

## ECLA EUROPEAN CLASSIFICATION

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

[N: **WARNING**

[C0412] The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:

<a href="#">B64D15/18</a>	covered by	<a href="#">B64D15/16</a>
<a href="#">B64D25/102</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/105</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/108</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/11</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/112</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/115</a>	covered by	<a href="#">B64D25/10</a>
<a href="#">B64D25/118</a>	covered by	<a href="#">B64D25/10</a>

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**B64D1/00** Dropping, ejecting, releasing, or receiving articles, liquids, or the like, in flight (with respect to weapon sights devices [F41G](#) takes precedence, parachutes per se [B64D17/00](#); ejectable seats [B64D25/10](#); ejectable capsules [B64D25/12](#); refuelling during flight [B64D39/00](#); launching apparatus for projecting projectiles or missiles [F41F1/00](#), [F41F7/00](#); rocket or torpedo launchers [F41F3/00](#))

- B64D1/02 . Dropping, ejecting, or releasing articles ([jettisonable fuel reservoirs B64D37/12](#))
- B64D1/04 . . the articles being explosive, e.g. bombs ([arming or setting bomb fuzes F42C](#))
- B64D1/06 . . . Bomb releasing; Bombs doors
- B64D1/08 . . the articles being load-carrying devices
- B64D1/10 . . . Stowage arrangements for the devices in aircraft
- B64D1/12 . . . Releasing
- B64D1/14 . . . Absorbing landing shocks
  
- B64D1/16 . Dropping or releasing powdered, liquid, or gaseous matter, e.g. for fire-fighting ([jettisoning fuel B64D37/26](#))
- B64D1/18 . . by spraying, e.g. insecticides ([spraying apparatus per se B05B](#))
- B64D1/20 . . for sky-writing
  
- B64D1/22 . Taking-up articles from earth`s surface

**B64D3/00** Aircraft adaptations to facilitate towing or being towed ([B64D39/00](#) takes precedence; ground installations for launching or towing aircraft [B64F](#); towing ropes per se [D07B](#))

- B64D3/02 . for towing targets ([towed targets per se F41J](#))

**B64D5/00** Aircraft transported by aircraft, e.g. for release or reberthing during flight (flying units formed by separate aircraft [B64C37/02](#))

- B64D7/00**                    **Arrangements of military equipment, e.g. armaments, armament accessories, or military shielding, in aircraft; Adaptations of armament mountings for aircraft (dropping bombs or the like [B64D1/00](#); armaments or mountings therefor per se [F41](#))**
- B64D7/02                    . the armaments being firearms
- B64D7/04                    . . fixedly mounted
- B64D7/06                    . . movably mounted
- B64D7/08                    . Arrangements of rocket launchers [N: or releasing means] (rocket launchers per se, e.g. rocket pods, [F41F3/06](#))
- B64D9/00**                    **Equipment for handling freight; Equipment for facilitating passenger embarkation or the like (emergency equipment 17/00, 19/00, 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](#))**
- B64D9/00A                    . [N: Devices for retaining pallets or freight containers (securing freight containers on vehicles [B60P7/00](#))] [N9710]
- B64D10/00**                    [N: Flying suits (helmets in general [A42B3/00](#); breathing helmets [A62B18/00](#))]
- B64D11/00**                    **Passenger or crew accomodation; Flight-deck installations not otherwise provided for**
- B64D11/00B                    . [N: Devices specially adapted for food or beverage distribution services]
- B64D11/00C                    . [N: Arrangements for entertainment or communications, e.g. radio, television]
- B64D11/00D                    . [N: Movable or removable cabin dividers, e.g. for class separation (bulkheads [B64C1/10](#))]
- B64D11/00E                    . [N: Stowage devices for passengers` personal luggage] [N9409]
- B64D11/02                    . Toilet fittings (of general application [A47K](#))
- B64D11/04                    . Galleys
- B64D11/06                    . Arrangements or adaptations of seats (seat constructions for emergency purposes [B64D25/04](#); [N: seat accessories [B60N3/00](#)])
- B64D11/06B                    . . [N: specially adapted for pilots] [C9501]
- B64D11/06C                    . . [N: Width modification of seat assemblies, e.g. for class modification] [N9501]
- B64D11/06D                    . . [N: Means for fastening seats to floors, e.g. to floor rails] [N9501]
- B64D13/00**                    **Arrangements or adaptations of air-treatment apparatus for aircraft crew or passenger, or freight space; [N: or structural parts of the aircraft] (treatment rooms with artificial climate for medical purposes [A61G10/02](#); respiratory apparatus in general [A62B](#); for for vehicles in general [B60H](#)) [C9810]**
- B64D13/00B                    . [N: the air being used to cool structural parts of the aircraft] [N9810]

