



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**THIRD MEETING OF THE AERODROMES OPERATIONS AND
PLANNING – WORKING GROUP (AOP/WG/3)**

Putrajaya, Malaysia, 2 – 4 June 2015

Agenda Item 4: Provision of AOP in the Asia/Pacific Region

CONTROL OF WORKS AT MACAU INTERNATIONAL AIRPORT

(Presented by Macao China)

SUMMARY

This paper presents the practices implemented at Macau International Airport regarding the control of works.

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

1. INTRODUCTION

1.1 Macau International Airport started its construction on 15th November 1989 and was put into operation on 9th November 1995. After 20 years of continuous operation and growing traffic, the effects of “wear and tear” become visible. On the past three years the renovation, replacement and upgrade projects become one of our daily routines that need to be carefully managed and controlled to ensure safe, secure and smooth operations. Airport Operations to strengthen the safety net and cope with growing on traffic established a new Service called Operations Safety and Standards that is fully dedicated on monitoring, assurance and compliance of operations safety and standards on the aerodrome being one of its functions the control of works at Macau International Airport.

2. INFORMATION

2.1 This Information Paper and the attached presentation include the following content regarding Control of Works Implemented at Macau International Airport:

- a) Control of Works;
- b) Definitions;
- c) Worksite Rules at MFM;
- d) Contractor’s Safety Program;
- e) Construction Safety Program;
- f) Work Permits & T.W.A.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information and presentation; and
- b) discuss any relevant matters as appropriate.

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Control Of Works



Control of Works

Renovation and Maintenance Works

Building of New Infrastructures

Operations Safety Coordinator (OSC)

Monitoring of Work Authorizations

Safeguarding of safety concerns

Definitions

Hot Work & Fire Isolation Permit

- An authorization to allow contractors / subcontractors to perform tasks associated with fire hazards in a safe manner

Major Works

- Those planned in detail to be executed during a long period of time (more than 3 months) and/ or involving a large quantity of manpower and equipment and the work will have big affectation on the movement area. Those works require the issuance of a work permit and a movement area works plan

Movement Area Works Plan (MAWP)

- Document that details the safety and security rules and procedures to be applied.

Perimeter of the Airport

- Asset of the airport under the responsibility of airport authority

Site Supervisor

- Nominated person from the contractors / subcontractors responsible to ensure that the works are performed within the conditions stated on the work permit, site rules and the general regulations of movement area works

Work Permit

- A form authorizing a specific individual or party to work in the airport perimeter within certain prescribed time limits, accesses and working conditions, as well as specific operational, safety / security rules and / or instructions to be followed.

Temporary Work Authorization (TWA)

- A form authorizing some short term minor work to Regular Maintenance Subcontractor Internal / External entities that does not require a Work Permit, for a maximum of 7 days, and MUST be requested at least 48 hours before work starts.

Worksite Rules at MFM

All works conducted by airport staff / contractors / are performed in accordance with work permit requirements, quality, safety & environmental legislation.

Site Rules apply to airport staff / contractors / subcontractor / tradesperson / partnership / corporation (i.e “Contractor”) undertaking a project in the airport.

The activities of the Contractor shall remain at all times under the control of Airport Operations or appointed delegate.

Contractor's Safety Program

The Contractor should have a specific Construction Safety Program:

- ✓ To encourage its operatives, foreman and supervisor to actively manage safety in order to limit losses from personal injuries and property damage
- ✓ To achieve greater efficiency and reduce direct and indirect costs associated with losses and loss control.

Construction Safety Program

Effectiveness depends on active participation and cooperation of the Contractor's project managers, supervisors, and employees & the coordination of their efforts with MFM in carrying out the following basic procedures:

Detection

- Maintain a system of prompt detection and correction of unsafe practices and conditions

Education

- Establish and conduct an educational program to foster interest & cooperation of employees through safety meetings and trainings, use of personal protective equipment & mechanical guards

Investigation

- All accidents, incidents and claims will be investigated to determine their causes and take reasonable corrective action when possible.

Planning

- Plan all work to minimize the potential for personal injury, property damage, and loss of productive time.


