

## ADVISORY CIRCULAR

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DATE	:	15/06/2020
EDITION	:	FIRST
ISSUED BY	:	SRVSOP

**SUBJECT: GUIDE FOR THE SAFETY MANAGEMENT OF NEW OPERATIONS, OR OPERATION CHANGE, DURING THE COVID-19 CRISIS**

### Section A – PURPOSE

- a. This Advisory Circular (AC) contains guidance material to States and aerodrome operators/users to identify changes and examine the impact of those changes on aerodrome operations, due to the COVID-19 crisis.

### Section B – SCOPE

**The scope is oriented towards the following aspects:**

- a. Provide guidance to aerodrome operators/users for the identification and mitigation of new safety risks associated with restrictions due to the COVID-19 crisis, and return to normal operations.
- b. Provide guidance material to States AGA inspectors and CAAs to enable them to assess the actions taken by aerodrome operators within the scope of their SMS to identify and mitigate safety risks associated with restrictions imposed by the COVID-19 crisis, and return to normal operations.

### Section C – INTRODUCTION

- a. In accordance with LAR 153, paragraph 153.015, the aerodrome operator should implement a safety management system (SMS) that counts with the requirements set in Appendix 1 of that same LAR.
- b. LAR 153, Chapter 5, Appendix 1, provides that the aerodrome operator must have procedures in place to maintain a formal process to identify changes that could affect the level of safety risks associated with its products or services, in order to identify and manage the safety risks that may arise from those changes.
- c. The ICAO *Council Aviation Recovery Task Force* (CART) issued the following Recommendation 3 in its Report of 1 May 2020:  
*“Member States should expedite the development of guidance for safety management of new operations or operation change during this crisis”.*
- d. ICAO Document 10144 - *ICAO Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19*, First Edition, May 2020, provides general guidance to support civil aviation authorities (CAAs) in the management of aviation safety risks that they may face as part of their responsibilities during the new coronavirus disease pandemic (COVID-19).
- e. Document 10144 also indicates that regional safety oversight organizations (RSOOs), e.g. SRVSOP, play a key role in supporting and harmonizing Member States' actions to manage aviation safety risks related to the pandemic.

- f. Acting within the framework of the State's strategy for maintaining civil aviation safety levels during the crisis and in its recovery phase, aerodrome operators are responsible, under their SMS, for managing the new safety risks that may arise from the rapid contraction, and subsequent return, of operations. There is a need to identify such risks and to control or mitigate them.
- g. This AC addresses recommendations for the monitoring of safety risks arising during the period of dynamic change due to the COVID-19 crisis.
- h. This AC does not address risks related to public health, or affecting civil aviation security (AVSEC), or having an impact on facilitation, which are addressed by other ICAO and World Health Organization (WHO) documents.
- i. Section D presents the recommendations for risk management. A structure of MAC and MEI is used, which are defined as:
  - i. Acceptable methods of compliance (MAC): illustrates the means and methods, but not necessarily the only ones possible, to perform risk management; and
  - ii. Explanatory and informative material (EIM): provides explanations and information regarding the concepts and circumstances that lead to the need for risk management.

## **Section D – MANAGEMENT OF SAFETY RISKS**

### **D.1 DYNAMICAL CHANGES [MEI]**

- a. The COVID-19 crisis brought great changes to civil aviation from the beginning and will probably continue to result in profound operational changes during the crisis and in its recovery and return to normalcy phase. It is, therefore, imperative that change management procedures are implemented at aerodromes as part of the aerodrome safety management.
- b. Among the changes being experienced by the CAA AGA units and aerodrome operators during the crisis are the following:
  - i. The dramatic reduction in aerodrome operations;
  - ii. Saturation in the parking of commercial aircraft and aircraft parked in areas unsuitable for this purpose, such as aprons, taxiways, runways or other areas;
  - iii. Revenue reduction from airport and commercial fees, resulting in eventual difficulties in meeting financial commitments;
  - iv. Need for application (by operators) and granting (by CAA) of deviations and exemptions relating to the fulfilment of obligations (e.g. corrective action plans) and validity of certificates;
  - v. Restrictions on the conduct of face-to-face inspections/audits, and on-site follow-up of ongoing certification/oversight processes;
  - vi. Reduction in the workforce available for both the operation and the oversight of the aerodrome;
  - vii. Reduction or suspension of training of aerodrome personnel;
  - viii. Suspension or modification of the frequency of maintenance of the aerodrome infrastructure; and
  - ix. Uncertainty with regard to the future.
- c. The SMS is an important tool for identifying risks to safe operations and implementing mitigation actions.

