



ICAO

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Agenda Item 5

Agenda Item 5: ICAO / Member State / Industry Presentations

RESPONDING TO INDUSTRY'S NEEDS DURING COVID-19 IN HONG KONG

(Presented by Hong Kong, China)

SUMMARY

The aviation industry worldwide is facing unprecedented impacts as a result of the COVID-19 pandemic. The Civil Aviation Department (CAD) of Hong Kong, China put in place various facilitations measures during the pandemic with an aim to provide support to the continuation of the service of local operators and to respond to their needs. These measures have also taken into account the necessity to maintain aviation safety during the changing time. This paper shares some experiences of Hong Kong, China. CAD would stand ready to facilitate the industry's operations as far as possible and to cope with the challenges ahead.

1. INTRODUCTION

1.1 The outbreak of COVID-19 created a devastating impact on the global economy and the aviation industry. Due to the quarantine arrangements and travel restrictions, the number of air travelers decreased significantly over the past year and resulted in an unprecedented downturn in the demand for air transportation of passengers. The Civil Aviation Department (CAD) of Hong Kong, China has been working closely with the local aviation industry to facilitate their operations while maintaining flight safety during this difficult time. With an aim to provide support to the continuation of the service of local operators and respond to their needs, the CAD granted various relief measures to the Hong Kong Air Operator's Certificate (AOC) holders and other operators, within the boundary of ICAO standards and subject to inspections by CAD.

1.2 A safety risk management approach was adopted when establishing alleviations. Local operators seeking for relief measures were required to submit a complete package with the background information and the problem encountered, the proposed alternative means of compliance, the corresponding safety risk assessment, and the suggested mitigation measures for the CAD's consideration. Upon receiving the requests, the CAD would carefully review the information provided and thoroughly assess the associated safety risks before considering the granting of the relief measures. The CAD would provide further guidance to the industry partners where necessary. All relief measures granted are temporary in nature.

2. DISCUSSION

The Transportation of Cargo in the Passenger Cabin (TCPC)

2.1 The CAD had received proposals from Hong Kong AOC holders for TCPC in their aircraft due to the increased demand in the transportation of medical supplies and general cargo during COVID-19. Since the passenger cabin is not designed for cargo carriage, additional safety

measures have to be considered and implemented in various aspects such as fire prevention, detection and control, security screening, cargo restraint, aircraft weight and balance limitations, specialised cargo loading/unloading procedures, inflight monitoring and handling of abnormal situations by crew and the associated training. To respond to the urgent need of the industry, the CAD allocated extra manpower to review and process those requests in a timely manner, with significant manhours spent. After verifying the implementation and compliance of additional safety requirements, the CAD accepted such applications, where necessary with conditions for ensuring an equivalent level of safety.

2.2 The CAD was also approached by a Hong Kong AOC holder regarding a proposal of removing the passenger seats in the economy and premium economy classes on its Boeing 777-300ER so as to make room for more cargo capacity in the passenger aircraft. Again, noting the difficulties the airline industry was facing and the upsurging demand of shipping humanitarian resources around the world, the CAD promptly facilitated the application by allocating sufficient manpower and worked closely with the concerned operator as well as the design organisation responsible for the proposed modification (as the applicant of the Supplemental Type Certificate (STC)), with a common goal of expediting the issuance of the STC and the associated operational acceptance. By making reference to the relevant guidance materials from the aircraft manufacturer and other major aviation authorities, the STC applicant fulfilled the requirements through various measures such as restricting the types of cargo to be carried, using cargo nets and specially tailored fire proof cargo bags, deactivating several electrical systems, re-positioning fire-fighting equipment and using alternative operational procedures. With the collaborative effort from all concerned parties, the STC was issued within seven weeks.

Accepting Alternative Means of Compliance for the Maintenance of Crew Qualifications and Competency

2.3 The CAD issued a Flight Operation Notice to all AOC holders and local operators in April 2020 with an aim to provide all necessary facilitation to operators for the maintenance of the qualifications and competency of their personnel within the legal and safety boundary of operation.

2.4 Due to a drastic decrease in the number of flights, AOC holders experienced difficulties in complying with some AOC requirements for maintaining crew qualifications and competency. Proposals on means to alleviate such situation were submitted to the CAD with full justifications and the associated risk assessments in accordance with the respective company's Safety Management System. After careful review and consideration by the CAD, temporary relief measures were granted by making better use of full flight simulators and other alternative means of compliance. All relief measures granted do not deviate from the ICAO Standards and Recommended Practices (SARPs) and therefore the filing of COVID-19 Contingency Related Differences (CCRDs) is not necessary. In addition, these alleviations will not be valid beyond 31 March 2021 for maintaining consistency with the recommendations by the ICAO Council Aviation Recovery Task Force (CART).

Contingency Parking Arrangement and Typhoon Measures at Hong Kong International Airport

2.5 To accommodate the surge in demand for parking space in response to the reduction in air transport services due to the COVID-19-related restrictions, the Airport Authority Hong Kong (AA) has been working closely with the CAD in formulating a contingency parking plan for long layover aircraft at the Hong Kong International Airport. Apart from re-designating a number of frontal and remote parking stands for long layover aircraft, temporary parking positions on taxiways and taxilanes were also arranged. In formulating the contingency parking arrangement, Annex 14 Volume I SARPs on aircraft clearance were adopted as the basis of design. Ground access by Rescue and Firefighting Services personnel, and airlines' aircraft deployment and maintenance plans have also been taken into consideration.

2.6 As Hong Kong is located in the sub-tropical zone where tropical cyclones frequently visit during the period between April and October on an annual basis, additional measures would be required in order to secure aircraft and airfield safety considering that majority of taxiways / taxilanes are located in exposed areas with no or limited shelters (e.g. terminal buildings, hangars etc.) for protecting aircraft from strong winds during typhoon conditions. Through close communication and coordination among CAD, AA, home-based carriers and the Hong Kong Observatory (the local aviation meteorological service provider), different safeguarding measures were adopted which are summarized below:

- a) Analyzed wind data (e.g. wind speed, wind direction, gust) obtained from previous typhoons;
- b) Arranged fly out of aircraft. For aircraft in out port, return flight should be delayed until passage of typhoon;
- c) Arranged strategic parking of aircraft in accordance with their wind resilience characteristics as advised by aircraft manufacturers. Aircraft types which were more resilient to strong wind (e.g. B777 and A350) were strategically parked / positioned on taxiways and taxilanes to create shelter for aircraft with less wind resilience (i.e. Code C aircraft). Frontal parking was also arranged for Code C aircraft;
- d) Increased aircraft weight through typhoon pre-fuel;
- e) Provided double chocks to secure the aircraft;
- f) Arranged concrete or metal block tie-downs for designated aircraft as per airlines' instruction;
- g) Loaded pallet-blocks and / or sandbags into cargo compartment of aircraft to i) increase aircraft weight and ii) adjust the centre of gravity of aircraft to enhance wind resilience.

2.7 With the close coordination and the joint efforts of the airport community, all contingency parking arrangement and typhoon preparation measures have been implemented and incorporated in an effective manner.

2.8 It is expected that the pandemic may continue for a certain period of time, as well as the recovery of the aviation industry may take some time. CAD would stand ready to facilitate impacts of the industry's operations as far as possible and to cope with the challenges ahead without compromising aviation safety.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information contained in this Paper;
- b) note the effort of Hong Kong, China in facilitating the aviation industry during COVID-19; and
- c) share experiences with regard to the relief measures granted to the industry during COVID-19.