

GENERAL AVIATION SAFETY PROMOTION 2024

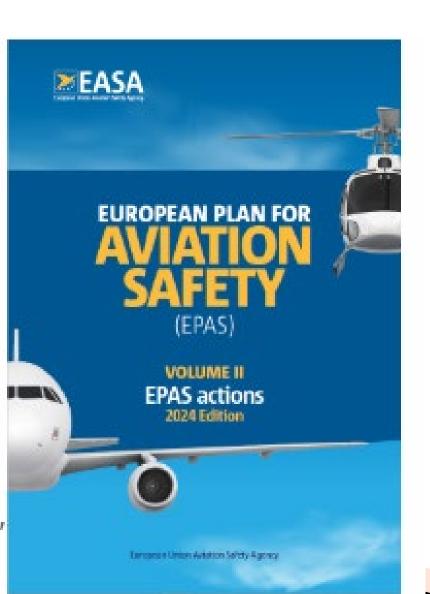
Colonel Mark Said & Victoria Grech

EASA thorough the European Plan for Aviation Safety

(EPAS) has set strategic priorities in the regional aviation safety plan for 2023-2025.

https://www.easa.europa.eu/en/document-library/general-publications/european-plan-aviation-safety-epas-2024

EPAS Volume I 'Strategic Priorities' (2023 – 2025)





LET'S START

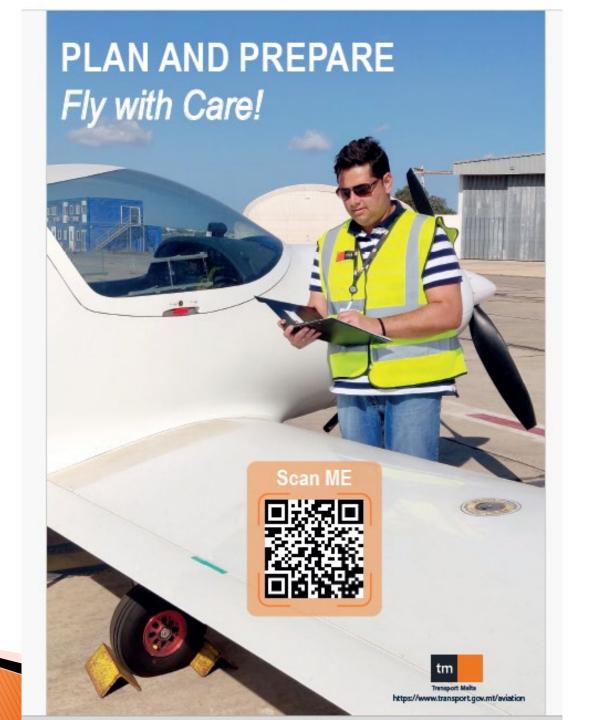


Perform the 'I'M SAFE' check every time you fly.

- I LLNESS Free of illness and symptoms
- M EDICATION Safe medication only
- S TRESS Managing stress well at home and work
- A LCOHOL OR DRUGS free of alcohol and their effects
- F ATIGUE Rested and steeping well
- E ATING Fed, watered and ready to go

Don't Just Pre-Flight the Plane Pre-Flight Yourself!