- B64D13/02 . the air being pressurised
- B64D13/04 . . Automatic control of pressure
- B64D13/06 . the air being conditioned ([pressurising B64D13/02](#))
- B64D13/08 . . the air being heated or cooled
  
- B64D15/00** **De-icing or preventing icing on exterior surfaces of aircraft** ([motor vehicles specially adapted for carrying de-icing equipment B60P](#); [[N:Ground-installations for de-icing aircraft B64F5/00C](#)])
  
- B64D15/02 . by ducted hot gas or liquid
- B64D15/04 . . Hot gas application
- B64D15/06 . . Liquid application ([in general B05](#))
- B64D15/08 . . . exuded from surface
- B64D15/10 . . . sprayed over surface
  
- B64D15/12 . by electric heating ([electric heating elements in general H05B](#))
- B64D15/14 . . controlled cyclically along length of surface
  
- B64D15/16 . by mechanical means
- B64D15/16B . . [[N: using electro-impulsive devices](#)]
- B64D15/16C . . [[N: using pneumatic boots](#)]
  
- B64D15/20 . Means for detecting icing or initiating de-icing
- B64D15/22 . . Automatic initiation by icing detector
  
- B64D17/00** **Parachutes** ([non canopied parachutes B64D19/00](#))
  
- B64D17/02 . Canopy arrangement or construction  
  
  - [[N: Note](#)  
[B64D17/02B](#) takes precedence over [B64D17/04](#) - [B64D17/18](#)  
]
- B64D17/02B . . [[N: for gliding chutes](#)]
- B64D17/04 . . formed with two or more canopies arranged about a common axis
- B64D17/06 . . formed with two or more canopies arranged in a cluster
- B64D17/08 . . Secondary or shock-absorbing canopies attached to load line
- B64D17/10 . . Ribbon construction or the like
- B64D17/12 . . constructed to provide variable or non-uniform porosity over area of canopy
- B64D17/14 . . with skirt or air-deflecting panels
- B64D17/16 . . . secured to hem of main canopy
- B64D17/18 . . Vent arrangement or construction
- B64D17/20 . . . variable in area
  
- B64D17/22 . Load suspension

- B64D17/24 . . Rigging lines
- B64D17/26 . . . attached to hem of canopy
- B64D17/28 . . . attached to apex of canopy
- B64D17/30 . . Harnesses ([harnesses per se A62B](#))
- B64D17/32 . . . Construction of quick-release box
- B64D17/34 . . adapted to control direction or rate of descent
- B64D17/34B . . . [N: by reefing means]
- B64D17/34C . . . [N: by anti-squid lines]
- B64D17/36 . . incorporating friction devices or frangible connections to reduce shock loading of canopy [N: ([B64D17/34B](#), [B64D17/34C](#) take precedence)]
- B64D17/38 . . Releasable fastening devices between parachute and load or pack
- B64D17/38B . . . [N: Cargo release hooks]
- B64D17/38C . . . [N: Devices adapted to cut lines or straps]
  
- B64D17/40 . Packs
- B64D17/42 . . rigid
- B64D17/44 . . . forming part of load
- B64D17/46 . . Closing means
- B64D17/48 . . with separate pack for extractor of auxiliary parachute
- B64D17/50 . . formed with separate compartments for main canopy, rigging lines, or auxiliary parachute
- B64D17/52 . . Opening, e.g. manual
- B64D17/54 . . . automatic
- B64D17/56 . . . . responsive to barometric pressure
- B64D17/58 . . . . responsive to time-delay mechanism
- B64D17/60 . . . . by static line
  