- d. The rapid reduction in the use of airside areas of airports may have led to the deterioration and loss of capacity of infrastructure, facilities, equipment and systems, leading to the need to restore their normal conditions. In addition, operational personnel must be prepared and re-trained, if necessary, to resume operations.

## D.2 SAFETY-RELATED ELEMENTS TO MONITOR [MAC]

- a. Some key elements that may affect safety should be monitored, in order to identify possible new risks, according to established metrics allowing for the tracking of changes in those elements.
- b. Aerodrome operators should monitor safety elements related with the *organization and operations*.
- c. CAAs should monitor elements related to metrics to track changes in aerodrome operations and priority focus areas.
- d. **Appendix 1** proposes a list of some elements that could be monitored.

## D.3 CHANGE IMPLICATIONS AND RISK MITIGATION

### Actions [MEI]

- a. The aerodrome operator's action in the area of its SMS is essential for the management of risks related to the drastic decrease in operations due to the COVID-19 crisis, and to changes after the resumption of normal operations.

### Actions [MAC]

- b. The actions that could be taken by the aerodrome operator, and which are detailed in the following paragraphs of this AC, are:
  - i. Evaluate the pavements, aprons, runways, facilities and equipment;
  - ii. Work with aircraft operators with the objective of planning for the return to operations;
  - iii. Planning the resumption or return to normal of fire-fighting services (SEI);
  - iv. Strengthen measures with respect to wildlife hazard management; and
  - v. Plan for physical distancing and protection of operations personnel.

### Parked aircraft [MEI]

- c. Parking aircraft for long periods can lead to infrastructure and safety risks, including:
  - i. Damage due to using the pavement in a manner different from that intended by its design;
  - ii. Damage to aircraft, especially the risk of collision during short-distance parking manoeuvres;
  - iii. Runway or taxiway incursions; and
  - iv. Problems relating to access to, and availability of, aircraft.
- d. As additional support material, Airport Council International (ACI) has a guide available to assist aerodromes in identifying and mitigating these risks:
  - Advisory Bulletin on 24 April 2020 titled "Mitigating the risks created by overflow aircraft parking": [https://aci.aero/wpcontent/uploads/2020/04/200423-Airfield-Parking-Advisory-Bulletin-FINAL\\_001.pdf](https://aci.aero/wpcontent/uploads/2020/04/200423-Airfield-Parking-Advisory-Bulletin-FINAL_001.pdf)

**Parked aircraft [MAC]**

- e. The aerodrome operator should consider the following, before restarting normal operations:
- i. Carry out, together with air navigation services and aircraft operators, an **aircraft movement plan** considering the arrangement of aircraft parking in unusual locations, so as to avoid collisions between aircraft, incursions into maneuvering areas, or damage to aircraft or infrastructure.
  - ii. Evaluate the weight support capacity to ensure that the pavement can accommodate the anticipated loads.
  - iii. Verify compatibility between the Pavement Classification Number (PCN) of the aerodrome pavements and the Aircraft Classification Number (ACN) of the aircraft to be operated.
  - iv. Monitor pavement conditions with visual inspections of all areas that were used to park aircraft. If aircraft were parked on taxiways or runways, photos should be taken of those pavements at different points, while the aircraft is still parked and after the aircraft has been removed. These photos can then be used to monitor and assess any structural damage to the pavement. New evaluations should be carried out, including documenting by taking new photos of the same points one month after return to normal operations, to corroborate whether there were any changes to the pavement.
  - v. Clean the pavement after aircraft are removed from a taxiway or runway. These areas should be washed and swept to remove any oil, grease or other chemicals that may have been deposited during maintenance activities or spills, and also remove any foreign object debris (FOD) that may have been deposited on the floor while in use as a parking point.
  - vi. Review procedures for access, inspection and maintenance of infrastructure that may have undergone changes during the COVID-19 crisis. Aerodrome operators should review all related procedures and adjust them, as necessary.
  - vii. Coordinate with all stakeholders to plan for resumption of operations. Aerodrome operators should ensure that all their actions and safety assessments are coordinated with relevant stakeholders, including air navigation services and aircraft operators.
- f. The aerodrome operator should consider the following, after restarting normal operations:
- i. Monitor the condition of the pavement. Following the resumption of normal operations, aerodrome operations personnel should perform frequent checks in areas where aircraft were parked during the crisis, to ascertain if there were any changes to the pavement. It is advisable to repeat these checks at least twice a month, and to create a special continuous monitoring schedule for those areas. In pavement inspections the damage to be documented should include, for example:
    - a. Depressions in flexible pavements due to wheel stress;
    - b. Sinking or corrugation;
    - c. Disintegrations; and
    - d. Defects from solvent spills and other oil products.

