envelope rip line (Envelope rip line)** 100000210

*A line that runs from the rip panel to the basket. It is the means of initiating the deflation procedure.*

**Gas burner (Gas burner)** 11510212

**Gas pipes/lines/hoses (Gas pipes/lines/hoses)** 11510211

**Gas storage (Gas storage)** 11510210

*The cylinders in which the propane gas is stored.*

**Gas valve (Gas valve)** 11510213

**Gores (Gores)** 11510207

*The lengthy pieces of balloon fabric which taper at each end to form the vertical sections of the envelope.*

**Parachute valve (Parachute valve)** 11510208

*At the crown of the balloon is a large opening which is used to deflate the balloon on landing. During flight, this opening is sealed by a parachute valve. held in place by the pressure inside the balloon. The pilot can pull the parachute down out of hole via pulleys using the parachute valve cord that drops down to the basket*

**Parachute valve cord (Parachute valve cord)** 11510209

*The cord/rope that allows the pilot to pull out the parachute valve to deflate the balloon*

**Pilot light (Pilot light)** 11510214

*A separate small burner with a constant flame. The purpose is to ignite the burner.*

**Skirt (Skirt)** 11510205

*An optional extension of the envelope usually made of flame-proof NOMEX. Its purpose is to help channel hot air into the mouth of the balloon.*

**Skirt panel (Skirt panel)** 11510206

*A part of the skirt*

**Suspension cables (Suspension cables)** 100000211

*Kevlar or stainless steel wires which transmit loads from the burner frame assembly or the basket superstructure to the load tapes on the envelope.*

**Tether lines (Tether lines)** 11510202

*Lines used to ther the balloon on the round.*

**Investigation, Cleanup and Aerodynamic Smoothness (ATA Code 5110) (5110 Investigation, Cleanup and Aerodynamic Smoothness)** 100000230

*(ATA Code 5110) Definition of damage classifications. Cleanup of dents, cracks, scratches, corrosion, etc. Aerodynamic smoothness requirements for the airplane, and permissible contour variations, gaps, and mis-match data.*

**Processes (ATA Code 5120) (5120 Processes)** 100000231

*(ATA Code 5120) Special processes for use in the repair of the airplane. Will not include general engineering practices unless specific deviations are required. Unique processes such as welding specifications, etc., relative to a single repair shall be incorporated in the repair and only referenced here.*

**Materials (ATA Code 5130) (5130 Materials)** 100000232

*(ATA Code 5130) Description of materials (metallic and nonmetallic) including extrusions, formed sections, sheet, sealants, adhesives, and special materials used in airplane repair. Where possible, permissible substitutes and sources of supply will be given.*

**Fasteners (ATA Code 5140) (5140 Fasteners)** 100000233

*(ATA Code 5140) Description of fastener types, materials, and sizes. Procedures for fastener installation and removal including hole preparation. Fastener strength values and substitution data.*

**Support of Airplane for Repair and Alignment Check Procedures (ATA Code 5150) (5150 Support of Airplane for Repair and Alignment Check Procedures)** 100000234

*(ATA Code 5150) Procedure for supporting the airplane to relieve loads during repairs. Includes locations for supports and contour dimensions for required ground equipment.*

**Control-Surface Balancing (ATA Code 5160) (5160 Control-Surface Balancing)** 100000235

*(ATA Code 5160) Procedures for adjusting the mass balance of control surfaces after repair. Where applicable, individual repairs will contain their own balancing instructions.*

**Repairs (ATA Code 5170) (5170 Repairs)** 100000236

*(ATA Code 5170) Typical repairs suitable for general use, not limited to one ATA Chapter.*

**Electrical Bonding (ATA Code 5180) (5180 Electrical Bonding)** 100000237

*(ATA Code 5180) Topics concerning the electrical bonding of aircraft structure as well as electrical bonding of subsystems to aircraft structure.*

**Fuselage doors (ATA Code:5200) (5200 Fuselage doors)** 11520000

*(ATA Code:5200) Fuselage doors: The removable units used for entrance or exit and for enclosing other structure contained within the fuselage. Includes passenger and crew doors, cargo doors and emergency exits. Includes electrical and hydraulic systems associated with door control as appropriate.*

**Passenger/crew doors (ATA Code:5210) (5210 Passenger/crew doors)** 11521000

*(ATA Code:5210) Passenger/crew doors: The cabin entrance doors not including door frames, warning systems, or cabin emergency exit doors/hatches. Typical parts are hinges, actuators, latches, handle, seals, structure, spring, cable, bellcrank and skin.*

**Crew door (Crew door)** 11521002

*Crew door: The aircraft doors used for entrance and exit of the crew.*

**Door power assist (Door power assist)** 100000259

*Mechanisms for power assistance of either crew or passenger doors.*

**Passenger door (Passenger door)** 11521001

*Passenger door: The passenger cabin entrance doors not including door frames, warning systems or cabin emergency exit doors/hatches. Typical parts are hinges, actuators, latches, handle, seals, structure, spring, cable, bellcrank and skin.*

**Emergency exits (ATA Code:5220) (5220 Emergency exits)** 11522000

*(ATA Code:5220) Emergency exits: The emergency exit doors, windows and hatches. Typical parts are pan, hinge, latch and hook.*

**Cargo/baggage doors (ATA Code:5230) (5230 Cargo/baggage)** 11523000

*(ATA Code:5230) Cargo/baggage doors: The exterior doors used to gain access to cargo or baggage storage areas. Does not include door frames on fuselage, door warning or compartment interior furnishings. Typical parts are door structure, seal, hinge, latch, latch pin, handle and skin.*

**Service doors (ATA Code:5240) (5240 Service doors)** 11524000

*(ATA Code:5240) Service doors: The exterior doors used to gain access for servicing aircraft systems and equipment.*

**Galley doors (ATA Code:5241) (5241 Galley)** 11524100

*(ATA Code:5241) Galley doors: The exterior doors used primarily to gain access for servicing the aircraft galley. Typical parts are hinges, structure and the latch mechanism.*

**Electric/electronic compartment doors (ATA Code:5242) (5242 Electronic compartment)** 11524200

*(ATA Code:5242) Electric/electronic compartment doors: The exterior doors used primarily to gain access for servicing the electrical/electronic compartment. Typical parts are hinges, structure and the latch mechanism.*

**Hydraulic compartment doors (ATA Code:5243) (5243 Hydraulic compartment)** 11524300

*(ATA Code:5243) Hydraulic compartment doors: The exterior doors used primarily to gain access for servicing the hydraulic compartment. Typical parts are hinges, structure and the latch mechanism.*

**Accessory compartment doors (ATA Code:5244) (5244 Accessory compartment)** 11524400

*(ATA Code:5244) Accessory compartment doors: The exterior doors used primarily to gain access for servicing the accessory compartment. Typical parts are hinges, structure and the latch mechanism.*

**Air conditioning compartment doors (ATA Code:5245) (5245 Air conditioning)** 11524500

*(ATA Code:5245) Air conditioning compartment doors: The exterior doors used primarily to gain access for servicing the air conditioning compartment system and components. Typical parts are hinges, structure and the latch mechanism.*

**Fluid service doors (ATA Code:5246) (5246 Fluid service doors)** 11524600

*(ATA Code:5246) Fluid service doors: The exterior doors used primarily to gain access for servicing the fluid service areas but excluding compartment doors [Code 11524300]. Typical parts are hinges, structure and the latch mechanism.*

**Auxiliary power unit door (ATA Code:5247) (5247 APU door)** 11524700

*(ATA Code:5247) Auxiliary power unit door: The aircraft doors used to gain access for servicing the APU and components. Typical parts are hinges, structure and the latch mechanism.*

**Tail cone door (ATA Code:5248) (5248 Tail cone door)** 11524800

*(ATA Code:5248) The tail cone door. Typical parts are hinges, structure and the latch mechanism.*

**Fixed inner doors (ATA Code:5250) (5250 Fixed inner doors)** 11525000

*(ATA Code:5250) Fixed inner doors: The doors within the fuselage in fixed partitions but not including doors in movable partitions. Typical parts are structure, hinges, latches and lining.*

**Entrance stairs (ATA Code:5260) (5260 Entrance stairs)** 11526000

*(ATA Code:5260) Entrance stairs: The cabin entrance stairs which operate in conjunction with, but are not an integral part of, entrance doors. Typical parts are structure, actuator, controls and handrails, step, cable, bungee, latch hook, latch, bracket and bellcrank.*

**Door warning system (ATA Code:5270) (5270 Door warning system)** 11527000

*(ATA Code:5270) Door warning system: The system which is used to indicate to the flight crew whether the exterior doors are closed and properly latched. Does not include the landing gear position warning indications [Code 11326000]. Typical parts are switch, lamp, horn and relay.*

**Landing gear doors (ATA Code:5280) (5280 Landing gear doors)** 11528000

*(ATA Code:5280) Landing gear doors: The structural aspects of landing gear doors including hinges and seals on the wing, landing gear, and fuselage mounted doors. Does not include the operating mechanism or position indicating or warning system [Codes 11323100 or 11326000].*

**Main landing gear door (Main landing gear door)** 11528001

*Main landing gear door: The structure of the doors used to enclose the main landing gear compartments. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls and attachment fittings.*

**Nose landing gear door (Nose landing gear door)** 11528002

*Nose landing gear door: The structure of the doors used to enclose the nose landing gear compartments. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls and attachment fittings.*

**Door system wiring (ATA Code:5297) (5297 Door system wiring)** 100000018

*(ATA Code:5297) Wiring specific to the door systems.*

**Fuselage structure (general) (ATA Code:5300) (5300 Fuselage structure general)** 11530000

*(ATA Code:5300) Fuselage structure (general): The structural units and associated components and members which make up the compartments for crew, passengers, equipment and cargo.*

**Aerial tow equipment (ATA Code:5301) (5301 Aerial tow equipment)** 11530100

*(ATA Code:5301) The aerial towing equipment including the attachments on fuselage and release mechanism.*

**Tow release mechanism (Tow release mechanism)** 11530101

*The mechanism to release the tow cable.*

**Rotorcraft tail boom (ATA Code:5302) (5302 Rotorcraft tail boom)** 11530200

*(ATA Code:5302) Rotorcraft tail boom: The structure, including exterior skin and truss framework, of tail booms on rotorcraft. Includes attachment fittings for tail boom and stabilizer surfaces. Typical parts are bulkhead, bracket, frame, frame tube and plates.*

**Fuselage main structure (ATA Code:5310) (5310 Main structure)** 11531000

*(ATA Code:5310) Fuselage main structure: The fuselage structure defects which affect two or more related parts.*

**Fuselage main frames (ATA Code:5311) (5311 Main frames)** 11531100

*(ATA Code:5311) The main fuselage frames: The associated attachment fittings are covered in "Fuselage miscellaneous structure".*

**Fuselage main bulkheads (ATA Code:5312) (5312 Main bulkheads)** 11531200

*(ATA Code:5312) The main fuselage bulkheads and the associated attachment fittings.*

**Fuselage main longeron/stringer (ATA Code:5313) (5313 Main longeron/stringer)** 11531300

*(ATA Code:5313) The main fuselage longerons/stringers and the associated attachment fittings.*

**Fuselage main keel (ATA Code:5314) (5314 Main keel)** 11531400

*(ATA Code:5314) The main fuselage keel beams and the associated attachment fittings.*

**Fuselage main floor beam (ATA Code:5315) (5315 Main floor beam)** 11531500

*(ATA Code:5315) The main fuselage floor beams and the associated attach fittings.*

**Fuselage miscellaneous structure (ATA Code:5320) (5320 Miscellaneous structure)** 11532000

*(ATA Code:5320) The miscellaneous structures of the main fuselage that aid in the support of the primary structure. Includes such items as brackets, channels, stiffeners and clips. Does not include movable partitions.*

**Fuselage floor panel (ATA Code:5321) (5321 Floor panel)** 11532100

*(ATA Code:5321) Fuselage floor panel: The interior floor panels within the main fuselage auxiliary structure.*

**Fuselage internal mounting structure (ATA Code:5322) (5322 Internal mounting)** 11532200

*(ATA Code:5322) Fuselage internal mounting structure: The internal mounting auxiliary structure which aids in the support of the fuselage structure.*

**Fuselage internal stairs (ATA Code:5323) (5323 Internal stairs)** 11532300

*(ATA Code:5323) Fuselage internal stairs: The internal stairs which are part of the fuselage auxiliary structure.*

**Fuselage fixed partitions (ATA Code:5324) (5324 Fixed partitions)** 11532400

*(ATA Code:5324) Fuselage fixed partitions: The fixed partitions which are part of the fuselage structure.*

**Fuselage plate/skin (ATA Code:5330) (5330 Plate/skin)** 11533000

*(ATA Code:5330) Fuselage plate/skin: The exterior covering of the fuselage including access covers and skin doublers.*

**Fuselage panel (Fuselage panel)** 11533007

*Fuselage panel: Any panel which forms part of the exterior covering of the fuselage.*

**Fuselage attachment fittings (ATA Code:5340) (5340 Fuselage attachment)** 11534000

*(ATA Code:5340) Fuselage attachment fittings: The fittings on the fuselage used for the attachment of doors, wings, stabilizers, landing gear, engine and rotor pylons and the support of equipment within the fuselage.*

**Wing attachment fittings (on fuselage) (ATA Code:5341) (5341 Wing attachment fittings)** 11534100

*(ATA Code:5341) Wing attachment fittings (on fuselage): The fittings on the fuselage used for the attachment of the wings.*

**Stabilizer attachment fittings (on fuselage) (ATA Code:5342) (5342 Stabilizer attachment)** 11534200

*(ATA Code:5342) Stabilizer attachment fittings (on fuselage): The fittings on the fuselage used for the attachment of the stabilizers.*

**Landing gear attachment fittings (on fuselage) (ATA Code:5343) (5343 Landing gear attachment)** 11534300

*(ATA Code:5343) Landing gear attachment fittings (on fuselage): The fittings on the fuselage used for the attachment of the landing gear.*

**Door attachment fittings/hinges (on fuselage) (ATA Code:5344) (5344 Door attachment/hinge)** 11534400

*(ATA Code:5344) The fittings on the fuselage used for the attachment of the doors.*

**Equipment attachment fittings (on fuselage) (ATA Code:5345) (5345 Equipment attachment)** 11534500

*(ATA Code:5345) The fittings on the fuselage used for the attachment of equipment.*

**Powerplant attachment fittings (on fuselage) (ATA Code:5346) (5346 Powerplant attachment)** 11534600

*(ATA Code:5346) Powerplant attachment fittings (on fuselage): The fittings on the fuselage used for the attachment of the powerplant e.g. the centre engine on tri-engine airplanes.*

**Seat/cargo attachment fittings (on fuselage) (ATA Code:5347) (5347 Seat/cargo attachment)** 11534700

*(ATA Code:5347) Seat/cargo attachment fittings (on fuselage): The fittings on the fuselage used for the attachment of seats and cargo restraint mechanisms.*

**Fuselage fairings (ATA Code:5350) (5350 Fuselage fairings)** 11535000

*(ATA Code:5350) Fuselage fairings: The fixed and removable aerodynamic fairings between the fuselage and wing/empennage/nacelle attachment points, tail cones and radomes. Also includes the rings on rotorcraft tail cones. Typical parts are tail, radome, fairing, stiffener, screw, fillet and skin.*

**Fuselage nose cone (Nose cone)** 11535001

*Fuselage nose cone: The conical nose-cap which is designed to optimize the airflow around the fuselage.*

**Radome (Radome)** 100000179

*Radome is the housing for a radar antenna transparent to radio waves.*

**Fuselage tail cone (Tail cone)** 11535002

*Fuselage tail cone: The conical cap which is designed to optimize the departure of the airflow from the fuselage.*

**Nacelle/pylon structure (ATA Code:5400) (5400 Nacelle/pylon structure)** 11540000

*(ATA Code:5400) Nacelle/pylon structure: The structural units and associated components and members which furnish a means of mounting and housing the power plant or rotor assembly. Includes skins, longerons, belt frames, stringers, clamshells, scuppers, doors, nacelle fillets, attachment fittings and the structure of power plant cowling inclusive of the structural portion of the inlet whether or not integral with the aircraft. Structural portions of the exhaust system are excluded where they are not integral with the airframe.*

**Main frame (nacelle/pylon) (ATA Code:5410) (5410 Main frame)** 11541000

*(ATA Code:5410) Main frame (nacelle/pylon): The structure which houses and supports powerplants. Includes the firewall and all structure aft on multi-engine aircraft and firewalls on single engine aircraft. Does not include engine mounting or cowling.*

**Frame/spar/rib (nacelles/pylon) (ATA Code:5411) (5411 Frame/spar/rib)** 11541100

*(ATA Code:5411) The main frame, spar or rib structure on the nacelles or pylons.*

**Bulkhead/firewall (nacelle/pylon) (ATA Code:5412) (5412 Bulkhead/firewall)** 11541200

*(ATA Code:5412) The bulkhead or firewall structure of the nacelles or pylons.*

**Longeron/stringers (nacelle/pylon) (ATA Code:5413) (5413 Longeron/stringers)** 11541300

*(ATA Code:5413) The longeron or stringer structure on the nacelles or pylons.*

**Plate skin (nacelle/pylons) (ATA Code:5414) (5414 Plate skin)** 11541400

*(ATA Code:5414) The plates or skins on the nacelles or pylons.*

**Attachment fitting (nacelle/pylon) (ATA Code:5415) (5415 Attachment fitting)** 11541500

*(ATA Code:5415) Attachment fitting (nacelle/pylon): The fittings on the nacelles/pylons used for the attachment to its connecting structure, powerplant, thrust reverser and for the support of equipment within the nacelle/pylon.*

**Nacelle/pylon fairing (ATA Code:5416) (5416 Fairing)** 11541600

*(ATA Code:5416) Nacelle/pylon fairing: The panels mounted on the nacelle/pylon to optimize the airflow around these structures.*

**Nacelle/Pylon, Miscellaneous Structure (ATA Code:5420) (5420 Nacelle/Pylon, Miscellaneous Structure)** 11542000

*(ATA Code:5420) Miscellaneous structure on the nacelle/pylon structure which aids in the support of the primary structure. Includes such items as brackets, channels, stiffeners, doublers, clips, etc.*

**Nacelle/Pylon, System Wiring (ATA Code:5497) (5497 Nacelle/Pylon, System Wiring)** 11549700

*(ATA Code:5497) Wiring specific to the Nacelle/Pylon System*

**Empennage structure (ATA Code:5500) (5500 Empennage structure)** 11550000

*(ATA Code:5500) Empennage structure: The horizontal and vertical stabilizers include the structure of the elevator and rudder.*

**Horizontal stabilizer structure (ATA Code:5510) (5510 Horizontal stabilizer structure)** 11551000

*(ATA Code:5510) Horizontal stabilizer structure: The structural aspects of horizontal stabilizer and stabilators or canard. Includes fuselage and boom-to-surface attachment fittings. Does not include any actuating mechanism [Code 11274200].*

**Spars/ribs (horizontal stabilizer) (ATA Code:5511) (5511 Spar/ribs-horizontal stabilizer)** 11551100

*(ATA Code:5511) The spars/ribs of the horizontal stabilizer.*

**Plates/skins (horizontal stabilizer) (ATA Code:5512) (5512 Skins-horizontal stabilizer)** 11551200

*(ATA Code:5512) The plates/skins on the horizontal stabilizer.*

**Horizontal stabilizer tab structure (ATA Code:5513) (5513 Horizontal stabilizer tab)** 11551300

*(ATA Code:5513) Horizontal stabilizer tab structure: The structure and attachment of the tab surface mounted on movable stabilizers and stabilators. Includes hinge brackets and bearings/bushings. Does not include the actuating mechanism [Code 11274000]. Typical parts are hinge, skin, rib and spar.*

**Elevator structure (ATA Code:5520) (5520 Elevator structure)** 11552000

*(ATA Code:5520) Elevator structure: The aerofoil hinged to the horizontal stabilizer for longitudinal control. Includes the "ruddervator" on V-tail aircraft and balance weights. Does not include the stabilator structure [Code 11551000] or the torque tubes [Code 11273000].*

**spars/ribs (elevator) (ATA Code:5521) (5521 Spars/ribs-elevator)** 11552100

*(ATA Code:5521) spars/ribs (elevator)*

**plates/skins (elevator) (ATA Code:5522) (5522 Plates/skins-elevator)** 11552200

*(ATA Code:5522) plates/skins (elevator)*

**Elevator tab structure (ATA Code:5523) (5523 Elevator tab structure)** 11552300

*(ATA Code:5523) Elevator tab structure: The structure of elevator trim surfaces hinged to elevators and "ruddervators." Includes hinge fittings and associated bearings and bolts. Does not include actuating mechanism [Code 11273100].*

**Vertical stabilizer (ATA Code:5530) (5530 Vertical stabilizer)** 11553000

*(ATA Code:5530) Vertical stabilizer: The structural aspects of the fixed vertical surface attached to the fuselage including the dorsal fin.*

**spars/ribs (vertical stabilizer) (ATA Code:5531) (5531 Spars/ribs-vertical stabilizer)** 11553100

*(ATA Code:5531) spars/ribs (vertical stabilizer)*

**plates/skins (vertical stabilizer) (ATA Code:5532) (5532 Skins-vertical stabilizer)** 11553200

*(ATA Code:5532) plates/skins (vertical stabilizer)*

**Ventral structure (ATA Code:5533) (5533 Ventral structure)** 11553300

*(ATA Code:5533) The ventral structure and skin of the ventral fin mounted on the lower, aft fuselage for added directional stability. Typical parts are skin, rib and rivets.*

**Rudder structure (ATA Code:5540) (5540 Rudder structure)** 11554000

*(ATA Code:5540) Rudder structure: The vertical aerofoil hinged to the vertical stabilizer. Does not include the actuators, actuator mechanism or mounting [Code 11272000]. Typical parts are hinge, hinge fittings, bearing and bolts.*

**Spars/ribs (rudder) (ATA Code:5541) (5541 Spars/ribs-rudder)** 11554100

*(ATA Code:5541) The spars or ribs of the rudder structure.*

**Plates/skins (rudder) (ATA Code:5542) (5542 Plates/skins-rudder)** 11554200

*(ATA Code:5542) The plates or skins on the rudder structure.*

**Rudder tab structure (ATA Code:5543) (5543 Rudder tab structure)** 11554300

*(ATA Code:5543) Rudder tab structure: The structure of the movable surface hinged to the rudder surface for directional trim. Typical parts are skin, hinge fitting, spars and ribs.*

**Attachment fitting [empennage flight control surfaces] (ATA Code:5550) (5550 Empennage attachment)** 11555000

*(ATA Code:5550) Attachment fitting [empennage flight control surfaces]: The fittings on the empennage structure which are used for the support of the flight control aerofoils.*

**Horizontal stabilizer attachment fitting (ATA Code:5551) (5551 Horizon stabilizer attachment)** 11555100

*(ATA Code:5551) Horizontal stabilizer attachment fitting: The fittings on the horizontal stabilizer which are used to support equipment within the structure.*

**Elevator/tab attachment fitting (ATA Code:5552) (5552 Elevator/tab attachment)** 11555200

*(ATA Code:5552) Elevator/tab attachment fitting: The fittings on the elevator or elevator tab which are used to support equipment within the structure.*

**Vertical stabilizer attachment fitting (ATA Code:5553) (5553 Vertical stabilizer fitting)** 11555300

*(ATA Code:5553) Vertical stabilizer attachment fitting: The fittings on the vertical stabilizer which are used to support equipment within the structure.*

**Rudder attachment fitting (ATA Code:5554) (5554 Rudder attachment fitting)** 11555400

*(ATA Code:5554) Rudder attachment fitting: The fittings on the rudder which are used to support equipment within the structure.*

**Stabilizer fairing (ATA Code:5560) (5560 Stabilizer fairing)** 11556000

*(ATA Code:5560) Stabilizer fairing: The fixed or removable aerodynamic fairings between the fuselage and the stabilizer.*

**Canard (ATA Code:5570) (5570 Canard)** 11557000

*(ATA Code:5570) Canard: The smaller surface on an aeroplane providing stability or a means of control and placed forward of the main lifting surface.*

**Stabilizer System Wiring (ATA Code:5597) (5597 Stabilizer System Wiring)** 11559700

*(ATA Code:5597) Wiring specific to the Stabilizer System*

**Window/windshield system (ATA Code:5600) (5600 Window/windshield system)** 11560000

*(ATA Code:5600) Window/windshield system: The fuselage and crew compartment windows inclusive of windshield and those windows installed in doors.*

**Flight compartment windows/windshields (ATA Code:5610) (5610 Flight compartment window)** 11561000

*(ATA Code:5610) Flight compartment windows/windshields: Any cockpit windows, cockpit overhead canopies, observation windows and windshield panels in the flight compartment. Includes attachment and sliding feature of sliding windows. For cockpit windows including the breakage of electrically heated windshield panels regardless of cause. Does not include the heating aspects associated circuitry of heated windshields, [Code 11304000]. Typical parts are windshield, sliding window, seal, frame, panel, latch, hinge and chin bubbles.*

**Canopy window (Canopy)** 11561007

*Canopy window: The part of the structure of the transparent cover of the cockpit in an aircraft.*

**Canopy jettison system (Canopy jettison system)** 100000216

**Fligght compartment window frame (Flight compartment window frame)** 100000212

**Flight compartment window inner pane (Flight compartment window inner pane)** 100000213

**Flight compartment window outer pane (Flight compartment window outer pane)** 100000214

**Passenger compartment windows (ATA Code:5620) (5620 Passenger compartment window)** 11562000

*(ATA Code:5620) Passenger compartment windows: The cabin mounted windows in the passenger compartments. Includes the inner and outer windows, frame attaching hardware, picture windows. Does not include the windows in the escape hatches [Code 11522000].*

**Door windows (ATA Code:5630) (5630 Door window)** 11563000

*(ATA Code:5630) Door windows: The windows mounted in doors. Does not include emergency exit windows [Code 11522000].*

