

Ground Operational Readiness - Post COVID-19 (2021)

Introduction

In April 2020, members of the Ground Handling Operations Safety Team (GHOST) worked together to create guidance materials, to assist all stakeholders prepare for a return to safe operations, through the adoption of a standardised approach:

1. A risk assessment template was developed for use by the community, to ensure that risks associated with the re-start/ramp-up of operations were being identified and evaluated, along with suggested control measures that could be used to reduce ratings to acceptable levels. It was the individual stakeholder's responsibility to review the template and determine their own organisational strategies.
2. Further ground operational readiness guidance (this document) was also developed to support the risk assessment and provide enhanced details to stakeholders on key risks identified by its industry subject matter experts.

Both documents have been extensively reviewed and amended for 2021, to reflect the experiences and learnings of last year. The updated focus areas are:

- **Operational Management and Supervision.**
- **Personnel Competence.**
- **Staff Wellbeing.**
- **GSE/Vehicle Care and Maintenance.**
- **Wildlife Hazard Management.**

GHOST intends to remain aligned with the outputs from other industry groups and will simply provide more detailed analysis of the topics that are affecting our community. Where possible, links to other data sources have been provided.

Scope

As the industry starts to recover from COVID-19, flight activity could increase at short notice, creating a demand for ground operational services, provided by both in-house and contracted organisations. All stakeholders have been heavily affected by COVID-19 and continue to experience

challenges with both their resources and capabilities. During this re-start period, a focus on ground operational activities is vital, to ensure safety standards are maintained.

The COVID-19 pandemic has taken much longer to move forward than was expected. During this time, Aircraft Operators, Aerodrome Operators and Ground Handling Service Providers (GHSPs) have had to use redundancy and furlough to survive. This means that many re-starts/ramp ups will need to be treated as 'new' operations, and stakeholders should work collaboratively, to ensure a safe return to flying operations.

Aircraft and Aerodrome Operators may contract certain activities to external organisations such as: aircraft de/anti-icing, handling (loading, dispatch, pushback and towing), servicing (potable water, toilets and cleaning), cargo (dangerous goods control, build and screening), fuelling, load control (mass and balance) and passenger services/assistance (dangerous goods control and ramp supervision).

When contracting or purchasing any services as a part of its activities, the operator shall ensure that these services comply with the applicable requirements and that any aviation safety hazards associated with contracted or purchased services, are considered by the operator's safety management and compliance monitoring programmes. The ultimate responsibility for the service provided by external organisations, should always remain with the certificate holder.

Operational Management and Supervision

Key Concerns: Financial, travel and/or resource restrictions, resulting in reduced assessment of new stations/GHSPs, station restarts, increased volume of operations and continued oversight activities. Reduced and unpredictable resources and/or workloads, resulting in a reduced ability to provide adequate manpower to fulfil contracted tasks.

Existing management system processes should be used to establish and monitor capabilities. Management of change processes should include identifying, assessing and mitigating safety hazards and risks, particularly those which have developed because of the pandemic situation. For example, the implications of COVID related health control measures, the complexity/consequence of any new procedures, revised roles/responsibilities and capabilities of Ground Handling Service Providers at home base and destination aerodromes.

Stakeholders have more than likely already completed capability assessments but they should be reviewed again to ensure they are up to date. Extended pandemic driven topics, such as any services that have been further sub-contracted out (to an unknown or unassessed provider) and appropriate facilities should be included. Many facilities have been handed back to the airport, as operations have downsized (in an attempt to reduce fixed costs) and if not assessed, could affect staff wellbeing and training standards.

Any changes to key contacts/responsible managers should be appropriately communicated. Staff responsible for planning functions should be reinstated as early as possible, to ensure that appropriate resources are made available to meet operational demands. Safety/Operational managers that have been supporting front line duties during the pandemic should return to their original roles or additional competent resource should be provided.

Procedures should be continually monitored for compliance through established management system processes. This may also be supplemented by accessing and assessing the GHSP's own oversight activities. Use of unapproved or unassessed procedures may result in unsafe (and unintended) consequences. The scope and frequency of oversight activity should be regularly reviewed to ensure an appropriate level of safety assurance.

Effective communication and collaboration is important to ensure safe and successful operations. In the current pandemic situation, stakeholders may be focused on financial security but must ensure that safe operations are a priority. Staff must be encouraged and supported to report any adverse behaviours or safety concerns in line with Regulation (EU) No 376/2014. Just Culture principles should be applied.

