

# ECCAIRS 4.2.8

## Data Definition Standard

### Event phases

The ECCAIRS 4 event phases are based on ICAO's ADREP 2000 taxonomy. They have been organised at five hierarchical levels. A phase can be defined at each desired level.

ECCAIRS 4		Event phases	Data Definition Standard
10000	Powered aircraft.		<b>Powered aircraft</b>
	<i>Phases of flight of a powered aircraft.</i>		
10100	Standing.		<b>Standing</b>
	<i>The phase of flight from the time the first person boards the aircraft with the intention of flight until push-back or, if pushback does not apply, until taxiing from the gate or parking position is commenced. subsequently, from engine shut down upon reaching the gate or parking position after flight until the last person has exited the aircraft.</i>		
010101	Standing : Engine(s) not operating.		<b>Standing : Engines not</b>
	<i>The phase of flight after the first person boards the aircraft with the intention of flight until the first engine is started. subsequently, from engine shut down upon reaching the destination after flight until the last person has exited the aircraft.</i>		
010102	Standing : Starting engines.		<b>Standing : Starting engines</b>
	<i>The phase of flight, while the aircraft is parked with the intention of flight, during which the first engine is started.</i>		
010103	Standing : engines operating.		<b>Standing : engines</b>
	<i>The phase of flight following engine start-up, or after post-flight arrival at the destination.</i>		
010104	Standing : Engine run-up.		<b>Standing : Engine run-up</b>
	<i>The phase of flight after start-up, during which power is applied to engines, for a pre-flight engine performance test.</i>		
010105	Standing : Rotors running.		<b>Standing : Rotors running</b>
	<i>The phase of flight when the helicopter is standing with its rotors turning prior to take-off or after landing.</i>		
010198	Standing : Other.		<b>Standing : Other</b>
	<i>An event involving any standing phase of flight other than one of the above.</i>		
10200	taxi		<b>taxi</b>
	<i>The phase of flight in which movement of an aircraft on the surface of an aerodrome under its own power occurs, excluding take-off and landing. icao annex 2.</i>		
010201	Push-back/tow.		<b>Push-back/tow</b>
	<i>The phase of flight when an aircraft is moving from the gate or parking position, not under its own power, but with the assistance of a tug.</i>		
010202	Taxiing to/from runway.		<b>Taxiing to/from runway</b>
	<i>The phase of flight, after reaching the movement area, when the aircraft progresses under its own power to the departure runway, or post-flight moves under its own power after leaving the landing runway.</i>		
010203	Air taxi/hover taxi.		<b>Air taxi/hover taxi</b>
	<i>Air-taxiing. movement of a helicopter/vtol above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kt). icao annex 2.</i>		
010204	power- back		<b>power-back</b>
	<i>reversing the aircraft using its own means of propulsion</i>		
010298	Taxiing: Other.		<b>Taxiing: Other</b>
	<i>An event involving any phase of taxiing other than one of the above.</i>		
10300	Take-off.		<b>Take-off</b>
	<i>The phase of flight from the application of take-off power until reaching the first prescribed power reduction, or until reaching the vfr pattern or 1,500 feet (450 metres) above runway end elevation, whichever comes first or the termination (abort) of the take-off.</i>		
010301	Take-off run.		<b>Take-off run</b>
	<i>The phase of flight from the application of take-off power, through the take-off roll and rotation up to 50 feet [15 metres] above runway end elevation.</i>		
010302	Initial climb.		<b>Initial climb</b>
	<i>The phase of flight from 50 feet [15 metres] above runway end elevation to the first prescribed power reduction, or until reaching 1500 feet (450 metres).</i>		
010303	Aborted take-off.		<b>Aborted take-off</b>
	<i>The phase of flight in which any attempt is made to terminate a take-off between the application of take-off power, through rotation and up to 50 feet [or 15 metres] above the elevation of the runway end.</i>		
010304	Climb into traffic pattern.		<b>Climb into traffic pattern</b>
	<i>The phase of flight from 50 feet [15 metres] above runway end elevation to the first prescribed power reduction on reaching the vfr pattern. applies to pilot training in which the aircraft's climb phase is not intended to reach altitude.</i>		

