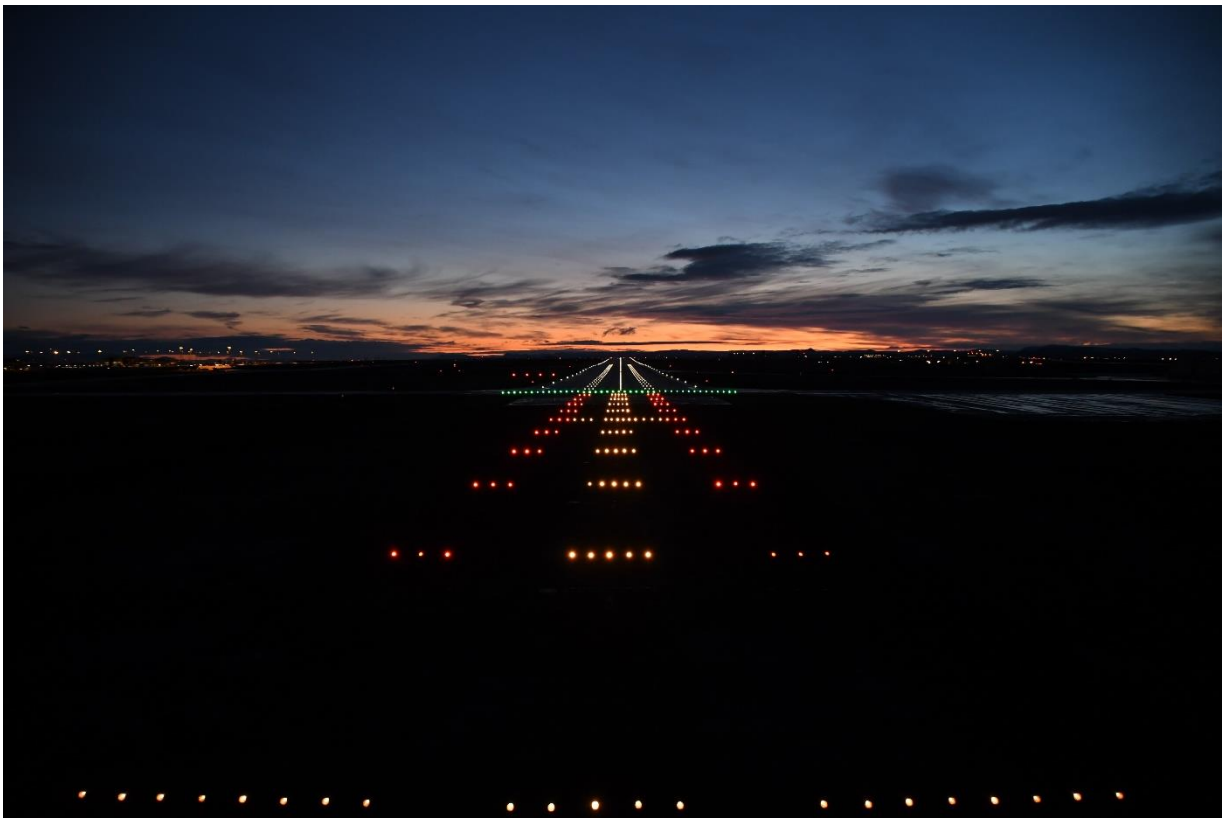
Safety rules

Keflavik International Airport

ISAVIA



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425-6200

Airport Operation Centre (APOC)

HB700 02- 7.0 Safety Rules KEF

Samþykkjandi: Chief Service & Operations Officer

1 CSOO statement

Accident-free operations at Keflavik Airport (KEF) is a main objective for of Isavia ohf. The objective of these rules is to minimize risk of accidents, incidents and other occurrences which could compromise safety. To meet these objectives, following non-exhaustive list of items is stated:

1 Isavia policy stipulates that safety and security is placed ahead of economic issues, feasibility, workload, flexibility, and environmental issues.
2 Isavia ensures with compliance monitoring that requirements from Icelandic and international laws, rules, regulations, standards and international obligations for aviation safety and security are complied with at KEF.
3 Isavia Minimizes all operational risk at the aerodrome to acceptable level.
4 Based on just culture principles, Isavia has in place a management system (MS), including an approved and active safety management system (SMS) and a compliance monitoring process at KEF. The MS provides safety assurance for all operations at the aerodrome whether provided by Isavia or other entities.
5 Isavia ensures these safety rules for KEF are applied and enforced.

Safety rules for Keflavik Airport are furthermore in compliance with current laws and regulations fort occupational safety and health management for Workplaces.

The rules are applicable to all entities and personnel operating at the aerodrome.

Aerodrome management, design and operations requires appropriately qualified, trained and competent personnel.

These safety rules are a part of Aerodrome Manual BIKF FH700 01 and The General Aerodrome Manual FHGN 01.

Isavia ohf.

Chief Service and Operations Officer Keflavik Airport

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3 Purpose and definitions

Keflavík Airport safety rules are intended to explain the current requirements, obligations, and safety standards applicable to the aerodrome operations at Keflavík Airport (KEF). These rules are set forth with references to the following law and regulations with changes:

Leiðbeiningar vinnueftirlitsins nr. 3/2014 um að lyfta fólki með lyftara
Lög nr. 46/1980, um aðbúnað, hollustuhætti og öryggi á vinnustöðum.
Lög nr. 77/2019, um umferðarlög.
Lög nr. 60/1998, um loftferðir.
Lög nr. 61/2013, efnalög.
Reglugerð ESB nr. 139/2014 um kröfur og stjórnsýslumeðferð er varða flugvelli samkvæmt reglugerð Evrópuþingsins og ráðsins (EB) nr. 216/2008
Reglugerð nr. 1050/2017, um varnir gegn hættu á stórslysum vegna hættulegra efna.
Reglugerð nr. 1077/2010, um flutning á hættulegum farmi á landi.
Reglugerð nr. 112/2012, Byggingarreglugerð.
Reglugerð nr. 1129/2014, um starfsleyfi flugleiðsöguþjónustu og rekstarstjórnun flugumferðar.
Reglugerð nr. 236/1990, um flokkun, merkingu og meðferð eiturefna.
Reglugerð nr. 237/2014 um tæknikröfur og stjórnsýslureglur í tengslum við starfrækslu loftfara.
Reglugerð nr. 252/1999, um varnir við losun rokgjarnra lífrænna efnasambanda (VOC), við geymslu á bensíni og dreifingu þess frá birgðastöðum til bensínstöðva.
Reglugerð nr. 282/1980, um eldsneytisáfyllingar loftfara.
Reglugerð nr. 322/1990, um öruggan flutning hættulegs varnings flugleiðis.
Reglugerð nr. 390/2009, um mengunarmörk og aðgerðir til að draga úr mengun á vinnus.
Reglugerð nr. 553/2004, um verndun starfsmanna gegn hættu á heilsutjóni af völdum efna á vinnustöðvum.
Reglugerð nr. 723/2017 um eldvarnir og eldvarnareftirlit.
Reglugerð nr. 75/2016, EB 139/2014 um kröfur og stjórnsýslumeðferð er varða flugvelli samkvæmt reglugerð Evrópuþingsins og ráðsins (EB) nr. 216/2008
Reglugerð nr. 750/2016, um flugvernd.
Reglugerð nr. 770/2010 um flugreglur
Reglugerð nr. 822/2004, um gerð og búnað ökutækja.
Reglugerð nr. 884/2017, um varnir gegn olíumengun frá starfsemi í landi.
Reglugerð nr. 920/2006, um skipulag og framkvæmd vinnuverndarstarfs á vinnustöðum.
Reglugerð nr.1050/2017 um varnir gegn hættu á stórslysum af völdum hættulegra efna.
Reglugerð vinnueftirlitsins nr. 497/1994 um notkun persónuhlífa.
Reglugerð vinnueftirlitsins nr. 728/2018 um gerð persónuhlífa.
Reglugerð vinnueftirlitsins nr. 729/2018 um röraverkpalla

The *Convention on International Civil Aviation Organisation,* applicable Standards and Recommended Practices.
Special rules for Keflavík Airport are available on Isavia website. If discrepancy is between Icelandic and English version the Icelandic version applies.