**Inspection and observation windows (ATA Code:5640) (5640 Inspection and observation window)** 11564000

*(ATA Code:5640) Inspection and observation windows: The windows used for examining compartments and equipment in and about the aeroplane such as door latches and cargo bays.*

**Window System Wiring (ATA Code:5697) (5697 Window System Wiring)** 11569700

*(ATA Code:5697) Wiring specific to the Window System*

**Wing structure (ATA Code:5700) (5700 Wing structure)** 11570000

*(ATA Code:5700) Wing structure: The centre wing and outer wing structural units and associated components and members which support the aircraft in flight.*

**Wing main frame structure (ATA Code:5710) (5710 Wing main frame structure)** 11571000

*(ATA Code:5710) Wing main frame structure: The main frame structure of the wing.*

**Wing spar (ATA Code:5711) (5711 Wing spar)** 11571100

*(ATA Code:5711) A spar in the wing structure.*

**Wing centre spar (Centre spar)** 11571103

*The centre spar of those spars located in the wing structure.*

**Wing front spar (Front spar)** 11571101

*The front spar of those located in the wing structure.*

**Wing rear spar (Rear spar)** 11571102

*The rear spar of those located in the wing structure.*

**Wing spar (Spar)** 11571104

*The wing spar when the more detailed element cannot be determined or when there are no centre/rear spars in the structure.*

**Wing strut (Strut)** 11571105

*Wing strut: The rigid structure exterior to the wing which is attached between the wing and the fuselage or between wings to provide strength additional to that provided by the internal structure of the wing.*

**Wing ribs/bulkheads (ATA Code:5712) (5712 Ribs/bulkheads)** 11571200

*(ATA Code:5712) The ribs/bulkhead in the wing structure.*

**Wing longeron/stringer (ATA Code:5713) (5713 Longeron/stringer)** 11571300

*(ATA Code:5713) The longerons or stringers in the wing structure.*

**Wing centre box (ATA Code:5714) (5714 Centre box)** 11571400

*(ATA Code:5714) The centre wing box structure.*

**Wing bracing wire (Bracing wire)** 11571009

*Wing bracing wire: The wires attached to the wing or wings of an aircraft to provide support additional to that provided by the wing's internal structure.*

**Wing fairing (Fairing)** 11571010

*Wing fairing: The panels mounted on the wings to optimize the airflow around the attachment points and similar discontinuities.*

**Wing miscellaneous structure (ATA Code:5720) (5720 Miscellaneous structure)** 11572000

*(ATA Code:5720) Wing miscellaneous structure: The auxiliary or miscellaneous wing structure which includes the secondary items used for attachment. Does not include plates or skins. Typical parts are wing tip, clips, brackets, channels, angles and stiffeners.*

**Wing leading edge (Leading edge)** 11572001

*Wing leading edge: The front edge spanwise fairing between the wing's upper and lower surfaces which forms the front edge of the wing.*

**Wing trailing edge (Trailing edge)** 11572002

*Wing trailing edge: The spanwise join of the wing's upper and lower surfaces which forms the rear edge of the wing.*

**Winglet (Winglet)** 11572005

*Winglet: The upturned wingtip or added auxiliary aerofoils above and/or below the wingtip to increase the efficiency of the wing in the cruise, usually by reducing tip vortex and thus recovering energy lost therein and improving the circulation and lift of the outer portion of the wing.*

**Wingtip (Wingtip)** 11572003

*The structure of the wing tip and attached fittings.*

**Wing plates/skins (ATA Code:5730) (5730 Plates/skins)** 11573000

*(ATA Code:5730) Wing plates/skins: The exterior covering of the wing including the access covers, tip tank fillets or fairings. Includes the leading edge and trailing edge skin and wing mounted fuel compartment panels.*

**Wing attachment fitting (ATA Code:5740) (5740 Attachment fitting)** 11574000

*(ATA Code:5740) Wing attachment fitting: The structure on the wing used for the attachment of fuselage, nacelle or pylon and landing gear to the wing and for the support of equipment within the wing.*

**Wing fuselage attachment fitting (ATA Code:5741) (5741 Wing fuselage attachment)** 11574100

*(ATA Code:5741) The fittings on the wing used for attachment to the fuselage structure.*

**Nacelle/pylon attachment fitting [wing) (ATA Code:5742) (5742 Nacelle/pylon attachment)** 11574200

*(ATA Code:5742) The fittings on the wing used for attachment of the nacelle/pylon.*

**Wing landing gear attachment fitting (ATA Code:5743) (5743 Wing landing gear attachment)** 11574300

*(ATA Code:5743) The fittings on the wing used for attachment of the landing gear.*

**Wing control surface attachment fittings (ATA Code:5744) (5744 Wing control surface attachment)** 11574400

*(ATA Code:5744) The fittings on the wing used for attachment of the control surface. Includes flap attachment fittings.*

**Wing flap attachment fitting (Flap attachment fitting)** 11574016 *

*The fittings on the flap used for attachment to the wing.*

**Wing flight control surface (ATA Code:5750) (5750 Wing flight control surface)** 11575000

*(ATA Code:5750) Wing flight control surface*

**Trailing edge flap structure (ATA Code:5753) (5753 Trailing edge flap)** 11575300

*(ATA Code:5753) Trailing edge flap structure: The structural aspects of the fore, mid and aft segments of the flap surface mounted on the trailing edge of the wing. Does not include the operating mechanism such as the actuators, brackets, hydraulic or electric motors. Typical parts are skin, rib, spar, flap track, roller, flap carriage, bearing, bolt and rivet.*

**Leading edge devices (ATA Code:5754) (5754 Leading edge devices)** 11575400

*(ATA Code:5754) Leading edge devices: The structural aspects of the wing leading edge device control surface. Includes hinge, brackets and bolts but does not include actuators or actuator mounting brackets [Code 11278200]. Typical parts are skin, rib, track, roller, bearing and carriage.*

**Flap vane (Flap vane)** 11575406

*Flap vane: The slat fixed to the leading edge of a flap.*

**Leading edge flap (Leading edge flap)** 11575401

*Leading edge flap: Any hinged high-lift surface attached to the leading edge but not forming the leading edge itself.*

**Leading edge slat (Leading edge slat)** 11575402

*Leading edge slat: The moveable portion of the leading edge of an aerofoil, especially a wing, which in cruising flight is recessed against the main surface and forms part of the profile; at high angles of attack it either lifts away under its own aerodynamic load or is driven under power to move forward and down to leave an intervening slot.*

**Ailerons and Elevons (ATA Code:5760) (5760 Ailerons and Elevons)** 11576000

*(ATA Code:5760) Ailerons and Elevons The skins and structure of ailerons and elevons and tabs including balancing devices and attachment fittings.*

**Aileron structure (ATA Code:5761) (5761 Aileron structure)** 11576100

*(ATA Code:5761) Aileron structure: The structural aspects of the aileron mounted on the trailing edge of wing. Includes hinges and balance weights. Does not include operating mechanism.*

**Aileron tab structure (ATA Code:5762) (5762 Aileron tab structure)** 11576200

*(ATA Code:5752) Aileron tab structure: The surface mounted at the trailing edge of the aileron for lateral trim. Typical parts are spar, skin, hinge, bracket, bolt and bearings,*

**Spoiler structure (ATA Code:5770) (5770 Spoiler structure)** 11577000

*(ATA Code:5770) Spoiler structure: The structural aspects of the movable surface on the upper surface of the wing for increasing drag and lift reducing functions. Does not include operating mechanism such as actuators, hoses and lines.*

**Ground spoiler (Ground spoiler)** 11577011

*Ground spoiler: The spoiler that is available only after landing usually as a lift dumper.*

**5780 not assigned (5780 not assigned)** 100000019

**Wing folding system (ATA Code:5790) (5790 Wing folding system)** 11579000

*(ATA Code:5790) System that controls the on-ground movement of any portion of the main wing structure. Includes mechanisms, linkages, actuators, locks, indicating/warning systems, etc.*

**Wing systems wiring (ATA Code:5797) (5797 Wing systems wiring)** 11579700

*(ATA Code:5797) Wiring specific to the wing systems.*

**STANDARD PRACTICES - PROPELLER/ROTOR (ATA Code 6000) (6000 STANDARD PRACTICES - PROPELLER/ROTOR)** 100000238

*(ATA Code 6000) STANDARD PRACTICES - PROPELLER/ROTOR*

**Propeller system (ATA Code:6100) (6100 Propeller system)** 11610000

*(ATA Code:6100) Propeller system: The complete mechanical or electrical propeller, pumps, motors, governor, alternators and those units and components external to or integral with the engine used to control the propeller blade angle. Includes the propulsor duct assemblies, aerodynamic fairing of mechanical components, stators and vectoring systems.*

*Propeller: a device for propelling an aircraft that has blades on an engine-driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. (FAA)*

**Propeller assembly (ATA Code:6110) (6110 Propeller assembly)** 11611000

*(ATA Code:6110) The propeller assembly excluding controlling aspects or conditions which affect two or more parts of the propeller such as hub and blades.*

**Propeller blade section (ATA Code:6111) (6111 Blade section)** 11611100

*(ATA Code:6111) Propeller blade section: The propeller blade but not the de-ice boots. Includes retaining clamps and blade pitch change actuating mechanism which rotates with the propeller. Typical parts are blade, clamp, link, motor, counterweight and bearings.*

**Propeller blade (Blade)** 11611101

*The propeller blades other than de-icing boots.*

**Propeller blade bearing (Blade bearing)** 11611102

*The blade bearings associated with the propeller.*

**Propeller de-ice boot (ATA Code:6112) (6112 De-ice boot)** 11611200

*(ATA Code:6112) Propeller de-ice boot: The de-ice/anti-ice system parts on the rotating parts of the propeller such as blades or spinner. Does not include the power source, controls or other non-rotating system parts [Code 11306000]. Typical parts are boot and cuff, heat element and slip ring.*

**Propeller spinner section (ATA Code:6113) (6113 Spinner section)** 11611300

*(ATA Code:6113) Propeller spinner section: The propeller spinner assemblies. Typical parts are shell, back plate, bulkhead, rivets, screw, nut plate and brackets.*

**Propeller hub section (ATA Code:6114) (6114 Hub section)** 11611400

*(ATA Code:6114) Propeller hub section: The hubs which house and support the rotating blades. Includes the dome, but not the blade actuating mechanism [Code 11611000] or the attachment to the engine flange [Code 11611001].*

**Propeller hub bolt (Propeller hub bolt)** 11611403

*Propeller hub bolt: The retaining fastener for the propeller hub.*

**Propeller control system (ATA Code:6120) (6120 Propeller control system)** 11612000

*(ATA Code:6120) Propeller control system: The propeller speed controlling system other than the governor unit or the synchronizer. Includes the controlling systems of propellers regardless of the propeller type. (Includes propeller regulator, negative torque switch and the rigging mechanism). Also includes governor control linkage, levers, cable and associated brackets from the cockpit to the governor and the feather and unfeathering systems except the pump and accumulator. Typical parts are cable, bellcrank, lever, rod end, pressure switch, solenoid valve and beta switch.*

**Propeller synchronizer section (ATA Code:6121) (6121 Synchronizer section)** 11612100

*(ATA Code:6121) Propeller synchronizer section: The unit which controls the synchronization of propellers on multi-engine aircraft. Typical parts are synchronizer actuator, computer, synchrophaser and control unit.*

**Propeller governor (ATA Code:6122) (6122 Governor)** 11612200

*(ATA Code:6122) Propeller governor: The unit which controls the propeller blade angle, but is limited to parts in and on the governor. Does not include airframe furnished control linkage from the cockpit [Code 11612000]. Typical parts are shaft, flyweight, governor, spring, arm, seal, beta valve, pilot valve and head.*

**Propeller feather/reversing (ATA Code:6123) (6123 Feather/reversing)** 11612300

*(ATA Code:6123) Propeller feather/reversing: The system component and parts which store and deliver an energy charge for propeller feathering and unfeathering. Includes the pump and associated motor, switch, circuitry and plumbing which provides the force for feathering the propeller blades for stopping the engine's rotation. Typical parts are pump, motor, switch, accumulator, air valve and seal.*

**Propeller autofeather (Autofeather)** 11612307

*Propeller autofeather: The system component and parts which store and deliver an energy charge for propeller feathering in response to a signal initiated from a torque comparison system when it detects an engine failure at high power settings.*

**Propeller feather motor (Feather motor)** 11612309

*Propeller feather motor: The independent pump which supplies oil pressure to the propeller pitch control system's blade coarsening supply to streamline the blades and stop the propeller rotation. Feathered propeller: A propeller the blades of which ave been rotated so that the leading and trailing edges are nearly parallel with the aircraft flight path to stop or minimize drag and engine rotation*

**Propeller reversing (Reversing)** 11612310

*Propeller reversing: The propeller pitch control system's blade coarsening to set the blades to a negative angle of attack and provide reverse thrust during the aircraft's landing run.*

**Propeller fine pitch lock (Fine pitch lock)** 11612009

*Propeller fine pitch lock: The system designed to retain the propeller in fine pitch after landing so that it may assist with the reduction of the aircraft's speed during the landing run.*

**Propeller pitch change mechanism (Pitch change mechanism)** 11612008

*Propeller pitch change mechanism: The system designed to change the pitch of each propeller blade to the same degree in response to a control input.*

**Propeller pitch control unit/constant speed unit (Pitch control unit/CSU)** 11612001

*Propeller pitch control unit/constant speed unit: The portion of the system, other than the governor unit or the synchronizer, which controls the pitch of the propeller blades to maintain a selected rpm.*

**Propeller braking (ATA Code:6130) (6130 Propeller braking)** 11613000

*(ATA Code:6130) Propeller braking: The portion of the system which is used to decrease run-down time or stop propeller rotation during engine power-off conditions.*

**Propeller indicating system (ATA Code:6140) (6140 Propeller indicating system)** 11614000

*(ATA Code:6140) Propeller indicating system: The system components and parts which indicate the operation or activation of propeller systems. Typical parts are switch, lamp, connector, harness and indicators.*

**Propeller pitch indication (Pitch indication)** 11614001

*Propeller pitch indication: The system components and parts which indicate the blade pitch angle in a propeller system.*

**Propulsor Duct (ATA Code:6150) (6150 Propulsor Duct)** 11615000

*(ATA Code:6150) The complete duct assembly including vector drive attachment, fairings, stators, gearbox covers, etc.*

**Propeller/Propulsor System Wiring (ATA Code:6197) (6197 Propeller/Propulsor System Wiring)** 11619700

*(ATA Code:6197) Wiring specific to the Propeller/Propulsor Systems*

**Rotorcraft main rotor system (ATA Code:6200) (6200 Rotorcraft main rotor system)** 11620000

*(ATA Code:6200) The rotorcraft's main rotor systems. JAR:'Main rotor' means the rotor or rotors that supply the principal lift to a rotorcraft.*

**Main rotor blades (ATA Code:6210) (6210 Main rotor blades)** 11621000

*(ATA Code:6210) The main rotor blades including attachment to the rotor head and heating mats on the blades for anti-icing. Also includes tilt rotor blades. Does not include the anti-icing system [Code 11306000], or the rotor head [Code 11622000]. Typical parts are blade, attachment bolt and bushing,*

**Main rotor blade (Main rotor blade)** 11621004

*Main rotor blade: The aerofoil components of a main rotor system.*

**Main rotor head (ATA Code:6220) (6220 Main rotor head)** 11622000

*(ATA Code:6220) Main rotor head: The rotating assembly which supports the main rotor blades including blade folding system and the swashplate if it is an integral part of the mast head assembly. Also includes the head mechanism on tilt rotor craft. Typical parts are sleeve, spindle, damper and fairing. Does not include the controlling aspects [Code 11671000].*

**Main rotor damper (Damper)** 11622007

*Main rotor damper: A device which is attached to the main rotor blade to suppress unwanted oscillations or disturbances of the blades about any pivot axis in the main rotor.*

**Main rotor hub (Main rotor hub)** 11622010

*Main rotor hub: The central solid part of the main rotor head from which the main rotor blades radiate and which rotates with the mast.*

**Main rotor stabilizer bar (Stabilizer bar)** 11622009

*Main rotor stabilizer bar: The bar attached to the main rotor hub to provide stability.*

**Main rotor tracking (Tracking)** 11622003

*Main rotor tracking: The pattern described by the tips of the main rotor blades when rotating at operating rpm.*

**Main rotor trunnion (Trunnion)** 11622008

*Main rotor trunnion: Either of a pair of opposite pivots on which a main rotor swings.*

**Main rotor mast/swashplate (ATA Code:6230) (6230 Mast/swashplate)** 11623000

*(ATA Code:6230) Main rotor mast/swashplate: The vertical shaft which supports the main rotor head. Typical parts are shaft, bearing, guide, mast, seal and swashplate.*

**Main rotor bearing (Main rotor bearing)** 11623005

**main rotor spindle (Main rotor spindle)** 11623006

**Main rotor indicating system (ATA Code:6240) (6240 Main rotor indicating system)** 11624000

*(ATA Code:6240) Main rotor indicating system: The system used to indicate the operation or activation of the main rotor. Includes lights, gauges, switches and wiring.*

**Main rotor blade failure indication (Blade failure indication)** 11624001

*Main rotor blade failure indication: The system installed in the main rotor blades to detect imminent failure of any blade's integrity.*

**Main rotor rpm indication (RPM indication)** 11624002

*Main rotor rpm indication: The system installed to indicate the current rpm of the main rotor.*

**Main Rotor System Wiring (ATA Code:6297) (6297 Main Rotor System Wiring)** 11629700

*(ATA Code:6297) Wiring specific to the Main Rotor System.*

**Main rotor drive system (ATA Code:6300) (6300 Main rotor drive system)** 11630000

*(ATA Code:6300) Main rotor drive system*

**Engine/transmission coupling (ATA Code:6310) (6310 Engine/transmission coupling)** 11631000

*(ATA Code:6310) Engine/transmission coupling: The drive shaft between the engine and the main gearbox including the clutch and freewheel units (if applicable) and tilt rotor interconnect system. Typical parts are clutch, shaft, coupling, bearing, boot, seal, sync shaft, pulley, pulley bracket and belt.*

**Helicopter gearbox drive shaft (Helicopter gearbox drive shaft)** 11631001

*Helicopter gearbox drive shaft*

**Main rotor accessory drive (Main rotor accessory drive)** 11631005

*Main rotor accessory drive: The drive off the main gearbox which provides power to drive the accessories. JAR: 'Accessory drives' means any drive shaft or utility mounting pad, furnished as a part of the auxiliary power unit, that is used for the extraction of power to drive accessories, components, or controls essential to the operation of the auxiliary power unit or any of its associated systems.*

**Main rotor drive bearing (Main rotor drive bearing)** 11631006

*Main rotor drive bearing: Any main rotor drive system engine/transmission coupling bearing.*

**Main rotor drive clutch (Main rotor drive clutch)** 11631003

*Main rotor drive clutch: The clutch for progressively applying the output of the engine to the rotor transmission.*

**Main rotor drive freewheel (Main rotor drive freewheel)** 11631004

*Main rotor drive freewheel: The system which allows the main and tail rotors to rotate at normal speeds when the engine input falls below the desired rpm.*

**Main rotor gearbox belt drive (Main rotor gearbox belt drive)** 11631002

*Main rotor gearbox belt drive: The belt connection between the engine output and the main gearbox.*

**Main rotor gearbox (ATA Code:6320) (6320 Gearbox)** 11632000

*(ATA Code:6320) Main rotor gearbox: The component which transmits engine power to rotary motion in the main rotor mast. Includes the mechanical power take-off(s) and accessory drives but does not include the accessories themselves such as alternators and hydraulic pumps. Includes the gearbox lubricating system(s). Typical parts are gearbox, case, shaft, gear, pump, seal and sun gear.*

**Main rotor brake (ATA Code:6321) (6321 Main rotor brake)** 11632100

*(ATA Code:6321) Main rotor brake: The system which reduces rundown time or stops rotor rotation during engine power-off conditions. Typical parts are brake, calliper, lining, seal and check valve.*

**Cooling fan system (ATA Code:6322) (6322 Cooling fan system)** 11632200

*(ATA Code:6322) Cooling fan system: The component which provides a cooling air flow to the rotorcraft piston engine cylinders and oil coolers. Typical parts are fan, shroud, blade, impeller, duct, drive belt and stator.*

**Main rotor transmission mount (ATA Code:6330) (6330 Transmission mount)** 11633000

*(ATA Code:6330) Main rotor transmission mount: The suspension system for the transmission mounting in the airframe. Typical parts are suspension bars and isolation mount.*

**Rotor drive indicating system (ATA Code:6340) (6340 Rotor drive indicating system)** 11634000

*(ATA Code:6340) Rotor drive indicating system: The indicators, sensors/transmitters and associated systems which indicate operation or activation of rotor systems. Typical parts are tachometer, transmitter, circuit breaker, wiring harness, light, switch, indicator and needle.*

**Chip detector indicator (Chip detector indicator)** 11634001

*Chip detector indicator: The indicator which shows that an unacceptable amount of metal has built up on the detector.*

**Gearbox failure indicating system (Gearbox failure)** 11634002

*Gearbox failure indicating system: The system designed to indicate distress in the gearbox which my lead to rapid failure.*

**Main Rotor Drive System Wiring (ATA Code:6397) (6397 Main Rotor Drive System Wiring)** 11639700

*(ATA Code:6397) Wiring specific to the Main Rotor Drive System.*

**Tail rotor system (ATA Code:6400) (6400 Tail rotor system)** 11640000

*(ATA Code:6400) Tail rotor system: The rotorcraft's anti-torque rotor, rotating at the tail about a more or less horizontal axis.*

**Tail rotor blade (ATA Code:6410) (6410 Tail rotor blade)** 11641000

*(ATA Code:6410) The tail rotor blade assemblies, including the heating mats (electrical resistors) for anti-icing but not the anti-icing system [Code 11306000]. Also includes attachment to rotor head. Typical parts are blade and attach bolt.*

**Tail rotor head (ATA Code:6420) (6420 Tail rotor head)** 11642000

*(ATA Code:6420) Tail rotor head: The rotating assembly which supports the tail rotor blades. Does not include the controlling aspects [Code 11672000]. Typical parts are trunnion, fairing, damper plate, shaft and hub.*

**Tail rotor damper (Tail rotor damper)** 11642015

*Tail rotor damper: The tail rotor system provided to suppress unwanted oscillations or disturbances.*

**Tail rotor head bearing (Tail rotor head bearing)** 11642003

*The bearings installed in the tail rotor head system.*

**Tail rotor hydraulic actuator (Tail rotor hydraulic actuator)** 11642019

**Tail rotor mixing unit (Tail rotor mixing unit)** 11642016

*Tail rotor mixing unit: The tail rotor mechanical unit which translates flight control inputs into required surface deflections on two axes.*

**6430 not assigned (6430 not assigned)** 11643000

**Tail rotor indicating system (ATA Code:6440) (6440 Tail rotor indicating system)** 11644000

*(ATA Code:6440) Tail rotor indicating system: The indicators, sensors, transmitters and associated systems which indicate operation or activation of the tail rotor system.*

**Tail Rotor System Wiring (ATA Code:6497) (6497 Tail Rotor System Wiring)** 11649700

*(ATA Code:6497) Wiring specific to the Tail Rotor System*

**Tail rotor drive system (ATA Code:6500) (6500 Tail rotor drive system)** 11650000

*(ATA Code:6500) Tail rotor drive system: The components transmitting power to the tail rotor.*

**Tail rotor drive shaft (ATA Code:6510) (6510 Tail rotor drive shaft)** 11651000

*(ATA Code:6510) Tail rotor drive shaft: The shafts, flexible couplings and bearings, from the main rotor transmission to the tail rotor assembly. Typical parts shaft, coupling, bearing and hanger.*

**Tail rotor drive bearing (Tail rotor drive bearing)** 11651002

*The bearings installed in the tail rotor drive system.*

**Tail rotor gearbox (ATA Code:6520) (6520 Tail rotor gearbox)** 11652000

*(ATA Code:6520) Tail rotor gearbox: The gearboxes which transmit engine power to the tail rotor, including intermediate gearboxes. Typical parts are case, seal, box, gear and spider gear.*

**6530 not used (6530 not used)** 11653000

**Tail rotor drive indicating system (ATA Code:6540) (6540 Tail rotor drive indication)** 11654000

*(ATA Code:6540) Tail rotor drive indicating system: The indicators, sensors, transmitters and associated systems which indicate operation or activation of the tail rotor drive system.*

**Tail Rotor Drive System Wiring (ATA Code:6597) (6597 Tail Rotor Drive System Wiring)** 11659700

*(ATA Code:6597) Wiring specific to the Tail Rotor Drive System*

**Folding blades/pylon (ATA Code:6600) (6600 Folding blades/pylon)** 11660000

*(ATA Code:6600) Folding blades/pylon: The whole of the system ensuring automatic or manual folding and spreading of the rotor blades and/or tail pylon.*

**Rotor blades folding (ATA Code:6610) (6610 Rotor blades folding)** 11661000

*(ATA Code:6610) Part of the system ensuring rotor blade folding and spreading; includes the mechanical, hydraulic and electrical means permanently fitted on the aircraft.*

**Tail pylon folding (ATA Code:6620) (6620 Tail pylon folding)** 11662000

*(ATA Code:6620) Part of system ensuring tail pylon folding and spreading; includes mechanical, hydraulic and electrical means permanently fitted on the aircraft.*

**Folding - Controls and Indicating (ATA Code:6630) (6630 Folding - Controls and Indicating)** 11663000

*(ATA Code:6630) Part of the system intended for controlling folding/spreading sequences and for indicating the system operation. Includes the control units, caption lights, indicators, wiring, etc.*

**Rotorcraft flight control (ATA Code:6700) (6700 Rotorcraft flight control)** 11670000

*(ATA Code:6700) The rotorcraft control system.*

**Main rotor control (ATA Code:6710) (6710 Main rotor control)** 11671000

*(ATA Code:6710) Main rotor control: The system components and parts, other than the servo control system, which control and indicate the attitude or the angle of attack of the rotor blades. Typical parts are collective pitch lever, cyclic pitch stick, coupling and mixing units and position indicators.*

