SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B64 AIRCRAFT; AVIATION; COSMONAUTICS

B64D EQUIPMENT FOR FITTING IN OR TO AIRCRAFT; FLYING SUITS; PARACHUTES; ARRANGEMENTS OR MOUNTING OF POWER PLANTS OR PROPULSION TRANSMISSIONS

Subclass index

FLIGHT ARRANGEMENTS ON AIRCRAFT
- Of power plant and auxiliaries....27/00, 29/00, 33/00, 41/00
- Of power-plant controls and transmissions....31/00, 35/00
- For fuel supply....37/00, 39/00
- Of flying instruments....43/00

USE OF AIRCRAFT
- For military purposes....1/00, 7/00
- For persons or freight....9/00-13/00

SAFETY OR EMERGENCY ARRANGEMENTS OR EQUIPMENTS
- For the aircraft
  - against icing; against lightning....15/00, 45/02
  - for landing....17/80, 45/00
- For jettisoning or other means concerning fuel....37/26, 37/32
- For persons or material
  - by holding or ejecting means....25/00
  - by parachutes; parachuting....17/00-21/00, 23/00
- Other safety, emergency, or protection means....10/00, 25/00, 45/00

EQUIPMENT FOR OPERATIONS PERFORMED DURING FLIGHT
- Releasing or receiving articles, fluent materials, or another aircraft....1/00, 5/00
- Towing, fuel replenishing....3/00, 39/00

OTHER ARRANGEMENTS OR EQUIPMENT....47/00

1/00 **Dropping, ejecting, releasing, or receiving articles, liquids, or the like, in flight** (with respect to weapon sights, F41G takes precedence; parachutes B64D 17/00; ejectable seats B64D 25/10; ejectable capsules B64D 25/12; refuelling during flight B64D 39/00; launching apparatus for projecting projectiles or missiles F41F 1/00, F41F 7/00; rocket or torpedo launchers F41F 3/00)

1/02 • Dropping, ejecting, or releasing articles (jettisonable fuel reservoirs B64D 37/12)

1/04 • • the articles being explosive, e.g. bombs (arming or setting bomb fuzes F42C)

1/06 • • • Bomb releasing; Bomb doors

1/08 • • the articles being load-carrying devices

1/10 • • • Stowage arrangements for the devices in aircraft

1/12 • • • Releasing

1/14 • • • Absorbing landing shocks

1/16 • Dropping or releasing powdered, liquid or gaseous matter, e.g. for fire-fighting (jettisoning fuel B64D 37/26) **[5]**

1/18 • • by spraying, e.g. insecticides (spraying apparatus in general B05B)

1/20 • • for sky-writing

1/22 • Taking-up articles from earth's surface

3/00 **Aircraft adaptations to facilitate towing or being towed** (B64D 39/00 takes precedence; ground installations for launching or towing aircraft B64F; towing ropes per se D07B)

3/02 • for towing targets (towed targets per se F41J)

5/00 **Aircraft transported by aircraft, e.g. for release or reberthing during flight** (flying units formed by separate aircraft B64C 37/02)

7/00 **Arrangement of military equipment, e.g. armaments, armament accessories, or military shielding, in aircraft; Adaptations of armament mountings for aircraft** (dropping bombs or the like B64D 1/00; armaments or mountings therefor per se F41)

7/02 • the armaments being firearms

7/04 • • fixedly mounted

7/06 • • movably mounted

7/08 • Arrangement of rocket launchers (rocket launchers per se, e.g. rocket pods, F41F 3/06)

9/00 **Equipment for handling freight; Equipment for facilitating passenger embarkation or the like** (emergency equipment B64D 17/00, B64D 19/00, B64D 25/00; structures integral with fuselage to facilitate loading, fuselage floors specially adapted for freight, steps mounted on, and retractable within, aircraft B64C; ground installations B64F)

10/00 **Flying suits** (helmets in general A42B 3/00; breathing helmets A62B 18/00) **[3]**

11/00 **Passenger or crew accommodation; Flight-deck installations not otherwise provided for**
11/02 • Toilet fittings (of general application A47K)
11/04 • Galleys
11/06 • Arrangements or adaptations of seats (seat constructions for emergency purposes B64D 25/04)

13/00 **Arrangements or adaptations of air-treatment apparatus for aircraft crew or passengers, or freight space** (treatment rooms with artificial climate for medical purposes A61G 10/02; respiratory apparatus in general A62B; for vehicles in general B60H)
13/02 • the air being pressurised
13/04 • • Automatic control of pressure
13/06 • the air being conditioned (pressurising B64D 13/02)
13/08 • • the air being heated or cooled