ECCAIRS 4		Event phases	Data Definition Standard
010305	Emergency descent during take-off.  <i>The phase of flight in which an intentional descent is made, in response to an emergency, which occurs after rotation but before the first prescribed power reduction, on reaching 1500 feet (450 metres) or the vfr pattern, whichever comes first.</i>		<b>Emergency descent during</b>
010306	Uncontrolled descent during take-off.  <i>The phase of flight in which any uncontrolled descent occurs after rotation but before the first prescribed power reduction, on reaching 1500 feet (450 metres) or the vfr pattern, whichever comes first.</i>		<b>Uncontrolled descent</b>
010307	Vertical-take-off (helicopter)  <i>Vertical-take-off (helicopter)</i>		<b>Vertical-take-off (helicopter)</b>
010308	Hovering / transition to forward flight on take-off  <i>Hovering during the take-off phase.</i>  <i>Hovering is a maneuver in which the helicopter is maintained in nearly motionless flight over a reference point at a constant altitude and on a constant heading.</i>		<b>Hovering - take-off</b>
010398	Take-off: Other.  <i>The phase of flight in which any event occurs during take-off, other than one of the above.</i>		<b>Take-off: Other</b>
10400	En-route.  <i>The phase of flight from the completion of initial climb at the departure aerodrome to the completion of controlled descent to the outer marker [ifr] or [vfr] to completion of the controlled descent to the vfr pattern or 1,500 feet [450 metres] above runway end elevation, whichever comes first.</i>		<b>En-route</b>
010401	Climb to cruising level or altitude.  <i>The phase of flight in which the climb from the completion of the initial climb to cruising level or altitude occurs.</i>		<b>Climb to cruising level or</b>
010402	Cruise.  <i>The phase of flight from the top of climb to cruise altitude, or flight level, to the start of the descent toward the destination aerodrome or landing site.</i>		<b>Cruise</b>
010403	Change of cruise level..  <i>The phase of flight during which the aircraft climbs, or descends, from one cruising flight level or altitude to the next cruising flight level or altitude.</i>  <i>cruise climb. an aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases.doc 4444</i>		<b>Change of cruise level</b>
010404	Normal descent.  <i>The phase of flight in which a controlled descent is made from cruise to the initial approach fix, final approach fix, outer marker, 1500 feet above runway end elevation, or entry to the vfr pattern, whichever occurs first.</i>		<b>Normal descent</b>
010405	Emergency descent en-route.  <i>The phase of flight in which an intentionally rapid, or premature, descent is made en-route, in response to an in-flight emergency. the descent is controlled by the crew.</i>		<b>Emergency descent en-</b>
010406	Uncontrolled descent en-route.  <i>The phase of flight in which an uncontrolled descent is made en-route.</i>		<b>Uncontrolled descent en-</b>
010407	En-route - holding.  <i>The phase of flight, in which a pre-determined ad-hoc manoeuvre occurs, which keeps the aircraft within a specified airspace en-route awaiting further instructions.</i>		<b>En-route-holding</b>
010498	En-route: Other.  <i>Any phase of flight en-route, other than one of the above.</i>		<b>En-route: Other</b>
10500	Manoeuvring.  <i>An event involving a phase of flight in which planned low-level flight, or attitude, or planned abnormal attitude, or abnormal acceleration occurs.</i>		<b>Manoeuvring</b>
010501	Aerobatics.  <i>An event involving any phase of flight in which manoeuvring into an abrupt change in attitude, abnormal attitude or abnormal acceleration occurs, (usually associated with air shows and military flight).</i>		<b>Aerobatics</b>
010502	Low flying.  <i>The phase of flight made at a height below the normal minima, e.g. in preparation for, or during, observation work, demonstration, photography work or aerial application.</i>		<b>Low flying</b>
010503	Emergency descent.  <i>The phase of flight in which an intentionally rapid or premature descent, from a previously normal manoeuvre, is made in response to an in-flight emergency. the descent is controlled by the crew.</i>		<b>Emergency descent</b>