**Main rotor collective control (Collective control)** 11671002

*Main rotor collective control: The control which transmits an identical change of pitch angle to each blade of the main rotor.*

**Main rotor cyclic control (Cyclic control)** 11671001

*Main rotor cyclic control: The control which tilts the main rotor by transmitting a different pitch angle to individual blades.*

**Yaw control system (Yaw control system)** 11671003

*Yaw control system: The control which transmits an identical change of pitch angle to each blade of the main rotor.*

**Tilt rotor flight control (ATA Code:6711) (6711 Tilt rotor flight control)** 11671100

*(ATA Code:6711) Tilt rotor flight control: The system components and parts of the tilt rotor control system which controls the direction of thrust of the aircraft's engines by rotating the dual main rotor assembly through up to 90-degrees. The zero or vertical position allows vertical takeoff. Horizontal take-off runs and run-on landings are achieved by selection of an intermediate angle which gives adequate blade tip clearance from the runway surface.*

**Anti-torque Rotor control (Yaw control) (ATA Code:6720) (6720 Anti-torque Rotor control (Yaw control))** 11672000

*(ATA Code 6720) That portion of the controls which control the direction of the helicopter (yaw control). Includes items such as tail rotor control pedals, relevant linkage and cable controls, bellcranks constituting the yaw control channel and the control position indicating system.*

**Servo system (ATA Code:6730) (6730 Servo system)** 11673000

*(ATA Code:6730) Servo system: The system which ensures distribution of mechanical or electrical power to the rotor servo-control system. Includes items used to monitor and indicate operation of the servo control system. Typical parts are pressure relief valves, electro valves, check valves and accumulators.*

**Rotors Flight Control System Wiring (ATA Code:6797) (6797 Rotors Flight Control System Wiring)** 11679700

*(ATA Code:6797) Wiring specific to the Rotors Flight Control System*

**STANDARD PRACTICES - ENGINES (ATA Code 7000) (7000 STANDARD PRACTICES - ENGINES)** 100000239

*(ATA Code 7000) STANDARD PRACTICES - ENGINES*

**Powerplant system (ATA Code:7100) (7100 Powerplant system)** 11710000

*(ATA Code:7100) The complete powerplant.*

**Engine cowling system (ATA Code:7110) (7110 Engine cowling system)** 11711000

*(ATA Code:7110) Engine cowling system: The enclosure which houses engines for drag reducing and cooling. Includes attachment, structure and access doors. Does not include engine cylinder baffles of fire seals. Typical parts are latch, fastener, lock pin, hook, skin, nose cap, stud, access door, hinge, hinge pin, rivet, bracket and stiffener.*

**Cowl flap system (ATA Code:7111) (7111 Cowl flap system)** 11711100

*(ATA Code:7111) Cowl flap system: The moveable flaps mounted in the engine cowling for increasing cooling air flow. Also includes the component which electrically or hydraulically actuates the cowl flaps. Typical parts are actuator, piston, seal and hinge brackets.*

**Cowl flap control (Control)** 11711111

*Cowl flap control: The system which enables the appropriate cowl flap position to be selected.*

**Engine air baffle section (ATA Code:7112) (7112 Engine air baffle section)** 11711200

*(ATA Code:7112) Engine air baffle section: The baffles which direct cooling air flow to the engine cylinders and accessories. Does not include cylinder baffles certificated with the engine [Code 11853000]. Typical parts are baffle, shield, bracket, shroud and cooling duct.*

**Engine mount (ATA Code:7120) (7120 Engine mount)** 11712000

*(ATA Code:7120) Engine mount: The structural framework which supports the engine on the nacelle, firewall or pylon. Typical parts are mount, bracket, fitting, shock mount, bolt, isolator and hanger.*

**Engine fire seals (ATA Code:7130) (7130 Engine fire seals)** 11713000

*(ATA Code:7130) Engine fire seals: The fire-resistant partitions and seals mounted on or about the powerplant to isolate areas subject to fire. Typical parts are shroud and bracket. Does not include those fire-walls on the nacelle or pylon.*

**Engine attachment fittings (ATA Code:7140) (7140 Engine attachment)** 11714000

*(ATA Code:7140) The fittings and brackets which are used for the support of equipment in and about the powerplant.*

**Engine electrical harness (ATA Code:7150) (7150 Engine electrical harness)** 11715000

*(ATA Code:7150) Engine electrical harness: The electrical cables, conduits, plugs and sockets, which serve several power plant systems, but which are banded together to facilitate removal and installation of the power plant. Does not include the wiring which is specifically covered under another system.*

**Engine air intake system (ATA Code:7160) (7160 Engine air intake system)** 11716000

*(ATA Code:7160) Engine air intake system: The portion of the powerplant system which directs airflow to the engine. Does not include integral structure with the airframe. Typical parts are carburetor air heat doors, alternate air doors, linkages, controls, filter element, ducts, hose, air box, latch, seals, nose ring cowls, scoops, compressor fan cowls, buried engine ducts, vortex generators, actuators, control handles, cables, wiring, plumbing, doors, warning systems and position indicators.*

**Engine intake alternate air valve (Alternate air valve)** 11716005

*The valve installed to enable air to be taken from an alternate source should the normal intake be unsuitable.*

**Engine air intake filter (Filter)** 11716001

*Engine air intake filter: The filters installed specifically to remove contaminants from the engine air supply.*

**Engine intake induction manifold (Induction manifold)** 11716002

*The manifold which guides air from the intake to the engine.*

**Engine drains (ATA Code:7170) (7170 Engine drains)** 11717000

*(ATA Code:7170) Engine drains: The components and manifold assemblies which are used to drain off excess fluids from the power plant and its accessories. Includes drain lines, manifolds, flame arrestors and supporting brackets. Also includes components that are an integral part of, or fitted to the power plant cowling.*

**Powerplant installation indications (ATA Code:7180) (7180 Powerplant indications)** 11718000

*(ATA Code:7180) Powerplant installation indications: The system installed to provide continuous indication to the flight deck of the functioning of the power plant.*

**Nacelle fire/overheat warning (Nacelle overheat warning)** 11718005

*Nacelle fire/overheat warning: The system installed to detect a fire or overheat condition and provide a warning thereof.*

**Powerplant System Wiring (ATA Code:7197) (7197 Powerplant System Wiring)** 11719700

*(ATA Code:7197) Wiring specific to the Powerplant System.*

**ENGINE TURBINE/TURBO PROP DUCTED FAN/UNDUCTED FAN (ATA Code:7200) (7200 Turbine/turboprop engine)** 11720000

*(ATA Code:7200) Turbine/turboprop engine: The units and components which are used to induce and convert fuel-air mixture into power and to transmit power to the propeller shaft, if any, and accessory drives. Includes bird strikes to engine cowlings.*

**Engine power ( Engine power)** 11720200

*Engine power: The situation where a specific component of the engine cannot be identified but there is a need to make a general statement regarding the engine power.*

**Turbine engine reduction gear, shaft Section Section (TurboProp and/or Front Mounted Gear Driven Propulsor) (ATA Code:7210) (7210 Reduction gear, shaft section)** 11721000

*(ATA Code:7210) The section of the engine which contains the propeller shafts and reduction gears. Includes items such as drives for hose mounted accessories, etc. If applicable, the section of the engine which uses mechanical force, through a gear-driven system, to drive front mounted propulsors which provide the majority of the energy generated. Includes items such as Propulsor Blades, Actuation Systems, Reduction Gears, Drive-Shafts, etc.*

**Engine housing/casing (Engine housing/casing)** 11721004

**Propeller shaft (Propeller shaft)** 11721002

*The shaft directly connected to the propeller.*

**Reduction gear bearing (Reduction gear bearing)** 11721003

*The bearings in the reduction gears.*

**Reduction gear shaft (Reduction gear shaft)** 11721001

**Turbine engine air inlet (ATA Code:7220) (7220 Air inlet)** 11722000

*(ATA Code:7220) Turbine engine air inlet: The engine section through which air enters the compressor section. Typical parts are inlet case, inlet cone, inlet screen, guide vane and inlet scroll.*

**Turbine engine compressor (ATA Code:7230) (7230 Compressor)** 11723000

*(ATA Code:7230) Turbine engine compressor: The section of the engine in which the incoming air is compressed. Does not include the operation of variable stator blades or linkage to the various valves and sense lines. [Code 11753000] Includes items such as case, the rotating portion of the compressor, lines, fan blades, disc, bearings, seals, mounts, carbon seals, disc tie bolts and shaft.*

**Compressor bearing (Compressor bearing)** 11723008

**Compressor blade (Compressor blade)** 11723010

*Compressor blade: JAR:'Blade' means an energy transforming element of the compressor or turbine rotors whether integral or attached design.*

**Compressor bleed valve (Compressor bleed valve)** 11723017

**Compressor casing (Compressor casing)** 11723014

*Any part of the compressor casing.*

**Compressor disc (Compressor disc)** 11723001

**Compressor hub (Compressor hub)** 11723002

**Compressor impeller (Compressor impeller)** 11723018

**Compressor shaft (Compressor shaft)** 11723006

**Compressor spacer/seal (Compressor spacer/seal)** 11723009

**Compressor stator/vane (Compressor stator/vane)** 11723011

**Rotating guide vane (Rotating guide vane)** 11723019

**Turbine engine combustion section (ATA Code:7240) (7240 Turbine engine combustion)** 11724000

*(ATA Code:7240) Turbine engine combustion section: The engine section in which fuel and air are mixed and burned. Typical parts are case, burner can, liner and vane ring.*

**Combustion section casing (Turbine engine casing)** 11724001

**Flame tube liner (Flame tube liner)** 11724002

*Flame tube liner: The turbine engine combustion section flame tube liner .*

**Fuel manifold (Fuel manifold)** 11724005

*Fuel manifold: The turbine engine combustion section fuel manifold.*

**Fuel nozzle (Fuel nozzle)** 11724004

*Fuel nozzle: The turbine engine combustion section fuel nozzle.*

**Turbine assembly (ATA Code:7250) (7250 Turbine assembly)** 11725000

*(ATA Code:7250) Turbine assembly: The turbine engine section which contains the turbine disc and associated nozzles and cases. Typical parts are case, disc, blade, nozzle, bearing, bearing cover, power turbine, shaft, tie bolts and seals.*

**Turbine assembly bearing (Turbine assembly bearing)** 11725010

*The turbine engine section turbine assembly bearing.*

**Turbine assembly casing (Turbine assembly casing)** 11725001

*The turbine engine section turbine assembly casing.*

**Turbine assembly disc (Turbine assembly disc)** 11725005

*The turbine engine section turbine assembly disc.*

**Turbine assembly shaft (Turbine assembly shaft)** 11725003

*The shaft on which the turbine assembly rotates.*

**Turbine assembly spacer/seal (Turbine assembly spacer/seal)** 11725011

*The turbine engine section turbine assembly spacer/seal.*

**Turbine assembly stator/vane (Turbine assembly stator/vane)** 11725012

*The turbine engine section turbine assembly stator/vane.*

**Turbine assembly blade (Turbine blade )** 11725002

*Turbine assembly blade: The turbine engine section turbine assembly blade.*
*JAR: 'Blade' means an energy transforming element of the compressor or turbine rotors whether integral or attached design.*

**Turbine engine accessory drive (ATA Code:7260) (7260 Accessory drive)** 11726000

*(ATA Code:7260) Turbine engine accessory drive: The turbine engine mounted gearbox which provides mechanical power take-offs [to drive accessories such as pumps and generators] and chip detectors. Does not include the remote gearboxes. [Code 11830000].*

*JAR:'Accessory drives' means any drive shaft or utility mounting pad, furnished as a part of the auxiliary power unit, that is used for the extraction of power to drive accessories, components, or controls essential to the operation of the auxiliary power unit or any of its associated systems.*

**Turbine engine oil system (ATA Code:7261) (7261 Oil system)** 11726100

*(ATA Code:7261) Turbine engine oil system: The turbine engine system components and parts which provide lubricating oil pressure, circulation and scavenging throughout the engine. Does not include externally mounted storage tanks [Code 11791000], connecting lines [Code 11792000] or coolers [Code 11792100]. Typical parts are relief valve, fitting, seal, pump, screen, filter, seal, check valve and elements.*

**Turbine engine by-pass section (ATA Code:7270) (7270 By-pass section)** 11727000

*(ATA Code:7270) Turbine engine by-pass section: The turbine engine non-rotating portion of engine airflow ducting for the prime purpose of adding to the thrust of turbo-jet engines. Does not include the rotating components such as blades. Typical parts are duct, skin and duct segment.*

**Engine fan (ATA Code:7271) (7271 Engine fan)** 11727100

*(ATA Code:7271) The turbine engine fan.*

**Fan bearing (Fan bearing)** 11727106

*Any turbine engine fan bearing.*

**Fan blade (Fan blade)** 11727102

*The turbine engine fan blade.*

**Fan case (Fan case)** 11727101

*The turbine engine fan case.*

**Fan disc (Fan disc)** 11727103

*The turbine engine fan disc.*

**Fan shaft (Fan shaft)** 11727108

*The turbine engine fan shaft.*

**Fan variable blade mechanism (Fan variable blade mechanism)** 11727109

*The variable blade mechanism for the turbine engine fan.*

**Turbine Engine Propulsor Section (Rear Mounted) (ATA Code:7280) (7280 Turbine Engine Propulsor Section (Rear Mounted))** 11728000

*(ATA Code:7280) The section of the engine which contains a propulsor(s) and provides the majority of the energy generated. The propulsor may be turbine-driven or gear-driven. Includes such items as propulsor turbines, propulsor blades, blade actuation, and frames (rotating and/or stationary).*

**Turbine Engine System Wiring (ATA Code:7297) (7297 Turbine Engine System Wiring)** 11729700

*(ATA Code:7297) Wiring specific to the Turbine Engine System.*

**Engine fuel and control systems (ATA Code:7300) (7300 Engine fuel and control system)** 11730000

*(ATA Code:7300) Engine fuel and control systems: The turbine engine and reciprocating engine fuel systems.*

**Engine fuel system (ATA Code:7310) (7310 Engine fuel system)** 11731000

*(ATA Code:7310) Engine fuel system: The components and parts of the engine fuel system from the main quick disconnect fitting or airframe fuel system strainer to the fuel control unit. Does not include the controlling or metering aspects [Code 11732200], or the primer systems [Code 11282000] on reciprocating engines or the engine fuel pumps, fuel heater, cooler, divider or injector nozzle (turbine and piston engines). Typical parts are supply lines, hoses, fuel, filters on turbine engines, shutoff and solenoid valves.*

**Fuel oil cooler (ATA Code:7311) (7311 Fuel oil cooler)** 11731100

*(ATA Code:7311) Fuel oil cooler: The powerplant fuel unit in which aircraft fuel flows to cool the turbine engine lubricating oil. Does not include the connecting lines.*

**Fuel heater (ATA Code:7312) (7312 Fuel heater)** 11731200

*(ATA Code:7312) Fuel heater: The powerplant fuel unit which heats fuel flowing to the engine to prevent freezing of entrapped water. Does not include connecting lines or the heat source.*

**Fuel injection nozzle (ATA Code:7313) (7313 Fuel injection nozzle)** 11731300

*(ATA Code:7313) Fuel injection nozzle: The powerplant fuel unit which injects metered fuel into piston engine cylinders and burner cans in turbine engines.*

**Engine fuel pump (ATA Code:7314) (7314 Engine fuel pump)** 11731400

*(ATA Code:7314) Engine fuel pump: The powerplant engine fuel pumps: typical parts are housing, spring, rocker, pump, diaphragm, shaft, seal, relief valve, regulator and coupling.*

**Fuel filter (on the engine) (Fuel filter (on the engine))** 11731001

*Fuel filter (on the engine)*

**Powerplant fuel line/fitting (Fuel line/fitting)** 11731002

**Powerplant fuel valve (Powerplant fuel valve)** 11731003

**Fuel control system (ATA Code:7320) (7320 Fuel control system)** 11732000

*(ATA Code:7320) Fuel control system: The powerplant fuel system components or parts other than the fuel control, amplifier, computer, carburetor and indication systems which control and deliver metered fuel/air to engine cylinders or turbine engine burner cans. Typical parts are sense line, power and drain valve (P & D valve), drain valve and carburetor inlet temperature sensor.*

**Fuel control - electronic (ATA Code:7321) (7321 Fuel control-electronic)** 11732100

*(ATA Code:7321) Fuel control - electronic: The components which control metered fuel flow electronically under all probable temperature, altitude and barometric pressure conditions. Typical parts are computer, amplifier, synchronizer box and carburetor inlet temperature sensor.*

**Fuel control - carburetor (ATA Code:7322) (7322 Fuel control-carburetor)** 11732200

*(ATA Code:7322) Fuel control - carburetor: The component which meters fuel/air mixture for engine combustion, both reciprocating and turbine engines. Includes turbine engines which utilize non-electronic fuel controls. Typical parts are computer, amplifier, synchronization box and carburetor inlet temperature sensor.*

**Carburettor heat control (Carburettor heat control)** 11732225

*The system that controls the heat supply to the carburettor*

**Fuel injector (Fuel injector)** 11732201

*Any powerplant fuel injector.*

**Mixture valve (Mixture valve)** 11732203

**Turbine governor (ATA Code:7323) (7323 Turbine governor)** 11732300

*(ATA Code:7323) Turbine governor: The component which controls the rpm of turbine engines. Typical parts are governor, shaft, overspeed limiter and topping governor.*

**Fuel divider (ATA Code:7324) (7324 Fuel divider)** 11732400

*(ATA Code:7324) Fuel divider: The unit in metered fuel lines which directs fuel to individual cylinders or burner cans.*

**Fuel regulator (Fuel regulator)** 11732006

*The powerplant fuel regulator.*

**Engine fuel indicating system (ATA Code:7330) (7330 Indicating system)** 11733000

*(ATA Code:7330) Engine fuel indicating system: The fuel temperature, flow rate or pressure indicating and warning systems other than the indicators, sensors and transmitters. Typical parts are line, hose, lamp, bulb, wiring harness and circuit breaker.*

**Fuel flow indicating system (ATA Code:7331) (7331 Flow indicating system)** 11733100

*(ATA Code:7331) Fuel flow indicating system: The instrument which indicates the flow rate of metered fuel to the engine. Does not include the transmitter. Typical parts are indicator, power supply, needle and dial.*

**Fuel flow sensor (Fuel flow sensor)** 11733101

*Fuel flow sensor: The unit and associated circuitry and parts which senses and transmits the rate of fuel flow to the cockpit indicator. Typical parts are transmitter, sensor, fitting, connector and transducer.*

**Fuel pressure indicating system (ATA Code:7332) (7332 Pressure indicating)** 11733200

*(ATA Code:7332) Fuel pressure indicating system: The instrument which indicates the pressure of fuel at the fuel control/carburetor as provided by the engine driven, or motor driven, pumps. Includes the pressure warning indicating lamps. Typical parts are indicator, bourdon tube, diaphragm, needle and case.*

**Fuel Flow Sensor (ATA Code:7333) (7333 Fuel Flow Sensor)** 100000020

*(ATA Code:7333) The unit and associated circuitry and parts which senses and transmits the rate of fuel flow to the cockpit indicator. Typical parts are transmitter, sensor, fitting, connector, transducer, etc.*

**Fuel press sensor (ATA Code:7334) (7334 Fuel press sensor)** 11733201

*(ATA Code:7334) Fuel press sensor: The units which sense and transmit to the cockpit indicator or indicator lamps, the pressure of fuel available at the engine fuel control/carburetor. Includes pressure switch and circuitry for warning indication. Typical parts are transducer and transmitter.*

**Carburetor air temperature indication (Carburetor air temperature indication)** 11733012

*The carburetor air temperature indication.*

**Fuel temperature indication (Fuel temperature indication)** 11733001

*The fuel temperature indication system.*

**Engine Fuel System Wiring (ATA Code:7397) (7397 Engine Fuel System Wiring)** 11739700

*(ATA Code:7397) Wiring specific to the Engine Fuel System*

**Ignition system (ATA Code:7400) (7400 Ignition system)** 11740000

*(ATA Code:7400) Ignition system: The units which ignite the fuel air mixture in the cylinders of reciprocating engines or in the combustion chambers or thrust augmenters of turbine engines.*

**Ignition power supply (ATA Code:7410) (7410 Ignition power supply)** 11741000

*(ATA Code:7410) Ignition power supply: The units and components which generate, control, furnish or distribute an electrical current to ignite the fuel air mixture in cylinders of reciprocating engines or in the combustion chambers or thrust augmenters of turbine engines.*

**Low tension coil (ATA Code:7411) (7411 Low tension coil)** 11741100

*(ATA Code:7411) Low tension coil: The magneto coils used on select engines such as the Pratt and Whitney, model R2800, to generate a low tension voltage for high tension voltage coil mounted at each engine cylinder. Not generally used on modern light aircraft reciprocating engines.*

**Ignition system exciter (ATA Code:7412) (7412 Ignition system exciter)** 11741200

*(ATA Code:7412) Ignition system exciter: The unit used with turbine engine ignition systems for starting engines. Typical parts are exciter box, bracket and relay.*

**Induction vibrator (ATA Code:7413) (7413 Induction vibrator)** 11741300

*(ATA Code:7413) Induction vibrator: The unit which provides a high tension spark to reciprocating engine spark plugs for starting.*

**Magneto/distributor (ATA Code:7414) (7414 Magneto/distributor)** 11741400

*(ATA Code:7414) Magneto/distributor: The components which generate and distribute a high voltage to spark plugs in reciprocating engines for fuel/air combustion. Typical parts are coil, breaker points, gear, bearing, contact finger, distributor block, frame, impulse coupling, condenser, rotor, cam, electrode and seal.*

**Ignition harness (ATA Code:7420) (7420 Ignition harness)** 11742000

*(ATA Code:7420) Ignition harness: The high tension insulated wiring from the magneto to the spark plug which provides a spark for combustion in reciprocating engines. For turbine engine, the high tension leads to burner can igniters used for starting. Typical parts are lead, shielding, sleeve, ignition cable, terminal and ferrule.*

**Spark plug/igniter (ATA Code:7421) (7421 Spark plug/igniter)** 11742100

*(ATA Code:7421) Spark plug/igniter: The part which provides the spark in the reciprocating engine cylinders or combustion chamber of turbine engines.*

**Igniter plug (Igniter plug)** 11742102

*The part which provides the spark combustion chamber of turbine engines.*

**Spark plug (Spark plug)** 11742101

*The part which provides the spark in the reciprocating engine cylinders*

**High tension (HT) wiring/harness (High tension wiring/harness)** 11742006

**Ignition switching (ATA Code:7430) (7430 Ignition switching)** 11743000

*(ATA Code:7430) Ignition switching: The unit which provides a means of rendering the ignition power supply (magneto) inoperative. Also used to direct electrical current to the engine starter motor. Typical parts are start button, switch, back plate and contacts.*

**Ignition/magneto switch (Ignition/magneto switch)** 11743001

*Ignition/magneto switch: The unit which provides a means of rendering the ignition power supply (magneto) inoperative.*

**Ignition indication (ATA Code:7440) (7440 Ignition indication)** 11744000

*(ATA Code:7440) Ignition indication*

**Wiring specific to the Ignition System (ATA Code:7497) (7497 Ignition System Wiring)** 11749700

*(ATA Code:7497) Wiring specific to the Ignition System*

**Ignition system - other (ATA Code:7498) (7498 Ignition system-other)** 11749800

*(ATA Code:7498) Ignition system - other: Components of the ignition system - other than those listed above.*

**Ignition system - automatic relight system (Ignition system - auto-relight system)** 11749802

**Ignition system - continuous ignition (Ignition system - continuous ignition)** 11749801

**Engine bleed air system (ATA Code:7500) (7500 Engine bleed air system)** 11750000

*(ATA Code:7500) Engine bleed air system: The turbine engine compressor bleed air systems used to control the flow of air through the engine, cooling air systems and heated air for engine anti-icing.*

**Engine anti-icing system (ATA Code:7510) (7510 Engine anti-icing system)** 11751000

*(ATA Code:7510) Engine anti-icing system: The engine system components and parts used to eliminate and prevent the formation of ice. Includes the control valve and associated actuator, switch and circuitry which controls the flow of turbine engine compressor bleed air to the engine anti-icing system. Does not include anti-icing pertaining to the power plant cowling [Code 11302000]. Typical parts are control valve, actuator, motor, switch, relay, circuit breaker, hose, manifold, coupling, fuel heat duct and fuel heat valve.*

**Engine cooling system (ATA Code:7520) (7520 Engine cooling system)** 11752000

*(ATA Code:7520) Engine cooling system: The portion of the engine compressor bleed air system which is used to ventilate engine compartments and accessories. Does not include the engine bleed control valve [Code 11753200]. Typical parts are jet pumps, vortex generators, valve, actuator and associated parts and circuitry used to control bleed air to engine accessory cooling systems.*

**Compressor bleed control (ATA Code:7530) (7530 Compressor bleed control)** 11753000

*(ATA Code:7530) Compressor bleed control: The system, except the valve and governor, which controls the flow of air through turbine engines. Includes the operation of variable stator blades, linkage to the various valves and sense lines. Typical parts are sense line, stator vane, fitting, cable, sense line filter and speed sense valve.*

**Compressor bleed governor (ATA Code:7531) (7531 Compressor bleed governor)** 11753100

*(ATA Code:7531) Compressor bleed governor: The unit controlling relative position of the compressor bleed valve in turbine engines for air flow control.*

**Compressor bleed valve (ATA Code:7532) (7532 Compressor bleed valve)** 11753200

*(ATA Code:7532) Compressor bleed valve: The component which releases air from turbine engine compressor sections for air flow control. Typical parts are bleed valve, actuator and check valve.*