**Return of aircraft to service (in cooperation with airlines) [MEI]**

- g. When an aircraft returns to service after a long period of standstill, the appropriate checks and tests to ensure its airworthiness must be carried out by its operator. All systems must be operationally tested, according to the manufacturer's instructions and regulatory requirements.
- h. Some of the aircraft will require taxiing, ground engine run-ups and/or test flights before they can be returned to service.
- i. Some aircraft may require high volume fuel unloading, or refueling, and tire changes, before they can be removed or towed.

#### **Return of aircraft to service (in cooperation with airlines) [MAC]**

- j. Aerodrome operators should develop a coordinated plan for the return to operation of the aircraft that have been parked for a long period of time.
- k. This plan should focus on the sequence - which aircraft will be worked on and when, and what type of testing and facilities will be needed before returning to service.
- l. The plan should be initiated by the airlines (maintenance and flight operations) in coordination with the entities involved, including ATC and airside management. The plan should include planning for aircraft towing.
- m. To complement the plan, it is recommended that aerodromes issue a directive for the return of aircraft to service after a long period of having been parked.

#### **Return to the service of the aprons, taxiways, runways, visual aids, facilities, etc. [MAC]**

- n. Aerodrome infrastructure, visual aids and airside facilities should be checked prior to return to normal operations and should have a more frequent and specific inspection schedule in the first month after return to operations.
- o. **Appendix 2** presents possible problems that may have occurred on the airside of the aerodrome, and possible solutions and recommendations.
- p. **Appendix 3** presents a checklist developed by the SRVSOP that can be used by aerodrome operators to record the verifications made at the airport for the resumption of operations.

#### **Return of furloughed staff [MEI]**

- q. Airport personnel may have been on leave or away from service for short or long periods. As a result, the skills needed to perform the activities may be reduced when they return to work, even if they have been trained previously. Also, some aerodromes may hire short-term staff to have greater agility and flexibility to increase or decrease the volume of operations.

#### **Return of furloughed staff [MAC]**

- r. Aerodrome operators should resume normal operations in a controlled environment, where the risk of incidents related to personnel misconduct is reduced.
- s. The need for re-training or re-certification of personnel should be assessed, depending on the period of time they were away from their work activities. For training and initial phases of the resumption of operations, the use of virtual and on-line classes should be maximized, whenever possible.
- t. Operators should outline the critical functions relating to safety, the training (skills and qualifications) required by national regulations, and the severity of these.

- u. The necessary training of permanent and temporary staff should be ensured in accordance with regulatory requirements, and the status of a person's training should be ascertained before they are assigned to a safety-critical task.
- v. Before any task is carried out, and based on its severity -- e.g. personnel working in critical areas of the aerodrome, as well as essential maintenance and/or inspections in the manoeuvring area or with management of critical facilities of the CNS/MET infrastructure -- high priority should be given to verifying mandatory trainings and qualifications. Due to the circumstances, an additional competence verification should be considered as a good approach to take, within a controlled process of resuming operations.
- w. Another effective measure to reduce the probability of a safety event during the restart of operations phase is to limit access to the manoeuvring area.

#### **Human factors in airside safety management [MEI]**

- x. Aerodrome operators' personnel and companies operating at the aerodrome find themselves under an abnormal situation.
- y. Mental distractions can affect personnel behaviour in a number of ways, for example:
  - i. The consequences of the epidemic may cause concerns regarding short and long term prospects for employment, the health and safety of colleagues, family members, etc.; and
  - ii. Aerodromes are overloaded by aircraft parked in various locations that are not normally used for that purpose. As a result, some aerodromes experienced an increased damage to aircraft or airport facilities, due to human factors.

#### **Human factors in airside safety management [MAC]**

- z. Aerodrome operators should take into account human factors when planning for the resumption of operations.
- aa. Awareness campaigns should be conducted as a mitigation measure, by promoting the importance of mental health and awareness on how mental distractions can affect safe behaviour and create operational risks.