There may be a possibility that staff who have remained on shift during the pandemic, will want to take leave as soon as resources allow. Stakeholders should carefully manage leave requests, to ensure that the appropriate number of competent personnel are available to conduct the required tasks.

Full onsite pre-operational assessments may not be possible in the current situation. Although onsite visits are preferred, alternative strategies such as robust desktop safety assessments supported by verbal communications may be used. The following aide-memoire and self-declaration template may assist stakeholders capture some of the topics included above.

High-Level Aide-Memoire for Risk Assessment

Actions	Evaluation Guidance
Verify that competent staff are available to perform ground handling activities.	Are there enough numbers of trained staff for: <ul style="list-style-type: none"> ▪ Anti-/De-icing. ▪ Cargo Operations. ▪ Fuelling. ▪ Load Control. ▪ Passenger Services. ▪ Ramp Operations. ▪ Turnaround Supervision.

	<p>Is there robust management of staff that have been recruited from multiple organisations, with differing standards, including the complication of various staff training exemptions?</p> <p>Have any significant measures been taken to operate at a reduced or differing capability been fully evaluated?</p> <p>Have all ground staff have been advised about new/revised policies and procedures?</p>
<p>Verify that vehicles & ground servicing equipment are available to perform ground handling activities.</p>	<p>Have all vehicles and GSE have been maintained during phases of low and/or no activity, including:</p> <ul style="list-style-type: none"> ▪ Airbridges. ▪ Baggage Tugs. ▪ Belt Loaders. ▪ Catering Vehicles. ▪ Cleaning Vehicles. ▪ De-icing Rigs. ▪ Ground Power Units. ▪ PRM Vehicles. ▪ Toilet Service. ▪ Water Service. ▪ ULD Loaders and Dollies.
<p>Verify use of any additional providers.</p>	<p>Has any service provided by any contractor, sub-contracted by a current provider been evaluated? (Use topics above)</p>
<p>Verify that appropriate facilities are available for ground handling activities.</p>	<p>Have all facilities been maintained during phases of low and/or no activity, including:</p> <ul style="list-style-type: none"> ▪ Security. ▪ Screening. ▪ Check-in. ▪ Gate equipment.
<p>Verify SMS principles are present.</p>	<p>Is there any evidence of participation in the appropriate safety meetings with both the airport and their contracting operators?</p> <p>Have reporting systems been maintained and remain available, including staff to investigate safety incidents?</p>
<p>Verify actions to ground staff wellbeing.</p>	<p>Are support programmes to manage such ongoing operational challenges as limited resources, fatigue and pressure, all of which are enhanced during this COVID-19 influenced period.</p>
<p>Verify standards of a new provider.</p>	<p>If entering into an agreement with a different provider, previous experience of the duties to be undertaken must also be incorporated. For example, a provider may be newly established or</p>

	be an existing organisation, required to turnaround an aircraft type they have not previously handled.
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GHSP Specific Self-Declaration

Ground Handling Partner:	
Airport:	
Date:	
1	Have risks and associated with a restart/ramp-up of operations and mitigating actions been documented in a risk assessment? Please provide supporting evidence.
2	Has an operational restart/ramp-up plan been developed that addresses identified risks? Please provide supporting evidence.
3	Has a plan been developed to ensure continued oversight of activities, including sub-contracting of services if applicable? Please provide supporting evidence.
4	Has a plan been developed to ensure all staff are competent and have completed mandatory training? Please provide supporting evidence.
5	Do you have sufficient staff available to handle the proposed schedule by airlines?
6	Do you have an employee support program to manage ongoing operational challenges as limited resources, fatigue and pressure, enhanced during this COVID-19 influenced period? Please provide supporting evidence.
7	Has GSE been maintained during the period of reduced operations and has a plan been developed to ensure serviceability of equipment prior to restart/ramp-up of operations? (Refer to IATA guidance) Please provide supporting evidence.
8	Do you have enough GSE to handle the proposed schedule by airlines?

9	Have your reporting systems been maintained and remain available, including staff to investigate safety events?
10	Are you participating in any appropriate safety meetings with key stakeholders (e.g. airport and other operators)? Please provide supporting evidence.

The results of the above should determine the ground handling service provider’s readiness state:

GHSP Self-declaration - Please delete as appropriate	
Major resourcing/equipment issues. No risk assessment completed or plans in place for restart/ramp up of operations.	Will not be ready for ramp-up of operations
Minor resourcing/equipment issues. Risk assessment complete and mitigations identified with action plan to resolve prior to restart/ramp-up of operations.	Likely to be ready for re-start of operations.
No resourcing/equipment issues. Risk assessment complete and mitigating actions completed.	Will be fully ready for safe restart of operations.