15/00 **De-icing or preventing icing on exterior surfaces of aircraft** (motor vehicles specially adapted for carrying de-icing equipment B60P)
15/02 • by ducted hot gas or liquid
15/04 • • Hot gas application
15/06 • • Liquid application (in general B05)
15/08 • • • exuded from surface
15/10 • • • sprayed over surface
15/12 • by electric heating (H05B 3/84 takes precedence; electric heating elements in general H05B) **[5]**
15/14 • • controlled cyclically along length of surface
15/16 • by mechanical means, e.g. pulsating mats or shoes attached to, or built into, surface
15/18 • • the surface being an aerofoil, rotor, or propeller
15/20 • Means for detecting icing or initiating de-icing
15/22 • • Automatic initiation by icing detector

17/00 **Parachutes** (non-canopied parachutes B64D 19/00)
17/02 • Canopy arrangement or construction
17/04 • • formed with two or more canopies arranged about a common axis
17/06 • • formed with two or more canopies arranged in a cluster
17/08 • • Secondary or shock-absorbing canopies attached to load line
17/10 • • Ribbon construction or the like
17/12 • • constructed to provide variable or non-uniform porosity over area of canopy
17/14 • • with skirt or air-deflecting panels
17/16 • • • secured to hem of main canopy
17/18 • • Vent arrangement or construction
17/20 • • • variable in area
17/22 • Load suspension
17/24 • • Rigging lines
17/26 • • • attached to hem of canopy
17/28 • • • attached to apex of canopy
17/30 • • Harnesses **[4]**
17/32 • • • Construction of quick-release box
17/34 • • adapted to control direction or rate of descent
17/36 • • incorporating friction devices or frangible connections to reduce shock loading of canopy
17/38 • • Releasable fastening devices between parachute and load or pack
17/40 • Packs
17/42 • • rigid
17/44 • • • forming part of load
17/46 • • Closing means
17/48 • • with separate pack for extractor of auxiliary parachute
17/50 • • formed with separate compartments for main canopy, rigging lines, or auxiliary parachute
17/52 • • Opening, e.g. manual
17/54 • • • automatic
17/56 • • • • responsive to barometric pressure
17/58 • • • • responsive to time-delay mechanism
17/60 • • • • by static line
17/62 • Deployment
17/64 • • by extractor parachute
17/66 • • • attached to hem of main canopy
17/68 • • • attached to apex of main canopy
17/70 • • by springs
17/72 • • by explosive or inflatable means (connection of valves to inflatable elastic bodies B60C 29/00)
17/74 • • Sequential deployment of a plurality of canopies
17/76 • • facilitated by method of folding or packing
17/78 • in association with other load-retarding apparatus
17/80 • in association with aircraft, e.g. for braking thereof

19/00 **Non-canopied parachutes**
19/02 • Rotary-wing parachutes

21/00 **Testing of parachutes**

23/00 **Training of parachutists**

25/00 **Emergency apparatus or devices, not otherwise provided for** (parachutes B64D 17/00, B64D 19/00; jettisoning of fuel tanks or fuel B64D 37/00; safety belts or body harnesses in general A62B 35/00; safety belts or body harnesses for land vehicles B60R 22/00; severable or jettisonable parts of fuselage facilitating emergency escape B64C) **[4]**
25/02 • Supports or holding means for living bodies (for ejector seats B64D 25/115) **[5]**
25/04 • • Seat modifications
25/06 • • Harnessing **[4]**
25/08 • Ejecting or escaping means (escape apertures B64C)
25/10 • • Ejector seats
25/102 • • • Propelling means, e.g. by a combination of catapult and rocket means (B64D 25/11, B64D 25/112 take precedence) **[5]**
25/105 • • • • by catapult means only **[5]**
25/108 • • • • by rocket means only **[5]**
25/11 • • • Controlling attitude or direction of ejector seat or associated mechanism prior to ejection **[5]**
25/112 • • • Controlling attitude or direction of ejector seat after ejection **[5]**
25/115 • • • Occupant restraining, positioning or protecting devices **[5]**
25/118 • • • Separation of occupant from seat after ejection **[5]**
25/12 • • Ejectable capsules
25/14 • • Inflatable escape chutes (connection of valves to inflatable elastic bodies B60C 29/00)
25/16 • • Dinghy stowage
25/18 • • Flotation gear (aircraft alighting gear B64C)
25/20 • • Releasing of crash-position indicators

27/00 **Arrangement or mounting of power plant in aircraft; Aircraft characterised thereby** (attitude, flight-direction, or altitude control of aircraft by jet reaction B64C)