Definitions:

a. **Movement area:** The part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and aprons.

b. **Manoeuvring area**: The part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

c. **Safety Management System:** A systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures.

4 Scope

These rules specify safety requirements and safety management for operations on the movement area and other operational areas on KEF. The safety rules apply to, but are not limited to, the following:

- Isavia personnel.
- Police and customs personnel.
- Aircraft operators at KEF.
- Personnel of air operators at KEF.
- Personnel of Ground Handling Service Providers providing services at KEF
- Employees for contractors working for any organization at KEF requiring temporary or regular aerodrome access permit.
- As appropriate, all other employees at KEF including landside areas.

5 Safety rules for Keflavik airport

5.1 General

Safety rules are stipulated by Isavia ohf., for the services described in these rules. They shall not be ignored, changed, disaffected, diminished, or cancelled by other rules or by other authorities than Isavia ohf.

The Safety Management System's attainment correlates with safety awareness and management of safety rules for all involved with operations at KEF. Managers, supervisors, and employees shall, with no exception, abide by these rules. Repeated or deliberate violations of safety regulations may result in suspension of KEF driving permit or aerodrome access permit, according to Isavia rules for penalties for violation of safety rules.

A safety reporting system is in place as part of the safety management system on the aerodrome as stated in the Aerodrome manual FH700 01.

In case of any concerns of discrepancy regarding a topic in these rules, these concerns shall be forwarded to Isavia ohf. by using safetykef@isavia.is, in writing and signed by the person concerned, for discussion or correction.

Directors of organizations within the scope of these rules, as noted in article 3 above, are responsible to comply with these rules and for compliance of their personnel, services, and operations.

To mitigate risk of personal injury, property damage or damage to distribution systems, each institution, firm or private contractor, shall apply for a special work permit at *Airport Operations*, prior to any gravel or ground digging project. In accordance with regulation 920/2006, 75/2016, 464/2007 and 1129/2014, safety assessment shall be forwarded before the project concerned is started. All identified hazards shall be analysed, risk assessed, mitigation measures shall be defined, and risk controls implemented as appropriate to reduce the risks to ensure the acceptable level.

To ensure effectiveness and adherence to these safety rules, they shall be adequately promoted, communicated, and studied by all relevant organizations and personnel.

Directors for organizations within the scope of these rules shall ensure that their personnel receive adequate and appropriate theoretical and practical safety training at least twice annually. As always, all training and briefing for personnel shall be documented.

Management of organizations within the scope of these rules, shall in accordance with these rules and all other applicable rules, develop and implement standard operating procedures and project specific safety rules as appropriate, for their personnel. The specific safety rules shall be updated regularly and always in case of changes to ensure compliance with these rules and other applicable rules.

5.2 Good housekeeping practices / FOD

Safety of aerodrome operations is dependent on supporting safety culture which includes good housekeeping practices; disciplined, responsible and professional conduct of all tasks in the operations. Safety of the operation is everyone's responsibility. This includes the responsibility to ensure that no Foreign Object Debris (FOD) is introduced to any areas on the aerodrome, in particular not on the movement area (aprons including aircraft stands, taxiways and runways).

It is the duty of any person to remove any FOD they observe, or in case it cannot be removed, to report the FOD instantly to Airport Operations and to nearest manager. FOD and reports concerning the safety of the aerodrome shall be reported into the aerodrome operator's safety reporting system.
Discharge of hot water shall be at designated area. During winter months when temprature is low (frost) it is not authorized to discharge water at stand, if needed suitable equipment shall be used.

5.3 Fire prevention

To comply with article 23 in the Fire Protection Act 75/2000, fire prevention for companies and agencies at KEF is the responsibility of the owner of each building and funded by each owner. This refers to fire prevention performed by owners and managers or their trained employees or parties on their behalf, i.e. special service agents or independent fire inspectors.

All use of open flame is prohibited at KEF, the use of spark igniting tools, as well as undertaking of any activity that would create a fire hazard within areas of the aerodrome where fuel or other flammable material is stored.

Application for hot work permit shall be sent via Isavia homepage. Use of fireworks is prohibited at Keflavik Airport.

5.4 Adverse weather

These safety rules are established for normal weather conditions. When weather conditions become worse, all risk in operations at the airport increases. The airport operator recommends that all ground handling agents at Keflavik Airport stops passenger ground handling services in adverse weather conditions where wind gusts exceed 50 knots. This does not affect the completion of service which has started or service aiming at avoiding damage.

Management of organizations operating on the aerodrome, and all personnel at KEF, must adapt all operations to the adverse weather conditions and take into consideration the increased risk involved. Current applicable rules for such conditions shall be complied with to mitigate risk.

Special rules for KEF including rules for action due to bad weather, are located at Isavia website. Precise information on weather conditions at KEF is also accessible 24/7 by calling Automatic Terminal Information System (ATIS), tel; 425-6101.

Real time measurements from KEF meteorological measurement systems can be found on http://awos.kefairport.is/

5.5 Incidents, accidents, or emergencies

Call 112 (Neyðarlínan) if emergency conditions do occur, or an accident with injured victims which require an ambulance. Also call Airport Operation Centre (APOC) tel: 425-6200.

All emergencies, incidents, damage, minor abnormality, incursions, or situations that can create a danger or a threat to safety or security, shall be reported to APOC tel: 425-6200.

All incidents shall also be reported through Keflavik Airport online safety reporting system.

5.6 Special issues

Personnel working on the movement area (aprons, runways, and taxiways) shall wear reflective and high visibility clothing that complies with ISO EN 20471 standard. All Personal Protective Equipment (PPE) shall fulfil set requirements in, the labour law 46/1980. All pedestrian traffic is prohibited during snow removal operations, only necessary vehicular traffic is permitted on the movement area and then by exercising extreme caution.

It is strictly forbidden to erect any type of crane on or around the Keflavik Airport area without permission from Keflavik Airport safety officer, after a valid safety assessment has been

conducted and the ATC has approved, and NOTAM has been issued. Near aircraft stands it is necessary to consider the cranes fall radius. The crane operator/manager will need to demonstrate on a drawing the crane's fall radius in relation to the aircraft stand. If the safety officer anticipates the fall radius interfering with an aircraft stand, the stand will be closed while the crane is raised, or crane operations halted while there is an aircraft occupying the stand. When applying for a permit for the operation of a crane, the anticipated location (latitude and longitude coordinates) of the crane must be included in the application. The dimensions of the crane must also be included in degrees as well as its elevation above sea level. The application must be received by the Airport Operations at least one week before the crane is raised.

Pets are not permitted at the airport except by a special authorization issued by Isavia ohf., in cases of animals required for special purposes at the airport.

The use of headphones for entertaining purpose is prohibited, office work excluded, during work at KEF airport. This does not apply when hands free device is used while driving.

General use of bicycles is prohibited at the aerodrome movement area. Exception to this is the route from the gate "Silfurhlið", over east apron "Háaleitishlað", by using service roads to work area. It is also permitted to walk the bicycle from the gate "Gullnahlið" to work area at FLE terminal, to "Fálkavellir" and apron to "Pétursvellir", where bicycling is permitted to "Háaleitishlað".