- B64D17/62 . Deployment
- B64D17/64 . . by extractor parachute
- B64D17/66 . . . attached to hem of main canopy
- B64D17/68 . . . attached to apex of main canopy
- B64D17/70 . . by springs
- B64D17/72 . . by explosive or inflatable means
- B64D17/72B . . . [N: by explosive means]
- B64D17/74 . . Sequential deployment of a plurality of canopies
- B64D17/76 . . facilitated by method of folding or packing
  
- B64D17/78 . in association with other load-retarding apparatus
- B64D17/80 . in association with aircraft, e.g. for braking thereof
  
- B64D19/00 Non-canopied parachutes**
- B64D19/02 . Rotary-wing parachutes

- B64D21/00**                    **Testing of parachutes**
- B64D23/00**                    **Training of parachutists**
- B64D25/00**                    **Emergency apparatus or devices, not otherwise provided for** (parachutes [B64D17/00](#), [B64D19/00](#); jettisoning of fuel tanks or fuel per se [B64D37/00](#); [N: specially adapted for protection against criminal attack, e.g. anti-hijacking systems [B64D45/00H](#)]; safety belts or body harnesses in general [A62B35/00](#); safety belts or body harnesses for land vehicles [B60R22/00](#); jettisonable parts of fuselage facilitating emergency escape [B64C](#)) [[C9609](#)]
- [B64D25/02](#)                    .    Supports or holding means for living bodies
- [B64D25/04](#)                    .    .    Seat modifications
- [B64D25/06](#)                    .    .    Harnessing
- [B64D25/08](#)                    .    Ejecting or escaping means (escape apertures [B64C](#))
- [B64D25/10](#)                    .    .    Ejector seats
- [B64D25/12](#)                    .    .    Ejectable capsules
- [B64D25/14](#)                    .    .    Inflatable escape chutes
- [B64D25/16](#)                    .    .    Dinghy stowage
- [B64D25/18](#)                    .    .    Flotation gear (aircraft alighting gear [B64C](#))
- [B64D25/20](#)                    .    .    Releasing of crash position indicators
- B64D27/00**                    **Arrangement or mounting of power plant in aircraft; Aircraft characterised thereby** (attitude, flight direction, or altitude control of aircraft by jet reaction [B64C](#))
- [B64D27/02](#)                    .    Aircraft characterised by the type or position of power plant (fuselages or wings adapted for mounting power plant [B64C](#))
- [B64D27/02B](#)                    .    .    [N of rocket type e.g. for assisting taking-off or braking]
- [B64D27/04](#)                    .    .    of piston type
- [B64D27/06](#)                    .    .    .    within or attached to wing
- [B64D27/08](#)                    .    .    .    within or attached to fuselage
- [B64D27/10](#)                    .    .    of gas-turbine type ([B64D27/16](#) takes precedence)
- [B64D27/12](#)                    .    .    .    within or attached to wing
- [B64D27/14](#)                    .    .    .    within or attached to fuselage
- [B64D27/16](#)                    .    .    of jet type
- [B64D27/18](#)                    .    .    .    within or attached to wing
- [B64D27/20](#)                    .    .    .    within or attached to fuselage
- [B64D27/22](#)                    .    .    using atomic energy
- [B64D27/24](#)                    .    .    using steam, electricity, or spring force ([B64D27/16](#) takes precedence)
- [B64D27/26](#)                    .    Aircraft characterised by construction of power-plant mounting
- B64D29/00**                    **Power-plant nacelles, fairings, or cowlings** (nacelles not otherwise provided for [B64C](#))

- B64D29/02 . associated with wings ([wings adapted for mounting power plant B64C](#))
- B64D29/04 . associated with fuselages
- B64D29/06 . Attaching of nacelles, fairings or cowlings
- B64D29/08 . Inspection panels for power plants
  
- B64D31/00** **Power plant control; Arrangement thereof** ([flying controls B64C](#)) [N: [F02](#) takes precedence]
- B64D31/02 . Initiating means
- B64D31/04 . . actuated personally
- B64D31/06 . . actuated automatically
- B64D31/08 . . . for keeping cruising speed constant ([conjoint control of power plant and propeller B64C](#))
- B64D31/10 . . . for preventing asymmetric thrust upon failure of one power plant
- B64D31/12 . . . for equalising or synchronising power plants
- B64D31/14 . Transmitting means between initiating means and power plants
  