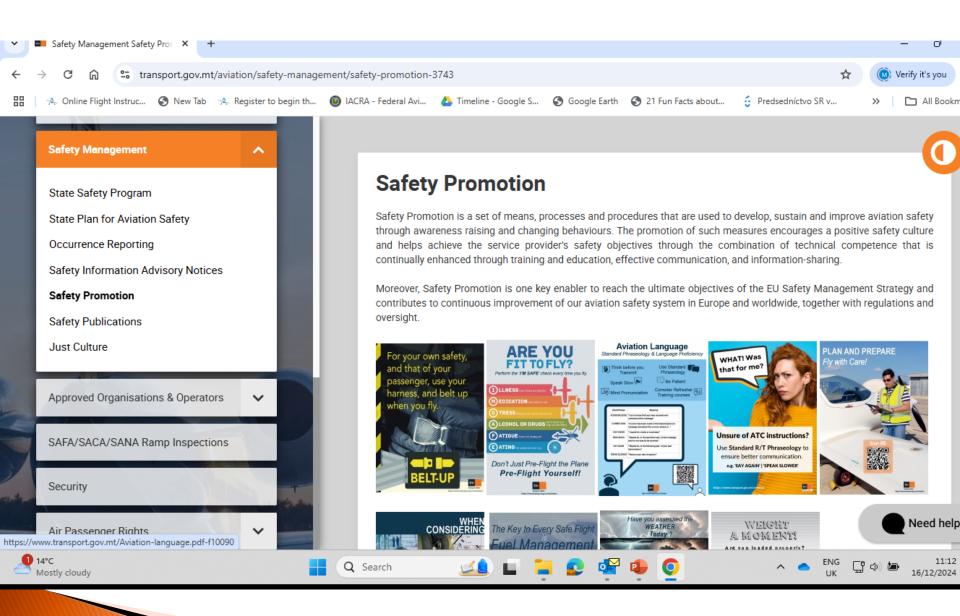


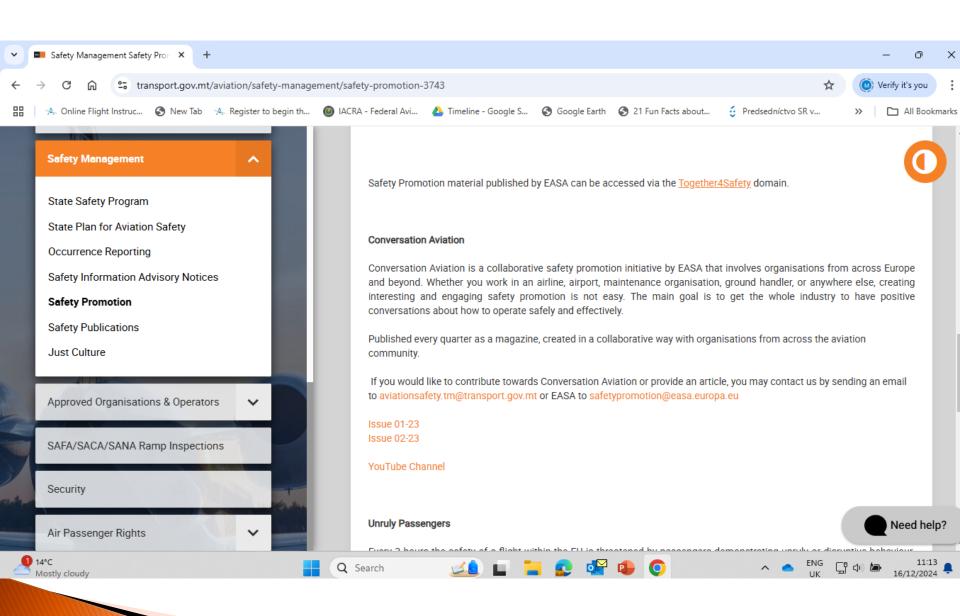


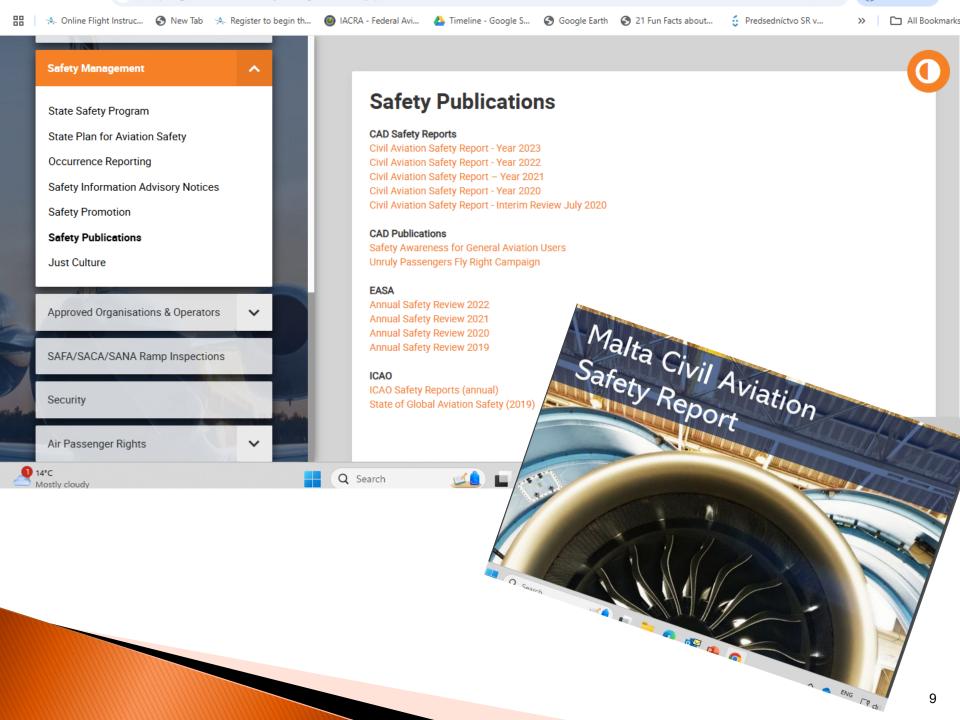


GA Season Opener - 11 to 24 March "Be Ready - Fly Safely"









MORE Aircraft, MORE Movements Navigating Crowded Skies Requires Extra Caution



ALERT AWARE AGILE
In Crowded Airspace, Every Move Matters!



Distraction can paint a messy picture...



EYES on the SKIES | MIND on the FLIGHT



DECONFLICTION

Air Routes

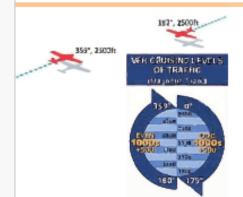
Airways

Control Areas

Control Zone

IFR vs. VFR

Do you know the difference?

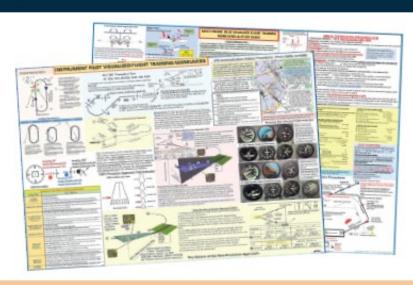


Are you supposed to be there?



IFR? Know Your Limits! Avoid IMC without proper qualifications and practice





Visual Flight Rules (VFR) flight into Instrument Meteorological Conditions (IMC) is a significant cause of accidents in General Aviation flying. A VFR flight into IMC scenario occurs when a pilot enters IMC, despite intending to operate under VFR. When an unqualified pilot enters IMC, a loss of control or flight into terrain will often result. Pilots qualified to enter IMC may also be at risk if the entry is unplanned or the pilot is not in adequate instrument flying practice.





Manage passengers





Make use of 'standby' command. Do not drop the aircraft to fly the radio



Focus on aircraft flight path



Effective preflight preparation to anticipate distractions both on the ground and in the air

Make the best use of checklists



Use Threat and Error Managemer to anticipate high workload, distractions and interruptions

Prevent Loss of Control

Loss of control due to **stalling** or entering a **spin** remains a leading cause of General Aviation accidents.

A stall can lead to a spin, which at low levels may be <u>unrecoverable</u>.

Pilots must stay vigilant for signs of an impending stall and focus on avoiding stall conditions altogether.