Pedestrian traffic is allowed from Silfurhlið over east apron to Airport operation service house when visibility is good and snow removal equipment are not operating at east apron. Pedestrians must use visibility clothing/vest.

Directors of organizations within the scope of these rules shall ensure regular safety briefing sessions with staff, where main current safety concerns shall be discussed. These sessions could be conducted as appropriate monthly, weekly, or even at the start of each shift.

6 Safety rules for vehicles and aircraft

6.1 Stipulations regarding vehicle condition

To obtain a permission to drive on aprons, vehicles and equipment shall fulfil the requirements set forth in these rules, see articles below.

Vehicles intended for use on aprons, taxiways and runways should have ownership markings on both sides the markings should be at least 30 cm high and 30 cm wide and should be clear and in colours that are easily legible on CCTV cameras. Operators on east apron (Háaleitishlað) are authorized to have ownership marking in rear side windows, provided they are visible, not tinted and kept clean.

The vehicles shall display a yellow low flashing light on the roof or on the highest point on the vehicle. Reflective patches or tape shall be on all sides on equipment used on KEF.

All vehicles intended for use on taxiways and runways shall have an appropriate radio communication equipment to ensure safe radio communication with Air Traffic Control (ATC).

Vehicles and equipment shall be kept in good condition and not cause additional threat to safety due to condition. Organizations and individuals operating vehicles and other equipment, such as but not limited to mobile stairs, dollies, tows and tractors at KEF, are responsible for its condition and for regular maintenance of these vehicles and equipment, and that it is always operated in accordance with the instructions in the operator manual or approved procedures and to keep a record of its use, ownership, mishaps, maintenance and check lists for each vehicle. All records shall always be readily available for audits. Each vehicle and equipment shall be marked on both sides by its owner's registration number, with at least **15 cm high number**.

It is recommended that each service provider use his selected colours for his equipment used at the airport.

6.2 Vehicle registration and inspection

An effective inspection system shall be implemented to inspect the vehicles and other relevant equipment. In addition, a check list shall be prepared for each vehicle and equipment that covers at least these basic items noted here below, for recorded inspection at least weekly.

All registered vehicles used for operations at KEF, shall pass inspection in accordance with Icelandic traffic law 50/1987 and regulation on vehicle make and mechanism 822/2004

All mechanically operated equipment not required to be registered in accordance with the traffic law, and used for service on aprons, shall pass inspection in accordance with applicable regulation set by the Administration of Occupational Safety and Health in Iceland (AOSHI, Vinnueftirlitið).

Following is a list of items that shall be regularly inspected and kept in good order on daily basis for each operation. The list is not exhaustive:

- All lighting equipment, headlights, brake-, direction- and park lights both front and rear, direction- and warning lights in dashboard where applicable, as well as the yellow obstacle beacon.
- Last inspection date on fire extinguishers and first aid kit.
- No potential FOD loose inside or outside on the vehicle.
- Condition of tires, rims, bolts, and wheel suspension.
- Brakes, including parking brake.
- Electrical wiring and fuel- oil- or hydraulic fluid leaks.
- Radios.
- Map of the airport with vehicle call sign located in the car (B and C licensed driver and car equipped accordingly)
- Ensure the vehicle is appropriately prepared for the weather and driving conditions.
- Mirrors, windshield, and other windows must be clear and unbroken.

6.3 Traffic signs

Traffic signs, instructions signs and warning signs are to display information to vehicle operators, in accordance with domestic and international rules.





6.4 Priority in traffic

As a part of the service the aerodrome provides to its users, it is important to create the safe means that allow aircraft operators to maintain schedule. Traffic rules on the aerodrome are set for safety in accordance with the applicable aviation law and regulation, and in accordance with Icelandic traffic law and regulation.

Aircraft landing or in take-off have priority over other aircraft and vehicles. After that the priority is following:

1. Emergency vehicles in priority.
2. Aircraft taxiing using its own power.
3. Snow removal and anti-ice operations, runway inspections, sweeping and braking action measurements.
4. Tug towing aircraft
5. Service vehicles and other vehicles

Aircraft anti-collision lights shall be switched on before aircraft engines are started. Unless the anti-collision beacon has been turned off, it is forbidden to drive into the safety zone of aircraft. All traffic on aprons shall remain within safe distance from aircraft with lighted anti-collision beacon.

Vehicle operators and pedestrians must give aircraft traffic the right of way. Vehicles and pedestrians shall stop and maintain safe distance from aircraft until the aircraft has passed by. It is prohibited to pass/overtake taxiing aircraft. Vehicle operators shall avoid blinding aircraft pilots during landing, take offs or taxiing by use of vehicle headlights or other disturbing lights.

6.5 Speed limits

At aprons, runways and taxiways Icelandic traffic law apply, also the Aviation Act and safety rules for KEF in compliance with regulation 464/2007.

Maximum vehicle speed limits:

- Service road between FLE apron and East apron: ……..…….…… 70 km/h.
- Runways and taxiways and service roads: ……..……..50 km/h.
- Aprons: .....…….…….……30 km/h.

- Vicinity of aircraft: .....10 km/h.

Vehicles and equipment used for snow removal, breaking action measurements and responding emergency vehicles are excluded from the above-mentioned speed limits.

6.6 Stipulations to vehicle operators

Following is a list of items that drivers need to pay special attention to while driving:

- It is important to use direction lights properly to avoid accidents, activate the direction lights in due time with good advance.
- Maintaining full control of the vehicle or service equipment is always the responsibility of the operator, both hands are to be used to control the vehicle.
- The usage of the high beam light shall be severely restricted to avoid blinding pilots or other traffic at the airport.
- Catering, cargo, and other vehicular equipment with elevating mechanism, shall always be driven and parked in the lowest position.
- While driving on areas and services roads adjacent to the movement area, it is only permitted to pass very slow-moving vehicles and equipment. This shall only be done if deemed safe. This does not apply to driving on aprons or other parts of the movement area where overtaking is prohibited.
- Overtaking the slow equipment is only permitted during safe conditions and by not leaving marked routes.
- At least 10 meters' save distance shall be maintained between vehicles traveling on the aerodrome where 50 km speed limit is permitted.
- Vehicle shall always deviate for aircraft either being towed or using its own power.
- Vehicles shall not cross a taxiway being used by taxiing aircraft. A distance of at least 200 meters to the nearest moving aircraft shall be maintained, in front and behind aircraft.
- It is prohibited to leave a vehicle unattended with engine running on the movement area.
- Parking is prohibited on marked routes at aprons and unnecessary stops shall be avoided.
- Vehicles or equipment shall not be stopped, parked, or left unattended where it can become an obstacle in the way of aircraft or other vehicles, or where it could create a hazard or unnecessary inconvenience.
- Use of motorcycles is prohibited on the aerodrome.
- Pedestrian traffic is prohibited on the manoeuvring area (runways and taxiways) except in case of emergency or during necessary work.
- All vehicle drivers and passengers shall use safety belts while the vehicle is driving (if the vehicle has safety belts).
    - This does not apply in passengers' busses that are not equipped with safety belts and when vehicle/equipment is driving within aircraft stand and adjacent equipment storage area on stand while servicing aircraft and driving within speed limits (10 km/hour).
- This exemption does not change the obligation to use safety belt while driving in all other places within Keflavik Airport.