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010504	Uncontrolled descent. <i>The phase of flight in which an uncontrolled descent from a previously normal manoeuvre occurs.</i>		<b>Uncontrolled descent</b>
010507	Autorotative descent <i>Autorotation: a rotorcraft flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft is in motion.</i> <i>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</i>		<b>Autorotative descent</b>
010508	Hovering in ground effect <i>Hovering in ground effect. Hover: The helicopter maintains a constant position at a selected point.</i> <i>Ground effect is a condition of improved performance encountered when operating near (within 1/2 rotor diameter) of the ground</i>		<b>Hovering in ground effect</b>
010509	Hovering out of ground effect <i>Hovering out of ground effect. The helicopter maintains a constant position at a selected point.</i> <i>Ground effect is a condition of improved performance encountered when operating near (within 1/2 rotor diameter) of the ground</i>		<b>Hovering out of ground</b>
010598	Manoeuvring: other <i>An event involving any phase of manoeuvring flight other than one of the above.</i>		<b>Manoeuvring: other</b>
10600	Approach. <i>The phase of flight from the outer marker to the to the point of transition from nose-low to nose-high attitude immediately prior to the flare above the runway [ifr]; or [vfr] from 1500 feet (450 metres) above the runway end elevation or from the point of vfr pattern entry to the flare above the runway.</i>		<b>Approach</b>
010601	Intermediate approach. <i>The phase of flight between the middle approach fix and the final approach fix; or between the end of a reversal procedure or dead-reckoning track procedure and the final approach fix.</i>		<b>Intermediate approach</b>
010602	Final approach. <i>Final approach. that part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified,</i> <i>a) at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or</i> <i>b) at the point of interception of the last track specified in the approach procedure; and</i> <i>ends at a point in the vicinity of an aerodrome from which:</i> <i>1) a landing can be made; or</i> <i>2) a missed approach procedure is initiated.</i> <i>icao annex 11</i>		<b>Final approach</b>
010603	Circuit pattern - downwind. <i>The phase of vfr flight from 1500 feet above runway end elevation (450 metres) or the point of vfr pattern entry; commences at about 45 degrees from the threshold, continues parallel to the runway in the direction opposite to landing and terminates upon initiating the turn to base final.</i>		<b>Circuit - downwind</b>
010604	Circuit pattern-base leg. <i>The phase of vfr flight from the start of the turn at end of downwind leg, then at 90 degrees to the landing runway until reaching the extended centre line off the approach end of the runway.</i> <i>base turn. a turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. the tracks are not reciprocal.</i> <i>note. base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.</i>		<b>Circuit pattern-base leg</b>
010605	Circuit pattern - final. <i>The phase of flight between the start of the turn from base leg to a flight path along the extended runway centre line, to the runway.</i>		<b>Circuit pattern-final</b>