AVIATE NAVIGATE COMMUNICATE

are key, yet, flying requires constant attention to attitude and airspeed.

Whatever the other demands on your attention are, ensure you return your focus to the aircraft's flight path.

Aviation Language

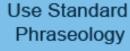
Standard Phraseology & Language Proficiency



Think before you **Transmit**



Speak Slow P







Be Patient



Consider Refresher Training courses



Word/Phrase	Meaning
ACKNOWLEDGE	"Let me know that you have received and understood this message."
CORRECTION	"An error has been made in this transmission (or message indicated) The correct version is"
ISAYAGAIN	"I repeat for clarity or emphasis."
READ BACK	"Repeat all, or the specified part, of this message back to me exactly as received."
SAYAGAIN	"Repeat all, or the following part, of your last transmission."
SPEAK SLOWER	"Reduce your rate of speech."





VFR Moving Map Devices

Where is the best place for it to be when in use?

Why is it an issue?

The device position can affect many things.

Can it be seen or reached? Does the charging lead reach or potentially foul the controls? Will it get a good signal/view of the sky from its position? Is it likely to fall on the floor/down the back of the seat?

Potential outomes?

The device could become unusable if the positioning is wrong or may cause flight control issues should it or any equipment associated with it interfere with the controls. Does it obscure your view/ability to lookout? Could it become a loose article?

Mitigation

Spend some time on the ground positioning the device to ensure the issues mentioned are avoided. **Use a robust mount** to avoid it moving once airborne. Find a location that works both with and without passengers while making sure it does not interfere with any controls.