6.7 Vehicle operations on aprons

- A vehicle shall not be driven over hoses, ground- or electrical cables or fuel lines.
- A vehicle shall not be driven nor parked under aircraft or aircraft wings except when necessary to service the aircraft.
- Fuel truck at stand must always be able to drive away without limitations. It is therefore not authorized to park cars/equipment that blocks their escape route.
- When a vehicle is driven towards aircraft to render service, the operator shall emphasize doing so parallel to the longitudinal axis of the aircraft. The vehicle shall be parked in a direction facing away from the aircraft with front wheels lined up straight, not in a turn. Special caution shall be exercised when it is necessary to drive directly towards the aircraft.
- Driving in front of an aircraft at stand is not permitted. When ground power (GPU) cable is connected to aircraft from GPU equipment, two safety cones shall be placed at the GPU cable to identify its location.
- Marked routes shall always be used when driving on aprons. Passing another vehicle is prohibited. In case a vehicle needs to vacate marked routes to render service to aircraft, marked routes shall be used if possible. When returning to the marked route, the shortest and / or safest way shall be selected. Isavia vehicles and equipment are exempted from this requirement, when marked routes need to be vacated to perform necessary work. Special caution shall be exercised and safe distance from aircraft maintained.
- Safe distance from a parked aircraft is at least
    - **5 meters** from imaginary line drawn from aircraft nose to wing tips and aft.
    - **15 meters** from same line during aircraft refuelling operation
- People and vehicles shall maintain at least.
    - 3 meters distance from aircraft fuel tank air vent.
    - A safe distance from a running engine, in particular behind and in front of a running a jet engine and a jet engine being started.
    - A safe distance from propellers regardless of whether engine is running or not.
    - A safe distance form rotor of helicopters.
- To reverse a vehicle or vehicular equipment towards or from aircraft, or in vicinity of aircraft is prohibited, except when driver is, with enough means of communication, supervised adequately to ensure safe reversing by another competent person ensuring safety of the reversing all around, above and behind the vehicle. Special attention shall be given to antennas or other items sticking out from the vehicle in any direction before the reversing takes place.
- Passengers are only permitted in vehicles equipped with passenger seats.
- If approaching aircraft ready for push-back is necessary, or when push-back has started, a vehicle must stop and wait unless supervised otherwise by the push-back crew. Vehicle driver shall comply with instructions from push-back crew when in vicinity of push-back operation.
- Equipment or vehicles shall not be in designated aircraft parking area, nor too close to designated aircraft parking area when aircraft push-back takes place.
- No vehicle is permitted to enter a designated aircraft parking area except a vehicle rendering service to aircraft in area concerned. APOC needs to be informed.

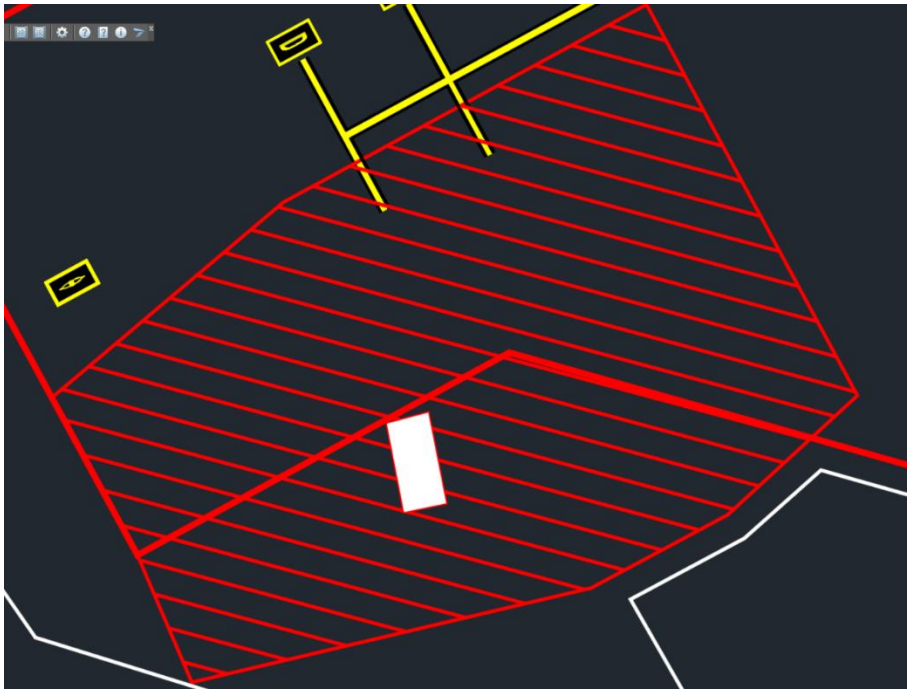
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- Vehicles and equipment on aprons shall only be parked at approved parking areas. Service vehicles should neither be parked on or inside aircraft stand safety lines, nor inside the area marked with parallel red lines on the diagram below, as they are the safety zone for passenger boarding bridges.
- Ground handlers are allowed to locate ground handling equipment, in marked equipment places, on aircraft stand no earlier than 15 minutes before aircraft arrival.
- Ground handlers shall remove ground handling equipment located at aircraft stand no later than 15 minutes after aircraft departure.
- Exception: when the same ground handler is using the same stand twice in a row equipment may be left at stand until next aircraft arrival.
- Special caution shall be exercised to not hinder possible emergency exits for passengers from aircraft or possible access points for emergency rescue crews, as well as not to block off fire extinguishers or refuelling emergency stop switches.







The red lines on the above photos represent the safety zone of parked aircraft and the safety zone of passenger boarding bridges (parallel red lines, partially inside the safety zone of the aircraft).

6.8 Baggage area

To drive a vehicle through areas where baggage and or cargo is handled is prohibited except for personnel assigned to that work each time.

Shortcuts are prohibited through areas where loading or unloading of baggage and or cargo on or off aircraft takes place.

Aprons shall be kept clean. Special emphasis shall be placed on aircraft stands or other aircraft parking areas, baggage, and cargo handling areas where there is a potential risk of cargo covers and debris being left behind. Although supervisors are responsible for proper FOD cleaning in their areas of operation each time, no one is exempt from responsibility. It is everyone's duty to remove FOD or report it if unable to remove.

6.9 Vehicular operation on the movement area

- Drivers should be familiar with the requirements for driving and vehicles intended to be driven into the movement area (runways, taxiways, and aprons).
- Drivers shall always read back instructions/authorizations from tower.
- All vehicles in the movement area (runways, taxiways, and aprons) must be equipped with a yellow obstacle light, and headlamps of vehicles must be set to a low beam.
- Vehicles or persons are not allowed to enter the manoeuvring area (runways and taxiways) unless operationally necessary for the safety of aircraft, maintenance, renovation, or other necessary work. An ATC clearance shall be obtained from the aerodrome control tower outside the safety area of the runway or taxiway. It is forbidden to take shortcuts over runways unless for emergency reasons.
- Driving on taxiways is prohibited without the ATC clearance from the aerodrome control tower except on the marked road across Sierra 3 taxiway, to and from building 1708. Overtaking or stopping of the vehicle on this route is prohibited. The stop sign at the taxiway shall be observed and adhered to.
- When driving on a taxiway or runway, always drive on the right side, unless special conditions prevent it.
- If a driver gets lost or becomes uncertain about his / her location or the ATC clearance, he / she shall immediately notify the tower.
- Unless otherwise instructed by the ATS unit the driver shall simultaneously vacate the landing area, taxiway, or other part of the manoeuvring area, to a safe distance as expeditiously as possible; and then stop the vehicle.
- Do not leave a vehicle unmanned on a runway or taxiway without permission from the tower.
- In case of the malfunction of a vehicle on a runway or taxiway, the tower shall be informed, and necessary steps taken to remove the vehicle.
- Access to runways is via taxiways where stop bars are located. Where chains are used to block access to runways all traffic with exception of the Airport Operations, is prohibited.