Regulations

- Comply with MSAR laws, regulations, industry standards, and Airport regulations and requirements.

Work Permits

➤ All contractor/subcontractors performing works within the airport perimeter shall apply for work permit.

➤ Work permit imposes conditions to contractors / subcontractors to be followed and works control (inspection of works from time to time) performed by OSS or TMS to ensure objective was achieved.

 機場管理有限公司 ADMINISTRATION OF AIRPORTS LTD. ADMINISTRAÇÃO DE AEROPORTOS, LDA.		Airport Operations Service Work Permit	
Company Name:		Serial No.:	
Contact No.:	Fax No.:		
Applicant Name:		Site Supervisor Name:	
Contact No.:		Contact No.:	
Supervision Company Name:			
Contact Person:	Contact No.:	Fax No.:	
Detailed nature of work and location <input type="checkbox"/> Manoeuvring Area, <input type="checkbox"/> Apron, <input type="checkbox"/> Passenger Terminal, <input type="checkbox"/> Others)			
Work Period: From _____ to _____ Daily Schedule _____ to _____			
Access Route:			
Airport Operations Requirements:		Issuance of NOTAM <input type="checkbox"/> Yes Nr: _____ <input type="checkbox"/> No Need of Trunk Mobile <input type="checkbox"/> Yes Quantity ____ <input type="checkbox"/> No Talk Group : _____ Call Sign: _____ Need of Safety Officer <input type="checkbox"/> Yes <input type="checkbox"/> No MAWP <input type="checkbox"/> Yes <input type="checkbox"/> No Need of Hot Work & Fire Isolation Permit <input type="checkbox"/> Yes <input type="checkbox"/> No Need of Site Storage <input type="checkbox"/> Yes <input type="checkbox"/> No Need of Hoarding <input type="checkbox"/> Yes <input type="checkbox"/> No Need Marking and Lighting <input type="checkbox"/> Yes <input type="checkbox"/> No	
Work Restrictions: NO OUTDOOR WORK when RVR below 800m, typhoon signal 3 or strong wind signal is hoisted. Amber or RED thunderstorm warning is hoisted. All works performed shall comply with applicable Macao Legislation and rules in force in the airport and the subcontractor is liable to any damages to the airport properties for the work period as specified on this work permit.			
Site Supervisor shall contact the following entities before start of work and conclusion of work on daily basis. <input type="checkbox"/> Airport Supervisor 88982501/66833057, <input type="checkbox"/> AOCC 28861111 ext. 1111, <input type="checkbox"/> TCD 28861111 ext 4129, <input type="checkbox"/> Tower (Trunk Mobile Radio)/ 28860021, <input type="checkbox"/> Operations Safety Coordinator 88982029 / 66982991 <input type="checkbox"/> Terminal Management Supervisor 88982834 / 62969998			
Applicant Signature		Site Supervisor Signature	
Date: ____/____/____		Date: ____/____/____	
Work Permit distributed to:		<input type="checkbox"/> E&M, <input type="checkbox"/> SEC, <input type="checkbox"/> SAF, <input type="checkbox"/> ATC, <input type="checkbox"/> IMS, <input type="checkbox"/> AOCC, <input type="checkbox"/> Focus, <input type="checkbox"/> CTM <input type="checkbox"/> Contractor, <input type="checkbox"/> Supervision Company, <input type="checkbox"/> _____	
Attachment distributed with work permit		<input type="checkbox"/> MIA Site Rules - Revision (____)	

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Exemption of Work Permits

Preventive maintenance
(not including work requiring
isolation of equipment or
facilities)

Baggage Handling System,
escalators & elevators routine
maintenance.

Corrective maintenance or
repair works in areas not
affecting passenger flows and
not involving noisy work

Urgent repair defined by
Airport Supervisor or OSC.

FIDS server shutdown for
maintenance.

Fire alarm test
(prior coordination with
involved entities required)

Corrective maintenance of
toilets at PTB.

Temporary Work Authorization

In order to expedite some operational needs the TWA shall be used :

Installation of
publicity/promotion.

