



Civil Aviation Authority
SAFETY NOTICE
Number: SN-2021/012



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Operational Resilience – Aviation industry recovery post COVID-19

This Safety Notice contains recommendations regarding operational safety.

Recipients must ensure that this Notice is copied to all members of their staff who need to take appropriate action or who may have an interest in the information (including any 'in-house' or contracted maintenance organisations and relevant outside contractors).

Applicability:	
Aerodromes:	Not primary affected
Air Traffic:	Not primarily affected
Airspace:	Not primarily affected
Airworthiness:	Not primarily affected
Flight Operations:	All CAT/NCC/SPO Operators
Licensed/Unlicensed Personnel:	Not primarily affected

1 Introduction

- 1.1 During the last 12 months the aviation system has undergone significant challenge and change. It is difficult to forecast the state of the industry over the forthcoming months, however the situation is without precedent, all the risks are not easily definable, and all elements of the aviation industry will face challenges not experienced before. Due to the unique nature of the crisis, there is also an absence of historical safety data to identify potential hazards.
- 1.2 **All** operators will be impacted by the threats developing over the coming months, even if they have been busy during the crisis; the industry has been functioning at a fraction of normal capacity and staff in many technical areas outside an operator may have been adversely affected.
- 1.3 The COVID 19 operating environment has resulted in numerous effects on operators, such as:
 - Reduced working hours
 - Reduction in numbers of staff
 - Increased working hours for those who have remained operational
 - Extended periods between competency checks
 - Limited training opportunities or changes in training delivery due to travel restrictions
 - Reduced levels of recent experience
 - Operating under multiple exemptions
 - New and unfamiliar procedures

- New or unfamiliar types of operation or business models
- New and evolving threats replacing known, managed threats
- Reduced interaction between management and operational staff
- Changing routines compared to pre-COVID, resulting in the need for increased cognitive engagement
- Extra time spent completing COVID biosecurity measures such as self-testing and administrative procedures
- Disruptions to domestic arrangements such as hotels, airport transfers, meal arrangements
- Concerns regarding job security, career progression and pay
- Concern for family health and welfare

1.4 This is not an exhaustive list, and operators should continue to identify and assess the evolving threats associated with their own operations and their interaction with other entities within the aviation system.

1.5 In this context, operational resilience is the ability to return safely to pre-COVID levels of aviation activity.

1.6 The purpose of this Safety Notice is to highlight actions which should be considered to mitigate against the risks associated with the increase in aviation activity over the coming months, combined with the impact of the COVID crisis.

2 Actions to be taken

Operators should consider the following actions and ensure all activity is appropriately documented within their safety management systems (SMS).

2.1 Plan

- Complete a comprehensive hazard and risk analysis, specific to the operation and taking into account that the entire aviation system (including all key stakeholders such as ATC, ground handling, maintenance etc) will have been affected.
- Ensure that changes to the scope of operations are considered and assessed.
- Consider a phased ramp-up back to normal operations, using milestones to monitor progress.
- Consider the interactions between multiple organisations, expectations of each, especially if procedures have been modified.
- Depending on the nature of the operation, consider the likelihood of system constraints leading to delays, potentially extended duties and limited diversion options. Assess current operational control capabilities to deal with highly dynamic situations resulting from such constraints.
- Consider the compound effects of the whole operational environment on human performance; educate all employees about personal vulnerabilities and defences.
- The CAA will be promoting guidance for crew members. Operators are encouraged to review this material, promote and / or adapt it as part of their internal communications with their crew members. Please review Appendix One for key areas; additional information is also being developed and operators should also review further publications.
- Assess the likely impact of any new business opportunities on the planned operation before implementation and carefully consider the total resource requirements.

- Minimise changes to the operation as much as practicable.

2.2 People

- Develop a 'Fitness for Duty' training programme, which could include mental health monitoring, fatigue monitoring, impact of bio-security procedures (including long term use of PPE onboard), and pressure generated as a result of additional COVID related duties such as self-testing.
- Consider the effect of increase in workload on retained supervisory or operational control staff (resulting from increase in operational tempo coupled with already significant additional tasks associated with COVID requirements).
- Continue to implement and promote peer support programmes and provide guidance to employees related to reporting health concerns.
- Review, update and publicise the fitness for duty policy.
- Staff returning to work after a furlough may lack confidence. This should be considered and addressed by team meetings, confidential reporting, staff newsletters etc.
- Consider additional training due to lack of recency.
- Establish a return to work training programme and consider a pre-return to work briefing for employees coming back into the operation.

2.3 Procedures

- Advocate and support conservative operational procedures, allowing crew to take into consideration their currency, proficiency and familiarisation with the environment when managing routine or adverse situations, for example: reinforce automation policy, encourage crew to take extra time, be wary of accepting short cuts in the arrival phase that could lead to 'rushed approaches and reduce workload whenever possible.
- Reinforce competencies and behaviours which trap errors such as careful cross-checking, enhanced vigilance during safety critical functions, monitoring, following SOPs, effective briefing, etc.
- Consider lack of familiarity and the additional time required to complete routine tasks and factor this into operational planning.
- Consider increasing crew report times to allow time for adequate pre-flight briefing and threat and error management.
- Remind operational staff and crew of the effect that disruptions and distractions have on operational activities; procedural omissions are more likely.
- Minimise low-priority procedural changes to the operation to avoid unnecessary distractions and stress which may induce errors.
- Before implementing any change, assess the wider effects on the organisation and external stakeholders, e.g. given that diversion airports may be closed, limiting suitable emergency alternates, operators may need to review fuel and alternate aerodrome planning policies and the effects on contingency planning and their implementation by flight crew already working in a challenging work environment.