6.10 Stop bar

Stop bars consist of a series of unidirectional red lights, embedded in the pavement, crossing taxiways at the associated runway holding position. The stop bars are an important safety equipment for preventing runway incursions. All aerodrome traffic, aircraft and vehicles shall always comply with the indications of a stop bar. It is forbidden to cross a lighted stop bar.

- Aircraft taxiing, and vehicles driving on the manoeuvring area shall stop and hold at all lighted stop bars. Never cross an illuminated stop bar.
- Pilots and drivers may only proceed past a stop bar when ATC provides appropriate verbal instruction and switches the stop bar lights off.
- Drivers shall always choose the shortest route when crossing runways. Taxiway/taxilane, centerline lights are intended to provide guidance to aircraft, vehicles are not obliged to follow them.
- Never cross an illuminated stop bar. A lit stop bar means **STOP**.

6.11 Permission for vehicular operation on taxiways and runways at Keflavik Airport

Driver's permissions on the movement area at Keflavik Airport, are as follows:

Driving permits on aprons, taxiways and runways are issued electronically. The permits are not issued in hard copies. Validity of permits are checked and verified in a database holding all the information electronically. The database is maintained at the Keflavik Airport ID Office (Aðgangsskrifstofa).

Driving permits are issued in three categories:

A permit: Driving on aprons and adjacent areas.
B permit: Driving on aprons, adjacent areas, and taxiways (Access to taxiway Kilo)
C permit: Driving on all the movement area, including runways and taxiways.

Contact the ID Office (Aðgangsskrifstofa Keflavíkurflugvallar) to apply for driver's permit on the movement area at Keflavik Airport. The driver shall always carry a valid driver's license, in accordance with Icelandic traffic laws.

Violations of the Keflavik Airport safety rules will result in disciplinary actions and restrictions and in case of driving it can result in the driver's permit being suspended or revoked.

6.12 Low Visibility Operations (LVO)

- When visibility is significantly limited at the airport, a Low Visibility Operations (LVO) is implemented to prevent runway incursions and other incursions.
  Under these weather conditions; precision approach CAT II landing operations on runways 10 and 19 and low visibility take-off operations from all runways.
  Furthermore, there are special procedures relating to aircraft ground movements that are in effect.
- When LVO conditions are present special procedures for low visibility is activated, called Low Visibility Procedure or LVP.
- LVP are intended so that aircraft can safely land and take off when there is limited visibility. Also, to minimize the risk of vehicles driving in front of aircraft or runways or driving on the airports manoeuvring area (runways and taxiways). This hazard is called runway incursion.
- When LVP are in effect all ground movement of vehicles is restricted on the movement area and only essential vehicle movement, for example snow plowing and emergency vehicles, is allowed in accordance with the LVPs by ATC.

- ATC activates the LVP by an announcement via radio communication directed to entities and persons operating on the movement area. Furthermore, the information is distributed to all entities on the aerodrome via email through the APOC.
- Signs regarding activation of the LVP are displayed at all access points once LVP is activated.



A photo of a sign announcing LVP at an access point.

- It shall be ensured that equipment in use on the manoeuvring area does not disturb the Instrument Landing Systems. Vehicles on taxiways shall hold at ILS critical area boundary holding positions labelled with yellow signs and markings that spell out CAT II, on taxiways, before entering or crossing runways during LVP.

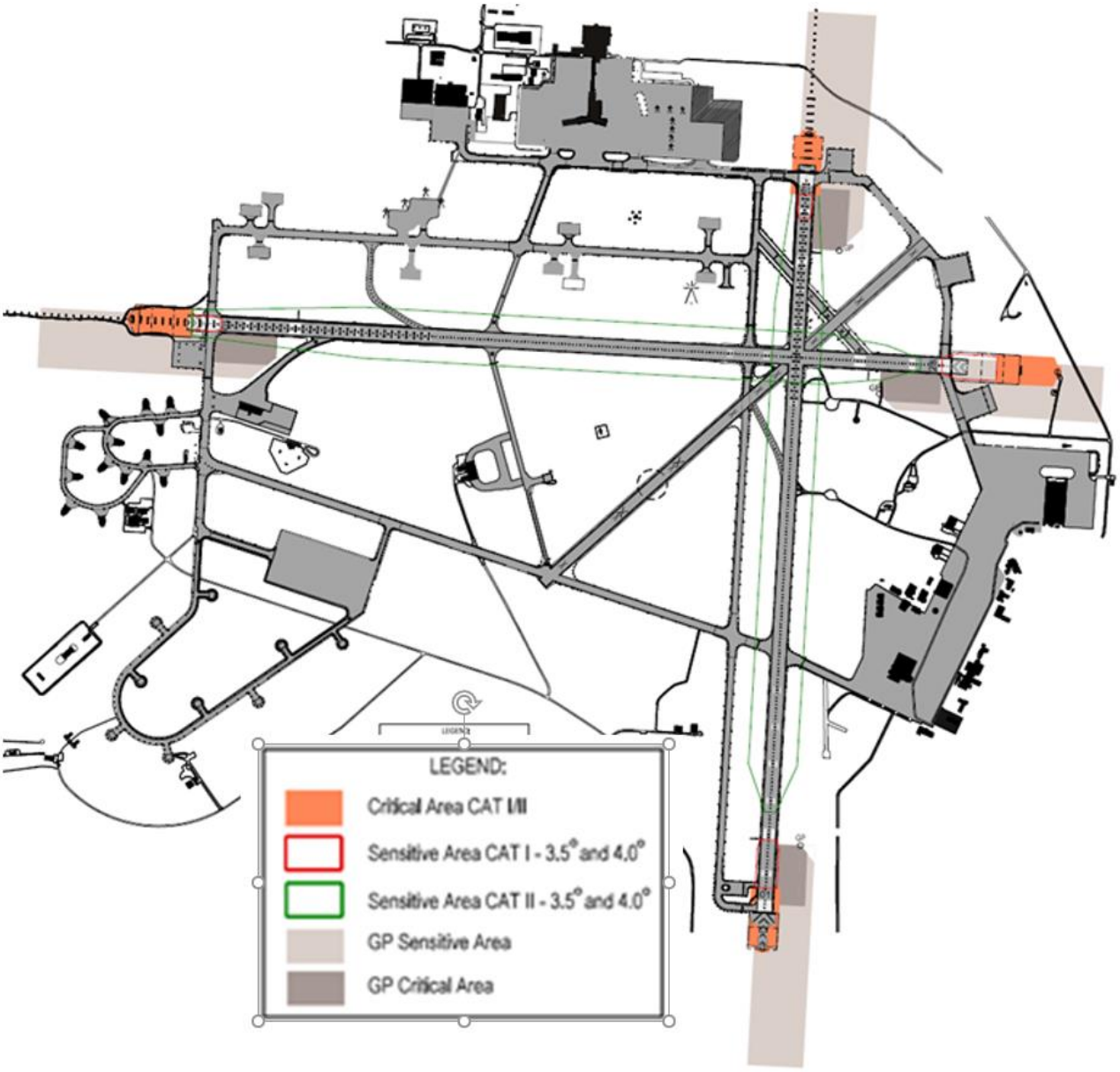


A warning sign of sensitive/critical area for ILS equipment.

Warning signs are by driveways towards runways where traffic might interrupt ILS beams. Do not drive within this critical area. Proceed with extreme caution, especially during LVP, when CAT II instrument approaches are taking place and the ILS beam is active during every landing.

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On the map above, these critical areas and sensitive areas for the ILS equipment are displayed. The critical areas are shown with a light-brown colour by end of each runway.