#### **Rescue and fire fighting services (RFFS) [MAC]**

- bb. The preparation of the RFFS for the resumption of normal operations should be informed at least one month before its re-commencement. The recommendations below apply when the RFFS is resumed after a period of inactivity, or partial activity. The plan for re-commencement of operations should involve the RFFS activities according to the level of protection to be provided.
- cc. The number of operations and the types of aircraft to be operated should be reported to the RFFS as soon as possible, so that the personnel needed to maintain the required level of protection can be assessed according to the aerodrome RFFS category and national regulations.
- dd. In accordance with national regulations and State CAA guidance, sufficient personnel should be provided during operating hours to enable the operation of vehicles and equipment according to their capacity, to meet response times and to apply the required extinguishing agents. Shifts should be scheduled so that there is sufficient time for staff turnover.
- ee. Upon return to work, all personnel should be instructed on the activities to be carried out according to the RFFS category, as well as their responsibilities and working hours. The skills

and competencies of staff who have been on leave from work should be assessed and validated.

- ff. All personal protective equipment should be inspected and cleaned before use.

#### **Equipment [MAC]**

- gg. Prior to resumption, the aerodrome operator should perform inspection and maintenance of all equipment and accessories, to ascertain that they are ready for use. The verification should include:
  - i. All RFFS vehicles, to ensure their acceleration and speed testing;
  - ii. Verification of rescue equipment and accessories. Hoses, personal protective equipment, respiratory protective equipment, etc.; and
  - iii. Verification of the fire extinguishing agent reserves (foam generating solution and dry chemical powder) and water, according to national regulations.

#### **Aerodrome inspections [MAC]**

- hh. The aerodrome operator should perform inspections in areas of the aerodrome that were out of service, including:
  - i. Inspection of emergency routes and entry points;
  - ii. Verification of the condition of the aerodrome perimeter roads;
  - iii. Inspection of the entrances to the RFFS range areas around the aerodrome; and
  - iv. Inspection of hydrants and supply systems.

#### **Wildlife hazards [MEI]**

- ii. The number of daily operations at aerodromes has been drastically reduced and some airports have temporarily closed their activities. This may lead to an increased presence of wildlife in and around the aerodrome and increase the risk of wildlife-related incidents.

#### **Wildlife hazards [MAC]**

- jj. Management of wildlife hazards during the resumption of normal operations should include risk assessment, mitigation measures, a resumption plan, and coordination with those involved.
- kk. In preparation for the return of operations, consideration should be given to:
  - i. Review/update risk assessment and related control measures:
    - a. if necessary, adjust the control measures based on the revised risk assessment.
    - b. If wildlife management activities were limited during the restriction of operations, pay particular attention to consequences, such as:
      - 1. Risk of increase of some bird or land animal specimens;
      - 2. Specimens returning accustomed to the absence of dispersal activities; and
      - 3. Occurrence of bird nests, especially in breeding season.
  - ii. Maintain and act according to regular procedures after the reactivation of a runway;
  - iii. Regular safety procedures should include detailed inspections to check for wildlife;

- iv. Inform airlines and other aircraft operators of measures taken to control wildlife hazards; and
  - v. Consult aircraft operators' technicians who make use of aircraft parking positions on runways, taxiways and aprons to watch for possible bird nests on the aircraft, including engines, and to watch for birds flying to and from the aircraft.
- II. Mitigating actions in preparation for the increased volume of operations should include the following:
- i. Continuous monitoring of wildlife according to the Wildlife Hazard Management Plan (or Wildlife Management Plan). Do not give wildlife the opportunity to settle on runways, taxiways, aprons, equipment or buildings;
  - ii. Maintain collection of fauna data (sightings) and monitor previously collected data;
  - iii. Conduct detailed inspections, looking for possible hotspots that may attract wildlife, especially in areas where access during normal operations is limited;
  - iv. Record any identified habitat, preferably in digital form, and produce and maintain an updated overview of the wildlife hazard at the aerodrome;
  - v. Attempt for possible increase of wildlife during the period with fewer operations and/or the presence of bird specimens and other animals not usually seen in the aerodrome environment. It may be necessary to update the Fauna Management Plan to include management of those new specimens found; and
  - vi. Recuperate fences to prevent entry of land animals.

#### **Airside Operations Personnel Protection [MAC]**

- mm. Measures taken during the crisis should be continued as far as possible, and for as long as necessary. This may include:
- i. Limit maintenance and operations personnel only to those required to perform critical safety-related functions, or those performing tasks that cannot be done remotely;
  - ii. Reduce employee exposure by using virtual media, where possible;
  - iii. Limit contact between crews (people) during shift changes;
  - iv. Crew members should not mix; shifts should maintain the same crew members so that if one person becomes ill, only one is affected. Performing an activity individually, rather than in twos, or in groups, should also be considered. Number of people in break rooms should also be reduced;
  - v. Maintain physical distance between individuals in the same crew;
  - vi. Reduce the exchange of physical documents;
  - vii. Every supervisor or crew leader should count with a replacement who does not have physical contact with him/her;
  - viii. Airports should have staff who are on call at home, for when needed;
  - ix. Increase the cleaning frequency of areas and equipment such as radios, vehicles, etc.; and
  - x. Any crew member with signs of a cold or flu should stay at home until medical evaluation is received.