**Bleed air coupling (Bleed air coupling)** 11753013

**Bleed air indicating system (ATA Code:7540) (7540 Bleed air indicating system)** 11754000

*(ATA Code:7540) Bleed air indicating system: The systems which indicate temperature, pressure, control positions and warning indications of turbine engine compressor bleed air systems in turbine engines. Typical parts are transmitter, sensor, indicator, lamp and pressure switch.*

**Engine Bleed Air System Wiring (ATA Code:7597) (7597 Engine Bleed Air System Wiring)** 11759700

*(ATA Code:7597) Wiring specific to the Engine Bleed Air System.*

**Engine controls (ATA Code:7600) (7600 Engine controls)** 11760000

*(ATA Code:7600) Engine controls: The controls which govern operation of the engine. Includes units and components which are interconnected for emergency shutdown. For turbo-prop engines, includes linkages and controls to the coordinator or equivalent to the propeller governor, fuel control unit or other units being controlled. For reciprocating engines, includes controls for blowers.*

**Engine synchronizing (ATA Code:7601) (7601 Synchronizing)** 11760100

*(ATA Code:7601) The components providing for engine synchronization in multi-engine aircraft.*

**Mixture control (ATA Code:7602) (7602 Mixture control)** 11760200

*(ATA Code:7602) Mixture control: The control for adjusting fuel-air mixture in piston engines. Includes linkage from the cockpit lever to the carburetor or fuel injector servo but does not include the arm on mixture control shafts. Typical parts are cable, rod, bellcrank, rod end, housing, clamp and cockpit control lever/knob.*

**Power lever (ATA Code:7603) (7603 Power lever)** 11760300

*(ATA Code:7603) Power lever: The system which provides for control of carburetor or fuel injectors on piston engines; fuel controls or coordinator on turbine engines and propeller regulator turboprop engines. Typical parts are cable, rod, rod end, bellcrank, bracket, clamp, actuator, shaft pin and knob.*

**Engine power control (ATA Code:7610) (7610 Engine power control)** 11761000

*(ATA Code:7610) Engine power control: The portion of the system which furnishes a means of controlling the main fuel control or coordinator. Includes controls to the propeller regulator on turboprop engines and items such as linkages, cables, levers, pulleys, switches and wiring. Does not include the units themselves.*

**High pressure cock (High pressure cock)** 11761003

**Thrust reverser control (Thrust reverser control)** 11761002

**Engine emergency shutdown system (ATA Code:7620) (7620 Emergency shutdown system)** 11762000

*(ATA Code:7620) Engine emergency shutdown system: The system which provides for rapid, complete shut-off of combustible fluids to the engine compartments during emergency procedures. Typical parts are cable, actuator, switch and lever.*

**Engine Control System Wiring (ATA Code:7697) (7697 Engine Control System Wiring)** 11769700

*(ATA Code:7697) Wiring specific to the Engine Control System*

**Engine indicating system (ATA Code:7700) (7700 Engine indicating system)** 11770000

*(ATA Code:7700) Engine indicating system: The engine indicators, transmitters and analyzers.*

**Engine power indicating system (ATA Code:7710) (7710 Power indicating)** 11771000

*(ATA Code:7710) Engine power indicating system: The power indicating systems which directly or indirectly indicates power or thrust e.g. brake mean effective pressure, engine pressure ratio and rpm.*

**Engine pressure ratio (EPR) indicating system (ATA Code:7711) (7711 Pressure ratio (EPR) indicating system)** 11771100

*(ATA Code:7711) Engine pressure ratio indicating system: The system which senses, measures and indicates the engine pressure ratio of a turbine engine. The system measures the difference between the compressor inlet pressure and the turbine discharge pressure. Typical parts are sensor, transducer, transmitter and probe.*

**Engine brake mean effective pressure/torque indicating system (ATA Code:7712) (7712 BMEP/torque indicating system)** 11771200

*(ATA Code:7712) Engine brake mean effective pressure/torque indicating system: The system that senses and measures brake mean effective pressure [BMEP] or engine torque in turbo-prop and piston engines. Does not include internal parts which are type certificated with the engine. Typical parts are indicator, line, sensor, transmitter and pressure switch.*

**Engine manifold pressure indicating system (ATA Code:7713) (7713 Manifold pressure indicating system)** 11771300

*(ATA Code:7713) Engine manifold pressure indicating system: The reciprocating engine manifold pressure indicating system including the indicator and sensor. Typical parts are lines, hoses and fittings.*

*Manifold pressure means absolute pressure as measured at the appropriate point in the induction system (FAA 14, Part 1)*
*JAR:'Manifold Pressure' piston engines means the absolute static pressure measured at the appropriate point in the induction system, usually in inches or millimetres of mercury.*

**Engine rpm indicating system (ATA Code:7714) (7714 RPM indicating system)** 11771400

*(ATA Code:7714) Engine rpm indicating system: The system including the indicator and sensor which indicates engine speed in revolutions per minute. Typical parts are cable, connector, tachometer, tachometer generator and N1 indicator.*

**Engine temperature indicating system (ATA Code:7720) (7720 Temperature indicating system)** 11772000

*(ATA Code:7720) Engine temperature indicating system: The system components and parts which indicate engine temperatures.*

**Cylinder head temperature indicating system (ATA Code:7721) (7721 Cylinder head temperature indicating system)** 11772100

*(ATA Code:7721) Cylinder head temperature indicating system: The instruments which indicate temperature measured at reciprocating engine cylinder heads. Typical parts are indicator, case, dial, needle, thermocouple lead, sensor and connector.*

**Engine exhaust gas temperature/turbine inlet temperature indicating system (ATA Code:7722) (7722 EGT-TIT indicating system)** 11772200

*(ATA Code:7722) Engine exhaust gas temperature/turbine inlet temperature indicating system: The exhaust gas temperature or turbine inlet temperature, temperature sensing and indicating. Includes the EGT indicators for both reciprocating and turbine engines and the TIT indicators for turbine engines. Typical parts are wiring, turbine outlet temperature (TOT) indicator, EGT indicator, probe, harness, terminal, connector, indicator, sensor, transducer and transmitter.*
*JAR:'Exhaust Gas Temperature' (turbine engines) means the average temperature of the exhaust gas stream obtained in an approved manner.*

**Engine jet pipe temperature indicator (JPT indicator)** 11772202

**Engine turbine inlet temperature indicator (TIT indicator)** 11772211

**Engine ignition analyzer system (ATA Code:7730) (7730 Ignition analyzer system)** 11773000

*(ATA Code:7730) Engine ignition analyzer system*

**Engine ignition analyzer (ATA Code:7731) (7731 Ignition analyzer)** 11773100

*(ATA Code:7731) Engine ignition analyzer: The unit which interprets and indicates by oscilloscope the condition of ignition systems on reciprocating engines.*

**Engine vibration analyzer (ATA Code:7732) (7732 Vibration analyzer)** 11773200

*(ATA Code:7732) The engine vibration analyzer system indicating to the flight crew unusual engine vibration conditions. Typical parts are connector, harness, indicator, monitor, sensor and amplifier.*

**Engine integrated instrument system (ATA Code:7740) (7740 Integrated instrument system)** 11774000

*(ATA Code:7740) Engine integrated instrument system: The portion of the system which is an integrated concept receives engine operating parameters and transmits this information to a central processor for flight crew presentation. Typical parts are display units, transmitters, receivers and computers.*

**Engine Indicating System Wiring (ATA Code:7797) (7797 Engine Indicating System Wiring)** 11779700

*(ATA Code:7797) Wiring specific to the Engine Indication System.*

**Engine exhaust system (ATA Code:7800) (7800 Engine exhaust system)** 11780000

*(ATA Code:7800) Engine exhaust system: The units and components which direct the engine exhaust gases overboard.*

**Engine exhaust collector/tailpipe/nozzle (ATA Code:7810) (7810 Collector/tailpipe/nozzle)** 11781000

*(ATA Code:7810) Engine exhaust collector/tailpipe/nozzle: The portion of the system which collects the exhaust gases from the cylinders, turbines, or turbochargers and conducts them overboard. Includes variable vanes or nacelle tailpipes used on turboprop powered aircraft and turbo-shaft powered rotorcraft. Typical parts are tailpipe, cone, nozzle, clamp eyebolt, duct and ejector.*

**Engine collector/tailpipe/nozzle (Collector/tailpipe/nozzle)** 11781010

**Engine exhaust clamp (Engine exhaust clamp)** 11781025

**Engine exhaust pipe (Engine exhaust pipe)** 11781009

**Exhaust cone (Exhaust cone)** 11781008

**Exhaust manifold (Exhaust manifold)** 11781007

**Engine noise suppressor (ATA Code:7820) (7820 Engine noise suppressor)** 11782000

*(ATA Code:7820) Engine noise suppressor: The clover leaf shaped unit mounted on turbo-jet engine exhaust tailpipes for sound suppression and components used on reciprocating engines to reduce engine exhaust noise. Does not include the shroud over the muffler used to collect heated fresh air for cabin and carburetor heat [Code 11214000]. Typical parts are baffle, cone, and flame tube.*

**Engine exhaust thrust reverser (ATA Code:7830) (7830 Exhaust thrust reverser)** 11783000

*(ATA Code:7830) Engine exhaust thrust reverser: The airframe furnished system and components mounted at turbo-jet engine exhaust tailpipes to direct engine thrust forward for deceleration. Does not include the engine tailpipe. Includes items such as clamshells, linkages, levers, actuators, plumbing, wiring, indicators and warning systems.*

**Electric reverser actuator (Electric reverser)** 11783016

**Fan reverser (Fan reverser)** 11783001

**Hydraulic reverser actuator (Hydraulic reverser)** 11783014

**Mechanical reverser actuator (Mechanical reverser)** 11783017

**Pneumatic reverser actuator (Pneumatic reverser)** 11783015

**Reverser blocker door (Reverser blocker door)** 11783004

**Reverser cascade (Reverser cascade)** 11783008

**Reverser clamshell door (Reverser clamshell door)** 11783003

**Turbine reverser (Turbine reverser)** 11783002

**Supplementary Air (ATA Code:7840) (7840 Supplementary Air)** 11784000

*(ATA Code:7840) That portion of the system which varies and controls supplementary air flow of the exhaust system. Includes items such as tertiary air doors, actuators, linkages, springs, plumbing, wiring, position indicators, warning systems, etc.*

**Engine exhaust system indication system (ATA Code:7850) (7850 Engine exhaust system indication )** 11785000

*(ATA Code:7850) Engine exhaust system indication*

**Reverser position indications (Reverser position indications)** 11785100

*Reverser position indications*

**Engine Exhaust System Wiring (ATA Code:7897) (7897 Engine Exhaust System Wiring)** 11789700

*(ATA Code:7897) Wiring specific to the Engine Exhaust System*

**Engine oil system (airframe) (ATA Code:7900) (7900 Engine oil system-airframe)** 11790000

*(ATA Code:7900) Engine oil system (airframe): The system units external to the engine which store and deliver engine lubricating oil to and from both turbine and reciprocating engines.*
*Airframe means the fuselage, booms, nacelles, cowlings, fairings, aerofoil surfaces (including rotors but excluding propellers and rotating aerofoils of engines), and landing gear of an aircraft and their accessories and controls.*

**Engine oil storage (airframe) (ATA Code:7910) (7910 Storage-airframe)** 11791000

*(ATA Code:7910) Engine oil storage (airframe): The engine oil storage tank furnished by the airframe manufacturer. Includes attached parts such as filler caps and mount brackets, but excludes engine manufacturer furnished tanks, quantity indication systems and distribution lines. Typical parts are tank, cap, seal, bracket and drain valve.*
*Airframe means the fuselage, booms, nacelles, cowlings, fairings, aerofoil surfaces (including rotors but excluding propellers and rotating aerofoils of engines), and landing gear of an aircraft and their accessories and controls.*

**Oil filler cap (Oil filler cap)** 11791008

**Oil tank (Oil tank)** 11791001

**Engine oil distribution (airframe) (ATA Code:7920) (7920 Distribution-airframe)** 11792000

*(ATA Code:7920) Engine oil distribution (airframe): The external oil system which distributes engine lubricating oil from the storage tanks to and from the engine. Does not include externally mounted units such as oil coolers, oil filters and shut-off valves. Typical parts are line, hose, coupling, fitting and clamps.*
*Airframe means the fuselage, booms, nacelles, cowlings, fairings, aerofoil surfaces (including rotors but excluding propellers and rotating aerofoils of engines), and landing gear of an aircraft and their accessories and controls.*

**Engine oil cooler (ATA Code:7921) (7921 Cooler)** 11792100

*(ATA Code:7921) Engine oil cooler: The component and associated parts that cool engine lubricating oil. Includes brackets, outlet doors, scoops, ducts and louvres, but excludes the temperature regulator. Typical parts are cooler, duct, scoop, door and door actuator.*

**Engine oil temperature regulator (ATA Code:7922) (7922 Temperature regulator)** 11792200

*(ATA Code:7922) Engine oil temperature regulator: The unit which is mounted on the airframe oil cooler or the engine for controlling engine lubricating oil temperature. Typical parts are thermostat, thermal valve and regulator.*

**Engine oil shut-off valve (ATA Code:7923) (7923 Shut-off valve)** 11792300

*(ATA Code:7923) Engine oil shut-off valve: The component and associated controls which stop the flow of lubricating oil to the engine for emergency purposes.*

**Powerplant lubrication-line/hose/fitting (Lubrication-line/fitting)** 11792001

**Oil filter (Oil filter)** 11792003

*Oil filter*

**Oil pump (Oil pump)** 11792005

*Oil pump*

**Oil system seal (Oil system seal)** 11792002

**Valve (Oil system valve)** 11792004

*Valve*

**Engine oil indicating system (ATA Code:7930) (7930 Indicating system)** 11793000

*(ATA Code:7930) Engine oil indicating system: The portion of the system which is used to indicate the quantity, temperature and pressure of the engine oil.*

**Engine oil pressure indication (ATA Code:7931) (7931 Pressure indication)** 11793100

*(ATA Code:7931) Engine oil pressure indication: The instrument or warning lamp which indicates, senses or transmits the pressure of engine lubricating oil available at the engine or when the pressure is improper for the conditions. Typical parts are transducer, pressure switch, transmitter, indicator, case, dial, needle and lamp.*

**Engine oil quantity indicator (ATA Code:7932) (7932 Quantity indicator)** 11793200

*(ATA Code:7932) Engine oil quantity indicator: The instrument or warning lamp which senses or indicates the quantity of oil in supply tanks or warns of an insufficient quantity. Typical parts are transmitter, indicator, case, lamp.*

**Engine oil temperature indicator (ATA Code:7933) (7933 Temperature indicator)** 11793300

*(ATA Code:7933) Engine oil temperature indicator: The instrument which senses and indicates temperature of engine oil. Typical parts are sensor, temperature bulb, case, indicator, needle and dial.*

**Engine oil - chip detector (Engine oil - chip detector)** 11793004

**Engine Oil System Wiring (ATA Code:7997) (7997 Engine Oil System Wiring)** 11799700

*(ATA Code:7997) Wiring specific to the Engine Oil System*

**Lubrication oil (Lubrication oil)** 11790100

*Lubrication oil*

**Engine starting system (ATA Code:8000) (8000 Engine starting system)** 11800000

*(ATA Code:8000) Engine starting system: The units, components and associated systems used for starting the engine. Includes electrical, inertia, air or other starter systems. Does not include ignition systems.*

**Engine cranking (ATA Code:8010) (8010 Engine cranking)** 11801000

*(ATA Code:8010) Engine cranking: The portion of the system which is used to perform the cranking functions of the starting operation. Typical parts are plumbing, valve, wiring switch and relay.*

**Engine starter (ATA Code:8011) (8011 Engine starter)** 11801100

*(ATA Code:8011) Engine starter: The component used for starting the engines. Includes parts which are separated from the engine during starter removals, but does not include parts within the engine. Does not include the starter-generator [Code 11243500]. Typical parts are brush, bearing, shaft, clutch, adaptor, back plate, housing, winding and terminal post.*

**Engine air starter (Air starter)** 11801102

**Engine electric starter (Electric starter)** 11801101

**Engine start valves/controls (ATA Code:8012) (8012 Start controls)** 11801200

*(ATA Code:8012) The valves and controls used for starting engines.*

**Engine Starting System Wiring (ATA Code:8097) (8097 Engine Starting System Wiring)** 11809700

*(ATA Code:8097) Wiring specific to the Engine Starting System*

**Exhaust turbine system (reciprocating) (ATA Code:8100) (8100 Reciprocating exhaust turbine system)** 11810000

*(ATA Code:8100) The exhaust turbine systems for reciprocating engines. Includes power recovery turbine assemblies and turbo-supercharger units when external to the engine.*

**Power recovery turbine (ATA Code:8110) (8110 Power recovery turbine)** 11811000

*(ATA Code:8110) Power recovery turbine: The turbines which extract energy from the exhaust gases and are coupled to the crankshaft on reciprocating engines. Includes the power recovery turbine and supercharger unit when external to the engine. Does not include the drive shaft, coupling, and gears [Code 11854000].*

**Exhaust turbocharger (ATA Code:8120) (8120 Exhaust turbocharger)** 11812000

*(ATA Code:8120) Exhaust turbocharger: The airframe or engine manufacturer furnished exhaust driven turbocharger systems including the turbocharger unit, density controller and waste gate valve. Does not include the tailpipe. Typical parts are clamp, coupling, rod end, bracket, hose, scroll, bearing, impeller and shaft.*

**Turbocharger - bearing (Turbocharger - bearing)** 11812004

*Turbocharger - bearing*

**Turbocharger - Impeller (Turbocharger - Impeller )** 11812003

*Turbocharger - Impeller*

**Turbocharger turbine (Turbocharger - turbine)** 11812001 *

**Turbocharger - Waste gate (Turbocharger - Waste gate)** 11812002

**Turbocharger System Wiring (ATA Code:8197) (8197 Turbocharger System Wiring)** 11819700

*(ATA Code:8197) Wiring specific to the Turbocharger System*

**Water injection system (ATA Code:8200) (8200 Water injection system)** 11820000

*(ATA Code:8200) Water injection system: The system components and parts which inject a water mixture into induction system of turbine and reciprocating engines. Typical parts are pump, switch, tank and valve.*

**Water injection - Storage (ATA Code:8210) (8210 Water injection - Storage )** 11821000

*(ATA Code:8210) That portion of the system which is used for the storage of water or water mixtures. Includes tank sealing, attachment of bladder type cells, ventilating system, cell and tank interconnectors, filling systems, etc.*

**Engine water/methanol injection (ATA Code:8201) (8201 Water/methanol injection)** 11820100 *

*(ATA Code:8201) Engine water/methanol injection*

**Water Injection - Distribution (ATA Code:8220) (8220 Water Injection - Distribution )** 11822000

*(ATA Code:8220) That portion of the system which is used to conduct water or water mixtures from the tanks or cells to the engine. Includes items such as plumbing, crossfeed system, pumps, valves, controls, etc.*

**Water Injection - Dumping and Purging (ATA Code:8230) (8230 Water Injection - Dumping and Purging)** 11823000

*(ATA Code:8230) That portion of the system which is used to dump injection water and to purge the system. Includes items such as plumbing, valves, controls, etc.*

**Water Injection - Indicating (ATA Code:8240) (8240 Water Injection - Indicating)** 11824000

*(ATA Code:8240) That portion of the system which is used to indicate the quantity, temperature and pressure of the water mixtures. Includes items such as transmitters, indicators, wiring, etc.*

**Water Injection System Wiring (ATA Code:8297) (8297 Water Injection System Wiring)** 11829700

*(ATA Code:8297) Wiring specific to the Water Injection System*

**Accessory gearboxes (ATA Code:8300) (8300 Accessory gearboxes)** 11830000

*(ATA Code:8300) Accessory gearboxes: The units and components which are remote but connected to the engine by a drive shaft and which does not include those accessory drives which are bolted to and are immediately adjacent to the engine [Code 11720000]. Does not include accessory drives bolted to and adjacent to engine [Code 11726000].*

**8310 Accessory Gearboxes Drive Shaft Section (8310 Accessory Gearboxes Drive Shaft Section)** 11831000

*That portion of the system which is used to conduct power from the engine to the gearbox. Includes items such as drive shaft, adapters, seals, etc*

**Accessory Gearboxes Gearbox Section (ATA Code:8320) (8320 Accessory Gearboxes Gearbox Section)** 11832000

*(ATA Code:8320) The case which contains the gear trains and shafts. Includes items such as gears, shafts, seals, oil pumps, coolers, etc*

**Accessory Gearbox System Wiring (ATA Code:8397) (8397 Accessory Gearbox System Wiring)** 11839700

*(ATA Code:8397) Wiring specific to the Accessory Gearbox*

**PROPULSION AUGMENTATION (ATA Code 8400) (8400 PROPULSION AUGMENTATION)** 100000240

*(ATA Code 8400) Those units and components that, independent of the primary propulsion system, furnish additional thrust of short duration. Includes solid or liquid propellants, controls, indicators, etc.*

**Jet Assist Takeoff (ATA Code 8410) (8410 Jet Assist Takeoff)** 100000241

*(ATA Code 8410) Those units or components dedicated to jet assist takeoff (JATO) systems.*

**Reciprocating engine (ATA Code:8500) (8500 Reciprocating engine)** 11850000

*(ATA Code:8500) Reciprocating engine problems such as over temperature, metal contamination and vibration.*

**Reciprocating engine front section (ATA Code:8510) (8510 Front section)** 11851000

*(ATA Code:8510) Reciprocating engine front section: The piston engine front cases which contain the propeller shaft, reduction gears, and accessory drive. Typical parts are propeller shaft, gear, bearing, bushing, case, seal and pinion gear.*

**Reciprocating engine power section (ATA Code:8520) (8520 Power section)** 11852000

*(ATA Code:8520) Reciprocating engine power section: The section of the reciprocating engine which contains the crankshaft, cam shaft, tappet guides, valve lifters, connecting rods and drive gears. Does not include the push rods which are in the cylinder section [Code 11853000] or rear case accessory drives. Typical parts are crankcase, crankshaft, cam ring, lifter, camshaft, cylinder stud, connecting rod, bolt, through bolt, cap, rod bolt, main bearing and rod bearing.*

**Reciprocating engine cam drive gear (Cam drive gear)** 11852003

**Reciprocating engine camshaft (Camshaft)** 11852002

**Reciprocating engine counterweight/vibration damper (Counterweight/vibration damper)** 11852010

**Reciprocating engine crankcase (Crankcase)** 11852006

**Reciprocating engine crankshaft (Crankshaft)** 11852001

**Reciprocating engine crankshaft bearing (Crankshaft bearing)** 11852004

**Reciprocating engine push rod (Push rod)** 11852035

**Reciprocating engine cylinder section (ATA Code:8530) (8530 Cylinder section)** 11853000

*(ATA Code:8530) Reciprocating engine cylinder section: The section of the engine which contains the cylinders and associated parts including the intake pipes and valve push rods/housing. Also includes the cylinder baffles furnished by the engine manufacturer for engine cooling. Does not include the connecting rods or cylinder flange hold down bolts/studs [Code 11852000]. Typical parts are piston, piston pin, exhaust valve, intake valve, valve guide, rocker arm, valve cover, cylinder, pushrod housing, intake pipe, piston pin plug, valve spring, rocker shaft, piston ring, oil drain lines, clamp and baffles.*

**Reciprocating engine connecting rod (Connecting rod)** 11853006

**Reciprocating engine cooling baffle (Cooling baffle)** 11853009

**Reciprocating engine cylinder (Cylinder)** 11853002

**Reciprocating engine cylinder head (Cylinder head)** 11853001

**Reciprocating engine cylinder valve (Cylinder valve)** 11853007

**Reciprocating engine gudgeon pin (Gudgeon pin)** 11853011

**Reciprocating engine piston (Piston)** 11853003

**Reciprocating engine piston ring (Piston ring)** 11853004

**Reciprocating engine push rod (Push rod)** 11853005

**Reciprocating engine rocker arm (Rocker arm)** 11853012

**Reciprocating engine rear section (ATA Code:8540) (8540 Reciprocating engine rear section)** 11854000

*(ATA Code:8540) Reciprocating engine rear section: The reciprocating engine case or section where accessories and associated engine drives are located. Includes the power recovery turbine (PRT) drive shaft, coupling and gears, the accessory pads, drives and drive seals but not the accessories. Does not include oil pump, filter or internal lubricating system [Code 11855000]. Typical parts are seal, gear, drive shaft, case, bearing and spacer.*

**Reciprocating engine supercharger (Reciprocating engine supercharger)** 11854400 *

*Reciprocating engine supercharger - a blower or compressor driven by the engine, for supplying air under high pressure to the cylinders of an internal combustion engine*

**Reciprocating engine oil system (ATA Code:8550) (8550 Reciprocating engine oil system)** 11855000

*(ATA Code:8550) Reciprocating engine oil system: The reciprocating engine components and parts that provide oil pressure and distribute lubricating oil within the engine. Includes the plumbing leading to and from the using external systems and components which utilize engine system oil for operation. Does not include the externally mounted oil system storage tanks and connecting lines [Code 11791000], or the oil cooler lines, hoses and drain valves [Code 11792000]. Typical parts are pressure and scavenge pump, impeller, housing, filter, air-oil separator, crankcase breather, screen, element, relief valve, drive gear, adapter, pan, dipstick, cap and propeller governor oil lines.*

**Reciprocating engine oil filter (Oil filter)** 11855001

**Reciprocating engine oil pump (Oil pump)** 11855002

**Reciprocating Engine Supercharger (ATA Code:8560) (8560 Reciprocating Engine Supercharger)** 11856000

*(ATA Code:8560) The components and parts of the Supercharger system. Typical parts are case, impeller, rotors, bearings, seals, belts, pulleys or sprockets. Does not include gears in engine rear section.*
*Reciprocating engine supercharger - a blower or compressor driven by the engine, for supplying air under high pressure to the cylinders of an internal combustion engine*

**Reciprocating Engine Liquid Cooling (ATA Code:8570) (8570 Reciprocating Engine Liquid Cooling)** 11857000

*(ATA Code:8570) The components and parts that provide cooling liquid to the engine. Includes the plumbing leading to and from the engine. Typical parts are radiator, hoses, pump, drive belt, pulleys, bearings, seals, overflow line, overflow tank, pressure cap, thermostat.*