CAT I and I sensitive areas are the same as the Runway strip. Control and limitation of entry onto these areas are also the same that is ATC authorizes traffic to these areas.

Below, there are four photos displaying the location of the afore mentioned warning signs of sensitive/critical area for ILS equipment.

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ILS equipment warning sign by runway 19



ILS equipment warning sign by runway 28



ILS equipment warning sign by runway 01.



ILS equipment warning sign by runway 10.

- When an announcement is made regarding the activation of LVP, all personnel must follow the procedures. Vehicles must vacate the manoeuvring area immediately, unless they are mentioned above and are deemed necessary to airport operations during LVP. Ground handlers, carriers, contractors, and others working on the manoeuvring area shall make sure their employees receive necessary information and act in accordance with it.
- In addition to a total ban on driving on the manoeuvring area, the number of people working on aprons shall be limited to the minimum required.
- The ATC notifies when LVP are no longer necessary. Everyone must be notified about this change.
- Further information regarding LVP can be found in Keflavik Airport's Aerodrome Manual FH700 01 and ATC's procedures on LVO.

7 Special safety rules

7.1 Baggage/cargo tractors

- Only tractors inspected and approved by the Administration of Occupational Safety and Health (AOSHI) and in good condition in accordance with owner's inspections and records, shall be used to pull baggage carts or cargo dollies.
- No tractor is permitted to tow more than 6 loaded carts / dollies at the same time and 8 empty carts / dollies. Special caution shall be used. The operator concerned is responsible for his actions as always during operations at KEF
- Equipment for towing shall not be left unattended with the engine idling. If driver's seat is vacated, engine shall be shut off and parking brake applied.
- If a cart / dolly is released from tractor, hand brake shall be applied.

7.2 Starting aircraft and push or tug an aircraft

Due to the hazards posed by the starting of aircraft engines on stands, it should only be authorized as exceptions, and then exclusively prior to check that confirms that the starting does not pose a risk on the stand. The main reason for starting a motor at an aircraft stand is that the engine needs to be started due to testing or checking of engines.

The following hazards may be present when engines are powered on stand.

- Jet-blast behind jet engines
- Risk from engine intake
- Increased engine noise
- FOD risk (foreign object debris)
- Risk of aircraft moving, e.g. in slippery surface.

The following procedure should be applied if an engine is started on a stand:

- […] Contract APOC and inform that engine start on stand is needed

- A pilot or aircraft maintenance personnel are in the cockpit and maintenance personnel outside the aircraft.
- An outdoor maintenance personnel is in direct communication via headset with the personnel in the cockpit.
- The site is made safe, maintenance personnel ensures that no workers are close to engines.
- All devices, except for Aircraft Passenger Stairs, are removed from the aircraft.
- Anti-collision beacon is switched on before the engine is started.

When a pilot requests permission to push an aircraft from an aircraft stand, the aircraft must be ready for immediate pushback. Pushback shall not be requested until the tug is ready to perform the pushing immediately.

Following shall be kept in mind:

- Only personnel specially trained in accordance with the Operator Training Plans, in accordance with the applicable requirements at any given time, are authorized to push and / or pull aircraft.
- Fire extinguishers shall be available for aircraft entry.
- Only approved tractors shall be used for the appropriate aircraft size. They must be inspected by the Administration of Occupational Safety and Health and have passed the operators' inspection process.
- The area the aircraft travels shall be free of foreign objects, obstructions and be safe before beginning pushback.
- Engine start is allowed when pushback starts, but only when it has been checked that the engine start dos not create a hazard.
- Ensure that either an anti-collision beacon is switched on before pushing or a red-flashing light on towing vehicle, according to the operating procedures of the aircraft operator.
- If an aircraft is tugged to the manoeuvring area, the anti-collision beacon shall be switched on, or a flashing red light on the towing vehicle, according to the operating procedures of the aircraft operator. Regulation no. 770/2010 about rules of the air addresses the use of navigation lights on the manoeuvring area.
- The only exception to the switching on of the anti-collision beacon is when an empty aircraft is towed with a towbarless tug. In such cases, there are special green and red lights on the tow tug that replace the beacon light of an airplane. There is no light on aircraft during such towing. This towing without a beacon light is limited to parking spaces at the FLE and Icelandair hanger (stand 51 to 69), where lighting is enough, and towing is only authorized on taxiways Kilo 2, Kilo 3, November 4, November 5, and Charlie 3.
- The maximum towing speed on apron, taxiway or runway aircraft be 20 km per hour.
- Tug operator shall make sure that nothing is in the way when performing pushback from stand.
- Tug operator shall not push aircraft from stand 44 when an aircraft is located at tug release point 10.
- Tug operator informs pilot when pushback is not possible (something is in the way) and pilots informs tower control.

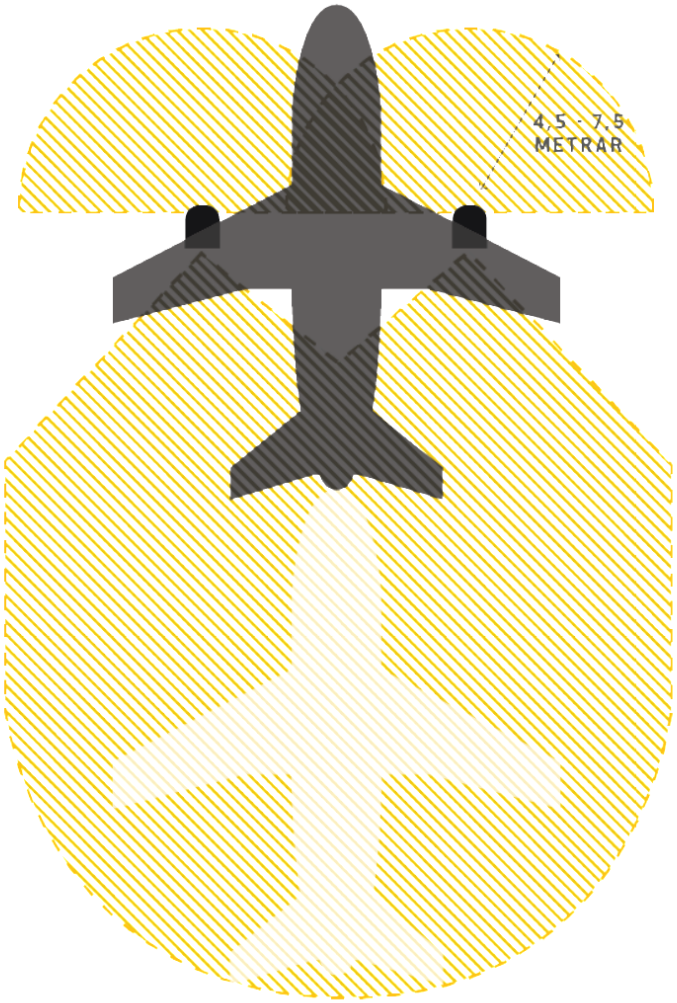
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The APU (Auxiliary Power Unit) shall be switched off no later than 15 minutes after the airplane has been parked on stand, and not started 15 minutes before the pushback. If the outside temperature is around or below 0° C, the APU can be used to heat the passenger compartment. Furthermore, if the APU is not operational, one engine can be started. See the process of starting engines on stands above.

A safe distance needs to be kept from jet engines. Jet and turboprop engines create dangerous suction and winds (jet blasts). These types of jet blasts also emit considerable heat.