Personnel Competence

Key Concerns: Extended periods of time away from the frontline, resulting in a lack of familiarity with day-to-day operational tasks. Under resourced training departments resulting in an inability to ensure all personnel are provided with the appropriate training to conduct expected duties.

EASA recently published an article, titled [Skills and Knowledge Degradation](#), that specifically addresses the aerodrome operations and ground handling community. The following information has been taken from that article:

Many ground handling companies are looking to reinstate ground handling staff in large numbers to cope with the expected increase in demand. In addition to ensuring that current staff have maintained their skills to cope existing procedures, ground handling organisations have to quickly train new hires who may have prior knowledge in ground handling procedures or are completely new to the industry. The varying levels of knowledge of existing staff and new hires may pose a difficulty in ensuring that all staff are trained to a certain degree.

Best Practice	Example
<p>Check that all staff have attended updated recurrent courses, which includes new health and safety measures or changes in operations.</p>	<p>Effective cooperation between the Training Department and the Human Resource Department is essential. The Training Manager must check that every person returning to work has completed all the mandatory and recurrent courses before returning to work.</p> <p>Due to COVID-19, many new health and safety measures have been implemented to protect airport operations personnel from potential transmission of viruses. It is important to ensure that personnel are updated on these new requirements.</p> <p>An example where a procedure has changed to integrate new health and safety measures is; the operational procedure to move a passenger who requires Wheelchair Carry (WCHC) assistance on board an aircraft. This procedure now requires the use of protective overalls as Personal Protective Equipment (PPE). To implement this new procedure effectively, the airport operator should provide specific instructions on the following to their airport operations personnel:</p> <ul style="list-style-type: none"> ▪ When the overalls must be put on. ▪ When they must be changed. ▪ Where overalls should be disposed of after use.
<p>Create a buddy system to pair more experienced personnel who have been working during the shutdown with personnel who have just returned to operations for the first few days of work.</p>	<p>After the mandatory and recurrent courses, personnel returning to work should undergo an On-the-Job-Training (OJT) period in the first few days of work. This allows the trainer or a more experienced colleague to verify if the first few tasks are conducted appropriately.</p> <p>A few examples for illustration:</p> <ul style="list-style-type: none"> ▪ A push-back operator should execute the first manoeuvres with a trainer next to them. ▪ A weight and balance operator should have their first few load sheets checked by a trainer. ▪ A follow-me operator should be supervised by an expert colleague during the first marshalling. <p>All OJT activities should include any additional health and safety measures introduced because of the pandemic. For example; in Italy, personnel are required to maintain a distance of 1 metre during OJT. If it is not possible to maintain the distance, both personnel are required to wear a FFP2 type protective mask.</p>
<p>Introduce mandatory pre-shift briefings to update</p>	<p>It should be clear which staff member is responsible for the pre-briefing to avoid confusion.</p>

<p>personnel on recent and on-going changes.</p>	<p>In general, this position could be covered by the “Shift Manager”, who then becomes responsible for updating the personnel on the on-going changes.</p> <p>The “Shift Manager” should create a checklist with the list of the operational changes to be communicated. It is recommended that personnel sign a document after the briefing to show that they understand their responsibility in working with the new changes.</p>
<p>For Aerodrome Operators, ensure the implementation of proficiency checks to verify the competence of the operators. Ground Handling Agents can also consider implementing such proficiency checks.</p>	<p>The aim of the proficiency check is to verify that all the skills and duties of the personnel have been understood and demonstrated.</p> <p>The proficiency checks could be performed by the assessors (experts on the specific job) to verify the compliance with procedures, instructions and rules. It is recommended that the assessor uses a checklist which focuses on the skills and items that need to be checked after a prolonged period of not working.</p> <p>In case of non-compliance, the personnel should be re-trained or updated again. It is important that the proficiency checks are conducted during the operations and include a visual check of personnel activities.</p>
<p>For Aerodrome Operators, ensure the implementation of internal audits to verify that the correct procedures have been implemented and respected by staff. Ground Handling Agents can also consider implementing such internal audits.</p>	<p>The internal audit should verify that the processes (especially changed processes) have been put in place, and that personnel are performing them competently.</p> <p>The implementation of internal audits is important to check if the process is correctly implemented or if there are some shortcomings in the flow of activities.</p> <p>During the internal audits, it is also important to consider the following: safety culture, adherence to health and safety measures and health and safety aspects in general. It is important to verify that safety and health and safety aspects can work together effectively.</p>
<p>Identify reference point personnel who provide peer-to-peer support in answering work-related questions during the shifts.</p>	<p>As indicated above, it is important to define who is responsible for providing peer-to-peer support in answering work-related questions during the shifts.</p> <p>We suggest that the “Shift Manager” would be suitable. This person should be on shift and easily contactable. For example, if a ramp agent does not remember a specific company procedure for boarding, the Shift Manager should be reachable by phone or by radio to suggest the updated boarding procedure with COVID-19 restrictions.</p>