**Reciprocating Engine System Wiring (ATA Code:8597) (8597 Reciprocating Engine System Wiring)** 11859700

*(ATA Code:8597) Wiring specific to the Reciprocating Engine System*

**CHARTS (ATA Code 9100) (9100 CHARTS)** 100000242

*(ATA Code 9100) Miscellaneous charts not applicable to any particular system, such as spare wire charts, junction box charts, disconnect plug charts, conduit and wire routing charts, rigid tube charts, flexible hose charts and control cables*

**Towing and taxiing equipment (Towing and taxiing equipment)** 11130000 *

**Cable cutter (winch) (Cable cutter (winch))** 11130300 *

**Winch cable (Winch cable)** 11130200 *

**Aircraft operation (Aircraft operation)** 12000000

*The flight crew's operation of the aircraft.*

**Aircraft handling miscellaneous issues (Aircraft handling issues)** 12120000

*Aircraft handling miscellaneous issues: Miscellaneous aspects affecting the pilot's flying of the aircraft.*

**Aircraft configuration (Aircraft configuration)** 12120200

*The configuration of the aircraft generally.*

**Aircraft directional control (Aircraft directional control)** 12120400

*Issues related to the general controllability of the direction of the aircraft.*

**An aircraft equipment deficiency (Aircraft equipment deficiency)** 12120300

*The adequacy of the aircraft equipment.*

**Aircraft lateral control (Aircraft lateral control)** 12120600

*Issues related to the lateral controllability of the aircraft.*

**Aircraft mass and balance (Aircraft mass and balance)** 12120800

*Aircraft mass and balance - when the aircraft mass and balance was exceeded or otherwise improper. Note: do not use this subject when the exceedance is caused by improper loading. In those cases use the subject under 'Loading procedures'.*

**Aircraft performance (Aircraft performance)** 12120100

*The performance of the aircraft generally. To be used when the deterioration of the performance of the aircraft has an influence on the development of the occurrence.*

**Ground resonance (Ground resonance)** 12120500

*Ground resonance: The dangerous natural vibration of helicopters on the ground caused by the stiffness and the frequency of the landing gear legs amplifying the primary frequency of the main rotor.*

**Helicopter vortex ring state (Helicopter vortex ring)** 12120700

*Helicopter vortex ring state: The operating state of the rotorcraft main rotor in which the direction of air flow through the rotor is opposite the relative vertical flow outside the rotor disc and opposite to rotor thrust.*

**Aircraft operational mode (Aircraft operational mode)** 12110000

**Aerobatics (Aerobatics)** 12110100

*Aerobatics: The pilot's performance of largely standardized manoeuvres, unnecessary in normal flight, executed to acquire or demonstrate mastery over the aircraft, for entertainment or competition.*

**Auto-approach (Auto-approach)** 12110200

*Auto-approach: The selection of a "hands off" approach made by the automatic flight control system in total absence of pilot visual cues.*

**Autoland (Autoland)** 12110300

*Autoland: The selection of a "hands off" landing made by the automatic flight control system in total absence of pilot visual cues.*

**Banner towing (Banner towing)** 12110400

*Banner towing: The towing of a display banner attached to the aircraft externally.*

**Engine-out ferry (Engine-out ferry)** 12110500

*Engine-out ferry: Flying a non-revenue flight with less than the normal number of engines operating.*

**Extra-engine ferry (Extra-engine ferry)** 12110600

*Extra-engine ferry: Flying an aircraft with a non-operational engine attached to a specially designed point adjacent to the aircraft's installed power plants.*

**Glider towing (Glider towing)** 12110700

*Glider towing: Towing a glider by a cable attached to a powered aeroplane.*

**Instrument flight rules missed approach (IFR missed approach)** 12110800

*Instrument flight rules missed approach: The execution of an IFR go-around at the completion of an IFR approach. Missed approach procedure: The procedure that is to be followed after an instrument approach procedure (IAP) if, for any reason, a landing is not effected and that occurs normally*

*(a) when the aircraft has descended to the decision height (DH), or has descended to the minimum descent altitude (MDA) and reached the missed approach point or waypoint, and has not established the required visual reference to land; or*

*(b) when the aircraft is directed by ATC to pull up or to go around.*

**An instrument landing system manual approach (ILS manual approach)** 12110900

*An instrument landing system manual approach: The execution of an instrument landing system approach without the aid of the autopilot.*

**Low flying (Low flying)** 12111100

*Low flying: The act of flying below the normal VFR minimum vertical and horizontal clearance from the terrain.*

**Mountain flying (Mountain flying)** 12111200

*Mountain flying: The act of flying in mountainous terrain while maintaining the minimum vertical and horizontal clearance from the terrain in VMC.*

**Instrument approach (no instrument landing system) (Non-ILS approach)** 12111000

*The execution of an instrument approach when no instrument landing system is available.*

**Practice autorotative descent (helicopter) (Practice autorotation)** 12112600

*During powered flight, the rotor drag is overcome with engine power. When the engine fails, or is deliberately disengaged from the rotor system, some other force must be used to sustain rotor RPM so controlled flight can be continued to the ground. This force is generated by adjusting the collective pitch to allow a controlled descent. Airflow during helicopter descent provides the energy to overcome blade drag and turn the rotor. When the helicopter is descending in this manner, it is said to be in a state of autorotation.*

*Note: emergency autorotations are covered under consequential events.*

**Radar assisted approach (Radar assisted approach)** 12111300

*Radar assisted approach: Flying an approach to an aerodrome which is monitored by a radar operator who will issue the instructions necessary to ensure the pilot flies the aircraft on a given approach path.*

**Rescue hoist operation (Rescue hoist operation)** 12111400

*Rescue hoist operation: The period during which the rescue hoist is employed to raise or lower passengers or cargo between the helicopter and the surface below.*

**Running take-off(fixed wing) (Running take-off (fixed wing))** 12111500

*Running take-off: The execution of a take-off by accelerating the aircraft without stopping after taxiing onto the active runway.*

**Running take-off (Helicopter) (Running take-off (helicopter))** 12112700

*taking off by making use of translational lift - forward speed (as opposed to a vertical take-off)*

**Run-on landing (helicopter) (Run-on landing)** 12112400

*Run-on landing (helicopter)*

**Simulated engine-out (Simulated engine-out)** 12111600

*Simulated engine-out: Flying the aircraft with the thrust from one engine reduced to a power setting which simulates the drag which would be experienced from a non-operating engine in that position.*

**Sling load operation (Sling load operation)** 12111700

*Sling load operation: The operation of an aircraft with a load suspended below it on a sling.*

**Spin (Spin)** 12111800

*Spin: The low airspeed, high rate of decent, rotating situation of an aeroplane which results from the unintentional or deliberate operation of the aeroplane's controls that induces rotation after it stalls.*

**Spiral (Spiral)** 12111900

*Spiral: The high airspeed, high rate of decent descending spiral of an aeroplane which results from the unintentional or deliberate failure to operate the aeroplane's controls to take-off engine power, level the wings and raise the aircraft's nose sufficiently to regain level flight.*

**Stall (Stall)** 12112000

*Stall: The situation that results from the unintentional or deliberate operation of the aeroplane's controls establishing an angle of attack which exceeds that at which the airflow over the wing will continue to provide sufficient lift to maintain level flight, for a given aircraft configuration.*

**Touch and go landing (Touch and go landing)** 12112100

*Touch and go landing: The training practice in which the aircraft touches down, then accelerates to complete a take-off.*

**Vertical landing (Vertical landing)** 12112500

*Vertical landing*

**Vertical take-off (Vertical take-off)** 12112200

*Vertical take-off: The procedure by which a helicopter, tilt rotor or deflected thrust aircraft becomes airborne without any longitudinal or lateral progression.*

**A visual flight rules go-around (VFR go-around)** 12112300

*A visual flight rules go-around: The situation in which a pilot flying an aircraft on approach to land in VFR conditions climbs the aircraft without completing its approach to land.*
*The procedure followed by a pilot who decides to abandon an approach or landing.*

**Weather avoidance (Weather avoidance)** 12112800

*Weather avoidance*

**Aircraft performance - control parameters (Aircraft performance - control parameters)** 12140000

**Actual gross weight (Actual gross weight)** 100000218

**Airspeed (Airspeed)** 12140100

**Altitude (Altitude)** 12140200

**Angle of attack (Angle of attack)** 12141800

**Attitude (Attitude)** 12140300

**Climb rate (Climb rate)** 12141300

**Configuration (Configuration)** 12140400

**Crosswind correction (Crosswind correction)** 12141100

**Descent rate (Descent rate)** 12141400

**Descent/approach/glide path (Descent/approach/glide path)** 12141600

**Directional control (Directional control)** 12140500

**Dynamic load (Dynamic load)** 12141200

**Engine out control (Engine out control)** 12140900

**Glide (Glide)** 12141000

| | |
|---|---|
| **Heading/course (Heading/course)** | 12142000 |
| **Landing flare/touchdown (Landing flare/touchdown)** | 12141700 |
| **Lateral/bank control (Lateral/bank control)** | 12140700 |
| **Pitch control (Pitch control)** | 12140600 |
| **Powerplant parameters (Powerplant parameters)** | 12142100 |
| **Propeller/rotor parameters (Propeller/rotor parameters)** | 12142200 |
| **Surface speed/braking (Surface speed/braking)** | 12141900 |
| **Taxi speed (Taxi speed)** | 12141500 |
| **Yaw control (Yaw control)** | 12140800 |
| **Aircraft performance - general (Aircraft performance - general)** | 12130000 |
| **Aircraft limitations (Aircraft limitations)** | 12131000 |
| **Braking capability (Braking capability)** | 12130800 |
| **Centre of gravity/weight distribution (Centre of gravity/weight distribution)** | 12130700 |
| **Climb capability (Climb capability)** | 12130100 |
| **Engine out capability (Engine out capability)** | 12130300 |
| **Instrument flight capability (Instrument flight capability)** | 12130900 |
| **Landing distance (Landing distance)** | 12130500 |
| **Maximum crosswind component (Maximum crosswind component)** | 12130200 |
| **Maximum weight (Maximum weight)** | 12130600 |
| **Take-off distance (Take-off distance)** | 12130400 |
| **Behaviour of passengers (Behaviour of passengers)** | 12410000 |
| **Passenger compliance with instructions/regulations (Instruction compliance)** | 12412000 |
| *Passenger compliance with instructions/regulations: i.e. non-compliance with regulations or crew instructions.* | |
| **Passengers' observation of seatbelt sign (Observation-seatbelt sign)** | 12411000 |
| **Passengers' irregular behaviour in the cabin which did not involve physical assault (Other irregular behaviour)** | 12414000 |

**Physical assault by passenger (Physical assault by passenger)** 12413000

*Physical assault by passenger: Passenger's assault on a crew member/passenger, e.g. 'air rage' incidents.*

**Cabin crew - actions (Cabin crew - actions)** 12330000

**Cabin crew, observation of seatbelt sign (Observation-seatbelt sign)** 12330100

**Cabin crew - operation of cabin equipment (Cabin crew - operation of equipment)** 12310000

**Cabin crew - procedures (Cabin crew - procedures)** 12320000

**Cabin crew's operation in the cabin (Cabin crew's operation)** 12300000

**Flight crew's aircraft handling (Flight crew aircraft handling)** 12240000

*Flight crew's aircraft handling: e.g. incorrect operation or technique, speeds etc.*

**Flight crew's control of the aircraft's pull-up (Aircraft pull-up)** 12241500

*Flight crew's control of the aircraft's pull-up*

**Flight crew's control of the aircraft's rotation (Aircraft rotation)** 12241900

*Flight crew's control of the aircraft's rotation on take-off or landing.*

**Flight crew's control of the aircraft's taxi speed (Aircraft's taxi speed)** 12242200

*Flight crew's control of the aircraft's taxi speed*

**Flight crew's control of the aircraft's airspeed (Airspeed)** 12240200

*Flight crew's control of the aircraft's airspeed: Indicated airspeed: the speed of an aircraft as shown on its pitot static airspeed indicator calibrated to reflect standard atmosphere adiabatic compressible flow at sea level uncorrected for airspeed system errors.*

**Flight crew's control of the aircraft's alignment with the runway (Alignment with runway)** 12242100

*Flight crew's control of the aircraft's alignment with the runway*

**Flight crew's control of the aircraft's altitude (Altitude)** 12240300

*Flight crew's control of the aircraft's altitude*

**Decision height or decision altitude (DH or DA) (Decision height/altitude (DH/DA))** 12240302

*Decision height or decision altitude: a specified altitude or height in the precision approach or approach with visual guidance at which the missed approach must be initiated if the required visual reference to continue the approach has not been established. (Annex 6, Part I).*

**Minimum descent altitude (MDA) (Minimum descent altitude (MDA))** 12240301

*MDA : Minimum descent altitude or minimum descent height: A specific altitude or height in a non-precision approach or circling approach below which descent must not be made without the required visual reference. (Annex 6, Part I)*

**Minimum sector altitude (MSA) (Minimum sector altitude (MSA))** 12240303

*Minimum sector altitude (MSA):The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in the area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.*
*(Annex 3, Annex 4, PANS-OPS/I, PANS-OPS/II)*

**Flight crew's control of the aircraft's attitude (Attitude)** 12240400

*Flight crew's control of the aircraft's attitude*

**The rate of climb of aircraft (Climb)** 12240500 *

*The rate of climb of aircraft*

**Flight crew's control of the aircraft's rate of climb (Control of climb rate)** 12241600

*Flight crew's control of the aircraft's rate of climb*

**Flight crew's control of the aircraft's rate of descent (Control of descent rate)** 12241700

*Flight crew's control of the aircraft's rate of descent*

**Flight crew's control of the aircraft's rotor rpm (Control of rotor rpm)** 12242000

*Flight crew's control of the aircraft's rotor rpm*

**The rate of descent of the aircraft (Descent)** 12240600 *

*The rate of descent of the aircraft*

**Flight crew's control of the aircraft's directional movement (yaw control) (Directional movement)** 12242700

*Flight crew's control of the aircraft's directional movement (yaw control)*

**Flight crew's control of the aircraft's entry into translational lift (Entry-translational lift)** 12242500

*Flight crew's control of the aircraft's entry into translational lift*

**Evasive maneuver (Evasive maneuver)** 12242600

*Flight crew's evasive maneuver*

**Flight crew's control of the flying speed of the aircraft (Flying speed)** 12240700

*Flight crew's control of the flying speed of the aircraft*

**Flight crew's control of the aircraft's glide path (Glide path)** 12240800

*Flight crew's control of the aircraft's glide path: A descent profile determined for vertical guidance during a final approach.*
*(An 4, PANS-ATM)*

**Flight crew's control of the aircraft's landing flare (Landing flare)** 12240900

*Flight crew's control of the aircraft's landing flare*

**Flight crew's control of the aircraft's lateral movements (roll) (Lateral movements)** 12241000

*Flight crew's control of the aircraft's lateral movements (roll).*

**Flight crew's control of the aircraft's level-off (Level-off)** 12241200

*Flight crew's control of the aircraft's level-off*

**Flight crew's control of the aircraft's lift-off (Lift-off)** 12241300

*Flight crew's control of the aircraft's lift-off*

**Flight crew's control of the aircraft in relation to its limitations (Limitations)** 12241100

*Flight crew's control of the aircraft in relation to its limitations*

**Flight crew's control of the aircraft's longitudinal movement (pitch) (Longitudinal movement)** 12241400

*Flight crew's control of the aircraft's longitudinal movement (pitch)*

**Flight crew's control of the aircraft (Pilot's aircraft control)** 12240100

*Flight crew's control of the aircraft: [use when more specific codes are not available or details could not be established].*

**Flight crew's recovery/remedial action (Recovery/remedial action)** 12241800

*Flight crew's recovery/remedial action*

**Flight crew's taxiing technique (Taxiing technique)** 12242300

*Flight crew's taxiing technique*

**Flight crew's control of the aircraft's touchdown (Touchdown)** 12242400

*Flight crew's control of the aircraft's touchdown.*
*Touchdown. The point where the nominal glide path intercepts the runway.(Annex 10, Chapter 1)*

**Flight crew's decisions (Flight crew decisions)** 12220000

**Flight crew's decision abort an approach (Decision abort an approach)** 12220500

*e.g. decision to commence or continue the approach when the weather minima did not permit this.*

**Flight crew's decision to continue flight (Decision to continue flight)** 12220400

*The flight crew's decision to continue the flight, e.g. decision to continue in spite of being aware of adverse weather conditions.*

**Flight crew's decisions to initiate flight (Decision to initiate flight)** 12220100

**Flight crew's decision to land (Decision to land)** 12220600

*e.g. the decision to land even though the landing area was not suitable.*

**Flight crew's decision to take-off (Decision to take-off)** 12220300

**Flight crew's decisions to taxi/park (Decision to taxi/park)** 12220200

*The flight crew's decisions to taxi/park the aircraft, e.g. deciding to park without proper guidance.*

**Flight crew's operation of equipment (Flight crew operation of equipment)** 12230000

*Flight crew's operation of equipment: e.g. incorrect operation, too early or too late. To be used, when the equipment is working fine but the use of it created a problem.*

**Flight crew's operation of air conditioning (Air conditioning)** 12230100

*Flight crew's operation of air conditioning: e.g. packs used inappropriately.*

**Flight crew's operation of airbrakes or speedbrakes (Airbrakes / speedbrakes)** 12235200

**Flight crew's operation of altimeter (Altimeter)** 12230200

*e.g. setting/reading of the altimeter.*

**Flight crew's use of the altitude alert system (Altitude alert)** 12234300

**Flight crew's operation of autoflight system (Autoflight system)** 12230400

*Flight crew's operation of autoflight system: e.g. engagement after incorrect mode selection.*

**Flight crew's operation of auxiliary power unit (Auxiliary power unit)** 12230300

**Flight crew's operation of brakes (Brakes)** 12230500

*Flight crew's operation of brakes: e.g. no use, late use or excessive use.*

**Flight crew's operation of communication equipment (Communication equipment)** 12232800

*Flight crew's operation of communication equipment: e.g. selection of incorrect frequency.*

**CPDLC: Controller Pilot Data Link Communication (CPDLC)** 100000044

*Flight crew's operation of communication equipment CPDLC: Controller Pilot Data Link Communication*

**Use of the cowling system (Cowling system)** 100000026

*Use of the cowling system, e.g. improper positioning of the cowl flaps*

**Use of documentation/guidance material (Documentation/guidance material)** 100000036

*e.g. improper/ inadequate use of available documentation*

**Flight crew's use of check lists (Check lists)** 12234400

**Flight crew's use of emergency check list (Emergency check list)** 12234500

*Flight crew's use of emergency check list: e.g. failure to use in an emergency situation.*

**Flight crew's use of flight manual (Flight manual)** 12234600

*Flight crew's use of flight manual: e.g. not used as a reference before taking incorrect action.*

**Flight crew's use of performance data (Performance data)** 12234700

*Flight crew's use of performance data: e.g. miscalculation of take-off distance required.*

**Flight crew's operation of door system (Door system)** 12230700

*Flight crew's operation of door system: e.g. take-off with door unlocked.*

**Flight crew's operation of electrical system (Electrical system)** 12230800

*Flight crew's operation of electrical system: e.g. sustained use of stand-by system unnecessarily.*

**Flight crew's operation of emergency brakes (Emergency brakes)** 12230900

*Flight crew's operation of emergency brakes: e.g. incorrect application.*

**Flight crew's operation of equipment furnishing (Equipment furnishing)** 12231000

*Flight crew's operation of equipment furnishing: [Use when no more specific choice is available].*

**Flight crew's operation of fire protection system (Fire protection system)** 12231100

*Flight crew's operation of fire protection system: e.g. wrong selection or incorrect method of operation.*

**Flight crew's operation of flaps/slats (Flaps/Slats)** 12231200

*Flight crew's operation of flaps: e.g. incorrect selection, selection too early or not selected when required.*

**Use of leading edge devices (flaps/slats) (Leading edge devices)** 100000022

*Flight crew's operation of leading edge flaps/slats: e.g. incorrect selection, selection too early or not selected when required.*

**Use of trailing edge devices (Trailing edge devices)** 100000023

*Flight crew's operation of traling edge flaps/slats: e.g. incorrect selection, selection too early or not selected when required.*

**Flight crew's operation of flight controls (Flight controls)** 12231300

*Flight crew's operation of flight controls: e.g. over controlling in turbulence.*

**Use of the flight management system (Flight management system)** 12235100

*Use of the flight management system - e.g. incorrect data entered, incorrectly programmed*

**Flight crew's operation of fuel dump system (Fuel dump system)** 12231400

*Flight crew's operation of fuel dump system: e.g. incorrect selection of valves or booster pumps.*
*Fuel dumping: The intentional airborne release of usable fuel. This does not include the dropping of fuel tanks.*

**Flight crew's operation of fuel system (Fuel system)** 12231600

*Flight crew's operation of fuel system: e.g. selection of incorrect tank or misuse of cross-feed system.*

**Flight crew's operation of fuel selector (Fuel selector)** 12231500

*Flight crew's operation of fuel selector: e.g. incorrect positioning or positioning between settings.*

**Flight crew's operation of gust locks (Gust locks)** 12231700

*Flight crew's operation of gust locks: e.g. not applying locks when required or not removing prior to flight.*

**Flight crew's operation of hydraulic power system (Hydraulic power system)** 12231800

*Flight crew's operation of hydraulic power system: e.g. mis-selection of system.*

**Flight crew's operation of ice protection system (Ice protection system)** 12231900

*Flight crew's operation of ice protection system: e.g. using too late or using inappropriately.*

**Ignition system (Ignition system)** 12235000

*use of the ignition system by the flight crew*

**Flight crew's operation of instruments (Instruments)** 12232000

*Flight crew's operation of instruments: e.g. using stop watch facility incorrectly.*

**Flight crew's operation of landing gear (Landing gear)** 12232100

*Flight crew's operation of landing gear: e.g. lowering above maximum permitted speed.*

**Flight crew's operation of lighting system (Lighting system)** 12232300

*Flight crew's operation of lighting system: [use when the more specific classification is not available].*

**Flight crew's operation of landing lights (Landing lights)** 12232200

*Flight crew's operation of landing lights: e.g. failure to select when required or forgetting to switch off after departure from aerodrome.*

**Flight crew's operation of navigation lights (Navigation lights)** 12232600

*Flight crew's operation of navigation lights: e.g. failure to ensure light switched on for flight.*

**Flight crew's operation of strobe lights (Strobe lights)** 12233700

*Flight crew's operation of strobe lights: e.g. failure to switch on for flight.*

**Flight crew's operation of taxiing lights (Taxiing lights)** 12233800

*Flight crew's operation of taxiing lights: e.g. not switched on to assist with visibility during taxiing.*

**Flight crew's operation of load jettison system (Load jettison system)** 12232400

*Flight crew's operation of load jettison system: e.g. failure to use in an emergency or using too late.*

**Flight crew's operation of miscellaneous equipment (Miscellaneous equipment)** 12232500

**Flight crew's operation of 'no smoking' sign (No smoking sign)** 12232900

*Flight crew's operation of 'no smoking' sign: e.g. failure to select during required periods.*

**Flight crew's operation of seatbelt sign (Seatbelt sign)** 12233500

*Flight crew's operation of seatbelt sign: e.g. omission to switch on when turbulence anticipated or experienced.*

**Flight crew's operation of navigation system (Navigation system)** 12232700

*Flight crew's operation of navigation system: e.g. using heading select instead of INS.*

**Flight crew's operation of nose wheel steering (Nose wheel steering)** 12233000

*Flight crew's operation of nose wheel steering: e.g. leaving engaged for the take-off run.*

**Flight crew's operation of oxygen system (Oxygen system)** 12233100

*Flight crew's operation of oxygen system: e.g. failure to select appropriate flow rate for altitude.*

**Flight crew's operation of pneumatic system (Pneumatic system)** 12233200

*Flight crew's operation of pneumatic system: e.g. inappropriate setting or selection.*

**Flight crew's operation of powerplant (Powerplant)** 12233300

*Flight crew's operation of powerplant: e.g. exceeding specified temperature limits.*

**Flight crew's operation of carburettor heat (Carburettor heat)** 12230600

*Flight crew's operation of carburettor heat: e.g. left on or used too late.*

**Use of the mixture control (Mixture control)** 100000025

**Use of the throttle (Throttle)** 100000024

*Inadequate or incorect operation ot the throttle*

**Use of water injection system (Water injection)** 100000028

*Improper use of the water injection system, e.g. not using it when required.*

**Flight crew's operation of propellers/rotors (Propellers/rotors)** 12233400

*Flight crew's operation of propellers: e.g. operation at rpm in a prohibited range.*

**Operation of the popeller feathering system (Propeller feathering)** 100000032

*Operation of the popeller feathering system, e.g. not feathering a propeller when required.*

**Operation of the propeller pitch control (Propeller pitch control)** 100000034

*Operation of the propeller pitch control, e.g. not selecting the proper propeller pitch for take-off.*

**Operation of the propller/rotor brake (Propeller/rotor brake)** 100000033

*Operation of the propeller/rotor brake, e.g. not using the propeller/rotor brake when required*

**Use/operation of the recording system (Recording systems)** 100000029

*Use/operation of the recording system, e.g. not starting the recording system or not stopping recordings when required*

**Operation of the CVR (CVR)** 100000030

*Operation of the CVR: e.g. not starting the CVR, not stopping the CVR after an incident.*

**Operation of the FDR (FDR)** 100000031

*Operation of the FDR: e.g. not stopping the FDR when required after an incident.*

**Flight crew's operation of spoilers/lift dump (Spoilers/lift dump)** 12233600

*Flight crew's operation of spoilers/lift dump: e.g. failure to select prior to landing.*

**Flight crew's operation of thrust reverser system (Thrust reverser system)** 12233900

*Flight crew's operation of thrust reverser system: e.g. not selected in accordance with company procedures.*

