



ICAO

The Second Meeting of the Asia/Pacific Aerodrome Design and Operations Task Force (AP-ADO/TF/2)

Video Teleconference, 26 to 29 January 2021

Agenda Item 2: Planning, Design and Construction of Aerodromes

**OVERVIEW OF ADVISORY CIRCULAR ON OPERATIONAL SAFETY
ON AIRPORTS DURING CONSTRUCTION**

(Presented by United States)

SUMMARY

This information paper presents guidelines for the continuous safe operations of aerodromes during construction activities within the movement areas. The IP highlights the general content of Advisory Circular, AC150/5370-2; titled *Operational Safety on Airports during Construction*, and the fact that safety must not be compromised. Most importantly, for the aerodrome operator to be able to develop, a safety plan to mitigate risk during project construction.

1. INTRODUCTION

1.1 Aerodromes range in complexity. The fact that some aerodromes may have one runway does not justify lowering the bar for safety. Understanding airport operations is critical to prepare an effective safety plan. The airport operator is responsible for the operational safety of their airport. Success in mitigating risk during airport construction depends on collaboration among all parties and their thorough understanding of the safety plan or the Construction Safety and Phasing Plan (CSPP).

1.2 Improvement to runways, and/or taxiways infrastructure are common and continuous construction projects. CSPP is a standalone document, to be developed early during the design phase. The development of the CSPP focuses on, 1) Identify affected areas due to construction, 2) Describe current airport operations, 3) Allow for temporary changes to operations, 4) Take required measures to revise operations, 5) Manage safety risk.

1.3 The establishment of a safety culture is paramount for the success of any safety plan. Everyone has a role in operational safety on airports during construction: the airport operator, the airport's consultants, the construction contractor and subcontractors, airport users, airport tenants, ARFF personnel, air traffic personnel, including maintenance personnel, and Civil Aviation Authorities (CAA). The AC is available at:

https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5370-2

2. DISCUSSION

2.1 A CSPP is a primary tool to ensure safety compliance when coordinating construction activities with airport operations. All aviation safety provisions included within the project drawings, contract specifications, and other related documents must be reflected in the CSPP. The airport operator must develop, certify, and submit to CAA for approval of each CSPP.

2.2 CSPP requirements should cover: safety plan coordination, phasing, areas affected by the construction activity, protection of navigation aids, contractor access, wildlife management, and foreign object debris management. In addition, CSPP should include hazardous materials management, notification of construction activities, inspection requirements, underground utilities, runway and taxiway visual aids. Marking and signs for access routes, work zone lighting, protection of runway and taxiway safety areas, obstacle free zone, and runway approach / departure surfaces are areas that need to be looked at in details.

2.3 Affected areas from a construction project should be identified on the construction drawings. As an example, closed runway, partially closed runway and partial area of pavement unavailable to aircraft operations. Some construction projects will affect approach surfaces. As such, the runway threshold will need to be temporarily displaced. The time and place of such displacement need to be discussed carefully within the construction safety phasing plan.

2.4 Safety areas may need to be reduced temporarily during a specific phase of construction. As such, runway designation may drop from airplane design group (ADG) V to IV; taxiway design group (TDG) usage may be lowered to protect the wingspan along a taxiway construction.

2.5 Closing to Aircraft Rescue and Fire Fighting access routes, closing to access routes used by airport and airline support vehicles, interruption of utilities, approach and departure surfaces affected by construction cranes, and logistics including mobilization of construction material and heavy equipment should be addressed.

2.6 We developed a CSPP checklist as an aid to assist the consultant and airport operator in covering all the areas affected by the construction project and need to be addressed. This is a helpful tool to rundown all safety categories to assure them being addressed if applicable.