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010606	Aborted - interrupted approach (before reaching decision <i>The phase of flight where the pilot aborts the approach during an ils or other precision approach involving an abnormally early turn on approach before reaching minimum decision altitude or decision height.</i>		<b>Aborted approach before</b>
010607	Missed approach or go-around. <i>The phase of flight where the aircraft aborts the approach during an ils or other precision approach involving an abnormally early turn on approach before reaching minimum decision altitude or decision height, or where the aircraft breaks off any approach to execute a missed approach or vfr go-around procedure when the approach cannot be continued.</i>		<b>Missed approach or go-</b>
010608	Emergency descent during approach. <i>The phase of flight in which an intentionally rapid or premature descent is made in response to an in-flight emergency during approach. the descent is controlled by the crew.</i>		<b>Emergency descent during</b>
010609	Uncontrolled descent during an approach. <i>The phase of flight in which a previously normal descent during an approach becomes uncontrolled.</i>		<b>Uncontrolled descent</b>
010610	Approach - holding. <i>The phase of flight in which a pre-determined ad-hoc manoeuvre during the approach keeps the aircraft within a specified airspace awaiting further instructions.</i>		<b>Approach - holding</b>
010611	Initial Approach <i>Initial Approach (IFR): From the Initial Approach Fix (IAF) to the Final Approach Fix (FAF).</i>		<b>Initial Approach</b>
010698	Other. <i>An event involving any phase of flight, while on approach, in which an event other than one of the above, occurs.</i>		<b>Other</b>
10700	Landing. <i>The phase of flight from the point of transition from nose-low to nose-up attitude, immediately before landing (flare), through touchdown and until aircraft exits landing runway or comes to a stop, whichever occurs first.</i>		<b>Landing</b>
010701	Level off-touchdown. <i>The phase of flight from the point of transition from nose-low to nose-up attitude, just before landing, until touchdown.</i>		<b>Level off-touchdown</b>
010702	Landing roll. <i>The phase of flight from touchdown until the aircraft exits the landing runway or comes to a stop, whichever occurs first.</i>		<b>Landing roll</b>
010703	Landing aborted after touch-down. <i>The phase of flight in which an attempt is made to get airborne after touchdown (successful or not). this does not include the take-off portion of a touch-and-go.</i>		<b>Landing aborted after</b>
010704	Run-on landing (helicopter) <i>The phase of flight in which the helicopter lands with power on.</i>		<b>Run-on landing (helicopter)</b>
010705	Autorotative landing - helicopter. <i>The phase of flight where the helicopter lands with no engine power being delivered to the aircraft's rotors, e.g. where the helicopter is manoeuvring in an emergency situation following an engine failure, with the intent to touch down.</i>		<b>Autorotative (helicopter)</b>
010706	Emergency landing or off-runway landing. <i>The phase of flight where an intentional landing is made at a point other than a runway or normal landing site, in response to an in-flight emergency.</i>		<b>Emergency landing or off-</b>
010707	Vertical-landing (helicopter) <i>Vertical-landing (helicopter)</i>		<b>Vertical-landing (helicopter)</b>
010708	landing roll - off runway <i>landing roll - off runway: the part of the landing roll after the aircraft left the runway by excursion to the side or overrunning the end of the runway. Also to be used when the aircraft has landed beside, in front of (undershoot) or behind the runway. The intent is to assist in better qualifying the related events, in particular in regards to any damages sustained. Added with 427 HF 1 After April 2008. This implies that records compiled before that date do not contain this classification.</i>		<b>landing roll - off runway</b>

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010709	Transition from forward flight to hovering / hovering on  <i>Transition from forward flight to hovering / hovering on landing Hovering is a maneuver in which the helicopter is maintained in nearly motionless flight over a reference point at a constant altitude and on a constant heading.</i>	<b>Hovering - landing</b>
010798	Landing: other.  <i>An event involving any phase of flight while landing other than one of the above.</i>	<b>Landing: other</b>
10800	Post-impact.  <i>The phase, in an accident or incident sequence, after the aircraft has collided with the first object, place or person.</i>	<b>Post-impact</b>
19900	Unknown.  <i>An event involving a phase of flight of the aircraft that is unknown or not recorded.</i>	<b>Unknown</b>