**Use of the towing system (Towing system)** 100000021

*Use of the towing system*

**Flight crew's operation of tow release (Tow release)** 12235400

**Operation/use of the transponder (Transponder)** 100000037

*Operation/use of the transponder, e.g. not selecting transponder on.*

**Flight crew's operation of transponder code selection (Transponder code selection)** 12235300

**Flight crew's operation of trim (Trim)** 12234000

*Flight crew's operation of trim: e.g. use in opposition to autopilot.*

**Flight crew's operation of vacuum system (Vacuum system)** 12234100

**Flight crew's use of visual approach slope indicator (VASI)** 12234800

*Flight crew's use of visual approach slope indicator: e.g. night approach too high leading to late touch down. Aerodrome/heliport visual approach slope indicator [VASI]/precision approach path indicator [PAPI]. VASIS: An approach slope indicator system consisting of four light units situated on the left side of the runway in the form of two wing bars referred to as the upwind and downwind wing bars. The aircraft is on slope if the upwind bar shows red and the downwind bar shows white, too high if both bars show white, and too low if both bars show red. Some aerodromes serving large aircraft have three-bar visual approach slope indicator systems (VASIS), which provide two visual glide paths (GP) to the same runway. The visual approach slope indicator system can be situated so as to provide three types of eye-to-wheel height (EWH): V1 (10 ft), V2 (25 ft) and V3 (25 ft and 45 ft).*

**Flight crew's use of weather radar (Weather radar)** 12234900

*Flight crew's use of weather radar: e.g. not or incorrectly using the radar to avoid turbulence encounter in IMC.*

**Flight crew's operation of windows (Windows)** 12234200

*Flight crew's operation of windows, e.g. not properly closing windows before flight.*

**Flight crew's perception/judgment (Flight crew perception/judgment)** 12210000

*The flight crew's perception and judgment related to visible objects.*

**Flight crew's distance judgement (Distance judgement)** 12210400

**Flight crew's height judgement (Height judgement)** 12210600

**Flight crew's landing judgement (Landing judgement)** 12210700

*The flight crew's judgment during the landing of the aircraft.*

**Flight crew's look-out (Look-out)** 12210100

*Flight crew's look-out: The flight crew's visual scan for conflicting traffic.*

**Flight crew's navigation (Navigation)** 12210800

*Flight crew's navigation: The management of the flight crew to maintain the desired course/track.*

**Flight crew's obstacle clearance judgement (Obstacle clearance)** 12210900

**Other flight crew's judgement (Other crew judgement)** 12211000

*The flight crew's judgement of other issues.*

**Flight crew's perception of object/obstacle (Perception obstacle)** 12210200

*Flight crew's perception of object/obstacle: The manner in which the flight crew perceived an obstruction or object other than another aircraft.*

**Flight crew's perception of visual/oral warning (Perception of warning)** 12210500

**Flight crew's perception of other aircraft (Perception-other aircraft)** 12210300

*Flight crew's perception of other aircraft: The manner in which the flight crew perceived another aircraft.*

**Flight crew's separation judgement (Separation judgement)** 12211100

**Flight crew's speed judgement (Speed judgement)** 12211300

**Flight crew's wind compensation judgement (Wind compensation)** 12211200

*Flight crew's wind compensation judgement*

**Crew action in respect to flight crew procedures, e.g. compliance with, deviation from etc. (Flight crew use of procedures)** 12250000

*Crew action in respect to flight crew procedures, e.g. compliance with, deviation from etc.*

**Flight crew's air to air communication (Air to air communication)** 12252700

*Interpilot air-to-air communication. Two-way communication on the designated air-to-air channel to enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.*

**Flight crew's air/ground/air communication (Air/ground/air communications)** 12252600

*Air-ground communication. Two-way communication between aircraft and stations or locations on the surface of the earth.*

**Flight crew's action in respect to air traffic control clearance (ATC clearance)** 12251500

*Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.*

**Altitude (Altitude)** 100000038

**Route (Route)** 100000040

**Speed (Speed)** 100000039

**Other (Other)** 100000041

**Flight crew's action in respect to air traffic control procedure (ATC procedure)** 12251600

**Flight crew's communication (Communication)** 12250600

**Flight crew's co-ordination (Co-ordination)** 12250500

**Flight crew's action in respect to decision height procedure (Decision height procedure)** 12250700

*Flight crew's decision height procedure: Decision altitude (DA) or decision height (DH).*
*JAR: 'Decision Height', with respect to the operation of aircraft, means the wheel height above the runway elevation by which a go-around must be initiated unless adequate visual reference has been established and the aircraft position and approach path have been visually assessed as satisfactory to continue the approach and landing in safety.*
*Note 1. Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.*
*Note 2. The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.*
*Note 3. For convenience where both expressions are used they may be written in the form 'decision altitude/ height' and abbreviated 'DA/H'. Doc 4444*

**Flight crew's action in respect of the emergency procedure (Emergency procedures)** 12252100

*Flight crew's action in respect of the emergency procedure*

**Flight crew's action in respect to engine relight procedure (Engine relight procedure)** 12251100

**Flight crew's action in respect to engine shutdown procedure (Engine shutdown procedure)** 12251000

**Flight crew's action in respect to engine start procedure (Engine start procedure)** 12250400

**Flight crew's action in respect to evacuation procedure (Evacuation procedure)** 12250900

*Flight crew's evacuation procedure: N.B. Evacuation means the leaving of the aircraft through approved exits and using approved means following the aircraft evacuation procedure. Escape from the wreckage through breaks in the fuselage is not what is meant by 'evacuation'.*

**Flight crew's frequency selection (Frequency selection)** 12251700

**Flight crew's fuel consumption calculation (Fuel consumption calculation)** 12252800

**Flight crew's action in respect to instruction (s) (not from air traffic control) (Instruction)** 12251400

*Flight crew's action in respect to instruction (s) (not from air traffic control)*

**Flight crew's interpretation of the instrument flight rules procedures (Interpretation-IFR)** 12252500

*Flight crew's interpretation of the instrument flight rules procedures: Instrument approach procedure. A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply.*

**Flight crew's interpretation of the visual flight rules procedure (Interpretation-VFR)** 12252300

**Flight crew's interpretation of the weather minima (Interpretation-weather minima)** 12250800

*Flight crew's interpretation of the weather minima: E.g. interpretation of the aerodrome operating minima.*

*Aerodrome operating minima. The limits of usability of an aerodrome for:*

*a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;*

*b) landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation; and*

*c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); and*

*d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions.*

**Landing site reconnaissance (Landing site reconnaissance)** 100000183

*Review of the suitability of the envisaged landing area (helicopters, hull/float equipped aeroplanes)*

**Flight crew's action in respect to noise abatement procedures (Noise abatement rule)** 12252000

*Flight crew's action in respect to noise abatement procedures*

**Flight crew's action in respect to passenger briefing (Passenger briefing)** 12250200

*Flight crew's passenger briefing: The pilot-in-command shall ensure that crew members and passengers are made familiar, by means of an oral briefing or by other means, with the location and the use of: a) seat belts; and, as appropriate,*
*b) emergency exits;*
*c) life jackets;*
*d) oxygen dispensing equipment; and*
*e) other emergency equipment provided for individual use, including passenger emergency briefing cards.*
*ICAO Annex 6*

**Flight crew's position reporting (Position reporting)** 12251900

**Flight crew action in respect to pre-flight check (Pre-flight check)** 12250300

**Flight crew's action in respect to pre-flight planning/preparation (Pre-flight preparation)** 12250100

**ATM Flight plan (ATM Flight plan)** 100000042

**Other flight planning issues (Other flight planning)** 100000043

**Flight crew's radiotelephony phraseology (Radiotelephony phraseology)** 12251800

**Flight crew's action in respect to of safety altitude (Safety altitude)** 12251200

**Flight crew's action in respect to standard operating procedure (Standard operating procedure)** 12252200

**Flight crew's supervision of the flight (Supervision of the flight)** 12251300

**Flight crew's action in respect to procedure for transfer to visual flight (Transfer visual flight)** 12252400

**Flight crew's weather evaluation (Weather evaluation)** 12252900

**Actions by other persons (Other persons - actions)** 12400000

**Aircraft dispatch (Aircraft dispatch)** 14000000

**Equipment required for aircraft dispatch (Equipment required)** 14010000

*The equipment required for aircraft dispatch procedures.*

**Dispatch facilities at destination (Facilities at destination)** 14030000

**Dispatch loadsheet/weight/balance calculations (Loadsheet calculations)** 14040000

*The loadsheet/weight/balance calculations provided by aircraft dispatch.*

**Aircraft dispatch procedure (Procedure)** 14050000

*The aircraft dispatch procedure other than those listed above.*

**Aircraft dispatch weather advisory (Weather advisory)** 14020000

*The provision of a weather advisory by aircraft dispatch.*

**Aircraft loading procedures (Aircraft loading procedures)** 15000000

**Aircraft cargo (Aircraft cargo)** 15300000

*Aircraft cargo: N.B. Does not include the mass/balance calculations or loading irregularities.*

**Aircraft ballast (Ballast)** 15300400

*Aircraft ballast: N.B. Does not include the mass/balance calculations or loading irregularities.*

**Cargo type (Cargo type)** 15300100

*Cargo type: e.g. unrestrained animals.*

**Dangerous cargo (Dangerous cargo)** 15300200

*Dangerous goods: Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.*

**Aircraft passenger load (Passenger load)** 15300500

*Aircraft passenger load: N.B. Does not include the mass/balance calculations.*

**Passengers' baggage (Passengers' baggage)** 15300300

*Passengers' baggage: N.B. Does not include the mass/balance calculations or loading irregularities.*

**Loading of the aircraft resulting in mass/balance problems (Mass/balance)** 15100000

*Loading of the aircraft resulting in mass/balance problems: N.B. Does not include the mass/balance calculations.*

**Loading of the aircraft resulting in centre of gravity problems (Centre of gravity)** 15100500

*Loading of the aircraft resulting in centre of gravity problems: N.B. Does not include the mass/balance calculations.*

**Loading of the aircraft resulting in problems related to the structural limitations of the floor (Floor structural limits)** 15100600

*Loading of the aircraft resulting in problems related to the structural limitations of the floor: N.B. Does not include the mass/balance calculations.*

**Loading of the aircraft resulting in fuel balance problems (Fuel balance)** 15100300

*Loading of the aircraft resulting in fuel balance problem: N.B. Does not include the mass/balance calculations.*

**Fuel load (Fuel load)** 100000243

*Issues realted to the amount of fuel carried / uplifted*

**Loading of the aircraft resulting in maximum landing mass problems (Maximum landing mass)** 15100200

*Loading of the aircraft resulting in maximum landing mass problems: N.B. Does not include the mass/balance calculations.*

**Loading of the aircraft resulting in maximum take-off mass problems (Maximum take-off mass)** 15100100

*Loading of the aircraft resulting in maximum take-off mass problems: N.B. Does not include the mass/balance calculations.*

**Use of the loadsheet (Use of the loadsheet)** 15100400

**Aircraft refuelling procedures (Refuelling procedures)** 15200000

**Improper fuel load (Improper fuel load)** 15200100

*Improper fuel load: N.B. Does not include the fuel load calculations.*

**Aircraft servicing and handling (Aircraft servicing and handling)** 16000000

*Aircraft servicing: i.e. the handling of the aircraft on the ramp.*

**Engine start - ramp personnel** 16300000

**(Engine Start)**

**Handling procedures** 16050000
**(Handling procedures)**

*The procedures related to the handling of the aircraft on the ground by ground handling personnel.*

**Obstacle/object clearance** 16060000
**(Obstacle/object clearance)**

*Activities of ground personnel in regard to clearance of the aircraft from objects and obstacles on the ground, e.g. clearance from other aircraft, parked equipment and vehicles etc.*

**Parking procedure (Parking procedure)** 16070000

*The procedures to be followed by ground personnel to dock / park the aircraft*

**Pushback/towing procedure** 16080000
**(Pushback/towing procedure)**

*The procedures to be followed by ground personnel to push back or tow the aircraft.*

**Refuelling (Refuelling)** 16200000

*Refuelling : The aircraft refuelling*

**Removal of protective cover(s) (Removal of protective cover(s))** 16400000

*Removal of protective cover(s)*

**Snow/frost removal from the aircraft (Snow/frost removal)** 16100000

*Snow/frost removal by ramp personnel: Snow is precipitation in the form of feathery ice crystals or large agglomerations in the form of flakes. Snow is composed of millions of star-shaped hexagonal ice crystals.*

**Aircraft maintenance or repair operations in general (Aircraft maintenance/repair)** 17000000

*Aircraft maintenance or repair operations in general: The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.*
*(Annex 8).*
*Repair. The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the Type Certificate for the respective aircraft type, after it has been damaged or subjected to wear.*
*(Annex 8).*

**Application of aircraft maintenance instructions/directives (Maintenance instructions)** 17300000

*The application of aircraft instructions/directives by maintenance personnel.*
*Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.*
*(Annex 8)*

**Time limits (Time limits)** 17300400

*Those manufacturer recommended time limits for inspections, maintenance and overhaul of the aircraft, its systems and units, and life of parts. For engine manufacturers this will include the flight cycle lives of major rotating components and other items designated critical.*

**Application of aircraft airworthiness directive (Airworthiness directive)** 17300100

*The application of airworthiness directives by maintenance personnel.*
*Airworthiness directives identify aeronautical products in which an unsafe condition exists and/or where the condition is likely to exist or develop in other products of the same type design. They prescribe corrective actions to be taken or the conditions or limitations under which the products may continue to be operated.*
*Note: The Airworthiness directive is the most commonly encountered form of the "mandatory continuing airworthiness information" mentioned in Annex 8.*

**Application of aircraft maintenance/repair documentation (Documentation)** 17300300

*The application of aircraft maintenance/repair documentation by maintenance personnel.*

**Application of aircraft Service Bulletin (Service Bulletin)** 17300200

**Application of aircraft maintenance procedures (Maintenance procedures)** 17200000

*The application of aircraft maintenance procedures by maintenance personnel.*
*Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair. (Annex 8)*

**Maintenance tools (Maintenance tools)** 17400000

*Maintenance tools: tools required to maintain aircraft.*

**Aircraft maintenance/repair operations (Maintenance/repair operations)** 17100000

*The aircraft maintenance/repair operations by maintenance personnel.*
*Repair. The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the Type Certificate for the respective aircraft type, after it has been damaged or subjected to wear. (Annex 8)*
*Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.*

*(Annex 8)*

**Un-scheduled maintenance check (Un-scheduled maintenance check)** 17100800

*Those maintenance checks and inspections on the aircraft, its systems and units which are dictated by special or unusual conditions which are not related to the time limits. Includes inspections and checks such as hard landing, overweight landing, bird strike, turbulent air, lightning strike, slush ingestion, radioactive contamination, maintenance checks prior to engine-out ferry, etc.*

**Aircraft maintenance (Aircraft maintenance)** 17100100

*Aircraft maintenance operations by maintenance personnel.*
*Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.*
*(Annex 8)*

**Aircraft installation by factory personnel (Factory installation)** 17100700

**Aircraft major repair (Major repair)** 17100200

*Aircraft Major Repair: The restoration of an aeronautical product to an airworthy condition as defined by the appropriate airworthiness requirements. (ICAO Annex 8)*

*EASA*
*Clarification of the terms Major/Minor*

*In line with the definitions given in 21A.91, a new repair is classified as 'major' if the result on the approved type design has an appreciable effect on structural performance, weight, balance, systems, operational characteristics or other characteristics affecting the airworthiness of the product, part or appliance. In particular, a repair is classified as major if it needs extensive static, fatigue and damage tolerance strength justification and/or testing in its own right, or if it needs methods, techniques or practices that are unusual (i.e., unusual material selection, heat treatment, material processes, jigging diagrams, etc.).*

*Repairs that require a re-assessment and re-evaluation of the original certification substantiation data to ensure that the aircraft still complies with all the relevant requirements, are to be considered as major repairs.*

*(EASA Part 21)*

*FAA:*
*Major repair: a repair*

*(1) That, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or*

*(2) That is not done according to accepted practices or cannot be done by elementary operations.*

**Aircraft minor repair (Minor repair)** 17100300

*The aircraft minor repair by maintenance personnel.*
*Repair. The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the Type Certificate for the respective aircraft type, after it has been damaged or subjected to wear.*
*(ICAO Annex 8)*

**Aircraft modification (Modification)** 17100400

*The aircraft modification by maintenance personnel.*

**Aircraft scheduled check (Scheduled check)** 17100500

*Aircraft scheduled check by maintenance personnel.*

**Application of service bulletin (SB) / air worthiness directive (AD) (Service bulletin/air worthiness directive)** 17100600

*Application of service bulletin (SB) / air worthiness directive (AD).*

**Management of the aircraft by air traffic management (ATM aircraft management)** 20000000

*Air traffic management. The aggregation of the airborne functions and ground-based functions (air traffic services, airspace management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of operations.*

**Air traffic management - components and systems (ATM components and systems)** 21000000

**Air traffic control equipment maintenance (ATC equipment maintenance)** 21300000

**Air traffic control conditional equipment maintenance (Conditional)** 21300300

**Air traffic control corrective equipment maintenance (Corrective)** 21300200

**Air traffic control preventive equipment maintenance (Preventive)** 21300100

**Other air traffic control equipment maintenance related matters (Other)** 21300400

**Air traffic control - equipment installation (ATC-equipment installation)** 21400000

**Installation of air traffic control equipment (Installation)** 21400100

**Integration of air traffic control equipment (Integration)** 21400200

**Air traffic management - communications systems (ATM - communications systems)** 21010000

**ATM components and systems other than those listed above (ATM components and system other)** 21011000

**Data exchange network (Data exchange network)** 21010700

**Datalink system (Datalink system)** 21010600

*CPDLC: Controller Pilot Data Link Communication*

**Headsets (Headsets)** 21010900

**HF radio telephony (HF radio telephony)** 21010300

**Intercom system (Intercom system)** 21010500

**Recording systems (Recording system)** 21010800

**Telephone system (Telephone system)** 21010400

**UHF radio telephony (UHF radio telephony.)** 21010200

**VHF radio telephony (VHF radio telephony)** 21010100

**Air traffic management system - power supply (ATM power supply)** 21060000

**ATM backup power (ATM backup power)** 100000046

*ATM backup power - alternate power supply to be used in case the primary power supply failed.*

**Air traffic management's support (ATM support)** 21050000

**Air traffic management's surveillance system (ATM surveillance system)** 21030000

**Air traffic management's use of airborne element of ATM (ATM-use airborne element)** 21030200

*Air traffic management's use of facilities carried in the aircraft.*

**Air traffic management's use of assigned code (ATM use of assigned code)** 21030203

*The code assigned to the aircraft's transponder by air traffic management.*

**Air traffic management's use of assigned mode (ATM use of assigned mode)** 21030202

*The mode assigned to the aircraft's transponder by air traffic management.*

**Air traffic management's use of transponder (ATM use of transponder)** 21030201

*Air traffic management's use of the aircraft's transponder.*

**Air traffic management's use of primary area radar (ATM use-primary radar)** 21030300

*Air traffic management's use of primary area radar: Surveillance radar. Radar equipment used to determine the position of an aircraft in range and azimuth..*

**Air traffic management's use of primary approach radar (Primary approach radar)** 21030303

**Air traffic management's use of primary area radar (Primary area radar)** 21030301

**Air traffic management's use of primary surface radar (Primary surface radar)** 21030302

**Air traffic management's use of secondary radar (ATM use-secondary radar)** 21030400

*Secondary surveillance radar (SSR). A surveillance radar system which uses transmitters/receivers (interrogators) and transponders. Annex 10, Vol 4, Chapter 1.*

**Air traffic management's use of secondary approach radar (Secondary approach radar)** 21030403

**Air traffic management's use of secondary area radar (Secondary area radar)** 21030401

**Air traffic management's use of secondary surface radar (Secondary surface radar)** 21030402

**Air traffic management's use of ground facilities (Ground facilities)** 21030100

**Air traffic management's use of radar data processing system (Radar data processing system)** 21030102

**Air traffic management's use of radar source (Radar source)** 21030101

**Air traffic management's use of traffic display system (Traffic display system)** 21030103

**Air traffic management - data processing (ATM use-data processing)** 21040000

**Air traffic management's information data system (ATM information data system)** 21040200

**Air traffic management - flight plan data processing system (Flight plan data system)** 21040100

**Air traffic management - of flight progress strip (ATM-flight progress strip)** 21040102

**Air traffic management - electronic data display (Electronic data display)** 21040101

**Air traffic management's use of the navigation approach aids (ATM-navigation approach aids)** 21020000

**Air traffic management's use of the navigational aids (ATM use-navigational aids)** 21020100

**Air traffic management's use of the distance measuring equipment (Distance measuring equipment)** 21020102

**Air traffic management's use of the instrument landing system (Instrument landing system)** 21020103

**Air traffic management's use of the microwave landing system (Microwave landing system)** 21020104

**Air traffic management's use of the non-directional beacon (Non-directional beacon)** 21020105

**Air traffic management's use of the precision approach radar (Precision approach radar)** 21020106

*Precision approach radar: A high-definition, short-range radar used as an approach aid. This system provides the controller with altitude, azimuth and range information of high accuracy for the purpose of assisting the pilot in executing an approach and landing. This form of navigation assistance is termed a 'precision radar approach.'*

**Air traffic management's use of the surveillance radar element of a precision approach radar system (Surveillance radar element)** 21020107

*Air traffic management's use of the surveillance radar element of a precision approach radar system: Surveillance radar. Radar equipment used to determine the position of an aircraft in range and azimuth.*

*Secondary surveillance radar (SSR). A surveillance radar system which uses transmitters/receivers (interrogators) and transponders.*

**Air traffic management's use of the very high frequency omni-directional radio range (VOR)** 21020101

**Air traffic management's use of any navigational or approach aid not listed above (Other navigational aid)** 21020200

**Air traffic management's operations (ATM operations)** 22000000

*Air traffic management's operations: Air Traffic Management is the aggregation of ground based (comprising variously ATS, ASM (Airspace Management), ATFM (Air Traffic Flow Management)) and airborne functions required to ensure the safe and efficient movement of aircraft during all phases of operations.*

**Air traffic management's aircraft identification (ATM aircraft identification)** 22010000

**Air traffic management's radar aircraft identification (Radar)** 22010100

**Air traffic management's visual aircraft identification (Visual)** 22010200

**Air traffic management's conflict detection (ATM conflict detection)** 22120000

**Air traffic management's tactical execution of the conflict detection strategy (ATM conflict detection)** 22120200

**Air traffic management's strategic planning for conflict detection (ATM strategic plan)** 22120100

**Air traffic management's conflict resolution (ATM conflict resolution)** 22130000

**Air traffic management's horizontal conflict resolution (ATM horizontal)** 22130100

**Air traffic management's horizontal conflict resolution by radar vectoring/monitoring (ATM horizontal-radar)** 22130101

**Air traffic management's horizontal conflict resolution other than by radar vectoring/monitoring (Horizontal conflict other)** 22130102

**Air traffic management's conflict resolution by planned controller action (ATM resolve-ATCO action)** 22130300

**Air traffic management's vertical conflict resolution (ATM vertical conflict)** 22130200

**Air traffic management's coordination (ATM coordination)** 22080000

**Air traffic management's external coordination (ATM external coordination)** 22080200

**Air traffic management's coordination with an adjacent civil sector (Adjacent civil sector)** 22080203

**Air traffic management's coordination with an adjacent civil unit (Adjacent civil unit)** 22080201

**Air traffic management's coordination with an adjacent military unit (Adjacent military unit)** 22080202

**Air traffic management's coordination with an adjacent sector military (Adjacent sector military)** 22080204

**Air traffic management's internal coordination (ATM internal coordination)** 22080100

**Air traffic management's internal coordination of positions in civil sectors in the same unit (Civil sector positions)** 22080103

**Air traffic management's internal coordination of civil sectors in the same unit (Civil sectors-unit)** 22080101

**Air traffic management's internal coordination of positions in military sectors in the same unit (Military positions)** 22080104

**Air traffic management's internal coordination of military sectors in the same unit (Military sectors-unit)** 22080102

**Air traffic management's special coordination procedures (ATM special coordination)** 22080300

**Air traffic management's instructions to expedite clearance (Expedite clearance)** 22080301

*Air traffic management's instructions to expedite clearance: Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.*

**Air traffic management's stipulation of prior permission required (Prior permission required)** 22080302

**Revision of air traffic management's coordination procedures (Revision)** 22080303

**Air traffic management's data interpretation (ATM data interpretation)** 22020000

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| **Air traffic management's flight plan data handling and processing (ATM flight plan handling)** | 22110000 |
| **Air traffic management's electronic flight plan sorting/classification (Electronic sorting)** | 22110400 |
| **Air traffic management's updating of a flight plan (Flight plan updating)** | 22110200 |
| **Air traffic management's integration of flight plan information by a controller (Integration by controller)** | 22110100 |
| **Air traffic management's flight plan strip sorting/classification (Strip sorting)** | 22110300 |
| **Air traffic management's hand-over/take-over (ATM hand-over/take-over)** | 22100000 |
| **Factors related to the acceptance of the hand-over/take-over (Acceptance)** | 22101100 |
| **Aerodrome during the hand-over/take-over (Aerodrome)** | 22100200 |
| **Airspace during the hand-over/take-over (Airspace during)** | 22100300 |
| **Equipment interaction during the hand-over/take-over (Equipment interaction)** | 22100500 |
| **Briefing for the hand-over/take-over (hand-over/take-over briefing)** | 22100600 |
| **Factors related to the initiation of the hand-over/take-over (Initiation)** | 22101000 |
| **Navigation aids during the hand-over/take-over (Navigation aids)** | 22100400 |
| **Non - standard hand-over/take-over (Non-standard)** | 22101300 |
| **Overlapping period during the hand-over/take-over (Overlapping period)** | 22100800 |
| **Factors related to the standard of the hand-over/take-over (Standard)** | 22101200 |
| **Familiarization with traffic during the hand-over/take-over (Traffic familiarity)** | 22100700 |
| **Transfer of traffic during the hand-over/take-over (Traffic transfer)** | 22100900 |
| **Weather briefing during the hand-over/take-over (Weather briefing)** | 22100100 |
| *Weather briefing during the hand-over/take-over: Briefing. Oral commentary on existing and/or expected meteorological conditions. ICAO Annex 3.* | |
| **Air traffic management's monitoring (ATM monitoring)** | 22060000 |
| **Air traffic management's monitoring of aircraft (Aircraft)** | 22060100 |
| **Air traffic management's monitoring of animals (Animals)** | 22060500 |
| **Air traffic management's monitoring of vehicles/equipment (Equipment)** | 22060400 |