Delivery/removal of
publicity/promotion,
material, and
infrastructures

not related to Work
Permit.

Rectification or
installation works
not related to Work
Permit.


Short term
(maintenance)
works not more
than **7 days**.

Washing/cleaning of
areas that affect
operational
routines/facilities on
Movement Area.

- Requested via email to OSC, cc Head of OSS & Airport Supervisor, 48hours prior start of work, fully supported with drawings, method statement, pictures and material to be used.
- Not a replacement of Work Permit, meaning that OSC will evaluate work scope and time to completion before issuance.

Sample Forms

TWA



機場管理有限公司
ADMINISTRATION OF AIRPORTS LTD.
ADMINISTRAÇÃO DE AEROPORTOS, LDA.


Airport Operations Division

Temporary Work Authorization

Entity: _____	Serial No.: _____
Email: _____	
Date / Time of work: _____	Location: _____
Description of works:	
<p>NOTE: AIRPORT SUPERVISOR MUST BE CONTACTED WHEN WORKS START/FINISH</p>	
Contractor/Company: _____	Approved by: _____
Applicant: _____	<input type="checkbox"/> Airport Supervisor <input checked="" type="checkbox"/> OSC Safety Coordinator
24h Contact No.: _____	
<ul style="list-style-type: none"> Applicant shall submit the requisition at least 48 hours prior to work commencement to Airport Supervisor during non office hours / OSC Safety Coordinator during office hours. After approved, the applicant and relevant entities will receive a copy by email. For all urgent requests, please contact the Airport Supervisor by phone. 	
<p>Contact No. Non Office Hours : Airport supervisor 66833057 / 88982501 Office Hours: OSC Safety Coordinator 66982991 / 88982029 AOCC 28861111 ext. 1111</p> <p>Fax: No. 28861326 Email: airportsupervisor@ada.com.mo opssafety@ada.com.mo</p>	

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Hot Work & Fire Isolation Permit



機場管理有限公司
ADMINISTRATION OF AIRPORTS LTD.
ADMINISTRAÇÃO DE AEROPORTOS, LDA.

Hot Work & Fire Isolation Permit	Permit No.
1, Site Location: <input type="checkbox"/> Maneuvering Area, <input type="checkbox"/> Apron, <input type="checkbox"/> Passenger Terminal, <input type="checkbox"/> Others _____	
2, The hot work that is covered by this permit: _____	
3, Work location: _____	
4, The equipment to be used: _____	
5, The fire fighting equipment to be laid out at worksite: _____	
6, Name of contractor performing the work: _____	
7, Site Supervisor (Name: _____ Contact No. _____)	
8, Supervision Company Name: _____ Contact No. _____	
Have combustible materials been removed from the work area or made safe? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Have tanks, valves, vents and pipelines been blanked off or effectively isolated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Is ventilation adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Is the fire equipment checked and laid out ready for use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Is the wind direction satisfactory for hot work to be done? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Has the site of the hot work been isolated and roped off? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Is Airport RFFS been informed? (Name: _____) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Work Period: From _____ to _____	Daily Schedule _____ to _____
Isolation of Smoke Detectors / Sprinkler Systems.	
Request disable of smoke detector at above work location and schedule. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Request disable of sprinkler system at above work location and schedule. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Site Supervisor Signature: _____ Date: ____/____/____	
This hot work permit should be prominently displayed on the worksite	
SAFETY OFFICE APPROVAL	
The above-mentioned work is <input type="checkbox"/> approved <input type="checkbox"/> not approved	
Name: _____ Signature: _____	
Title: _____ Date: _____	
Copy of this permit is distributed to below entities	
<input type="checkbox"/> SAF, <input type="checkbox"/> RFFS, <input type="checkbox"/> E&M, <input type="checkbox"/> TCD, <input type="checkbox"/> AOCC, <input type="checkbox"/> TWR, <input type="checkbox"/> FOCUS, <input type="checkbox"/> TMS, <input type="checkbox"/> Supervision Company	
All times in local with date format yyyy/mm/dd	

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