Staff Wellbeing

Key Concerns: Staff mental health issues may be triggered by pressure and anxiety, low morale, fatigue and/or fear of losing jobs. These issues may not be detected or addressed by organisations. Safety reporting may be compromised during this period.

The COVID-19 pandemic has seen many changes for people who work in aviation. It is likely that this situation has led to high levels of uncertainty and made it more likely that people will experience a range of feelings in a more dramatic way than usual. People who work in aviation may be experiencing greater pressure, anxiety, low mood, sadness and even depression. When people are concerned or worried, they may behave differently to normal. Some people will cope more easily with change than others, and anyone can become overwhelmed with a situation.

When people are not coping with life as well as they usually do, it is common to feel upset, irritable or short-tempered. Concerns might include;

- Work (including job security, financial issues and loss of routines).
- Relationships and health (worry about loved ones and their own health).
- Changes to future events or plans.

This high level of change presents additional stressors and may reduce a person's ability to perform work to their usual standard or monitor themselves as effectively as usual. These human factors issues may combine to increase the risk to safe operational performance. The UK CAA and EASA have recognised that human performance is a priority within the total system's safety; affecting individuals, regulated entities and their key suppliers: [SN-2020/014: The Effect On Aviation Mental Health From the Covid-19 Pandemic and Return to Re-defined 'Normal' Flight Operations](#).

The ICAO Manual on Ground Handling (Doc 10121) refers to the "Dirty Dozen". The Dirty Dozen refers to twelve of the most common human error preconditions or conditions that can act as precursors to accidents or incidents. These twelve elements influence people to make mistakes. During this challenging period and the subsequent recovery, stakeholders should continually assess these human factors aspects:

1. **Lack of communication;** check that communication is clear, concise and not ambiguous.
2. **Distraction;** [SN-2021/002: General Considerations for Managing Distractions During Aviation Activities](#).
3. **Lack of resources;** this may be exacerbated due to furlough and redundancies in the current period.
4. **Stressors;** such as those noted in the paragraphs above.
5. **Complacency and Habituation;** people may have become accustomed to taking 'short-cuts' because of operational pressures.

6. **Lack of teamwork**; the change in team structure during the COVID period may make this more difficult.
7. **Pressure**; people may feel pressure to take actions which are against safety guidelines but may save time or money. Staff should be empowered to say and/or accept a “no”.
8. **Lack of awareness**; there may be more people doing different work tasks during this time.
9. **Lack of knowledge**; there may be new procedures that are not yet well understood.
10. **Fatigue**; many work schedules may have been changed during this time and may not manage fatigue effectively. [SN-2021/003: Fatigue Management - Guidance for AOC Holders During Covid-19 Changing Conditions](#).
11. **Lack of assertiveness**; people may not be willing to share safety concerns if they think this will put their employment at risk.
12. **Norms “the way we do things around here”**; normal work may have changed to meet the demands of the pandemic situation.

Mental first aid training should be considered for managers/supervisors, to raise awareness of potential causes and indicators. Sickness, absence and the numbers of people engaging with internal support networks are typical indicators but regular talks between management and frontline workers should be introduced and maintained, to ensure a continued understanding of the challenges faced. As ground staff are notoriously reluctant to ask for help, the availability and benefits of using peer support networks and resources, such as <https://aviationaction.org/> and <https://www.easa.europa.eu/community/content/wellbeing>, should be encouraged.

Feedback from industry suggests that there are already signs of a divide in the workplace, between those who have remained at work and those who are returning. Feelings of resentment are common, as those who have continued to work feel they have been carrying the company whilst others have had a break. Those returning to work can be overconfident, trying to do too much and be over helpful. For those returning, life patterns will change working life may not be what it was.