Scan ME







VFR Moving Map Devices



VFR 'MOVING MAP' DEVICES

The use of VFR 'Moving Map' devices is now commonplace in General Aviation. Supported by the Global Navigation Satellite Systems (GNSS), these devices have considerably enhanced the process of flight planning and execution for GA pilots. Moving Maps encompass a range of electronic navigation solutions, including portable VFR GNSS devices and applications running on smart phones or tablets.

Viewing the aircraft's position in real time mitigates a variety of risks compared to the sole use of traditional VFR navigation techniques. However, like any technology or device, additional hazards may be generated if they are not used correctly.

There are too many different devices and applications available for TM-CAD to offer detailed advice on individual platforms. The purpose of this document is therefore to identify minimum levels of proficiency you should have when operating Moving Map devices and advise on some of the associated risks and issues.

IMPORTANT NOTE

Devices may be used during hour build up flights but may not be used during Skill tests

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w: https://www.transport.gov.mt/aviation e: aviationsafety.tm@transport.gov.mt

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What do we mean by 'Moving Map' device?

'VFR Moving Map' means either a device, or software for use on a device, which may be used for the planning and/or execution of a VFR flight. The key feature is that it displays the aircraft's position in real time on a map format that includes relevant aeronautical information for VFR flight.

These devices normally fall into three categories:

1. Panel mounted devices

The benefit for VFR flight varies a lot depending on the age and characteristics of the installation.



2. Portable GNSS systems

Dedicated portable GNSS systems provide the benefits of a platform designed for use in the aviation environment but may not provide regulated aeronautical information such as weather and NOTAM.



Tablet or smartphone devices

Experience has shown that consumer tablet or smart phone devices can be a safe and effective platform for applications that provide Moving Map functionality and integration of aeronautical data. Tablet-based devices with suitable applications are likely to provide the most



versatile and cost-effective solution for the average GA pilot flying under VFR.

Benefits

Situational Awareness

VFR Moving Maps, when used correctly, provide a significant enhancement to situational awareness.

Enhanced Planning

Moving Map devices and software applications also aid the process of flight planning and allow routes to be built taking into account the airspace environment to be navigated.

Other Features

When used effectively, these tools can assist pre-flight preparation and give more time to focus on studying the route.

Understanding your device



Different Features

A large proportion of GA pilots who fly with a Moving Map are not familiar with the use of all features or capabilities the device has — taking time to understand the more complex functions will enhance the device's utility. You should review the applicable manuals and user guides. Familiarise yourself with the device on the ground. Consider practising on simple flights away from significant airspace hazards and accompanied by another pilot.

Layers of Information

Be aware of information being hidden in layers. Sometimes to establish the altitude, the depiction must be selected to review detailed information on the site. Other hidden information may include radio frequencies and the vertical extent of an ATZ or other regulated airspace.

Training courses

Several Flight Training Organisations also offer training sessions/courses in the use of VFR Moving Maps; not only is this an ideal opportunity to learn their functionality from an expert but it might offer a refresher in flight planning techniques.

VFR Moving Map Devices / 4

When proficient you will be able to:

- Update the software and applicable aeronautical database of the device;
- Manage downloadable data to the device, such as weather, NOTAM and other live data:
- Plan a route and identify airspace features and hazards on that route, including information such as altitudes or hours of operation that may be hidden within layers;
- Mount the device (if applicable) in a secure location so that it is visible and accessible
 but does not obstruct the aircraft controls or visual look out:
- Configure and use the device in the most effective manner for a particular flight, for example setting appropriate altitude layers for the information displayed and any applicable airspace warning parameters;
- Navigate seamlessly throughout the software of the device, including altering key
 parameters such as map zoom, panning of the map and selecting information on the
 route as quickly and accurately as possible; and Use the device effectively in any
 abnormal situation, for example having to replan a route or divert due to weather.

Also consider:

- Will the screen be visible in all light conditions?
- Is the device prone to overheating when exposed to the sun?
- How long is the battery life under constant use?
- If there is provision for inflight charging, how reliable is this?
- Is an external aerial or receiver needed for consistent GNSS signal?

Your primary task must be flying the aircraft. Do not allow the device to become a distraction from core tasks such as maintaining an effective visual lookout. Being proficient with the device will help this since you will minimise the time needed to interact with it when executing different functions.



