

Development of Timer Device for Flight Following of Aircraft

Introduction

The State Aircraft Unit (SAU) has developed timing devices to assist with flight following of aircraft performing operational activities.

State Aircraft Unit Procedure AM 1.04 describes the background, tasks and responsibilities associated with Flight Following.

Flight following can, on frequent occasions, involve monitoring of multiple aircraft reporting at different times. During a heavy workload this has the potential to introduce confusion and circumstances where a scheduled call is overlooked or missed completely.

The flight following timer has multiple displays and provides a simple and visual status on the scheduled time for communication with each aircraft.



Product

The timing device consists of six individual timers allowing monitoring of multiple aircraft simultaneously and a 24 hour clock for reference when logging communications.

Adjacent to each timer display is a whiteboard panel where an aircraft callsign can be recorded with a whiteboard marker.

Each timer is preset to display a green coloured count down from 30 minutes until reaching zero.

When a communication is transmitted or received the timer can be reset returning the countdown from 30 minutes.

If the timer is not reset within the 30 minute countdown the display will change to red at zero, and begins an incrementing count up to indicate the overdue time of the scheduled call. At 10 minutes overdue the display will begin to flash. At 15 minutes past the scheduled call time the unit will sound a repeating tone to alert the critical overdue time.

A photo cell monitors the ambient light in which the device is operating and adjusts the brightness of the display accordingly.

The unit has been designed to operate on or from a number of power sources. Two separate battery modules containing 4 x AA size batteries are installed which can be selected individually or in tandem. The unit will continue to operate if either battery pack is removed provided the remaining pack contains serviceable batteries.

External power can be connected to the unit from a 12-24 volt DC source.

When external power is connected the battery supply/s are automatically disconnected. It does not recharge the batteries.

A single display timer device has also been developed with the intent that it will be used in aircraft to assist pilots and aircrew in reporting at scheduled flight following times.

The function of the single timer is identical to the multiple display unit and operates on two AA size batteries with the ability to input power from an external source.



Observations

A small number of timers have been produced and are currently located around the state where incidents and operations have allowed the device to be trialled by different users.

Feedback has been positive with no faults or significant issues reported. Those having used the timer commented on its ease of use and value when flight following multiple aircraft.

Comment

Funding has been provided for the production of the multiple display units for distribution to ICC Level 3 offices and firebombing bases throughout Victoria. The intent is for Agency personnel to be able to order and purchase additional units once this initial order is delivered.

Interest is also being shown from other States with the potential for their introduction across Australia.

Further Information

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