ECCAIRS 4		Event phases	Data Definition Standard
30000	Sailplane/glider.		<b>Sailplane/glider</b>
		<i>The adep accident and incident reporting system does not record occurrences involving gliders or sailplanes.</i>	
30100	Standing.		<b>Standing</b>
		<i>The phase of flight involving the sailplane or glider when it is stationary with or without wings level.</i>	
030101	Standing - tow/winch wire attached.		<b>Standing-tow/winch wire</b>
		<i>The phase of flight involving the sailplane or glider when it is stationary with, or without, wings level with the tow cable attached.</i>	
030102	Standing-after landing.		<b>Standing-after landing</b>
		<i>The phase of flight involving the sailplane or glider when it is stationary with, or without, wings level after landing.</i>	
030109	Standing - other.		<b>Standing-other</b>
		<i>Any phase of flight involving the sailplane or glider when it is stationary with or without wings level other than one of the phases above.</i>	
30300	Take-off.		<b>Take-off</b>
		<i>The phase of flight from the application of take-off power, [powered gliders] or pull from the tow, until reaching 1,500 feet (450 metres) above runway end elevation.</i>	
030301	Take-off run.		<b>Take-off run</b>
030302	Take-off - initial climb.		<b>Take-off - initial climb</b>
030303	Aborted take-off.		<b>Aborted take-off</b>
030304	Emergency descent during take-off		<b>Emergency descent during</b>
030305	Uncontrolled descent during take-off		<b>Uncontrolled descent</b>
		<i>Uncontrolled descent during take-off, e.g. after control was lost during the initial climb.</i>	
030398	Other.		<b>Other</b>
30400	En-route.		<b>En-route</b>
030401	Slope-lift.		<b>Slope-lift</b>
030402	Thermal lift.		<b>Thermal lift</b>
030403	Wave lift.		<b>Wave lift</b>
030404	Cloud flying.		<b>Cloud flying</b>
030405	Ferry towing.		<b>Ferry towing</b>
030406	Final glide - goal run.		<b>Final glide - goal run</b>
030407	Emergency descent en route		<b>Emergency descent en</b>
030408	Uncontrolled descent en route		<b>Uncontrolled descent en</b>
030498	Other enroute		<b>Other - enroute</b>
30500	Manoeuvring.		<b>Manoeuvring</b>
030501	Slope lift.		<b>Slope lift</b>
030502	Thermal lift.		<b>Thermal lift</b>
030503	Wave lift.		<b>Wave lift</b>
030504	Cloud flying.		<b>Cloud flying</b>
030505	In search of lift.		<b>In search of lift</b>
030506	Normal descent.		<b>Normal descent</b>
030507	Emergency descent.		<b>Emergency descent</b>
030508	Uncontrolled descent.		<b>Uncontrolled descent</b>
030598	Other.		<b>Other</b>
30600	Approach.		<b>Approach</b>
030601	Circuit pattern/downwind.		<b>Circuit pattern/downwind</b>
030602	Circuit pattern/base leg.		<b>Circuit pattern/base leg</b>
030603	Circuit pattern/final.		<b>Circuit pattern/final</b>
030604	Emergency descent.		<b>Emergency descent</b>
030605	Uncontrolled descent.		<b>Uncontrolled descent</b>
030698	Other.		<b>Other</b>
30700	Landing.		<b>Landing</b>
030701	Level-off/touchdown.		<b>Level-off/touchdown</b>
030702	Landing roll.		<b>Landing roll</b>
030703	Landing after failed launch.		<b>Landing after failed launch</b>

ECCAIRS 4	Event phases	Data Definition Standard
	030704 Emergency landing <i>Emergency landing - an emergency landing other than a landing after failed launch. To be used in cases when the specifics of the landing sub phases are not relevant as a result of the nature of the emergency.</i>	<b>Emergency landing</b>
30800	030798 Other. Post-impact. <i>The phase, in an accident or incident sequence, after the sailplane, or glider, has collided with the first object, place or person.</i>	<b>Other</b> <b>Post-impact</b>
39900	Unknown. <i>The phase of flight of the sailplane or glider is unknown or not recorded.</i>	<b>Unknown</b>