- B64D33/00** **Arrangements in aircraft of power plant parts or auxiliaries not otherwise provided for**
- B64D33/02 . of combustion air intakes ([air intakes for gas-turbine plants or jet-propulsion plants per se F02C7/04](#); [air intakes for combustion engines in general F02M35/00](#))
- B64D33/04 . 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) [N: [attitude, flight direction, or altitude control by jet reaction B64C](#)]
- B64D33/06 . . [N: [IPC2](#)] Silencing exhaust or propulsion jets ([ground installations B64F](#))
- B64D33/08 . 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, K](#))
- B64D33/10 . . Radiator arrangement
- B64D33/12 . . . of retractable type
  
- B64D35/00** **Transmitting power from power plant to propellers or rotors; Arrangements of transmissions** ([propellers or rotors per se, helicopter transmissions B64C](#))
- B64D35/02 . characterised by the type of power plant
- B64D35/04 . characterised by the transmission driving a plurality of propellers or rotors
- B64D35/06 . . the propellers or rotors being counter-rotating
- B64D35/08 . characterised by the transmission being driven by a plurality of power plants
  
- B64D37/00** **Arrangements in connection with fuel supply for power plant** ([refuelling during flight](#))

**B64D39/00**

- B64D37/00A . [N: Accessories not provided for in the groups [B64D37/02](#) to [B64D37/28](#)]
- B64D37/02 . Tanks (tanks constructed integrally with aircraft wings [B64C](#); shape or construction of tanks per se [B65D](#))
- B64D37/04 . . Arrangement thereof in or on aircraft
- B64D37/06 . . Constructional adaptations thereof
- B64D37/08 . . . Internal partitioning
- B64D37/10 . . . to facilitate fuel pressurisation
- B64D37/12 . . . jettisonable
- B64D37/14 . . Filling or emptying (transferring fuels to adjust aircraft trim [B64C](#))
- B64D37/16 . . . Filling systems (ground installations for fuelling aircraft [B64E](#))
- B64D37/18 . . . . Conditioning fuel during filling
- B64D37/20 . . . . Emptying systems
- B64D37/22 . . . . facilitating emptying in any position of tank
- B64D37/24 . . . . using gas pressure
- B64D37/26 . . . . Jettisoning of fuel
- B64D37/28 . . . . Control thereof

B64D37/30 . Fuel systems for specific fuels

B64D37/32 . Safety measures not otherwise provided for, e.g. preventing explosive conditions (extinguishing or preventing fires in aircraft [A62C](#))

B64D37/34 . Conditioning fuel, e.g. heating (during filling [B64D37/18](#))

**B64D39/00**      **Refuelling during flight** (filling or emptying fuel tanks [B64D37/14](#))

B64D39/02 . Means for paying-in or out hose

B64D39/04 . Adaptations of hose construction (pipes in general [F16L](#))

B64D39/06 . Connecting hose to aircraft; Disconnecting hose therefrom

**B64D41/00**      **Power installations for auxiliary purposes**

B64D41/00R . [N: Ram air turbines] [[N0309](#)]

**B64D43/00**      **Arrangements or adaptations of instruments** (arrangements of cameras [47/08](#); aeronautical measuring instruments per se [G01C](#))

B64D43/02 . for indicating aircraft speed or stalling conditions

**B64D45/00**      **Aircraft indicators or protectors not otherwise provided for** (camouflage [F41H3/00](#))

- B64D45/00B . [N: Devices specially adapted to indicate the position of a movable element of the aircraft, e.g. landing gear]
- B64D45/00H . [N: Devices specially adapted for the protection against criminal attack, e.g. anti-hijacking systems]
- B64D45/02 . Lightning protectors; Static dischargers (in general [H01T](#))
- B64D45/04 . Landing aids; Safety measures to prevent collision with earth`s surface
- B64D45/06 . . mechanical
- B64D45/08 . . optical
  
- B64D47/00**      **Equipment not otherwise provided for**
- B64D47/02 . Arrangements or adaptations of signal or lighting devices
- B64D47/04 . . the lighting devices being primarily intended to illuminate the way ahead
- B64D47/06 . . for indicating aircraft presence
  
- B64D47/08 . Arrangements of cameras