**Air traffic management's monitoring of frequencies (Frequencies)** 22060200

**Air traffic management's monitoring of persons (Persons)** 22060300

**Air traffic management's radar working technique (ATM radar technique)** 22030000

**Air traffic management's sector splitting (ATM sector splitting)** 22040000

**Air traffic management's traffic transfer (ATM traffic transfer)** 22090000

**Air traffic management's working technique (ATM working technique)** 22050000

**Aircraft performance (Aircraft performance)** 22050100

*Aircraft performance issues. For instance, the air traffic management's aircraft performance data which is different from that used by the other party.*

**Air traffic management's use/testing of controller working position equipment (Use/testing of equipment)** 22070000

**Air traffic management's procedures (ATM procedures)** 23000000

**Air traffic control use of procedures (ATC use of procedures)** 23020000

*Air traffic control use of procedures: ATC - a term covering those air traffic agencies which provide control services, i.e. they are authorised to issue instructions.*

**Air traffic control use of airways/route procedure (Use of airways/route procedure)** 23020100

**Air traffic control use of alerting procedure (Use of alerting procedure)** 23020200

*Air traffic control use of alerting procedure: Alerting service. A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid. ICAO Annex 2.*

**Air traffic control use of approach procedure (Use of approach procedure)** 23020300

**Air traffic control use of clearance procedure (Use of clearance procedure)** 23020400

*Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.*

**Air traffic control use of climb procedure (Use of climb procedure)** 23020500

**Air traffic control use of departure procedure (Use of departure procedure)** 23020600

**Air traffic control use of descent procedure (Use of descent procedure)** 23020700

**Air traffic control use of emergency procedure (Use of emergency procedure)** 23020800

**Air traffic control use of holding procedure (Use of holding procedure)** 23021100

*Holding procedure: A predetermined manoeuvre that keeps an aircraft within a specified airspace while it awaits further clearance.*

**ATM's use of LAHSO procedure (Use of LAHSO)** 23021200

*ATM's use of LAHSO procedure.*
*LAHSO: Land and hold short.*

**Use of LVP - Low Visibility Procedures (Use of LVP - Low Visibility Procedures)** 23021400

**Air traffic control use of missed approach procedure (Use of missed approach procedure)** 23020900

*Missed approach procedure: The procedure that is to be followed after an instrument approach procedure (IAP) if, for any reason, a landing is not effected and that occurs normally*

*(a) when the aircraft has descended to the decision height (DH), or has descended to the minimum descent altitude (MDA) and reached the missed approach point or waypoint, and has not established the required visual reference to land; or*

*(b) when the aircraft is directed by ATC to pull up or to go around.*

**Air traffic control use of noise abatement climb procedure (Use of noise abatement climb)** 23021000

*Noise abatement climb procedure: A procedure developed to ensure that the necessary safety of flight operations is maintained while exposure to noise on the ground is minimized.*

**ATM's use of a SIRO procedure (Use of SIRO)** 23021300

*ATM's use of a SIRO procedure.*
*SIRO: simultaneous intersecting runway operations.*

**ATS procedures (ATS procedures)** 23010000

**airways/route alerting procedure (Airways/route alerting)** 23010100

**airways/route approach procedure (Airways/route approach)** 23010200

**Surveillance radar element of a precision approach radar system approach (Surveillance radar element)** 23010201

**Clearance procedure (Clearance procedure)** 23010300

*Clearance procedure: Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.*

**Climb procedure (Climb procedure)** 23010400

**Departure procedure (Departure procedure)** 23010500

**Descent procedure (Descent procedure)** 23010600

**Emergency procedure (Emergency procedure)** 23010700

**Holding procedure (Holding procedure)** 23010800

**LAHSO Land and hold short (LAHSO)** 23011100

*LAHSO: LAHSO is an air traffic control procedure which permits the issuance of landing clearances to aircraft to land and hold short of an intersecting runway, taxiway, or other designated point on the runway. Examples include:*
*Land and hold short of an intersecting runway.*
*Land and hold short of an intersecting taxiway.*
*Land and hold short of an approach/departure flight path.*
*Land and hold short of a pre-determined point.*

**LVP - Low Visibility Procedure (LVP - Low Visibility Procedure)** 23011300

**Missed approach procedure (Missed approach procedure)** 23010900

*Missed approach procedure. The procedure that is to be followed after an instrument approach procedure (IAP) if, for any reason, a landing is not effected and that occurs normally*

*(a) when the aircraft has descended to the decision height (DH), or has descended to the minimum descent altitude (MDA) and reached the missed approach point or waypoint, and has not established the required visual reference to land; or*

*(b) when the aircraft is directed by ATC to pull up or to go around.*

**Noise abatement procedure (Noise abatement procedure)** 23011000

**SIRO: simultaneous intersecting runway operations (SIRO)** 23011200

*SIRO: simultaneous intersecting runway operations.*

**Air traffic management's provision of service (ATM provision of service)** 24000000

*Air traffic management's provision of service: The aggregation of ground based (comprising variously ATS, ASM (Airspace Management), ATFM (Air Traffic Flow Management)) and airborne functions required to ensure the safe and efficient movement of aircraft during all phases of operations.*

**Air information system's provision of service (AIS provision of service)** 24020000

*Air information system's provision of service: AIS is a service provided for the collection and dissemination of information needed to ensure the safety, regularity and efficiency of air navigation. Such information includes the availability of air navigation facilities and services and the procedures associated with them, and must be provided to flight operations personnel and services responsible for flight information service.*
*Aeronautical information. Information resulting from the assembly, analysis and formatting of aeronautical data.*

**AirSpace Management's provision of service (ASM provision of service)** 24030000

*ASM is a generic term covering any management activity provided for the purpose of achieving the most efficient use of airspace bases on actual needs and, where possible, avoiding permanent airspace segregation.*
*ASM:A planning function with the primary objective of maximizing the utilization of available airspace by dynamic time-sharing and, at times, the segregation of airspace among various categories of users based on short-term needs. In future systems, airspace management will also have a strategic function associated with infrastructure planning.*

**AirSpace Management's airspace management cell (Airspace management cell)** 24030100

*AirSpace Management's airspace management cell: The day-to-day management and temporary allocation of national or sub-regional airspace within its jurisdiction for a specific time period, by means of a standard message format.*

**AirSpace Management updated capacity of an airspace (ASM airspace capacity)** 24030300

**AirSpace Management's airspace use plan (ASM airspace use plan)** 24030200

**Air Space Management related to conditional routes (ASM conditional routes)** 24030201

**AirSpace Management conditional route type (Conditional route type)** 24030202

*AirSpace Management conditional route type: The specific conditional route type i.e. non-planifiable, planifiable or debateable.*

**AirSpace Management Cross-border Factors relating to the Area (Cross-border Area)** 24030204

*AirSpace Management Cross-border Factors relating to the Area: A cross-border area is a temporary segregated area established over international boundaries for specific operational requirements.*

**AirSpace Management's Temporary Segregated Area (Temporary Segregated Area)** 24030203

*AirSpace Management's Temporary Segregated Area: A temporary segregated area is an airspace of defined dimensions within which activities require the reservation of airspace for the exclusive use of specific users during a determined period of time.*

**AirSpace Management Conditional Route Factors Availability Message (ASM CRA Message)** 24030400

*AirSpace Management Conditional Route Factors Availability Message: A special consolidated AirSpace Management message is issued daily by the Centralised Airspace Data Function to promulgate in one message, on behalf of European Civil Aviation Conference States, the Airspace Management Cell decisions on conditional routes availability notified by the Airspace Use Plans for all the ECAC area. The CRAM is used by aircraft operators for flight planning purposes.*

**AirSpace management's updated (airspace) use plan (ASM updated use plan)** 24030500

*An AirSpace Management message of NOTAM status issued by an Airspace Management Cell on the day of operation to update Airspace Use Plan information.*

**Air traffic control provision of service (ATC provision of service)** 24010000

*Air traffic advisory service. A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.*
*Air traffic control service. A service provided for the purpose of:*
*a) preventing collisions: 1) between aircraft, and 2) on the manoeuvring area between aircraft and obstructions; and b) expediting and maintaining an orderly flow of air traffic.*

**Air traffic control use of air/ground communications (ATC air/ground communications)** 24010100

*Air-ground communication. Two-way communication between aircraft and stations or locations on the surface of the earth.*
*(Annex 10, Vol 2 Chapter 1)*

**Air traffic control requirement for the acknowledgement of information by the air traffic control officer (ATC acknowledgement)** 24010108

**Air traffic control call-sign confusion (ATC call-sign confusion)** 24010105

**Air traffic control communication technique (ATC communication technique)** 24010104

**Air traffic control use of phraseology (ATC phraseology)** 24010101

**Blocked communication (Blocked communication)** 24010103

**Air traffic control transfer of communication (Communications transfer)** 24010106

**Air traffic control requirement for the acknowledgement of information by the flight crew (Pilot acknowledgement-ATC)** 24010107

**Loss of communications (LOC) (Loss of communications)** 24010109

*EUROCONTROL : “Loss of communications between aircraft and ATC may occur for a variety of reasons, some technical and others resulting from mis-management of the man-machine interface. Losses of communications can vary considerably in length; it is, however, those with an impact on day-to-day ATC functions which have drawn attention to the problems and led to studies for their resolution.*
*The term "PLOC", an acronym for "prolonged loss of communications", has come into use in civil aviation to describe this phenomenon, while the term "COMLOSS", an abbreviation of "communications loss", is preferred by the military. “*

**Air traffic control use of readback/hearback error detection (Readback/hearback error)** 24010102

*Readback. A procedure whereby the receiving station repeats a received message or an appropriate part thereof back to the transmitting station so as to obtain confirmation of correct reception. ICAO Annex 10.*

**Air traffic control provision of warnings (ATC warnings)** 24010600

**Air traffic control provision of aerodrome warning (Aerodrome)** 24010602

**Air traffic control provision of an avoiding action warning (Avoiding action)** 24010607

*Air traffic control provision of an avoiding action warning.*

**Air traffic control provision of minimum safe altitude warning system warning (MSAW system)** 24010603

*Air traffic control provision of minimum safe altitude warning system warning: The air traffic control issue of a minimum safe altitude warning derived from the MSAW system.*
*MSAW: The generation of minimum safe altitude warnings is a function of an ATC radar data processing system. The objective of the MSAW function is to assist in the prevention of controlled flight into terrain accidents by generating, in a timely manner, a warning of the possible infringement of a minimum safe altitude.*

**Air traffic control provision of any other warning (Other warning)** 24010606

**Air traffic control provision of airborne proximity warning (Proximity/traffic advisory)** 24010605

*Air traffic control provision of airborne proximity warning: Traffic advisory (TA). An indication given to the flight crew that a certain intruder is a potential threat.*

**Air traffic control provision of a short term conflict alert (STCA) warning (Short term conflict alert)** 24010604

*The generation of short term conflict alerts is a function of an ATC radar data processing system. The objective of the STCA function is to assist the controller in maintaining separation between controlled flights by generating, in a timely manner, an alert of a potential infringement of separation minima.*

**Air traffic control provision of wind shear warning (Wind shear)** 24010601

*Air traffic control provision of wind shear warning: A windshear is a change in wind speed and/or direction in space, including updrafts and downdrafts ( ICAO Circular 186 - Wind Shear)*

**Air traffic control provision of weather information (ATC weather info)** 24010500

**Air traffic control provision of an aerodrome forecast (Aerodrome forecast)** 24010504

*Air traffic control provision of an aerodrome forecast: A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.*

**Air traffic control provision of automated terminal information service (ATIS)** 24010501

**Air traffic control provision of en route weather (En route)** 24010506

*SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.*

**Air traffic control provision of information concerning en route weather phenomena which may affect the safety of aircraft operations (En route phenomena)** 24010507

**Air traffic control provision of information concerning en-route weather phenomena which may affect the safety of low level aircraft operations (Low level weather)** 24010508

*Air traffic control provision of information concerning en-route weather phenomena which may affect the safety of low level aircraft operations: AIRMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.*

**Air traffic control provision of other weather information (Other weather information)** 24010510

**Air traffic control provision of flight crew weather reports (Pilot weather reports)** 24010509

*Air traffic control provision of flight crew weather reports: Air-report. A report from an aircraft in flight prepared in conformity with requirements for position, and operational and/ or meteorological reporting.*

*Note. Details of the AIREP form are given in the PANS-ATM (Doc 4444).*

**Air traffic control provision of aviation routine weather report (Routine weather report)** 24010511

*Provision of aviation routine weather report (in aeronautical meteorological code).*

**Air traffic control provision of aviation selected special weather report (Selected special report)** 24010505

**Air traffic control provision of a message containing snow fall information (SNOWTAM)** 24010502

*Air traffic control provision of a message containing snow fall information: A special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format.*
*(ICAO An 10/II, An 15)*
*Snow is precipitation in the form of feathery ice crystals or large agglomerations in the form of flakes. Snow is composed of millions of star-shaped hexagonal ice crystals.*

**Air traffic control provision of a volcanic activity report (Volcanic activity report)** 24010503

*Air traffic control provision of a volcanic activity report: Format of a volcanic ash advisory (ICAO Annex 3)*

*1 VOLCANIC ASH ADVISORY;*

*2 ISSUED: year month date (yyyymmdd)/time in UTC (using "Z") or date month year (ddxxx*yyyy)/time in UTC (using "Z");*

*3 VAAC: name of volcanic ash advisory centre;*

*4 VOLCANO: name and IAVCEI** number (or "UNKNOWN" or "UNNAMED");*

*5 LOCATION: degrees/minutes ("Nnnnn" or "Snnnn", "Wnnnnn" or "Ennnnn" or "UNKNOWN" or "UNNAMED");*

*6. AREA: State, or region if ash is not reported over a State;*

*7. SUMMIT ELEVATION: elevation in m or ft (including units);*

*8. ADVISORY NUMBER: year in full and message number (assuming separate sequence for each volcano);*

*9. INFORMATION SOURCE: free text;*

*10. AVIATION COLOUR CODE: colour code ("RED", "ORANGE", "YELLOW", "GREEN") or ("UNKNOWN") or ("NOT GIVEN") or ("NIL");*

*11. ERUPTION DETAILS: free text description (including date/time of eruption(s)) or ("UNKNOWN");*

*12. OBS ASH DATE/TIME: dd/time (UTC) (using "Z");*

*13. OBS ASH CLOUD: "SFC" or "FLnnn/nnn, boundary coordinates/area, direction of movement in eight compass points ("N", "NE", "E", "SE", "S", "SW", "W", "NW") and speed of each cloud mass in km/h or kt (including units), (up to 4 layers)"; or if ash reported (e.g. AIREP) but not identifiable from satellite data, include "ASH NOT IDENTIFIABLE FROM SATELLITE DATA" and instead of forecast ash positions include "WINDS" followed by upper winds for up to four selected layers;*

*14. FCST ASH CLOUD + 6 HR: forecast height and position for each cloud mass for fixed valid time .... UTC (six hours from observed time of ash cloud given in Item 12), in flight levels, and degrees/minutes or km or NM;*

*15. FCST ASH CLOUD + 12 HR: forecast height and position for each cloud mass for fixed valid time .... UTC (twelve hours from observed time of ash cloud given in Item 12), in flight levels, and degrees/minutes or km or NM;*

*16. FCST ASH CLOUD + 18 HR: forecast height and position for each cloud mass for fixed valid time .... UTC (eighteen hours from observed time of ash cloud given in Item 12), in flight levels, and degrees/minutes or km or NM, or "ASH DISSIPATED";*

*17. NEXT ADVISORY: year month date (yyyymmdd)/time in UTC (using "Z") or date month year (ddxxx*yyyy)/time in UTC (using "Z") or "NO LATER THAN year month date (yyyymmdd)/time (UTC)" (using "Z") or date month year (ddxxx*yyyy)/time in UTC (using "Z") or "NO FURTHER ADVISORIES" or "WILL BE ISSUED BY";*

*18. REMARKS: free text or "NIL".*
*Volcanic ash advisory centre (VAAC). A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, area control centres, flight information centres, world area forecast centres, relevant regional area forecast centres and international OPMET data banks regarding the lateral and vertical extent and forecast movement of volcanic ash in the atmosphere following volcanic eruptions.*

**Air traffic management's ground-ground communications (ATM ground/ground communication)** 24010200

**Air traffic management's use of readback/hearback error detection in ground to ground communication (ATM error detection)** 24010202

**Air traffic management's use of phraseology in ground to ground communication (ATM phraseology)** 24010201

**Blocked communication from, or to, air traffic management in ground to ground communication (Blocked)** 24010203

**Call-sign confusion in the air traffic management's use ground to ground communication (Call-sign confusion)** 24010205

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|---|---|
| **Communication technique used by air traffic management in ground to ground communication (Technique)** | 24010204 |
| **Transfer of communication in the air traffic management's use ground to ground communication (Transfer)** | 24010206 |
| **Air traffic management's use of equipment (ATM use of equipment)** | 24010300 |
| **Aircraft identification in the air traffic control operations (Aircraft identification-ATC operations)** | 24010303 |
| **Altimeter setting in the air traffic control operations (Altimeter setting-ATC operations)** | 24010302 |
| **Frequency selection in the air traffic control communication (Frequency selection-ATC communication)** | 24010301 |
| **Information input error in the air traffic control operations (Information error in ATC)** | 24010304 |
| **Air traffic control provision of information other than that listed above (Other ATC information)** | 24010700 |
| **Air traffic control provision of information on an abnormal situation (Abnormal situation)** | 24010707 |
| **Air traffic control provision of delay related information (Delay related information)** | 24010705 |
| **Air traffic control provision of flight information (Flight information)** | 24010703 |
| **Air traffic control provision of a minimum safe flight level/altitude/height/sector altitude (Minimum safe altitude)** | 24010704 |
| **Air traffic control provision of a navigation advisory (Navigation advisory)** | 24010702 |
| **Air traffic control provision of information on en-route navigation aid's serviceability (Navigation aid)** | 24010708 |
| **Air traffic control provision of a NOTAM (NOTAM)** | 24010701 |
| *Air traffic control provision of a NOTAM: A NOTAM is a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations. ICAO Annex 15.* | |
| **Air traffic control provision of a regional pressure reference datum (en-route/regional) (Regional pressure datum)** | 24010706 |
| **Air traffic control provision of a runway condition (Runway condition)** | 24010710 |
| **STAP - Parameters Automatic Transmission System (STAP)** | 100000270 |
| **Air traffic control provision of transition altitude (level) (Transition altitude/level)** | 24010709 |
| **Air Traffic Flow Management's provision of service (ATFM provision of service)** | 24040000 |

*Air Traffic Flow Management service is established to support air traffic control in ensuring an optimum flow of traffic to, from, through or within defined areas during times when demand exceeds, or is expected to exceed, the available capacity of the air traffic control system, including relevant aerodromes.*

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| **Air traffic flow management evaluation of traffic demand (ATFM evaluation-traffic)** | 24040100 |
| **Air traffic flow management regulation of traffic demand (ATFM regulation-traffic)** | 24040200 |
| **Air traffic management planning and design (ATM planning and design)** | 25000000 |
| **Air traffic management planning and design of the airspace structure (Airspace structure)** | 25010000 |
| **Air traffic management planning and design of the aerodrome layout (Aerodrome layout)** | 25010400 |
| **Air traffic management planning and design of the airspace capacity (Airspace capacity)** | 25010300 |
| **Air traffic management planning and design of the airspace classification (Airspace classifications)** | 25010500 |
| **Air traffic management planning and design of the airspace sectorization (Airspace sectors)** | 25010200 |
| **Air traffic management planning and design of the route structure (Route structure)** | 25010100 |
| **Air traffic management's contingency plans (ATM contingency plan)** | 25030000 |
| **Air traffic management service personnel operating procedures/instructions for technical systems engineering (ATM engineering)** | 25060000 |
| **Air traffic management service personnel operating procedures/instructions (ATM service personnel)** | 25050000 |
| **Air traffic management service personnel operating procedures/instructions for support functions (ATM support functions)** | 25080000 |
| **Air traffic management service personnel operating procedures/instructions for technical systems maintenance (ATM technical systems maintenance)** | 25070000 |
| **Air traffic management observance of Procedures for Factors relating to the air Navigation Services - Operations [PANS-OPS] (ATM-PANSOPS procedures)** | 25040000 |
| **Interface between air traffic management service units (Interface-ATM units)** | 25020000 |
| **Air traffic management's provisions for differences between civil and military requirements (ATM-civil/military differences)** | 25020100 |
| **Air traffic management's handling of emergencies/unusual situations (ATM occurrence handling)** | 26000000 |
| **Air traffic management handling of aircraft unusual/emergency situation (Aircraft unusual situations)** | 26070000 |
| **Air traffic management's handling of radio communication failures (Communication failures)** | 26010000 |
| **Air traffic management's handling of blocked microphones (Blocked microphones)** | 26010400 |

*The air traffic management's handling of blocked microphones during an emergency or unusual situation.*

**Air traffic management's handling of relay/relayed message (Message relay)** 26010600

*The air traffic management's handling of relay/relayed message during an emergency or unusual situation.*

**Air traffic management's handling of one way radio communication failures during an emergency or unusual situation (One way communication failures)** 26010100

**Air traffic management's handling of deteriorations in transmission/reception quality (Poor transmission/reception)** 26010300

**Air traffic management's handling of simultaneous transmissions (Simultaneous transmission)** 26010500

*The air traffic management's handling of simultaneous transmissions during an emergency or unusual situation.*

**Air traffic management's handling of two way radio communication failures during an emergency or unusual situation (Two way communication failures)** 26010200

**Air traffic management's handling of unlawful radio communication/transmission (Unlawful radio communication)** 26010700

**Air traffic management handling of data processing failures (Data processing failures)** 26040000

**Air traffic management handling of navigation failures (Navigation failures)** 26020000

**Air traffic management handling of ATM power supply failures (Power supply failures)** 26060000

*Air traffic management handling of ATM power supply failures*

**Air traffic management handling of ATM support function failures (Support function failures)** 26050000

**Air traffic management handling of surveillance functions (Surveillance functions)** 26030000

**Air traffic control operations room management (ATC operations room management)** 27000000

**Air traffic control monitoring of sector traffic load (ATC monitoring of traffic)** 27030000

**Air traffic control team briefing (ATC team briefing)** 27020000

**Air traffic control team management (ATC team management)** 27010000

**Air traffic control assessment team fitness (Assessment team fitness)** 27010100

**Air traffic control medical and competence check (Medical/competence check)** 27010200

**Air traffic control rostering/sector opening in relation to expected traffic (Rostering traffic)** 27010300

**Air traffic control coordination with coordination with external bodies (External coordination)** 27050000

**Factors relating coordination with air traffic flow management (Air traffic flow management)** 27050200

*Factors relating coordination with air traffic flow management: Air traffic flow management (ATFM). A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.Doc 4444*

**Air traffic control coordination with airport authorities (Airport authorities)** 27050500

**Air traffic control coordination with AirSpace management (AirSpace management)** 27050100

**Air traffic control coordination with aeronautical information service (AIS)** 27050700

**Air traffic control coordination with local authorities (Local authorities)** 27050400

**Air traffic control coordination with meteorological service (Meteorological service)** 27050600

**Air traffic control coordination with search and rescue personnel (Search and rescue)** 27050300

**Air traffic control handling of accidents, incidents and emergencies (Handling of occurrences)** 27060000

**Air traffic control assistance to the air traffic controller in recovering control of traffic (ATC assistance to ATCO)** 27060100

*The air traffic control assistance to the air traffic control officer in recovering control of traffic after an accident, incident or emergency. An Air Traffic Controller is a person authorised to provide an air traffic control service.*

**Air traffic control initiation of Critical Incident Stress Management (ATC initiation of CISM)** 27060300

*Air traffic control initiation of Critical Incident Stress Management: CISM - usually refers to a strategy for dealing with the effects of post-traumatic stress following a specific occurrence rather than a general experience of stress or depression. There are a number of methodologies associated with dealing with this problem involving essentially "talk therapies" of one sort or another e.g. "peer counsellors", associates trained to manage the early stages of the debriefing process, followed up with professional counselling. The aim is to provide a prompt response to prevent later problems.*

**Air traffic control relief of an air traffic controller from his/her position after an accident, incident or emergency (ATC relief of ATCO)** 27060200

**Other factors related to the air traffic control action after an accident, incident or emergency (Other ATC action)** 27060400

**Air traffic control coordination with technical department (Technical department)** 27040000

**ATC facilities (ATC facilities)** 28000000

*ATC facilities*

**Radio navaids (Radio navaids)** 28010000

*Radio navaids*

**Area radar (Area radar)** 28010300

*Area radar*

**DME (DME)** 28011400

*DME/N. Distance measuring equipment, primarily serving operational needs of en-route or TMA navigation, where the "N" stands for narrow spectrum characteristics (to be distinguished from "W").*

*DME/P. The distance measuring element of the MLS, where the "P" stands for precise distance measurement. The spectrum characteristics are those of DME/N.*

*DME/W. Distance measuring equipment, primarily serving operational needs of en-route or TMA navigation, where the "W" stands for wide spectrum characteristics (to be distinguished from "N"). (Annex 10, 3.5)*

**ILS complete (ILS complete)** 28010500

*ILS: The ILS shall comprise the following basic components:*

*a) VHF localizer equipment, associated monitor system, remote control and indicator equipment;*