27/02 • Aircraft characterised by the type or position of power plant (fuselages or wings adapted for mounting power plant B64C)
27/04 • • of piston type
27/06 • • • within, or attached to, wing
27/08 • • • within, or attached to, fuselage
27/10 • • of gas-turbine type (B64D 27/16 takes precedence)
27/12 • • • within, or attached to, wing
27/14 • • • within, or attached to, fuselage
27/16 • • of jet type
27/18 • • • within, or attached to, wing
27/20 • • • within, or attached to, fuselage
27/22 • • using atomic energy
27/24 • • using steam, electricity, or spring force (B64D 27/16 takes precedence)
27/26 • Aircraft characterised by construction of power-plant mounting

29/00 Power-plant nacelles, fairings, or cowlings (nacelles not otherwise provided for B64C)
29/02 • associated with wings (wings adapted for mounting power plant B64C)
29/04 • associated with fuselages
29/06 • Attaching of nacelles, fairings, or cowlings
29/08 • Inspection panels for power plants

31/00 Power plant control; Arrangement thereof (flying controls, conjoint control of power plant and propeller B64C)
31/02 • Initiating means
31/04 • • actuated personally
31/06 • • actuated automatically
31/08 • • • for keeping cruising speed constant
31/10 • • • for preventing asymmetric thrust upon failure of one power plant
31/12 • • • for equalising or synchronising power plants
31/14 • Transmitting means between initiating means and power plants

33/00 Arrangement in aircraft of power plant parts or auxiliaries not otherwise provided for
33/02 • of combustion air intakes (air intakes for gas-turbine plants or jet-propulsion plants per se F02C 7/04; air intakes for combustion engines in general F02M 35/00)
33/04 • of exhaust outlets or jet pipes (exhaust outlets for combustion engines in general F01N; jet pipes or nozzles for jet-propulsion plants per se F02K; plants characterised by the form or arrangement of the jet pipe or nozzle F02K) **[3]**
33/08 • of power plant cooling systems (cooling of internal-combustion engines per se F01P; cooling of gas-turbine plants or jet-propulsion plants per se F02C, F02K)
33/10 • • Radiator arrangement
33/12 • • • of retractable type

35/00 Transmitting power from power plant to propellers or rotors; Arrangements of transmissions (propellers or rotors per se, helicopter transmissions B64C)
35/02 • characterised by the type of power plant
35/04 • characterised by the transmission driving a plurality of propellers or rotors
35/06 • • the propellers or rotors being counter-rotating
35/08 • characterised by the transmission being driven by a plurality of power plants

37/00 Arrangements in connection with fuel supply for power plant (refuelling during flight B64D 39/00)
37/02 • Tanks (tanks constructed integrally with aircraft wings B64C; tanks in general B65D)
37/04 • • Arrangement thereof in or on aircraft
37/06 • • Constructional adaptations thereof
37/08 • • • Internal partitioning
37/10 • • • to facilitate fuel pressurisation
37/12 • • • jettisonable
37/14 • • Filling or emptying (transferring fuels to adjust aircraft trim B64C)
37/16 • • • Filling systems (ground installations for fuelling aircraft B64F)
37/18 • • • • Conditioning fuel during filling
37/20 • • • Emptying systems
37/22 • • • • facilitating emptying in any position of tank
37/24 • • • • using gas pressure
37/26 • • • • Jettisoning of fuel
37/28 • • • • Control thereof
37/30 • Fuel systems for specific fuels
37/32 • Safety measures not otherwise provided for, e.g. preventing explosive conditions (extinguishing or preventing fires in aircraft A62C)
37/34 • Conditioning fuel, e.g. heating (during filling B64D 37/18)

39/00 Refuelling during flight (filling or emptying fuel tanks B64D 37/14)
39/02 • Means for paying-in or out hose
39/04 • Adaptations of hose construction (pipes in general F16L)
39/06 • Connecting hose to aircraft; Disconnecting hose therefrom

41/00 Power installations for auxiliary purposes

43/00 Arrangements or adaptations of instruments (arrangements of cameras B64D 47/08; aeronautical measuring instruments per se G01C)
43/02 • for indicating aircraft speed or stalling conditions

45/00 Aircraft indicators or protectors not otherwise provided for (camouflage F41H 3/00)
45/02 • Lightning protectors (lightning arrestors H01C 7/12, H01C 8/04, H01G 9/18, H01T; circuit arrangements therefor H02H); Static dischargers (in general H05F 3/00)
45/04 • Landing aids; Safety measures to prevent collision with earth's surface
45/06 • • mechanical
45/08 • • optical

47/00 Equipment not otherwise provided for
47/02 • Arrangements or adaptations of signal or lighting devices
47/04 • • the lighting devices being primarily intended to illuminate the way ahead
47/06 • • for indicating aircraft presence
47/08 • Arrangements of cameras