**Ramp operations [MEI]**

nn. Guidance material regarding ground services (ramp operations) during COVID-19 and for return to normal operations can be obtained from <https://www.iata.org/en/programs/ops-infra/ground-operations/>

**Section E – DOCUMENTATION OF REFERENCE**

- ❖ ICAO1 – Document 10144, First Edition, May/2020 – ICAO Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19.
- ❖ ICAO 2 – Council Aviation Recovery Task Force (CART) Report, Montréal, Canada, 27 May 2020.
- ❖ ICAO 3 – Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis, ATTACHMENT, Council Aviation Recovery Task Force (CART), Montréal, Canada, 27 May 2020.
- ❖ ACI1 – Aviation Operations During COVID-19 Business Restart and Recovery, ACI (Airport Council International), 2020/01.

## APPENDIX 1

**ELEMENTS TO BE MANAGED BY AERODROME OPERATORS/USERS  
DURING THE COVID-19 CRISIS**

SAFETY ELEMENTS RELATIVE TO ORGANIZATION
Organizational Factors
- Centralized monitoring of changes in policy, procedures, waivers and deviations from standardized procedures
- Reduced reporting of safety data and operational impacts
- Transport or repatriation operations due to COVID-19
- Impacts on the workforce (retirements, new hires, leaves, resignations)
- SMS - Re-prioritize safety issues
- Monitoring the use of safety communication channels
Personnel Factors
- Monitoring the use of employee assistance programmes
- Monitoring of stress, fatigue, depression, anxiety, anger, mistrust, suicide
- COVID-19 test results
- Operations in risk areas for COVID-19
- Use of personal protective equipment
- Monitoring of staff numbers in the units/departments
- Participation in mental health programmes
- Incidents of violence at work
- Possible security breaches (physical and IT)
- Loss of key personnel

SAFETY ELEMENTS RELATIVE TO OPERATIONS
Organizational Factors
- Impact of parked aircraft on runways and taxiways - recovery plan
- Frequent changes in aircraft operators and their effect on aerodrome safety programmes
- Provision of updated information on the conditions of the aerodrome and possible restrictions regarding its disclosure to users
- Gaps in experience and/or knowledge on the part of the airport with respect to non-routine operations
- Occurrence of many and rapid changes in procedures for operations due to new national and local government regulations and/or operational restrictions
- Review of inspection/monitoring plans
- Staff training
- Reports on COVID-19
Movement Area Factors
- Use of aircraft unfamiliar to aerodrome personnel, ATC personnel and ground handling
- Aerodrome operators' personnel unfamiliar with the aerodrome
- Potential damage to aerodromes (pavements, signs, lights, ground collisions) during non-routine aircraft parking operations
- Foreign object debris (FOD)
- Operational impact of parked aircraft: encroachment on runway protection areas, interference with air navigation aids, more complex taxiing routes, increased risk of incursion mainly by crews unfamiliar with the aerodrome
Personnel Factors
- Staff lack of compliance regarding safety procedures and the aerodrome manual rules
- Distractions from tasks due to internal and external factors