All stakeholders (managers, supervisors, flight and ground crews) should consider the factors that will affect many staff and their workplace behaviours. All frontline operational staff will experience human performance challenges and therefore colleagues should exercise patience when dealing with day-to-day tasks and interactions.

Aircraft and Aerodrome Operators should consider an empathetic approach to performance/service level penalties. The challenging operating environment may put additional human/financial pressure on ground handling service providers, which could lead to short cuts and rushed tasks, and a reduction of safety margins.

GSE/Vehicle Care and Maintenance

Key Concerns: Financial and/or resource restrictions, resulting in the use of defective and potentially unserviceable assets, which may have been stored and/or unmaintained for many months, being used for aircraft turnaround.

It is better to keep ground service equipment (GSE) in an operational condition rather than allowing them to be stored without use, requiring a longer return-to-service maintenance check. Maintenance departments may be stretched as the industry recovers and may not have the capacity to perform post-storage maintenance.

Equipment/vehicles manufacturer's materials will provide related requirements. [CAP642: Airside Safety Management](#) (Chapter 4.3) recommends that; "The aerodrome operator should establish and promulgate its own local minimum standards for vehicles operating in airside areas. These standards should ensure that each vehicle is fit for its intended purpose and that its condition is such that it will not endanger vehicle users, other vehicles, pedestrians, aircraft or property".

IATA have published a '[Quick Reference for Ground Handling during COVID-19](#)', which includes a quick reference guide for taking GSE Out of Operational Use (OOU), how to manage it while OOU and steps to return it to service.

Aerodrome Operators will need to ensure that aircraft parking stand facilities such as fixed ground power, passenger boarding bridges, ADGVS, FEGP, fuel hydrants and PCA (Preconditioned Air) remain well maintained according to the manufacturer's (and where applicable, aerodrome) standards. It may be sensible to have them fully tested daily, as they will be expected to support any existing flying programmes. An underlying defect in any GSE or vehicles could result in aircraft damage.

Wildlife Hazard Management (WHM)

Key Concerns: Financial and/or resource restrictions, resulting in a reduced focus of wildlife hazard management programs leading to an increased likelihood of wildlife strikes that could lead to accidents, costs and operational delays.

Wildlife Hazard Management (WHM) is not likely to have been a priority for airport operators during the pandemic, and the lower number of flights landing and departing may have made the airfield more attractive to birds and wildlife. Research suggests that aircraft bird strikes are more likely after an airport has been shut down, and these can pose a significant risk to flight safety.

Many UK airports have noticed increased bird numbers and nesting activity during the pandemic period. Airport operations personnel have had to double typical bird harassment and dispersal techniques to manage this. There may be additional actions needed to re-assess and manage this hazard.

Many airports have had to reduce personnel due to decreased flights and although it may be challenging, it is important that WHM plans are carried out before flight operations re-start or increase.

Every airport will have their own view on WHMP's, so to better understand how control measures have changed and what support airports might need, the following aide-memoire may assist stakeholders.

Additional guidance is available in UK (EU) Reg No 139/2014 ADR.OR.D.010 and ADR.OR.B.020 Wildlife Strike Hazard Reduction for Certificated Aerodromes, [CAP168: Licensing of Aerodromes](#) (Appendix 2E) and [CAP772](#) for National Aerodromes.

Wildlife Hazard Management Assessment Aide-Memoire

1	What are your identified Wildlife Hazard Management risks associated with the changes imposed by the COVID-19 situation?
2	What changes to your Wildlife Management Plan have been made as a result of the COVID-19 situation?
3	Please provide details of any reduction in the delivery of active wildlife control that have resulted from the COVID-19 situation.
4	What changes have been made to your airside habitat management plan as a result of the COVID-19 situation?
5	Please provide details of your plan to ensure wildlife risks are managed when the number of flights increases/operations recommence. (Including lead time - how far in advance such a plan is activated)

Recommended Actions

Ground Handling Service Providers, Aircraft/Aerodrome Operators and Air Navigation Service Providers, are recommended to:

1. Review the GHOST guidance materials to ensure that management systems are considering the topics identified by industry subject matter experts.
2. Assess the readiness of their respective responsibilities and identify any additional risks associated with a return to and/or an increase in operational activities.
3. Manage actions to reduce risks, to [as low as reasonably practicable](#).
4. Perform continual monitoring of operational activities to enable proactive identification and correction of any further related concerns.

In these unprecedented times, collaboration and communication are of the utmost importance.

For any related comments, feedback or information please contact GHOST@caa.co.uk