2.4 Promotion

- All management should endorse and support the return to work culture, increase safety promotional activities targeted to their different groups of employees and encourage feedback.
- Consider nominating 'Champions' within the different workgroups, to feedback operational issues and challenges.
- Develop regular communications keeping everyone up to date on changes to COVID procedures.
- Include fitness for duty during crew / team briefings.
- Encourage employees to take ownership of their own welfare, such as
 - Routinely assessing their own competence and confidence levels.
 - Recognising the additional stressors in the working environment, the potential impact on their performance, including on their fatigue levels and the importance of adequate rest.
 - Ensuring they have adequate nutrition, especially during long shifts when normal facilities aren't available.
 - Seeking support from and giving support to colleagues if required.
 - Using the company reporting systems for providing feedback, including proactively highlighting operational challenges, near misses, and any event which could have adversely affected safety.

2.5 Performance

- Enhance and prioritise audit activity to monitor any adverse operational performance and unforeseen challenges.
- Review safety performance indicators (SPIs) to ensure they will accurately monitor return to normal operations.
- Consider increasing the frequency of safety meetings.

Normalise safety data against flight schedules to facilitate full understanding of the risk picture.

3 Further Information (in addition to those covered above)

- 3.1 ICAO Guidance "Roadmap to OPS normal". [Managing Risks to Human Performance \(HP\) \(icao.int\)](https://www.icao.int)

[Safety Notice SN-2020/011 Human Factors Considerations for Organisations during COVID19 restart activities](#)

[SN-2020/014 The Effect On Aviation Mental Health From the Covid-19 Pandemic and Return to Re-defined 'Normal' Flight Operations](#)

[SN-2020/015 Effective Change Management for Organisations During Covid-19](#)

[SN-2021/002 General Considerations for Managing Distractions During Aviation Activities](#)

[SN-2021/003 Fatigue Management – Guidance for AOC Holders During Covid-19 Changing Conditions](#)

4 Queries

- 4.1 Any queries or requests for further guidance as a result of this communication should be addressed to the relevant Flight Operations Inspectorate.

5 Cancellation

- 5.1 This Safety Notice will remain in force *until further notice*.

Appendix One

Guidance for Staff Returning to Operational Activities

Introduction

This is guidance for flight crew and cabin crew who will be operating during Summer 2021.

It is likely that if you haven't been recently exposed to the challenges of the operational environment, you may suffer from a reduced level of proficiency and other human performance limitations, depending on the length of time away from operational activities.

Your colleagues and others in the industry around you may also be affected.

You as crew will need to adopt a focussed approach and develop coping strategies.

Below are some examples of coping strategies to consider employing.

Proper preparation prevents poor performance....

- Familiarise yourself with new or modified procedures. Review all your emergency drills.
- Give yourself more time for everything, including activities which you may think are routine.
- Spend more time briefing as a team and acknowledge that you may be more likely to make mistakes.
- Don't forget that other operational staff, such as ground handlers, caterers, refuellers, security personnel, air traffic controllers, engineers, as well as colleagues in operations, crewing, flight planning, etc may also be less current and operating with reduced capacity and therefore errors are more likely.

Be aware

- of your own and your colleague's performance limitations. Skill fade is a threat to everyone who has been away from operational activity for a period of time.
- that biosecurity requirements are a distraction; your performance may be impaired by them and it may mean that things take longer. It may also cause frustration for you and other people, including passengers.
- of the potential for threat of fatigue and reduced physical and mental endurance in you or members of the crew.

In-Flight

- Monitor your own performance and those of your crew. Expect errors to be made by yourself and others. Don't assume – check.
- If you've made a mistake, think about the possibility that someone else may have made one at the same time. Consider the cumulative effect. Go back and double check.
- You will be sharing the sky with crew who have remained active throughout the pandemic. The potentially rapid increase in activities will inevitably introduce new threats as they are no longer used to the busy airspace. - Be vigilant, as their reactions may not be what you would expect or be used to.
- Be aware that your capacity may become limited. Keep talking to your colleagues and tell them if you feel under pressure, especially in unfamiliar or unexpected situations. Take more time when there is doubt or distractions.
- Recognise when workload is increasing for you and others. Monitor your colleagues and keep working as a team.
- Be prepared for unexpected delays, disruptions and diversions.
- Operate defensively especially while undertaking safety critical tasks. Don't accept shortcuts and ensure SOPs are followed. You may be lacking the awareness to monitor situations as effectively as you used to be able to.
- Pilots should ensure maximum appropriate use of automation. This isn't the time to practise manual handling or raw data procedures.
- Take advantage of controlled rest where appropriate.
- Make sure you stay hydrated and eat enough. This will help to maintain your individual alertness and performance. Make time for meal breaks.

Sharing experience

- Use your company safety reporting system to report hazards identified during the duty. Include pro-active reports, i.e. unexpected challenges, errors with no consequences, workload issues, etc. If your company has one, use Employee Assistance Programmes to report health and wellbeing concerns.
- Communicate any concerns with your management team. Use confidential reporting facilities if you're uncomfortable.
- Consider asking for additional training if necessary.
- Seek support from and offer support to colleagues before a situation deteriorates.
- Allow yourself adequate time to rest and recover. – Assess your health and fatigue status after each duty.