## APPENDIX 2

## POSSIBLE PROBLEMS THAT MAY HAVE OCCURRED ON THE AIRSIDE OF THE AERODROME AND POSSIBLE SOLUTIONS AND RECOMMENDATIONS

Problem	Cause(s)	Possible impact	Possible solutions / recommendations
<b>GENERAL</b>			
Maintenance - Runway - Taxiways - Aprons	Less resources due to lower traffic volume and economic crisis  Unused or disconnected systems	<ul style="list-style-type: none"> <li>- Fewer maintenance personnel available to perform tasks due to compulsory leave, absences and social distancing requirements</li> <li>- Electrical systems out of service</li> <li>- Increased risks due to reduced signal/sign/light performance</li> <li>- Deterioration of pavement due to long-term parking of aircraft</li> <li>- Increased risk due to decreased inspection capacity</li> <li>- Increased risk of non-compliance</li> </ul>	<ul style="list-style-type: none"> <li>- Identify operational risks before restarting operations (checklists should be available for normal operations)</li> <li>- Take mitigation measures to control risks</li> <li>- Perform preventive maintenance before operations resumption</li> <li>- Re-evaluate the maintenance plans and their priorities considering different scenarios (temporary, short, medium and long term)</li> <li>- Maintain coordination with the CAA to obtain the necessary authorizations for maintenance services, when necessary</li> </ul>
Works - Runway - Taxiways - Aprons	Lack of resources	<ul style="list-style-type: none"> <li>- Risk increase due to less ability to perform inspections</li> <li>- Risk of non-compliance</li> </ul>	<ul style="list-style-type: none"> <li>- Identify operational risks before restarting operations</li> <li>- Take mitigating measures to control risk</li> <li>- Consider temporary versus permanent solutions</li> <li>- Maintain coordination with the CAA in order to obtain the necessary authorizations for the execution and approval of the works</li> </ul>

Problem	Cause(s)	Possible impact	Possible solutions / recommendations
<b>PLATAFORM</b>			
<i>Maintenance / Apron</i>	<i>Refer to General – Maintenance</i>	<i>Refer to General – Maintenance</i>	<i>Refer to General – Maintenance, plus:</i> <ul style="list-style-type: none"> <li>- Inspection of pavement condition</li> <li>- Verification of signs and signals</li> <li>- Checking of apron lights</li> </ul>
<i>Works / Apron</i>	<i>Refer to General-Works</i>	<i>Refer to General-Works</i>	<i>Refer to General-Works</i>
<i>Fuel systems</i>	<i>Specific maintenance required to restart the use of the apron's fuel facilities</i>	<i>Risk of fuel supply interruption due to filter contamination or blockage</i>	<i>Check with fuel suppliers before restarting operations</i>
<b>TAXIWAYS</b>			
<i>Maintenance / Taxiways</i>	<i>Refer to General- Maintenance</i>	<i>Refer to General- Maintenance</i>	<i>Refer to General- Maintenance, plus:</i> <ul style="list-style-type: none"> <li>- Inspection of pavement condition</li> <li>- Verification of signs and signals</li> <li>- Verification of taxiway lights</li> <li>- Verification of energy supply systems</li> <li>- Verification of runway incursion protection systems and advanced surface movement guidance and control system (ASMGCS)</li> <li>- Check for the presence of mobile obstacles</li> <li>- Check for presence of material interfering with sensitive areas of the ILS</li> </ul>
<i>Works / Taxiways</i>	<i>Refer to General-Works</i>	<i>Refer to General-Works</i>	<i>Refer to General-Works</i>
<b>RUNWAYS</b>			
<i>Maintenance / Runways</i>	<i>Refer to General- Maintenance</i>	<i>Refer to General- Maintenance</i>	<i>Refer to General- Maintenance, plus:</i> <ul style="list-style-type: none"> <li>- Inspection of pavement condition</li> <li>- Verification of signs and signals</li> <li>- Verification of runway lights</li> </ul>

Problem	Cause(s)	Possible impact	Possible solutions / recommendations
			<ul style="list-style-type: none"> <li>- Verification of energy supply systems</li> <li>- Verification of runway incursion protection systems and advanced surface movement guidance and control system (ASMGCS)</li> <li>- Check for the presence of mobile obstacles</li> <li>- Check for presence of material interfering with sensitive areas of the ILS</li> <li>- Verification of air navigation aids on runways unused during the period of reduced operations</li> </ul>
Works / Runways	Refer to <i>General-Works</i>	Refer to <i>General-Works</i>	Refer to <i>General-Works</i>

## APPENDIX 3

## SAMPLE CHECKLIST – AIRSIDE OPERATIONS

The following Checklist was prepared based on the Spanish version of the checklist prepared by ICAO, available at <https://www.icao.int/safety/COVID-19OPS/Pages/aga.aspx>, and adapted to the LAR AGA package (available at <https://www.srvsop.aero/biblioteca/reglamentos/>).

The intention of this checklist is to facilitate a quick review for airports that are going to resume operations after a closure/reduced operational period. This is not an exhaustive list as detailed checks / inspections can be carried out as part of the State's aerodrome safety oversight. Items may be added or excluded from the checklist, depending on local conditions, taking into account whether aerodromes will resume operations after complete closure, or increase operations due to a period of minimal traffic.

In these extraordinary circumstances, it is not intended to obtain State approvals through this checklist for resuming aerodrome operations after an extended period of closure/reduced operations. However, States may decide to direct aerodrome operators to complete and submit this checklist, if local conditions require it.

