



Republic of the Philippines  
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES



NOV 03 2023

**MEMORANDUM**

**TO : AERODROME OPERATORS/ CLUSTER MANAGERS /  
AREA MANAGERS**

**FROM : THE DIRECTOR GENERAL  
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES**

**SUBJECT : IMPLEMENTATION OF SWITCH-OVER TIME LIMITS**

This Memorandum reiterates the Civil Aviation Authority of the Philippines (CAAP) Regulatory Policy for the Implementation of Switch-Over Time Limits in accordance with the requirement of the Manual of Standards for Aerodromes (MOS).


The main objective of this requirement is to achieve the time interval between failure of the primary source of power and the complete restoration as well as the time required for the actual intensity of a light measured to fall from 50% and recover to 50% during a power supply changeover, when the light is being operated at intensities of 25% or above of the services required as specified in MOS 9.1.8.1 – Table 9.1-1.

In line with this, all aerodrome operators are hereby directed to submit the latest result of the conduct of switch-over time limits at your respective aerodromes. The result of your test conducted shall be submitted to this Office not later than December 15, 2023, copy furnished to the Aerodrome and Air Navigation Safety Oversight Office (AANSOO) for evaluation. A corresponding Switch-Over Time Limits procedure is attached for your guidance.

For strict compliance.

  
**CAPTAIN MANUEL ANTONIO L. TAMAYO**,  
Director General

CIVIL AVIATION AUTHORITY  
OF THE PHILIPPINES  
CERTIFIED PHOTOCOPY  
(NOT VALID WITH ERASURE/ALTERATION)

  
11-3-2023  
MADONNA L. OROCIO  
Records Officer II  
Central Records and Archives Division



**SWITCH OVERTIME LIMITS**

Date: \_\_\_\_\_

Airport: \_\_\_\_\_

**Purpose:** To determine the compliance of \_\_\_\_\_ Power plant facility to the requirements of the Manual of Standards for Aerodromes (MOS) Chapter 9. Section 9.1.8 – Switch overtime limits.

**Objective/s:** The operational objective of the switch overtime testing for \_\_\_\_\_ Power plant facility and the aerodrome lighting intensities to achieve the time interval between failure of the primary source of power and the complete restoration as well as the time required for the actual intensity of a light measured to fall from 50% and the recover to 50% during a power supply changeover, when the light is being operated at intensities of 25% or above of the services required as specified in MOS 9.1.8.2 – Table 9.1.1.

| DIESEL ENGINE GENERATOR SET (DEGS) SPECIFICATION |              |               |          |
|--|--------------|---------------|----------|
|  |              |               | REMARK/S |
| <b>BRAND</b>                                     |              |               |          |
| <b>RATING</b>                                    |              |               | KVA      |
| <b>PHASE</b>                                     | SINGLE PHASE | 3-PHASE       |          |
| <b>OUTPUT VOLTAGE</b>                            |              |               | V        |
| <b>FREQUENCY</b>                                 |              |               | HZ       |
| <b>RPM</b>                                       |              |               | RPM      |
| <b>DEGS STATUS</b>                               | OPERATIONAL  | UNOPERATIONAL |          |



| <b>CHANGE-OVER TIME</b>                     |      |                 |
|---|------|-----------------|
|   |      | <b>REMARK/S</b> |
| <b>FROM COMMERCIAL POWER TO LOCAL POWER</b> | SEC. |                 |
| <b>FROM LOCAL POWER TO COMMERCIAL POWER</b> | SEC. |                 |

**CHANGE OVER-TIME VERIFICATION PROCEDURE (POWER AND LIGHTING):**

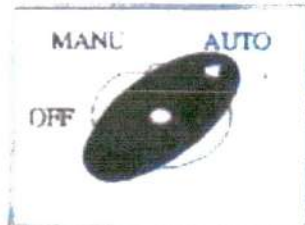
**NOTE:**

1. *Make sure that the ATS and CNS duty supervisors were properly informed for the exercise.*
2. *Advise them that this exercise is for the ICVM scheduled on \_\_\_\_\_.*
3. *Make sure that the commercial, local power supplies as well as aerodrome lighting are normal and operational.*

**I. TRANSFERRING LOAD FROM COMMERCIAL POWER TO LOCAL POWER AND VICE VERSA (POWER):**

*(Video for documentation; the Airfield Lighting System and Power Plant operation)*

- A. Switch Automatic Transfer Switch (ATS) to “AUTO” at the control cubicle.



- B. Switch “OFF” the commercial power supply.



**NOTE: Recording time will start at this point. The DEGS will automatically start and will start to supply power to the load within 15 sec. (Non – Precision & Aerodrome CAT. 1)**

- C. Let the DEGS supplies the load for 2-3 minutes.
- D. Switch “ON” the commercial power supply.

**NOTE: The load will automatically transfer to commercial power. The DEGS will automatically turned “OFF” once the commercial power becomes stable.**

- E. Testing concluded.

**II. TESTING NO. 2 (LIGHTING/S IN THE AIRFIELD) IN THE EVENT OF A COMMERCIAL POWER INTERRUPTION.**

- A. Simultaneous testing will be conducted (for power supply and lighting intensities), during mains power failure or shutdown, assigned personnel task to obtain the time required for the actual intensities of a light measured in a given direction (fall from 50% and recover 50% during a power supply changeover) must be readily available in the airfield.

**NOTE: Recording time will start at this point when the actual intensity of a light falls from 50% and recovers to 50% normal intensity during a power supply changeover.**

- B. Testing of switch overtime (for lights) concluded.

| <b>CHANGE-OVER TIME (LIGHTS)</b>  |     |                 |
|---|-----|-----------------|
|   |     | <b>REMARK/S</b> |
| <b>RUNWAY DESIGNATION</b>   |     |                 |
| <b>TYPES OF LIGHT/S</b>   |     |                 |
| <b>ACTUAL LIGHT INTENSITY FROM 50% BELOW OF NORMAL INTENSITY TO 50% RECOVERY OF LIGHTS NORMAL INTENSITY</b> | SEC |                 |

**NOTE:**

**Advise the ATC and CNS duty supervisors that the verification exercise is finished. Check for any operational abnormalities.**



Republic of the Philippines  
**CIVIL AVIATION AUTHORITY OF THE PHILIPPINES**

---

---

| <b>TOTAL CHANGE-OVER TIME (POWER + LIGHTING INTENSITY (airfield))</b> |            |                 |
|---|------------|-----------------|
|   |            | <b>REMARK/S</b> |
| <b>CHANGE-OVER TIME (POWER)</b>                                       | <b>SEC</b> |                 |
| <b>CHANGE-OVER TIME (LIGHTINGS)</b>                                   | <b>SEC</b> |                 |
| <b>TOTAL</b>  |            |                 |

\_\_\_\_\_  
***ALPT ON DUTY***

\_\_\_\_\_  
***ALPT POWER PLANT IN-CHARGE***

\_\_\_\_\_  
***ANS –FACILITY IN-CHARGE***

\_\_\_\_\_  
***ATS –FACILITY IN-CHARGE***

\_\_\_\_\_  
***AIRPORT MANAGER***