**The fields of aviation specified in document 9835 are the source of extracting the main questions and the scenario used in the exam.**

**EVENTS AND DOMAINS**

The events and domains compiled here are based on research at the Direction Générale de l’Aviation Civile, France.

The following inventory of events, domains and subdomains are some that characterize the day-to-day communications of air traffic controllers and pilots. These events represent control situations, routine or non-routine, that all controllers must be able to handle. Each event may require familiarity with many lexical domains, to which are associated related words.

**1. EVENTS, DOMAINS AND SUBDOMAINS IN AERODROME CONTROL**

**Air miss(es)**

Air traffic rules; avoiding action; trajectory/flight path; speed; distance/range; aircraft characteristics; position.

**Air shows**

Traffic information; activity: acrobatics, formation flights; procedures

**Approach delays**

Holding instructions; holding procedures; aerodrome circuit; endurance; diversion /alternate; necessary conditions; CAT 3; all-weather landing.

**Belly landing**

Attempted maneuvers; status of lights; visual check (low pass); position of landing gear; endurance, fuel remaining, fuel dumping/jettisoning; speed; traffic information; state of runway; aerodrome environment; airport installations; emergency evacuation (emergency slides/escape chutes, etc.); fire hazard/risk; damage; ground services.

**Bird risk/hazard**

Position; quantity; names/types of birds; bird scaring in progress; damage to aircraft; delays; bird scaring methods; behavior of birds.

**Bomb threat/alert/scare**

Disembarking passengers; diversion; baggage identification; dumping/ jettisoning; aircraft interior; crew actions/behavior; ground services; airport installations.

**Cargo problems/dangerous goods**

Customs; type of cargo; (perishable) organs for transplant; toxic substances; handling; packaging; veterinary services; police search; sniffer dogs; load badly fixed or damaged; intercepting; impounding.

**Fire on board**

Ground services; aircraft interior; smoke; asphyxia; smells; oxygen masks; warning lights; firefighting equipment; extinguishers; injuries, burns; medical assistance; fire brigade/firemen; emergency slides/escape chutes; engine shutdown; evacuation.

**Ground movement incidents**

Activity on the field; fire-brigade training exercises and interventions; vehicles on the field; braking action and visibility; traffic information; start-up; towing equipment; engine checks; remote holding pattern; holding point; runway infringement; delays; stuck in the mud; damage caused by vehicles on the ground; no entry disregarded; collisions; vehicle or plane breakdown; damage to beacons; foreign objects (name, description); problems boarding or

disembarking passengers; baggage identification; means of disembarking; health services; handicapped/sick passengers; parking position/space.

**Health problems**

Symptoms; first aid; aircraft interior; type of medical assistance medical background of passengers; diversion; airport installations; ground services; sickness, discomfort, wounds, epidemics; medical equipment; blood (group, transfusion ...); medical advice; the human body; forensic surgeon; quarantine; food poisoning; food; vaccines; medical staff; medicines and artificial limbs.

**Incidents on landing**

Long/short landing; missed exit; stuck in mud; weather; cargo problems; runway confusion; bird or animal hazard; damage to tires; aircraft breakdown; missed approach.

**Industrial action**

Ground staff; control/operational staff; effects on traffic; delays; types of strike; demonstrations; sit-ins.

**MET (weather) conditions**

ATIS (visibility, clouds, etc.); (thunder) storms, lightning; damage and breakdown; snow clearing; gusts; wind shear and microburst; minima; state of runway; tailwind, crosswind; braking action; runway visual range; temperature inversion; turbulence; natural disasters; runway closed; change of runway.

**Missed approach**

Go around; minima; traffic position; endurance; reasons; traffic; procedures; speed. Parachute jumping/dropping activity Position; information on other traffic and activity.

**Pilot not familiar with airfield**

Procedures; airfield installations; ground services; duration of drop; drop zone.

**Pilot’s temporary disability**

Health problems; aircraft controls and instruments; pilot`s actions / behavior; airfield environment; airport installations.

**Problems linked to flight plan**

Delays; slots; flight plan updating; computer breakdown; no flight plan; flight plan conformity; flight plan processing; search and rescue; type of flight plan.

**Problems linked to passenger’s behavior + unlawful interference**

Violent / threatening behavior; reasons (drunkenness, etc.); aircraft interior; damage; weapons; actions to overpower; assistance requested of police/fire rescue; demands; ethnic origin; physical description of persons; political allegiances; ground services; airport installations; injuries/wounds; stowaways.

**Re-routing/diversion**

Approach plates; procedures; routing; endurance; weather; airport installations; ground services; aircraft breakdowns.

**Special flights**

ILS calibration; Special test flight procedures; banners, balloons, etc.; ultralights, gliders; helicopters; aerial photography; highway watch; firefighting aircraft; supervision of power lines; military training procedures; types of military aircraft.

**Take-off incidents**

Abort; bird/animal hazards; traffic interference; runway incursion; overheating; towing; 180° turn back; runway excursion; cancellation and change of clearance; problems with steering gear, engine power; aircraft breakdown.