*Note: Resuming aerodrome operations may involve facilitation and security issues, such as facilities required for public health implementation (IHR 2005 regulations), border control (immigration, customs, quarantine), cleaning of various passenger facilities and services, review of the airport security plan, access control, etc. This checklist does not include areas associated with aerodrome facilitation (Annex 9) and aviation security issues (Annex 17).*

Items	Areas / Topics to cover	References <i>Add local CAA regulations</i>	Action taken* <i>Attach any relevant documentation, as necessary</i>	Remarks
<b>A</b>	<b>Aerodrome infrastructure</b>			
<b>A1</b>	<b>Visual navigation aids</b> Including, but not limited to, the status of all movement area signals, lights, signs, PAPI calibration, status of obstacle lighting, apron lighting, wind direction indicators, etc.	LAR 154, Amendment 6 Chapter E and F; Appendices 5, 6 and 8. LAR 153, Amendment 6 Chapter G y Appendix 10 CA-AGA-153-001		
<b>A2</b>	<b>Electrical systems</b> Including, inter alia, the status of primary and secondary energy supply systems for visual aids and radio navigation aids, etc.	LAR 154, Amendment 6 Chapter G and Appendix 9. LAR 153, Amendment 6 Chapter G and Appendix 10 CA-AGA-153-001		

Items	Areas / Topics to cover	References <i>Add local CAA regulations</i>	Action taken* <i>Attach any relevant documentation, as necessary</i>	Remarks
<b>A3</b>	<b>Non-visual navigation aids</b> Status of radio navigation aids, especially those that were not used during the lock-up period, i.e. VOR / DME, ILS for a specific runway.	LAR 210, Amendment 1, Chapter B		
<b>A4</b>	<b>Rescue and Fire Fighting (RFF)</b> Including, but not limited to, the condition of fire-fighting equipment, extinguishing agents and the readiness of personnel to comply with RFF and response time requirements, the condition of access roads, plans/equipment for the removal of disabled aircraft, etc.	LAR 153, Amendment 6, Chapter E and Appendix 6 CA-AGA-153-008		
<b>B</b>	<b>Aerodrome operations</b>			
<b>B1</b>	<b>Obstacle management</b> Inspect obstacles around the aerodrome with a specific focus on an obstacle-free zone (OFZ), by tree trimming or identifying any new structure during this period that will affect the safety of aircraft operations.	LAR 153, Amendment 6, Chapter C and Appendix 3 LAR 154, Amendment 6, Chapter D and Appendix 4		
<b>B2</b>	<b>Pavement management</b> Check the condition of runway, taxiway and apron pavements, with special attention to pavement damage due to possible prolonged parking of aircraft, as well as during aircraft ground manoeuvres in improvised parking areas.	LAR 153, Amendment 6, Chapter F and Appendix 11 LAR 154, Amendment 6, Chapter B and Appendix 3		
<b>B3</b>	<b>Wildlife Risk Management</b> With a focus on vegetation, habitat and land use management, check the status of wildlife activity reports and of deterrent systems. Check on aircraft and other infrastructure (i.e. passenger cargo bridges) for possible "nesting" due to inactivity, as well as on the effectiveness of wildlife management plans.	LAR 153, Amendment 6, Chapter E and Appendix 7 CA-AGA-153-006		
<b>B4</b>	<b>Platform Management</b> Including, but not limited to, efficient operation of passenger boarding bridges, visual docking guidance system (VDGS), platform lighting, foreign object debris (FOD) management, availability of aircraft positions for assignments, etc.	LAR 153, Amendment 6, Chapter E and Appendix 8 CA-AGA-153-005		