ECCAIRS 4		Event phases	Data Definition Standard
40000	Hang/para glider.		Hang/para glider
	<i>The adrep accident and incident reporting system does not record occurrences involving hang gliders or para gliders.</i>		
40100	Standing.		Standing
	040101 Ground check.		Ground check
	040198 Other.		Other
40300	Take-off.		Take-off
	040301 Foot launch.		Foot launch
	040302 Winch launch.		Winch launch
	040303 Aerotow launch		Aerotow launch
	040304 Aborted launch.		Aborted launch
	040305 Initial climb		Initial climb
	040306 Uncontrolled descent in the take-off phase		Uncontrolled descent
	040398 Other.		Other
40500	Manoeuvring.		Manoeuvring
	040501 Slope lift.		Slope lift
	040502 Thermal lift.		Thermal lift
	040503 Emergency descent.		Emergency descent
	040504 Uncontrolled descent.		Uncontrolled descent
	040598 Other.		Other
40600	Approach.		Approach
	040601 Circuit pattern/downwind.		Circuit pattern/downwind
	040602 Circuit pattern/base leg.		Circuit pattern/base leg
	040604 Circuit pattern/final.		Circuit pattern/final
	040605 Emergency descent.		Emergency descent
	040606 Uncontrolled descent.		Uncontrolled descent
	040698 Other.		Other
40700	Landing.		Landing
	040701 Level-off/touchdown.		Level-off/touchdown
	040798 Other		Other
40800	Post-impact.		Post-impact
	<i>The phase, in an accident or incident sequence, after the hang glider, or para glider, has collided with the first object, place or person.</i>		
49900	Unknown.		Unknown
	<i>The phase of flight of the hang glider, or paraglider, is unknown or not recorded.</i>		

ECCAIRS 4		Event phases	Data Definition Standard
50000	Balloon.		Balloon
		<i>The adrep accident and incident reporting system does not record occurrences involving balloons.</i>	
50100	Standing.		Standing
	050101 Assembly and checking.		Assembly & checking
	050102 Cold air ventilation.		Cold air ventilation
	050103 Hot air inflating.		Hot air inflating
	050104 Valve control test ("parachute test").		Valve control test
	050198 Balloon before take-off - other.		Before take-off, other
50300	Take-off.		Take-off
	050301 Weighting.		Weighting
	050302 Let-go.		Let-go
	050303 Initial climb.		Initial climb
	050398 Other.		Other
50400	En-route.		En-route
	050401 Stabilized climb.		Stabilized climb
	050402 Level flight.		Level flight
	050403 Stabilized descent.		Stabilized descent
	050404 Emergency descent.		Emergency descent
	050405 Uncontrolled descent.		Uncontrolled descent
	050498 Other.		Other
50600	Approach.		Approach
	050601 Final approach - using planned glide slope.		Final approach-using
	050602 Emergency descent.		Emergency descent
	050603 Uncontrolled descent.		Uncontrolled descent
	050698 Other.		Other
50700	Landing.		Landing
	050701 Flare.		Flare
	050702 Touch-down.		Touch-down
	050703 Tumbling.		Tumbling
	050704 Dragging.		Dragging
	050705 Tear-away panels or valve opening.		Tear-away panels or valve
	050706 Pilot light extinction.		Pilot light extinction
	050707 Deflating.		Deflating
	050708 Go-around.		Go-around
	050798 Other.		Other
50800	Post-impact.		Post-impact
	<i>The phase, in an accident or incident sequence, after the balloon has collided with the first object, place or person.</i>		
59900	Unknown.		Unknown
	<i>The phase of flight of the balloon is unknown or not recorded.</i>		

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990000	Unknown.	Unknown
		<i>The type of aircraft involved in the phase of flight is unknown or not recorded.</i>
990100	Standing.	Standing
990200	Taxi.	Taxi
990300	Take-off.	Take-off
990400	En-route.	En-route
990500	Manoeuvring.	Manoeuvring
990600	Approach.	Approach
990700	Landing.	Landing
990800	Post-impact.	Post-impact
		<i>The phase, in an accident or incident sequence, after the unknown type of aircraft has collided with the first object, place or person.</i>