

Safely Navigating the Industry Restart Bulletin 3 Flight Crew and ATCO Interface during Restart

1. Background

COVID-19 continues to impact the dynamics between airline operators and all the actors of the aviation supply chain. This also includes the interface, communication, and operating environment between flight crew and Air traffic Controllers (ATCOs). Several considerations need to be made with regards to the effects of training and recency and human factors on both flight crew and ATCOs as they interact with each other. In addition, varying traffic levels after periods of reduced operations could increase the magnitude of certain operational challenges for both airlines and ANSPs. The combination of new and amplified risks and challenges could affect safety of operations as traffic levels build up.

The combination of extension of licenses and recurrent training validity for flight crew and ATCOs and periods of no operations create additional risks when traffic starts building up. This is particularly because of a potential degradation in skills that were second nature to flight crew and ATCOs. As this pandemic persists, we might face further challenges related to maintaining skills and competencies for all operational staff.

In addition, government travel protocols and regulations for travel keep changing based on

the data related to COVID-19. Recently we saw examples of governments re-imposing the 14day quarantine for travel from certain countries without advance notice. Plans to resume operation between city pairs keep changing depending on new requirements for travelling passengers and fluctuating / unpredictable demand. Because of these new circumstances under which airlines are operating, it is even more critical that during restart aeronautical information is clear, easily available and timely to avoid operational issues.

As airlines and the aviation supply chain actors work together on restarting operations, it is expected that we will continue having varying traffic levels, changing conditions on the ground, and interactions between the flight crew and air traffic control that are not necessarily covered by existing procedures and phraseology. Therefore, it will be critical for both sides to understand the stressors that the other person is experiencing. For example, flight crew might be looking for a more efficient route but ATCOs may not be able to accommodate such request coming from the crew. Trying to meet expectations, at a time when there are additional or new capacity constraints because of the new operating environment, could create additional stress between crew and ATCOs.

In order to better understand the impact that COVID-19 could have on the interactions and dynamics between flight crew and ATCOs, a safety risk assessment (SRA) was carried out by the Civil Air Navigation Services Organization (CANSO), the International Federation of Air Traffic Controllers' Associations (IFATCA), the International Federation of Air Line Pilots' Associations (IFALPA) and International Air Transport Association (IATA). The SRA helped shape a webinar which was organized by the partners on July 30th, 2020.

This joint bulletin is a result of the SRA and the webinar and highlights key considerations to be taken up by flight crew and ATCOs during the restart of operations.

2. Challenges related to the interface between Flight Crew and ATCOs during Restart

2.1 Constantly changing and unclear aeronautical information regarding airport/airspace availability/capacity

COVID-19 continues to affect the global economic landscape and has had an unprecedent impact on the mobility of people. Economic outlook forecasts have been changing, at times from one week to the other. The ripple effect on flight operations and the supply chain caused by lockdown measures and closing of borders continues to be a challenge for airlines and the flying public.

Government requirements and protocols for travel might continue to change subject to the spread or containment of the coronavirus. As airlines strive to plan their operations during a time of uncertainty in terms of travel demand, operational staff need to continuously monitor new and changing aeronautical information.

Continuously changing, unclear, unavailable or untimely aeronautical information could lead to misunderstanding of requirements or errors in carrying out operational tasks and making decisions. There is a potential risk of misunderstanding and misalignment between flight crew and ATCOs if the interpretation of requirements was different on both sides. Because there is a higher than usual frequency in changes to State requirements and protocols, there is a need to take additional time and care to review aeronautical information and complete pre-flight preparation by flight crew.

In addition, flight crew will need to have confidence in the availability and capability of alternate airports. Alternate airports are required for the safe execution of a flight. Without the availability of alternate airports, a flight cannot be operated. Therefore, timely availability of information about any changes related to airport availability and capability is critical.

Mitigations

Management to encourage flight crew, dispatchers and ATCOs to take a safety pause when needed to carefully review aeronautical information and government requirements

There is a critical need for States to ensure alignment and harmonization in the dissemination of operational and safety critical information

Encourage pre-flight coordination between dispatch and ATCOs to ensure that expectations on both sides are aligned and consistent with operational and government requirements

2.2 Pilot - ATCO communication

After an almost complete halt of air travel worldwide in April 2020, traffic started to pick up in May. Border restrictions largely remain in place, as well as quarantine measures. With that, international travel is almost fully halted, except within Europe where recently some restrictions have been lifted. As the number of passenger-carrying flights starts increasing, flight crew may be called back to operate between city pairs after a period of no or different type of operation.

Coming back to operation in the new environment, there is a risk that flight crew may have diminished familiarity with phraseology or may have forgotten specific requirements for a given airspace, for example oceanic clearances or some aspects of emergency procedures. There is also a risk of reduced familiarity with certain procedures.

During restart it is important for flight crews and ATCOs to take time to make sure that they understand each other, and that any ATC clearance is clearly understood. If the flight crew are given a clearance they cannot comply with, then they should say so. If flight crew need a clearance to be repeated, then they should ask. Additional hear-back, read-back may cause frequency congestion but that is expected to go back to normal levels as both flight crew and ATCOs get back to their normal schedules of operations.