- Employees shall keep a safe distance equal to the length of the aircraft when an engine is running. Increased risk is involved when power is increased to propel the aircraft from its former place or station (i.e. stand).
- Engine suction occurs in front of the engines at a 90-degree angle to either side of the engines.
- Engine can occur up to 7,5 meters away from the engines. Employees shall stay out of the zone in which suction can take place.
- Some (larger) aircraft may have an even bigger danger zone. It is important to remember that access to aircraft stand is generally forbidden while aircraft engines are running.



Danger from jet engines due to suction and jet blast

7.3 Conveyor belt loader for baggage and cargo

Before conveyor belt loader is used, compartments on the conveyor belt loader for debris shall be emptied to ensure space available for potential debris. Safety items shall also be checked to ensure units works safely.

The parking brake shall always be on when unit is abandoned.

All equipment with a conveyer belt shall be checked at least weekly, in accordance with applicable check sheets to ensure all safety components are adequate.

7.4 Transportation of passengers and cargo

Transportation of passengers to and from aircraft shall only be performed using busses approved for this purpose, and in compliance with safety rules for passenger transportation.

When an aircraft has parked, and anti-collision lights have been turned off, the safety on the parking area, including the safety of the passengers stepping out of the aircraft onto the ground service equipment or apron is the ground handling service providers' responsibility.

Cargo and baggage shall be transported in a secure and safe manner to prevent increased risk. Driver shall ensure baggage is secured. For example, when making a sharp turn is necessary, special caution shall be exercised, especially when towing carts or dollies.

7.5 Aircraft refuelling

The ground handling service provider providing fuel to aircraft shall have implemented procedures to ensure storage, handling, and delivery of uncontaminated fuel and of the correct specification to aircraft. Regulation 282/1980, with amendments 466/1991 (and the regulation that will replace 282/1980, when the regulation outdates), defines stipulations for aircraft refuelling. The latest international manuals on aircraft refuelling are also used, Aviation Operating Standards and Joint Inspection Guidelines as applicable each time.

7.6 Aircraft de-icing

Regulation 464/2007, regarding aerodromes, chapter VI, article 3.15, defines requirements for aircraft de-icing operations. Service agents rendering aircraft de-icing/anti-icing services at KEF shall have approved safety and standard operating procedures for services of this nature in compliance with current requirements each time.

Only approved equipment shall be used for de-icing and anti-icing. To ensure user's safety and for others at the area, the equipment shall be checked before use. Inspections on condition of vehicles and equipment used for de-icing, shall be in accordance with chapter 6.2.

Only specially trained employees shall de-ice and anti-ice aircraft at KEF. The same applies to handling of chemicals for de-icing and anti-icing.

7.7 Use of passenger boarding bridges by Leif Eiríksson air terminal

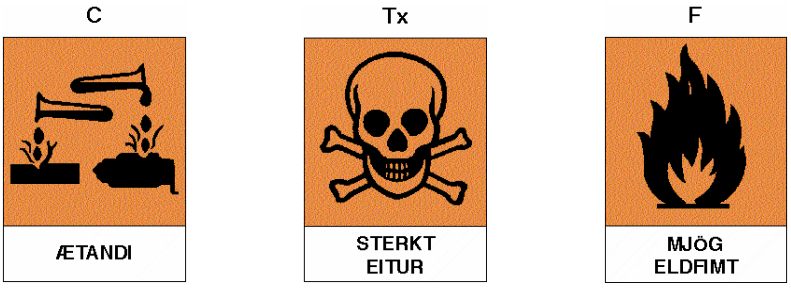
Vehicles shall not be parked in area marked with red lines under passenger boarding bridges as the lines that indicate their area of travel.

Only specially trained employees shall operate a passenger boarding bridge, in accordance with operating procedures KEF for the bridges.

Precise safety rules and instructions for proper use shall be readily accessible by each bridge.

7.8 Handling of hazardous materials

Precautions and safety rules regarding storage and handling of hazardous materials shall be in compliance with regulation 553/2004 about employee protection against loss of health from materials at the workplace.



Employer shall ensure employees' sufficient and applicable training in proper handling of hazardous materials, prevention and labels identification including first reactions in case of hazardous material incident.

Hazardous material spill shall be reported immediately to the emergency centre, tel. 112 and APOC tel: 425-6200 then warn others in the area of the danger.

7.9 Rules and instructions for use of chemicals in the workplace

Rules for use of chemicals at the workplace are available on the website for AOSHI www.vinnueftirlit.is See law 61/2013, about chemicals and chemical mixtures, where requirements regarding material safety data sheets can be found, regulation 390/2009, about threshold limits and measures to mitigate pollution at workplaces, and regulation 553/2004, about employee protection against health hazards from chemicals at workplaces. These references are listed above.

7.10 Hazardous chemical markings

All hazardous material passing through KEF shall be labelled in accordance with regulation 236/1990, about categorization, labelling and handling hazardous materials, and chemicals containing such substances. Regulation 322/1990, about safe transportation of dangerous goods by air, regulation 237/2014, about cargo flights, 1077/2010 about transportation of dangerous goods and in accordance with ICAO requirements.





All hazardous material shall be marked and labelled with a proper four letter „UN“ number indicating necessary precautions to use for concerned cargo.

7.11 Handling of flammable materials

- Handling of flammable materials shall be in accordance with regulations no. 723/2017 on fire prevention and fire prevention inspection and no. 282/1980 on aircraft refuelling.
- Smoking is prohibited on Keflavik Airport except in specially designated areas.
- Using tools or equipment in refuelling areas and other areas of the airport that can create sparks or fire is prohibited in accordance with regulation no. 282/1980 and ESB regulation no. 139/2014, except in safe conditions and with permission from Airport Operations Duty Officer or his representative.
- Special caution shall be exercised in proximity of aircraft while refuelling takes place. Vehicles shall always drive on marked routes and a distance of at least 15 meters shall be maintained.
- Employers shall ensure all employees on aprons receive training in operating procedures, safety, fire prevention and other actions in case of accidents and fire.
- Service agents shall ensure approved fire extinguisher is always readily available for aircraft in parking area, one fire extinguisher is considered enough between two aircraft if their parking areas are side by side.

7.12 In case of emergency

All emergencies shall immediately report to the ECC, phone: 112 and APOC. Then, others in potential danger shall warned the area vacated, and necessary information given to emergency personnel as they arrive on scene. Furthermore, a report shall be sent to the aerodrome safety reporting system.

In article 4.1 of these rules, stipulations regarding employers' responsibility about training for employees in safety, preventions, and actions in case of accidents or fire can be found. Use of fire extinguishers and other safety equipment, location of aircraft refuelling emergency stop switches, location of fire alarm switches and role for safety representatives is fundamental knowledge all employees should have.

Information regarding emergency exits and actions in case of emergencies shall be available at readily visible locations at all workplaces on KEF

7.13 Aircraft maintenance and repairs outside

Special caution shall be exercised to avoid fuel, oil, or hydraulic spill where repairs or maintenance on aircraft is performed. In case of any chemical spill, the spill shall be cleaned immediately and assistance from the fire service requested.

Service agents are responsible for safety and cleanliness at the area they operate each time.

When repairs or maintenance is performed on aircraft outside of aircraft hangers, the service agent concerned is responsible for compliance with applicable safety rules and regulations as well as operating procedures

7.14 Safety when working on scaffolds

Work on scaffolds in elevated height at KEF shall be done in compliance with construction regulation no. 112/2012 and regulation for scaffolds no. 729/2018

For short time work in a lifted basket, instructions for lifting people using forklifts. no. 3/2014, from the administration of health and safety shall be used.

Scaffolds, basket boom high lift vehicles, forklifts, and all equipment to be used for temporary use shall qualify all safety requirements stipulated in noted regulations and instructions by the AOSHI.