Items	Areas / Topics to cover	References <i>Add local CAA regulations</i>	Action taken* <i>Attach any relevant documentation, as necessary</i>	Remarks
<b>B5</b>	<b>Aeronautical information management</b> Check and initiate action to amend/cancel existing NOTAMS/publications regarding any restrictions on aircraft operations or closing (partial or full) of the aerodrome.	LAR 154, Amendment 6, Chapter B LAR 215, Second Edition CA-ANS-AIM-215-001		
<b>B6</b>	<b>Aerodrome emergency plan</b> Review the aerodrome's emergency plan to include preparing the aerodrome to handle medical emergencies. This may include, but is not limited to, lessons learned and procedures followed during the COVID-19 lockdown, plans for handling such contingencies in the future, etc.	LAR 153, Amendment 6, Chapter E and Appendix 2 CA-AGA-153-002		
<b>B7</b>	<b>Works on the airside</b> Including but not limited to reviewing the work plan under the currently changed conditions (management of change), such as changes in scope, contractual obligations, need for additional security precautions, etc.	LAR 153, Amendment 6, Chapter B		
<b>B8</b>	<b>Availability of vehicle / equipment (operational support / aerodrome maintenance)</b> Check the disposal of all vehicles and equipment at the aerodrome that have not been used for an extended period of time.	LAR 153, Amendment 6, Chapter E Aerodrome Manual According to the manufacturers' vehicle manual		
<b>C</b>	<b>Certification and compliance</b>			
<b>C1</b>	<b>Aerodrome certification status</b> Based on the validity of the current aerodrome certificate/license and the need for certification/certificate renewal during the shutdown/reduced period of operations	LAR 139, Amendment 6, Chapter B		
<b>C2</b>	<b>Exemptions, if any</b> Check the status of the exemptions granted and any conditions or procedures subject to the granting of the exemption.	LAR 139, Amendment 6, Chapter E		

Items	Areas / Topics to cover	References <i>Add local CAA regulations</i>	Action taken* <i>Attach any relevant documentation, as necessary</i>	Remarks
<b>C3</b>	<b>Safety risk assessment</b> Conduct a safety risk assessment for non-compliance with national aerodrome regulations/standards or deviation arising from prolonged closure or limited operations, such as violation of obstacle limitation surfaces (OLS) due to continuous parking of aircraft in non-designated areas, deviations from standard operating procedures (SOP) due to COVID-19, etc.	LAR 139, Amendment 6, Chapter E LAR 153, Amendment 6, Chapters I and J CA-AGA-139-001		
<b>D</b>	<b>Coordination and collaboration</b>			
<b>D1</b>	<b>Stakeholder preparation</b> Details of the virtual discussion and communications with stakeholders on plans to resume normal airport operations, addressing their concerns and the support they require. The option of airport collaborative decision making (A-CDM) as a basic tool for the entire coordination process can be considered to ensure timely and effective information exchange, if it is not already available. This will facilitate gaining the confidence of stakeholders to fully implement A-CDM in the future, using appropriate resources and processes.	CA-AGA-153-005 CA-AGA-153-010		
<b>D2</b>	<b>Revised aerodrome capacity</b> With the interested parties involved, agree on any operational restrictions, including declared capacity, timetable slot coordination, etc., in coordination with the slot coordinator at the airport, if necessary.			
<b>D3</b>	<b>Virtual meetings</b> Consider organizing virtual meetings of the local runway safety team (LRST) and of the local airport operations coordination group, if necessary, to understand the safety concerns of the parties involved.	CA-AGA-153-010		

Items	Areas / Topics to cover	References <i>Add local CAA regulations</i>	Action taken* <i>Attach any relevant documentation, as necessary</i>	Remarks
<b>D4</b>	<b>Air traffic control and meteorology</b> Coordinate with the local ATC (TWR, APP and ACC) to ensure the readiness of the aerodrome and airspace for the return to operations, and agree on operational or capacity restrictions. Coordinate with the local meteorological office for the availability of meteorological services, if not provided through the local ATC.	LAR 203, First Edition LAR 211, Amendment 1		
<b>D5</b>	<b>Airport Security</b> Coordinate and review with relevant airport security agencies on readiness to resume operations, with a specific focus on aerodrome perimeter fences, lighting, etc. related to the provisions of LAR 153. It may also include reviewing changes implemented during restricted operations/closure, and identifying any new requirements (e.g. related to temporary operations or infrastructure).	LAR 153, Amendment 6, Chapter E		
<b>E Human resources, competency and training</b>				
<b>E1</b>	<b>Availability of human resources.</b> Check the availability of human resources, especially if the aerodrome operator and/or subcontractors have reduced staff.	According to the requirements of the individual parties		
<b>E2</b>	<b>Preparation of aerodrome users</b> Including, but not limited to, the preparation of airport users for ground handling, refuelling, catering and other subcontracted agencies after a long period of closure, or reduced activity.	LAR 139, Amendment 6, Chapters A y D		
<b>E3</b>	<b>Preparation of aerodrome personnel</b> Brief information/training for aerodrome personnel on their roles and responsibilities, as they may resume work after an extended break. Refresher training for those with expired permits/qualifications.	CA-AGA-139-002		

\* The action taken may be a simple " verified, suitable for resumption of operations " or may include detailed inspection procedures, details of communications and virtual meetings, etc., as attachments.