**VFR flights lost/in difficulty**

Aerodrome environment; direction finder; maneuvers for identification; endurance problems; installations at alternate/diversion field; forced/crash landing; ground services.

**VIP flights**

Official ceremonies; protocol (greetings, etc.); ferry flight; military escort; diplomatic clearance; country names and nationalities; apron/ramp; terminal; boarding and disembarking of passengers; VIP vehicles; effects on traffic.

**Special conditions on arrival**

State of traffic on ground; priority flights; industrial action; accidents; weather conditions on the ground; ground equipment failure; airport installations; ground services; curfew; approach procedures.

**Special flights**

Type of aircraft; ferrying; diplomatic personnel; country names; nationalities; aeronautical military slang; military exercises; in-flight/mid-air refueling; pilot maneuvers; positions/fixes; weather conditions; VFR/IFR procedures; visual flight rules; airport installations; ground services.

**Unauthorized maneuvers**

Airspace; rules; previous messages; flight profile; positions/locations; stall levels. Weather/MET problems; Icing problems; clouds; struck by lightning; turbulence; external parts of aircraft; engine performance; response to controls; instrument performance; alarms; violent movements; relief/high ground; flight profile; injuries; objects in plan; blindness/loss of visibility.

**2. EVENTS AND DOMAINS LINKED TO EN-ROUTE AIR TRAFFIC CONTROL**

**Administrative problems**

Diplomatic clearances; customs regulations; civil service departments; impounded aircraft.

**Aids for VFR flights**

Instrument panel; on-board equipment; pilot rating; flight plan; local place names; visual landmarks; positions; directions; endurance; aircraft breakdown; weather problems.

**Aircraft breakdowns**

Instrument panel; instrument operation; radio beacon; positions/fixes; noises/sounds; smells; smoke; airport installations; ground services; engine performance; speed; relief/high ground; actions to solve problem; weather; dumping/jettisoning; flight profile; structural damage (glass, metal); health problems; flight systems; aircraft controls; response to controls; airframe; warning lights; landing gear.

**Aircraft proximity + pilot complaints**

Conflict situations; traffic load; aircraft characteristics; flight profile; weather conditions; injuries; distance/range; pilot maneuvers; rules, procedures; avoiding action.

**ATC system breakdowns**

ATC equipment/systems; radar display; radar performance; radio operation; previous messages; relaying messages; actions to repair; delays/duration; telephone lines.

**Bomb scare**

Aircraft interior; search methods; dumping/jettisoning; ground services; airport installations; ground movements.

**Cargo problems Dangerous goods**

Packaging; substances; toxic substances; animals; smells; cabin equipment; load distribution; loading/unloading.

**Collisions**

Airframe; structural damage (glass, metal, etc.); response to controls; debris; airport installations; ground services; relief/high ground; weather conditions; aerodynamic behavior.

**Fire on board**

Outbreak of fire; control of fire; damage; aircraft interior.

**Health problems**

Parts of the body; organs; symptoms; sicknesses; injuries/wounds; artificial limbs; medicine/drugs; first aid; medical equipment; medical staff; medical specialists; vaccines; quarantine.

**Lack of fuel**

Airport facilities/installations; ground services; high ground; positions/locations; endurance/fuel remaining.

**Misunderstandings**

Previous messages; types of message; radio performance. Passenger behavior + unlawful interference

Violent/threatening behavior; drugs; firearms; injuries; mental instability; nationalities; political allegiances; demands; threats; ground services; medical assistance; means of calming; means of overpowering; flight deck and cabin personnel.

**Request to relay**

Names of people; means of relaying.

**3. OTHER DOMAINS**

**Activities on the field**

Change of runway and pattern; ramp vehicles; snow clearing; sweeping; mowing; harvesting; closure, opening of runway; access roads; runway inspection.

**Aerodrome/airfield environment**

Topography (hill, slope, coastline, forest, etc.); civil engineering (water, tower, bridge, pylon, etc.); high ground/terrain; built-up areas; roads and railway lines; power lines; cardinal points; particular local activities (firing range, etc.); agricultural activities.

**Aircraft breakdowns**

Aircraft spare parts; systems (oxygen, hydraulic, electrical, de-icing, etc.); flight deck/cockpit; controls; instruments; instrument operation; noises and symptoms of malfunction; transponder problems; loss of radio contact; malfunctions; overheating (brakes, engine, etc.); dumping/jettisoning; landing gear/tires.

**Airfield facilities/installations**

ILS, radar, VOR, etc.; lighting systems; reliability of radio aids; direction finder; poor visibility equipment; aprons/tarmac/ramps; runways, taxiways; length and width of runway; parking zone; holding area; terminal; cargo area; bearing strength.

**Ground services**

Opening hours; availability of services at night; assistance on ground; safety altitude; passengers/persons on-board; unserviceable equipment (stairs, luggage trolleys, etc.); auxiliary power unit; de-icing; refueling; delay due to de-icing or refueling; bird scaring; towing; firefighting methods; safety services; medical assistance; baggage handling.

**Procedures**

Noise abatement; departure; approach; all weather takeoff and landing go-around; holding procedures; land behind; curfew; local residents.