7.15 Fuel Depots at Keflavik Airport

Fuel depots at KEF and transportation of fuels to the depots shall be in accordance with regulation no. 723/2017 regarding fire prevention and fire prevention inspection, regulation no. 35/1994 regarding oil pollution prevention from operations on land, and regulation no. 252/1999 regarding release of volatile organic compound (VOC) during fuel storage and its distribution of fuel to gasoline stations.

Traffic from visitors into fenced of fuel depots areas shall be limited and no visitor shall be inside the area unless under surveillance.

Manual containing incident management plans, defining clear information regarding actions in case of emergency, shall be readily available in control room on location and a separate issue in service agent's office.

Fuel and water separators for accumulation of potential fuel spills in the area, shall always maintained clean, same applies to drains and piping for same.

7.16 Actions in case of an environmental incident or fuel spill

In case of fuel spill for example during aircraft refuelling, it shall immediately be reported to APOC by ext. 425-6200. Refuelling operation can be stopped by use of emergency shut off switch. Fuel hydrants are also equipped with emergency shut off switches on parking areas. All personnel shall be warned, and area vacated upwind due to fire hazard. It is important that no engine is running, or other potential ignition sources, in the area downwind from fuel spill since fuel vapor move with wind.

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If a vehicle is located at the parking area concerned with the engine running, the vehicle may be driven upwind away from the fuel spill. An engine shall not be started in the area to remove vehicle from spill.

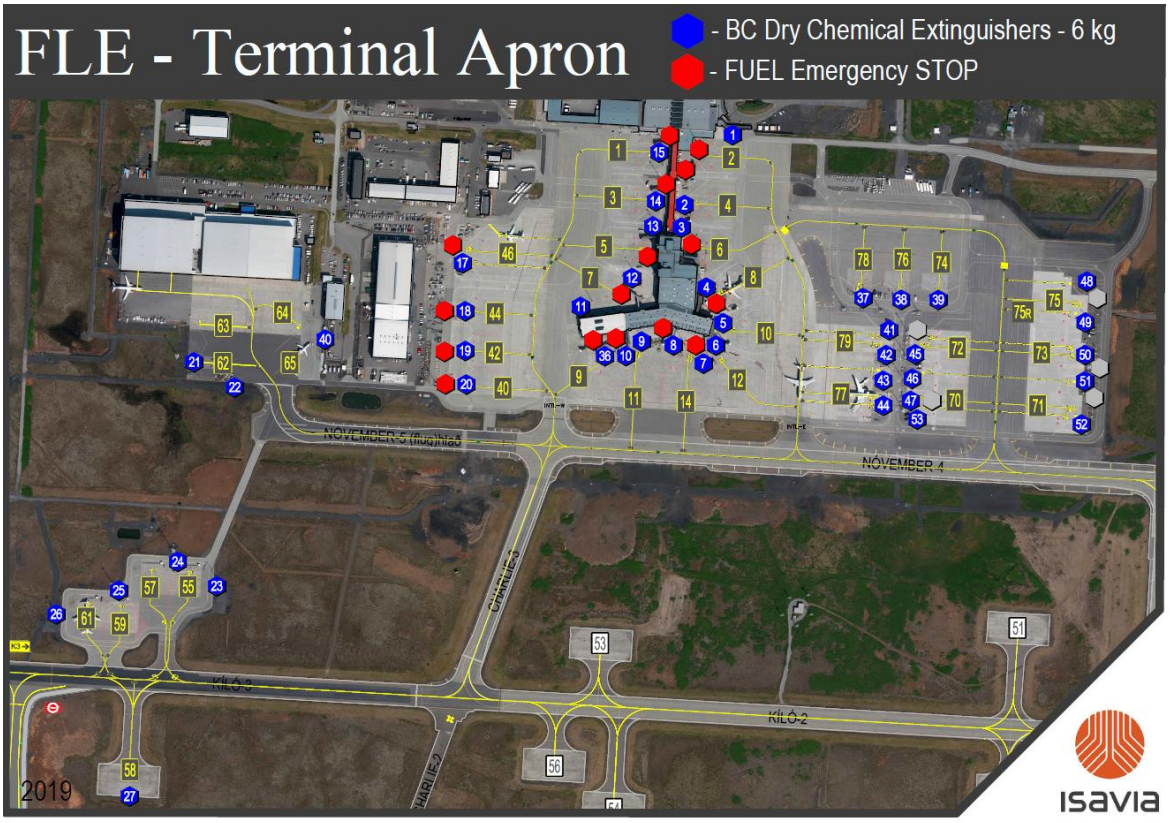
Ensure clear access for fire service.

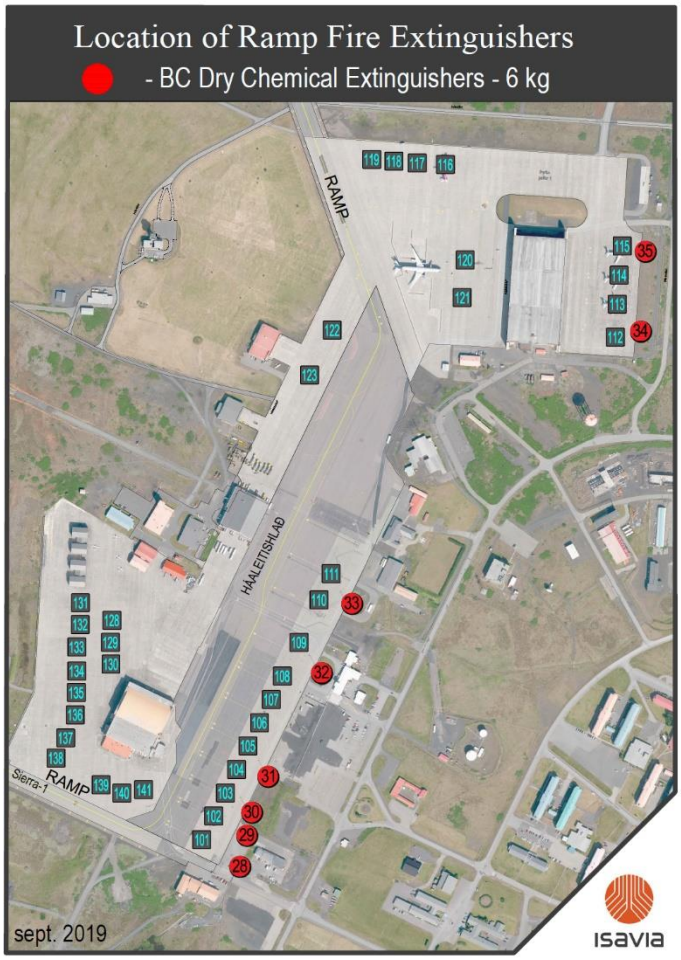
Assistance shall be given to Airport Security in directing traffic away from emergencies when required.

For aircraft refuelling emergency stop, emergency stop switches and fire extinguisher are located at the FLE air Terminal apron and East apron (east apron) as shown on picture below.

It does not matter which switch is used, any one switch will shut-off fuel pumping on all aircraft stands by FLE terminal.

The grey markings indicate aircraft refuelling emergency stops that are inactive.





7.17 Occupational safety and health protection

Companies and their managers at Keflavik airport are responsible for compliance with laws regarding accommodations, health issues and occupational safety at workplaces no. 46/1980, including later amendments, as well as maintaining systematic occupational safety occurrences prevention, workplace inspections and stipulated requirements.

Working under the influence of alcohol, psychoactive substances or drugs that may impair judgment and abilities is prohibited as that would endanger the safety of all passengers and personnel at the aerodrome.

Companies operating at Keflavik Airport shall establish policies regarding the consumption of alcohol, psychoactive substances, and medicinal products.