Mitigations

Increased awareness of requirements and procedures and emphasize the use of standard phraseology

Encourage ATCOs to break down clearances to digestible segments

Airlines should conduct their own internal SRA as they resume operations between city pairs

Safety promotion specifically to encourage operational staff to ask for clarification when in doubt

Early crew briefings before departures to ensure awareness of special procedures / requirements

2.3 Efficient operation in the evolving environment caused by COVID-19

Requirements to ensure the biosafety and health of passengers, crews, and staff will add buffers to ground time and impact overall network performance. There are estimates that additional sanitation and biosafety requirements could cause up to a doubling in the amount of time passengers have to spend at airports and aircraft turn-around times during the pandemic. These additional layers could affect airport terminal capacity and passenger throughput.

In addition, and due to the number of parked aircraft in different airports, it is expected that there will be an impact on airport and runway capacity. The number of parked aircraft worldwide reached a high of 18,118 in April 2020¹. Taking advantage of low traffic levels, some airports proceeded with maintenance and renovation of their infrastructure. With the new constraints in the system capacity, this might have an impact on infrastructure availability and by extension how much could on-time performance be achieved.

Due to these new elements affecting capacity and performance, flight crew and ATCOs should consider system and individual

¹ Source: IATA

stressors during operation. There are additional or new pressures affecting flight crew and ATCOs and therefore empathy and understanding on both sides is needed to minimize hazards. It is also important to avoid taking short cuts, rushing, or making hasty decisions. IATA recently published an Operational Notice regarding the recent increase in unstable approaches (link).

During periods of low traffic, it was possible to introduce more efficient routes and some operational improvements. During restart, it may not be possible for ATCOs to continue granting requests for direct routing for example, because of the increasing traffic levels and additional capacity constraints. Airlines and ANSPs should always work together to achieve system and operational improvements. Where feasible, pre-COVID capacity constraints should not be rolled back during restart. At the same time, flight crew are encouraged to take their time when they need to and not feel pressed or rushed because of the changing environment they're operating in.

Mitigations

Informative briefings related to Pilot/ATCO communication with an emphasis on the changing environment and its potential impact on system performance and delays

Emphasized operational briefings for flight crew and flight deck communication

Emphasize the importance of confirmation of intention with ATCO by flight crew

As traffic levels increase, flow management should make necessary adjustments in response to airport capacity changes

3. Recommendations

In order to utilize the best practices in this bulletin, it is recommended to use the identified hazards and the example safety risk assessment in **Attachment – A** to conduct an internal safety risk assessment by individual organizations or companies.

4. Additional Resources

Additional information and resources can be found on the following pages;

- iata.org/en/programs/covid-19resources-guidelines/
- ifatca.org/covid-19/
- canso.org/navigating-covid-19
- ifalpa.org/publications/covid-19resources/

If you have any question or would like more information, please send an email to infrastructure@iata.org.

Attachment A - Bulletin 3

Safety Risk Assessment Example

Event		Consequence	Enterfiner.	Disk	Additional Mitigation
	Hazards	(worst case scenario)	Existing Controls	Risk Rating	Actions (COVID-19 Impacts)
Constantly changing and unclear aeronautical information regarding airport/airspace availability/capacity	 Continuous changes related to borders opening/closing, airports opening/closing/capacity Additional time required for pre-flight/dispatch preparation and documentation, e.g. to review NOTAMs and procedural changes Expectations vs. reality because of unclear information 	Incident	 CRM, TEM Briefing pre- departure/arrival for flight crew Read-back/hear back Hand-over briefing Pilot reporting & SMS 	Tolerable (with existing control)	 Emphasis that crew and dispatchers take a safety pause when needed to carefully review all material. States to ensure alignment and harmonized in dissemination of operational and safety critical information. Check that EFB has most current update. Pre-flight coordination between dispatch and ATC.
Pilot - ATCO communication	 Risk of diminished English language skills and phraseology discipline. Potential reduction in pilot familiarity with procedures and related phraseology Possible frequency congestion 	Incident	 Hear back/read back CRM Surveillance and safety nets Pilot threat and error management briefing 	Tolerable (with existing control)	 Increased awareness via safety promotion Encourage controllers to break down clearance to digestible segments Airlines should conduct their own internal SRA when resuming operations on specific routes Emphasize the use of standard phraseology Additional sectors, where possible and based on staffing and traffic levels
Risk associated with a combination of pilot's aim to maintain on time performance and the ability of ATCOs to accommodate requests from pilots in the evolving environment caused by COVID- 19	 Pilots expectations vs ATCOs constraints and vice-versa might cause pressure to maintain on time performance in the new environment with all the added stressors and new constraints. As traffic increases, delays may be encountered due the evolving environment. This may put additional on pressure on pilots and effect their interaction with ATCOs. Energy management resulting in Unstabilized Approaches. 	Incident	Adherence to existing procedures (for both Pilot's and ATCO's)	Tolerable (with existing control)	 Informative briefings related to Pilot/ATCO communication with an emphasis on the changing environment and its potential impact on system performance and delays Flight deck communication emphasized operational briefings and confirmation of intention with ATCO. As traffic levels increase, flow management needs to make necessary adjustments in response to airport capacity changes.