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Using your device

Preflight

You should develop a routine with the device that suits your flying and provides a solid foundation for effective use while in flight. This must include ensuring the aeronautical data on the device is up to date. Download weather and NOTAM data as appropriate.

Inflight

Once airborne and away from the aerodrome traffic circuit, do a sense check against the surrounding environment – does the indicated position make sense and are you travelling in the intended direction?

Eves outside

During flight around 80% of the time you should be looking outside the aircraft. Under VFR, the aircraft's approximate flight attitude should be set visually by external reference rather than by the instruments in the cockpit.

Position Awareness

Keep orientation relative to ground features, but periodically check the Moving Map display to confirm position.

Prioritise

When rerouting due to weather or other threats, focus on the most important task first.

Contingencies



Like all technology, Moving Map devices can suffer errors or even fail. You must consider contingency arrangements for this.

Paper Back-Up

TM-CAD recommends that a paper chart be carried which is accessible, marked and folded for the relevant route or area of operation.

Traditional Skills

There is a risk that paper chart reading skills suffer decay if not used over time. It may be useful to include periodic refresher flights using conventional navigation techniques. TM- CAD / October 2024

Common issues

The incorrect or incomplete use of a VFR Moving Map device can be as significant as not using one. When using a Moving Map it is essential to apply effective Threat and Error Management (TEM). TEM is about mitigating relevant threats and preventing errors such that safe flight is maintained.

The following is a non-exhaustive list of Threats and Errors associated with the use of VFR Moving Maps and some example mitigations for them:





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• Software: Is the software/data current?

- Planning: Review your planned route.
- Care of device: Prevent a failure.
- Operation: Appropriate use and operation
- Device Position: Where is the best place for it to be when in use?





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Electronic Conspicuity

As well as Moving Map devices, there are a variety of 'electronic conspicuity' (EC) devices available that receive and/or broadcast information on the position of your aircraft and other traffic in the sky.

TM-CAD encourages the use of EC devices, but the capabilities, limitations and optimal techniques for use must be understood.

See and Avoid

The visual look-out should remain the number one priority for conflict identification and mitigation.

Data Integrity

It is important that users are aware of the integrity of the information that they receive from 3rd Party Service Providers.

Pilots should be aware that the depiction of aeronautical information on VFR Moving Maps may not be complete and will likely be different from Aeronautical Information products.

It is highly recommended that all organisations or individuals that process information sourced from Aeronautical Information products apply best practices to ensure integrity, timely delivery and a form suitable for users.



Find Out More

This leaflet does not address the airworthiness requirements for fitting or mounting devices in aircraft. When installing a device in an aircraft or mounting a portable device all applicable airworthiness requirements must be complied with – please take advice from a licensed engineer or the appropriate organisation responsible for the airworthiness of the aircraft.

Further reading is available at the European General Aviation Safety Team safety promotion leaflet and UK CAA Safety Sense Leaflet SS29 – VFR MOVING MAP DEVICES

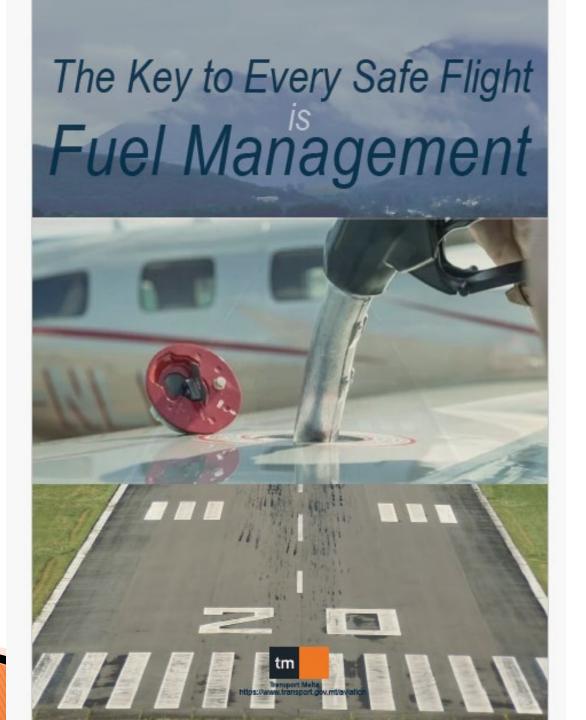
WHEN



THE SMALLEST THINGS MAKE A HUGE DIFFERENCE!