*b) UHF glide path equipment, associated monitor system, remote control and indicator equipment;*

*c) VHF marker beacons, associated monitor systems, remote control and indicator equipment, (Annex 10, Chapter 3, 3.1.2.1 )*

**ILS glide path (ILS glide path)** 28010600

*ILS glide path: UHF glide path equipment, associated monitor system, remote control and indicator equipment, (Annex 10, Chapter 3, 3.1.2.1 )*

**ILS localizer (ILS localizer)** 28010700

*ILS localizer: VHF localizer equipment, associated monitor system, remote control and indicator equipment;*

**MLS complete (MLS complete)** 28010800

*MLS complete*

**MLS glide slope (MLS glide slope)** 28010900

*MLS glide slope*

**MLS localizer (MLS localizer)** 28011000

*MLS localizer*

**Navaids en-route radar (Navaids en-route radar)** 28011800

*Navaids en-route radar*

**Navaids marker beacon (Navaids marker beacon)** 28011600

*Navaids marker beacon: A radio beacon installed in conjunction with the instrument landing system (ILS) marker is called a marker beacon.*

**Navaids other radar (Navaids other radar)** 28011900

*Navaids other radar*

**Navaids surface radar (Navaids surface radar)** 28011700

*Navaids surface radar*

**NDB (NDB)** 28011500

*NDB: An LF/MF or UHF radio beacon transmitting non-directional signals whereby the pilot of an aircraft equipped with direction-finding equipment can determine his or her bearing to or from the radio beacon and 'home' on or track to or from the station. When the radio beacon is installed in conjunction with the instrument landing system (ILS) marker, it is normally called a marker beacon.*

**Radio navaids area navigation (Radio navaids area navigation)** 28011100

*Radio navaids area navigation*

**Radio navaids marker (Radio navaids marker)** 28010100

*Radio navaids marker*

**Surface radar (Surface radar)** 28010400

*Surface radar*

**Surveillance radar (Surveillance radar)** 28010200

*Surveillance radar*

**Unspecified navaids (Unspecified navaids)** 28019800

*Unspecified navaids*

**VDF (VDF)** 28011200

*VDF*

**VOR (VOR)** 28011300

*VOR: A ground-based electronic NAVAID that transmits very high frequency navigation signals 360° in azimuth.*

**Meteorological information generally (Meteorological information)** 50000000

*Meteorological information. Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions. ICAO Annex 3.*

**Meteorological service operations (Meteorological service operations)** 100000055

**Maintenance of meteorological facilities (Maintenance)** 51011100

**Meteorological observations (Observations)** 51010900

*Observation (meteorological). The evaluation of one or more meteorological elements. ICAO Annex 3.*

**Relevant particular weather conditions (Weather conditions)** 52000000

**Altimeter setting (Altimeter setting)** 52070000

*Altimeter setting is the means by which all altimeters in controlled air space are set to a standard level as the basis for safe vertical separation. The standard for most en-route flying is 1013.25 hPa (1013.2 mb). When this pressure setting is set on the subscale of any aircraft's sensitive altimeter, it will cause the altimeter to read zero when at mean sea level in the ICAO standard atmosphere. ICAO Doc 9713. The second common setting is QNH at this setting the aircraft's sensitive altimeter will read the difference between the aircraft's height and mean sea level i.e. altitude. The third common setting is QFE at this setting the aircraft's altimeter will read the difference between the aircraft's height and the elevation of the appropriate aerodrome, thus the altimeter will read zero when landing at that aerodrome.*

**Density altitude (Density altitude)** 52070100

*Density altitude is the local pressure altitude corrected for non-International Standard Atmosphere temperature. ISA temperature is 15 degrees Celsius at sea level.*

**Atmospheric restrictions to visibility (Atmospheric visibility)** 52030000

*Visibility. Visibility for aeronautical purposes is the greater of:*
*a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background;*
*b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.*
*Note. The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).*

**Blowing snow (Blowing snow)** 52030900

*Snow is precipitation in the form of feathery ice crystals or large agglomerations in the form of flakes.*

**Cloud amount restricting visibility (Cloud amount)** 52031400

*The cloud amount is the amount of cloud in oktas.*

*Note: this should be coded under 'Clouds'. This value will become obsolete with Release 4.3.*

**Cloud base/ceiling restricting visibility (Cloud base)** 52031500

*The ceiling is the height above the nearest earth's surface of the lowest layer of clouds or obscuring phenomenon that is reported as 'broken', 'overcast' or 'obscuration' but not 'thin' or 'partial'. [FAA].*

*Note: this should be coded under 'Clouds'. This value will become obsolete with Release 4.3.*

**Dust (not volcanic ash) (Dust, not volcanic ash)** 52030100

**Fog (Fog)** 52030400

*Fog is a form of cloud in the surface layers of the atmosphere caused by suspended particles of condensed moisture or smoke, which reduces visibility to less than one kilometre.*

**Haze (Haze)** 52030700

*Haze is an obscuration of the atmosphere near the surface of the earth, caused by an infinite number of minute particles of vapour or similar contaminant in the air, which makes distant objects indistinct and often arises from heat (heat-haze).*

**Mist (Mist)** 52030500

*Mist is a visibility reduction, to between one and 10 kilometres, caused by water droplets.*

**Atmospheric pollution restricting visibility (Pollution)** 52031300

*Pollution is the presence in the environment, or the introduction into it, of products of human activity which have harmful or objectionable effects.*

**Precipitation restricting visibility (Precipitation)** 52030600

*Precipitation is moisture released from the atmosphere especially in large enough particles to fall sensibly except fog and mist. e.g. hail, snow, rain sleet and drizzle.*

**Sand/dust storm (Sand/dust storm)** 52030300

*Sand/dust storm restricting visibility: Particles of sand or dust carried aloft by strong wind. The sand or dust particles are mostly confined to the lowest ten feet, and rarely rise more than fifty feet above the ground.*

**Smoke (Smoke)** 52030800

*Smoke is the visible volatile product given off by burning or smouldering substances.*

**Spray (Spray)** 52031200

*Spray is water blown from, or thrown up by, the waves of the sea, or other large body of water, in the form of a fine shower or mist.*

**Sun glare (Sun glare)** 52031100

*Sun glare is the dazzling brilliance of the sun especially when falling upon reflecting surfaces and not relieved by shadow or the fresh green colour characteristic of flourishing vegetation.*

**Thunderstorm (Thunderstorm)** 52031600

*A thunderstorm is an extremely large cumuliform cloud with a top reaching the stratosphere and spreading out in the form of an ice-crystal anvil.*

*Note: this should be coded under 'General weather'. This value will become obsolete with Release 4.3.*

**Volcanic ash (Volcanic ash)** 52030200

*Volcanic Ash: Fine particles of mineral matter from a volcanic eruption which can be dispersed long distances by winds aloft. The chemical composition and abrasiveness of the particles can seriously affect aircraft and also machinery on the ground.*

**White out conditions (White out)** 52031000

*White out restricting visibility: An atmospheric optical phenomenon of snow-covered regions in which the observer appears to be engulfed in a uniformly white glow. Shadows, the horizon, and clouds are not discernible; depth perception and the sense of orientation are lost; and only very dark, nearby objects can be seen. Whiteout occurs over an unbroken snow cover and beneath a uniformly overcast sky when, with the aid of the snowblink effect, the light from the sky is about equal to that from the snow surface. Blowing snow may be an additional cause.*

**Other restrictions to visibility (Other)** 52031700

**Clouds (Clouds)** 52090000

**Cloud amount (Cloud amount)** 52090200

*The cloud amount is the amount of cloud in oktas.*

**Cloud base (Cloud base)** 52090300

*The ceiling is the height above the nearest earth's surface of the lowest layer of clouds or obscuring phenomenon that is reported as 'broken', 'overcast' or 'obscuration' but not 'thin' or 'partial'. [FAA].*

**Cloud type (Cloud type)** 52090100

**Cumulonimbus (Cumulonimbus)** 52090101

**Top of cloud (Top of cloud)** 52090400

**General weather (General weather)** 52010000

**Meteorological conditions condusive to carburettor icing (Carburettor icing conditions)** 52010700

*Carburettor icing: Ice is formed in venturi type and slide type Carburettors in ambient air temperatures ranging from about -10 °C to 30 °C if refrigeration and adiabatic cooling within the airways are sufficient to lower the air/fuel mixture temperature, and consequently the metal of the Carburetor, below the freezing point. There also must be sufficient moisture in the air, but this need not be visible moisture. Ice may form at the fuel inlet, around the valve or slide, in the venturi and in curved passages, choking off the engine's air supply and, if icing continues, will cause the engine to stop.*
*Temperature reduction within the Carburettor*
*Adiabatic cooling - in the induction system the constrictions at the throttle valve and choke venturi cause a local increase in air velocity, with consequent increase in dynamic pressure and decrease in static pressure. Density remains constant so the temperature instantly decreases in line with the decrease in static pressure, refer 1.2 equation of state. This adiabatic cooling is more noticeable when the throttle is closed, or partly closed, for extended periods, but it is unlikely to be more than a 5 °C drop at the coldest part, probably much less, say 2 - 3 °C .*

*Refrigeration cooling - when fuel is injected into the airstream a certain amount evaporates. The latent heat for fuel evaporation is taken from the surrounding air and metal, which is already being cooled adiabatically. The temperature drop caused by refrigeration may be as much as 15 °C , giving a total drop within the Carburetor as high as 20 °C . If the metal of the Carburetor is thus reduced to a temperature at or below freezing cooled, or supercooled, water droplets will freeze on contact - as in airframe icing.*

*Sublimination of water vapour*
*However even if there is no visible water in the air the temperature reduction may cause ice to be deposited on the freezing metal by sublimation of the water vapour in contact with it, refer 1.5 atmospheric moisture and 1.6 evaporation and latent heat. The amount forming depends on the absolute humidity of the atmosphere. Normally the higher the temperature the greater the absolute humidity can be thus it is possible that when flying in outside air temperatures as high as 20 °C , even 25 °C , Carburetor ice can form. Air having a relative humidity of 25% at 20 °C , or 50% at 10 °C , will reach saturation at 0 °C .*

*However an OAT range of 0 °C to 25 °C , peaking at around 10 °C to 15 °C, with relative humidity exceeding 60%, are the most significant conditions for moderate to severe clear air icing - particularly at low throttle openings.*

*Locally high absolute humidity may also occur in the following conditions:*
*poor atmospheric visibility at low levels, especially early morning and late evening*
*after heavy rainfall in light wind conditions*
*in clear air just after morning fog has dispersed*
*just below a stratiform cloud base.*
*When flying through visible moisture, cloud patches or light rain, some of this moisture will evaporate in the Carburetor, further reducing the temperature in the airstream. The drop is slight but may be enough to tip the scales. The probability of icing is increased if fuel flow is not leaned – the excess fuel injected into the intake airstream increases the refrigeration.*

**Frontal system (Frontal system)** 52010300

*A frontal system is the conditions in the boundary, at the earth's surface, between two contrasting air masses, usually associated with a belt of cloud and precipitation and a more or less sharp change in wind velocity.*

**Humidity (Humidity)** 52010600

*Humidity is the amount of moisture which air contains relative to complete saturation at the given temperature.*

**Instrument meteorological conditions (IMC)** 52010200

*IMC is visibility, distance from clouds, and ceiling less than the minima specified for visual meteorological conditions. N.B. In a control zone, a VFR flight may proceed under instrument meteorological conditions if and as authorized by air traffic control.*

**Lightning (Lightning)** 52010500

*Lightning: A discharge of atmospheric electricity accompanied by a vivid flash of light. During thunderstorms, static electricity builds up within the clouds. A positive charge builds in the upper part of the cloud, while a large negative charge builds in the lower portion. When the difference between the positive and negative charges becomes great, the electrical charge jumps from one area to another, creating a lightning bolt. Most lightning bolts strike from one cloud to another, but they also can strike the ground. These bolts occur when positive charges build up on the ground.*

**Temperature inversion (Temperature inversion)** 52010400 *

*A temperature inversion is an increase of temperature with height in part of the atmosphere (the reverse of the usual situation) or a layer of air having such a temperature gradient.*

**Thunderstorm (Thunderstorm)** 52010800

*A thunderstorm is an extremely large cumuliform cloud with a top reaching the stratosphere and spreading out in the form of an ice-crystal anvil.*

**Visual meteorological conditions (VMC)** 52010100

*The visual meteorological conditions which are expressed in terms of visibility, distance from clouds, and ceiling, equal to or better than specified minima. ICAO Doc 9713.*

**Light conditions generally (Light conditions)** 52080000

**Dawn light (Dawn light)** 52080100

*Dawn is the first appearance of light in the sky before sunrise, or the time when it appears; the beginning of daylight; daybreak.*

**Daylight (Daylight )** 52080200

*Daylight is the light available naturally between sunrise and sunset.*

**Dusk light (Dusk light )** 52080300

*Dusk is the darker stage of twilight before it is quite dark at night.*

**Night/dark (Night/dark )** 52080400

*Night is that part of the natural day (of 24 hours) during which no light is received from the sun; the time between the end of evening twilight and the beginning of morning twilight.*

**Night/moonlit light (Night/moonlit)** 52080500

*Night is that part of the natural day (of 24 hours) during which no light is received from the sun; the time between the end of evening twilight and the beginning of morning twilight.*

**Measurement of visibility (Measurement of visibility)** 52040000

*Visibility for aeronautical purposes is the greater of: a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background; b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background. N.B. The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).*

**Runway visual range (Runway visual range)** 52040100

*Runway visual range is the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.*
*Runway Visual Range (RVR)- An instrumentally derived value, based on standard calibrations, that represents the horizontal distance a pilot will see down the runway*
*from the approach end. It is based on the sighting of either high intensity runway lights or on the visual contrast of other targets whichever yields the greater visual range. RVR, in contrast to prevailing or runway visibility, is based on what a pilot in a moving aircraft should see looking down the runway. RVR is horizontal visual range, not slant visual range. It is based on the measurement of a transmissometer made near the touchdown point of the instrument runway and is reported in hundreds of feet. RVR is used in lieu of RVV and/or prevailing visibility in determining minimums for a particular runway.*

*1. Touchdown RVR- The RVR visibility readout values obtained from RVR equipment serving the runway touchdown zone.*
*2. Mid-RVR- The RVR readout values obtained from RVR equipment located midfield of the runway.*
*3. Rollout RVR- The RVR readout values obtained from RVR equipment located nearest the rollout end of the runway.*

**Precipitation (Precipitation)** 52050000

*Precipitation moisture released from the atmosphere especially in large enough particles to fall sensibly except fog and mist. e.g. hail, snow, rain sleet and drizzle.*

**Freezing drizzle (Freezing drizzle)** 52050800

*Freezing drizzle is precipitation of small super-cooled water droplets from stratus or fog.*

**Freezing rain (Freezing rain)** 52050700

*The effect of freezing rain. Freezing rain is the precipitation of supercooled rain drops.*

**Frost (Frost)** 52050600

*Frost is the small drops of dew which freeze on contact with an object colder than zero degrees Celsius. Dew is atmospheric moisture which condenses on cold objects.*

**Hail (Hail)** 52050400

*Hail is precipitation in the form of hard or soft ice pellets.*

**Icing (Icing)** 52050500

*Icing is an accretion of ice or related material on an aircraft. Includes:*
*Rime Ice: It is a rough, milky, opaque ice formed by the instantaneous freezing of small supercooled droplets as they strike the aircraft. The fact that droplets maintain their nearly spherical shape upon freezing and thus trap air between them gives the ice its opaque*
*appearance and makes it porous and brittle.*
*Clear Ice: It is a glossy, clear or translucent ice formed by the relatively slow freezing of large supercooled droplets. The large droplets spread out over the airfoil of an airplane before complete freezing, forming a sheet of clear ice*

**Rain (Rain)** 52050100

*Rain is precipitation in the form of water droplets making a noticeable impact. Ranges in size from 1 to 5.5 mm.*

**Rain and snow mixed (Rain and snow mixed)** 52050200

*Rain is precipitation in the form of water droplets making a noticeable impact. Ranges in size from 1 to 5.5 mm.*

**Snow (Snow)** 52050300

*Snow is precipitation in the form of feathery ice crystals or large agglomerations in the form of flakes.*

**Effect of temperature generally (Temperature)** 52060000

*Temperature is the property of material systems, commonly called intensity of heat, determining whether they are in thermodynamic equilibrium.*

**Outside air temperature (Outside air temperature)** 52060100

**Temperature inversion (Temperature inversion)** 52060200

*A temperature inversion is an increase of temperature with height in part of the atmosphere (the reverse of the usual situation) or a layer of air having such a temperature gradient.*

**Wind (Wind)** 52020000

*The wind generally. Wind is the air motion relative to the earth's surface.*

**Clear air turbulence (Clear air turbulence)** 52021100

*Clear air turbulence is eddy motion in the atmosphere which is a function of both time and space and occurs clear of cloud.*

**Crosswind (Crosswind)** 52020500

*A wind which is blowing other than directly in line with the aircraft's track.*

**Gale (Gale)** 52020200

*GALE: On the Beaufort Wind Scale, a wind with speeds from 28 to 55 knots (32 to 63 miles per hour). For marine interests, it can be categorized as a moderate gale (28 to 33 knots), a fresh gale (34 to 40 knots), a strong gale (41 to 47 knots), or a whole gale (48 to 55 knots). In 1964, the World Meteorological Organization defined the categories as near gale (28 to 33 knots), gale (34 to 40 knots), strong gale (41 to 47 knots), and storm (48 to 55 knots).*

**Headwind (Headwind)** 52020300

*A wind which is blowing from a direction ahead of abeam the aircraft.*

**Horizontal gusts (Horizontal gusts)** 52020900

*Gust: A sudden significant increase in or rapid fluctuations of wind speed. Peak wind must reach at least 16 knots and the variation between peaks and lulls is at least 10 knots. The duration is usually less twenty seconds.*

**Jet stream (Jet stream)** 52021000

*A jetstream is a quazi-horizontal wind greater than 80 knots [148 km/h] in warm air at a sharp boundary with cold air, high troposphere or stratosphere, mid-latitudes and predominantly westerly.*
*Jet Stream: A narrow band of strong winds in the atmosphere that controls the movement of high and low pressure systems and associated fronts. Jet Streams meander from time to time. Wind speeds can reach 200 mph or higher in certain cases. It is usually found at 30,000 to 40,000 feet above the earth's surface. It owes its existence to the large temperature contrast*
*between the polar and equatorial regions. The position and orientation of jet streams vary from day to day. General weather patterns (hot/cold, wet/dry) are related closely to the position, strength and orientation of the jet stream (or jet streams). A jet stream at low levels is known as a low-level jet.*

**Mountain wave (Mountain wave)** 52021400

*A mountain wave is the result of the surface wind being deflected upward by a barrier of high ground. The resulting airflow descends, some distance after crossing the highest ground, to approximately its original level. Such disturbances create turbulence, down drafts, temperature variations and localized precipitation.*

**Other wind/turbulence (Other wind/turbulence)** 52021700

*Factors relating to wind/turbulence other than those types listed above.*
*Turbulence:The irregular and instantaneous motions of air which is made up of a number of small of eddies that travel in the general air current. Atmospheric turbulence is caused by random fluctuations in the wind flow. It can be caused by thermal or convective currents, differences in terrain and wind speed, along a frontal zone, or variation in temperature and pressure*

**Squall line (Squall line)** 52021900

*Squall: A sudden onset of strong winds with speeds increasing to at least 16 knots (18 miles per hour) and sustained at 22 or more knots for at least one minute. The intensity and duration is longer than that of a gust. It is reported as "SQ"s in an observation and on the METAR.*
*Squall line: A narrow band or line of active thunderstorms that is not associated with a cold front. It may form from an outflow boundary or the leading edge of a mesohigh.*

**Surface wind speed (Surface wind speed)** 52020100

*The wind speed measured at the surface.*
*Variable Wind Direction: A condition when (1) the wind direction fluctuates by 60o or more during the 2-minute evaluation period and the wind speed is greater than 6 knots; or (2) the direction is variable and the wind speed is less than 6 knots.*

**Tailwind (Tailwind)** 52020400

*A wind which is blowing from a direction aft of abeam the aircraft.*

**Terrain induced turbulence (Terrain induced turbulence)** 52022000

*Terrain induced turbulence other than mountain wave*

**Tornado (Tornado)** 52021600

*A tornado is a localized violent wind with such low pressure in the core as to explode structures in its path. The tornado is usually pendant beneath a cumulonimbus cloud.*

**Tropical cyclone, hurricane or tropical storm (Tropical storm)** 52021500

*Hurricane is the name given primarily to the violent wind-storms of the West Indies, which are cyclones of diameter of from 45 to 850 nautical miles, wherein the air moves with a speed of from 70 to 115 knots round a central calm space, which with the whole system advances in a straight or curved track; hence, any storm or tempest in which the wind blows with terrific violence.*
*Tropical Cyclone: It is a warm-core low pressure system which is non-frontal. It originates over tropical and subtropical waters and a has a organized cyclonic (counter-clockwise) surface wind circulation.*

**Turbulence in cloud (Turbulence in cloud)** 52021200

*Air turbulence other than clear air turbulence (CAT).*
*Turbulence:The irregular and instantaneous motions of air which is made up of a number of small of eddies that travel in the general air current. Atmospheric turbulence is caused by random fluctuations in the wind flow. It can be caused by thermal or convective currents, differences in terrain and wind speed, along a frontal zone, or variation in temperature and pressure.*

**Vertical gusts (Vertical gusts)** 52020800

*Vertical wind shear is a change of horizontal wind direction and/or speed with height.*

**Vortex/wake turbulence (Vortex/wake turbulence)** 52021300

*Turbulent air behind an aircraft caused by any of the following: (a) wing-tip vortices;*
*(b) rotor-tip vortices;*
*(c) jet-engine thrust stream or jet blast;*
*(d) rotor downwash;*
*(e) prop wash.*

*Wing tip vortex: A circular pattern of air current created by the movement of an airfoil through the air when the airfoil is generating lift. As an airfoil moves through the atmosphere in sustained flight, an area of high pressure is created beneath it and an area of low pressure is created above it. The air flowing from the high-pressure area to the low-pressure area around and about the tips of the airfoil tends to roll up into two rapidly rotating vortices, cylindrical in shape. These vortices are the predominant parts of aircraft wake turbulence and their rotational force is dependent upon the wing loading, gross weight, and speed of the generating aircraft. The vortices from medium to heavy aircraft can be of extremely high velocity and hazardous to smaller aircraft.*

**Whirlwind (Whirlwind)** 52021800

*A whirlwind is a whirling or rotating wind; an atmospheric eddy or vortex; a body of air moving rapidly in a circular or upward spiral course around a vertical or slightly inclined axis which has also a progressive motion over the surface of land or water. In its larger forms a whirlwind constitutes a violent and destructive storm, as a cyclone or tornado; over a body of water it sometimes causes a waterspout, over a sandy or dusty region a sand-pillar or dust-whirl.*

**Windshear (Windshear)** 52020600

*Windshear is a change in wind speed and/or direction in space, including updrafts and downdrafts. (ICAO Circular 186 - Wind Shear)*

**Windshift (Windshift)** 52020700

*A change in direction of the ambient wind.*

**Weather observation (Weather observation)** 51000000

**Meteorological service equipment (Meteorological service equipment)** 51020000

**Meteorological service instruments (Instruments)** 51020100

**Weather information provision (Weather information provision)** 51010000

**Provision of meteorological advisory in flight (In-flight advisory)** 51010300

**Provision of meteorological information in flight (In-flight information)** 51010200

**Meteorological service operations (Operations)** 51010800 *

**Meteorological service weather briefing (pre-flight) (Pre-flight briefing)** 51010400

*Weather briefing. Oral commentary on existing and/or expected meteorological conditions.*

**Meteorological service's provision of meteorological information for aircraft in flight (VOLMET report)** 51010700

*VOLMET broadcast. Routine broadcast containing, as appropriate, current aerodrome weather reports, aerodrome forecasts and SIGMET messages for aircraft in flight.*

*VOLMET data link service (D-VOLMET). Provision of current aerodrome weather reports, aerodrome forecasts and SIGMET messages through data link.*

*SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations. ICAO Annex 3.*

**Meteorological service weather forecast (Weather forecast)** 51010500

*Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.*

**Meteorological service weather report (Weather report)** 51010600

*Meteorological report. A statement of observed meteorological conditions related to a specified time and location.*

**Updating of weather information by the meteorological service (Weather updating)** 51011000

**Meteorological service weather warning (Weather warning)** 51010100

*Meteorological service weather warning: e.g. AIRMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.*

**Terrain conditions generally (Terrain conditions)** 70000000

**Field surface (Field surface)** 72000000

*A field is open land as opposed to woodland; a stretch of open land; a plain.*

**Ice surface (Ice surface)** 76000000

*Ice surface on terrain or water.*

**Mountain/hill surface (Mountain/hill surface)** 71000000

*Mountainous means comprising natural elevations of the earth's surface rising more or less steeply above the level of the surrounding land. Restricted to heights of greater elevation than what are called hills; but the discrimination is a matter of local usage, heights which in one locality are called mountains being in another reckoned merely as hills. In Great Britain ground which rises to heights greater than 2,000 feet is generally called mountainous; but, in India, ranges of 5,000 and even 10,000 feet are commonly called 'hills', in contrast with the Himalayan Mountains, many peaks of which rise beyond 20,000 feet.*

**Paddock surface (Paddock surface)** 73000000

*A paddock is a small field or enclosure; usually a plot of pasture-land adjoining or near a house or stable.*

**Swampy surface (Swampy surface)** 74000000

*A swamp is a tract of low-lying ground in which water collects; a piece of wet spongy ground; a marsh or bog.*

**Water surface (Water surface)** 75000000

*Lakes, rivers, oceans etc.*

**Other terrain condition (Other terrain condition)** 77000000

*A terrain condition other than those listed above.*

**Undefined (Undefined)** 100000000

*Undefined factors.*

**Unknown factors (Unknown)** 90000000