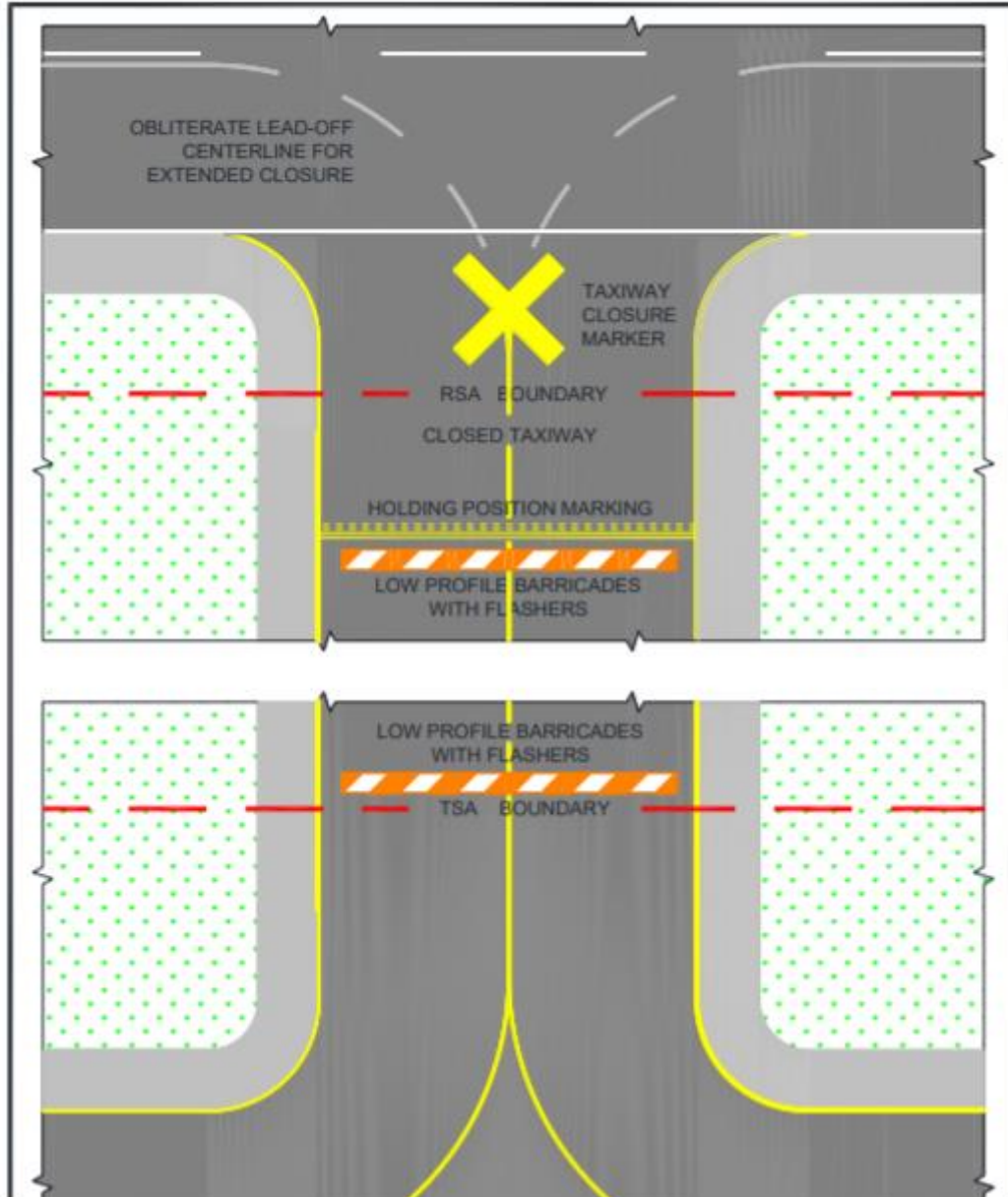
3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) encourage States to consider adopting the guidelines found in FAA AC 150/5370-2G.

Figures from the AC

Figure 2-4. Temporary Taxiway Closure



Taxiway Safety Areas / failure of phasing plane



Sample low profile Barricades
coloring and flags.

Figure 2-8. Interlocking Barricades



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