Airfield Elevation Aircraft Maintenance Aircraft Weight Slope Temperature Wind Surrounding Terrain Tyre Pressure Engine Handling

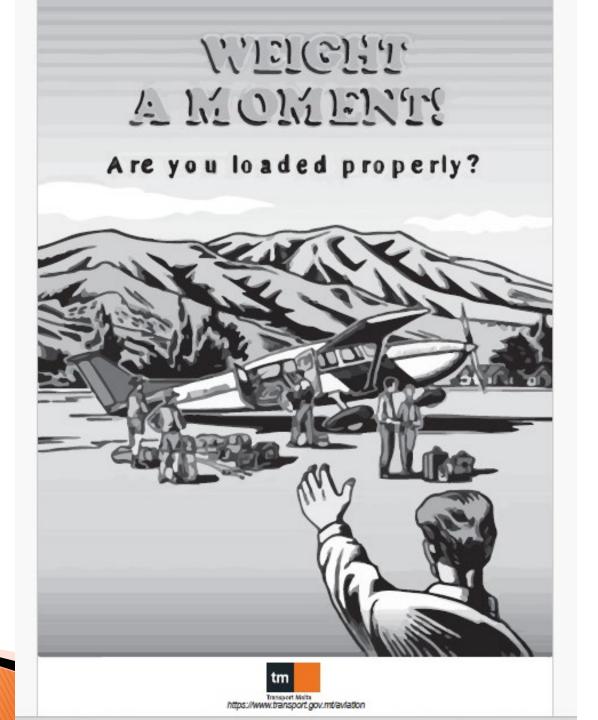
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CONVERSATION AVIATION START POSITIVE CONVERSATIONS ABOUT SAFETY



OBSERVE | REPORT | PROTECT
Your Report Matters



https://www.trensport.gov.mt/evietic

File a Report



Introduction

Welcome to the Transport Malta Civil Aviation Directorate occurrence reporting portal.

Please complete your information in the fields below then choose from the Mandatory, Voluntary or Just Culture Infringement* reporting forms available.

- If you wish to make a Voluntary report, you may leave this information blank.
 Note: If you do not provide your email address or telephone number, no follow up will be possible.
- . For Mandatory reports, this information is required.
- · For Just Culture Infringement* reports, this information is required.

If you are reporting on behalf of an organisation, please specify below so that we can attribute your report to their safety reporting culture.

Please note that if submitting an update to a previous report, the email address and report number must match the ones given from the original report.

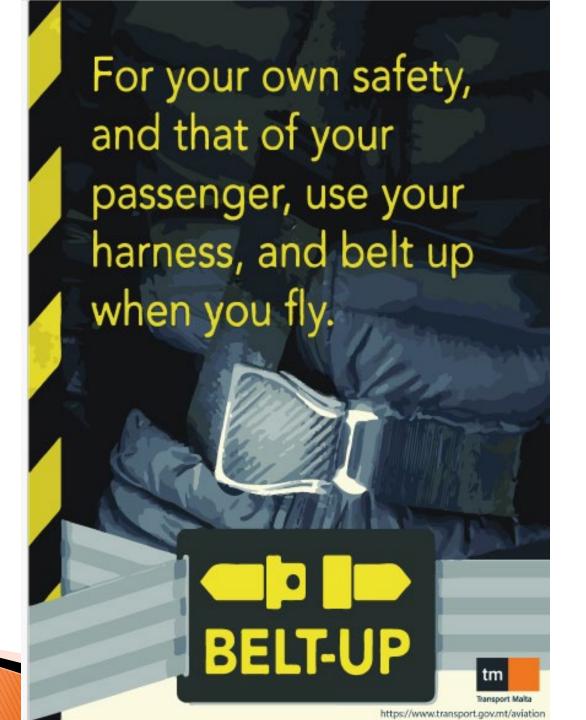
* The Just Culture Infringement report does not replace the occurrence reporting system of TM-CAD. Occurrences that compromise or that could compromise air safety must be reported to TM-CAD via the Mandatory or Voluntary reporting forms.

Step 1

Do you wish to:

- O Submit a **new report** O Submit
- O Submit an **update** to a previous report
- O Edit and submit a draft or returned report

Next





AVOID BECOMING A NEWS ITEM

"Two men taken to hospital after light plane crashes into hangar"





"Pilot fatally struck by moving propeller"

Comments, Questions?



