

WHAT IS YOUR LIFE WORTH?



A CAA safety investigator of 20 years' experience, Peter Stevenson-Wright, describes what he believes are two of the most frequent factors in incidents and accidents – not getting weather forecasts and not checking NOTAMs and AIP Supplements.



From my two decades as a safety investigator, I can recall many accidents, some fatal, where not getting a weather forecast was a contributing factor.

Two, in particular, stick in my mind.

One was a beautiful day and a pilot was taking a friend for a short local flight. The benign conditions probably persuaded the pilot they didn't need a forecast, and indeed the weather held on departure.

But just over an hour later, both pilot and passenger were dead.

Clearly the pilot did not anticipate getting caught in mechanical turbulence associated with a fast-moving frontal system.¹

But that is what a forecast is for – to allow pilots to 'see' the unseeable.

(The pilot, the investigation also uncovered, was flying below the prescribed minimum height for a VFR flight – check rule 91.311).

In the second instance, another pilot was planning a short 25 NM flight. The sky at the time was essentially overcast with all the local mountain range tops hidden in the cloud base.

That area forecast indicated the cloud base was also below the height of a saddle the flight intended to cross.

But the pilot didn't obtain the forecast.

The aircraft collided with terrain while trying to execute a reversal turn in the narrow confines at the head of a river valley. A family of four lost their lives.²

It's *really* easy to 'get the weather'

Access to the MetFlight GA website is free and it takes just a moment to log on: metflight.metra.co.nz

Information offered includes current and forecast weather, including GARFORs. Interpretation of the weather and overlaying it onto the route you intend to fly is well worth the investment, especially on complex weather days.

The importance of creating a strong mental picture of enroute conditions is critical to the safety of the proposed flight. »

¹ Fatal accident report 17/1635 aviation.govt.nz > Safety > Fatal accident reports

² Fatal accident report 15/1129 aviation.govt.nz > Safety > Fatal accident reports

» Using and being familiar with all MetFlight GA weather information and forecasts will help you make safer preflight and enroute decisions.

It also satisfies the requirements of rule 91.217 (see next page). Some pilots will debate that they don't need the weather for a short flight and on a perfect CAVOK (cloud and visibility okay) day they might have an awesome flight.

But I would say to those pilots that the benefits of being familiar with all relevant weather information far outweigh the disadvantages and increased stress they'll experience when they wish they'd got that information.

I'd say to them that if they turn back or divert because of weather, they'll have bragging rights about a great decision. But if they press on, they might remove the opportunity to have bragging rights. About anything. Ever again.

Some pilots make use of non-approved websites offering flight information. Pilots have found they provide additional and useful information to help their mental picture of the flight and route ahead. But the information is not always verified, and in my opinion, doesn't always cut the mustard.

As an example, while one popular, but unapproved, website offers additional and useful weather information, some of the aviation-specific data it provides may not be verified.

For instance, I've found it to be inexact in certain areas. In the most extreme case I've noted, it overstated a runway's length by 210 metres and its width by 30 metres (see 6 in the box on next page).

In another recent case, a pilot reported they had used this website to check NOTAMs, and when he found there were none, proceeded to land on a grass runway, that was in fact, closed by NOTAM.

It's always the same advice about NOTAMs. And AIP Supplements.

I've investigated numerous occurrences where pilots had not checked NOTAMs or current AIP Supplements.

They subsequently landed at closed aerodromes, landed on closed runways, taxied on closed manoeuvring areas, used obsolete radio frequencies, and busted temporary airspace restrictions.

Some pilots will debate that if they're only doing a local or short flight they don't need to check NOTAMs or supplements.

But there are plenty of incidents and accidents I've investigated over the years that have happened during a short hop.

// Not following the Civil Aviation Rules may mean the insurance company will not pay out. //

Visit the Airways' IFIS website to get NOTAMs and the current supplements: ifis.airways.co.nz.

The website provides other flight planning tools: area and route briefings, twilight times, and links to the AIP and Metflight GA websites.

Aerodrome data is published in Volume 4 of the AIP. The entire set (Vols 1-4) is free to use and can be opened via the IFIS website or directly at www.aip.net.nz.

Airways' IFIS mobile app is another tool you can use to easily access NOTAMs.

If you have neither internet access nor a mobile, call the National Briefing Office for all the services IFIS provides.

- NBO landline: 03 358-1509
- NBO freephone: 0800 626 756
(free, but may not work from a prepaid mobile)

The hidden costs

This hypothetical situation draws together the elements of many of the investigations I've led into aircraft accidents.

A pilot lands on the grass runway and the aircraft tips over as it rolls through a soft wet patch of ground.

The pilot and his passengers are moderately injured and the aircraft substantially damaged.

The dismayed pilot later learns the runway had been closed by NOTAM, due to dangerous runway conditions (the soft wet patches), but he had not checked.

So what are the consequences of this accident? People don't often consider the repercussions prevailing long after an accident or serious event.

There's the dollars-and-cents fallout of course: no income (without income insurance), cost of specialist

care (without medical insurance), cost of family travel if someone is hospitalised, cost of near-hospital accommodation, cost of aircraft wreckage removal and transport, and cost of aircraft repairs and storage.

Not following the Civil Aviation Rules may mean the insurance company will not pay out.

But by not checking the NOTAMs this pilot has also subjected himself and his passengers to a psychological toll not easily measurable, but nonetheless very real: distress, pain and discomfort, possibly extended recovery from injuries, possible lifelong after-effects.

There may be an impact on the pilot's medical – in a serious accident, it's possible they will never be fit enough to fly again.

And in the most extreme case there's the possibility of regulatory action.

The cost of obtaining a NOTAM or AIP Supplement is nil. The cost of an accident – possibly thousands.

So, what is your life worth? ➔

// RULE 91.217 PREFLIGHT ACTION SAYS:

Before commencing a flight, a pilot-in-command of an aircraft must obtain and become familiar with all information concerning that flight including —

1. where practicable, the current meteorological information; and
2. the fuel requirements; and
3. the alternatives available if the planned flight cannot be completed; and
4. any known or likely traffic delays that have been notified by ATS; and
5. the status of the communication and navigation facilities intended to be used; and
6. the current conditions of the aerodrome and runway lengths at aerodromes of intended use; and
7. any take-off and landing distance data contained in the aircraft flight manual; and
8. in the case of aircraft powered by two or more engines—
 - engine inoperative procedures; and
 - one engine inoperative performance data.

IT'S YOUR EXPOSITION

When done well, an exposition can become a powerful tool for both decision-makers and employees.

Every certificated organisation will have prepared an exposition as part of their initial certification process.

The exposition is a manual detailing the policies and processes that underpin the way the organisation goes about its day-to-day business.

It's more than just a regulatory requirement to demonstrate compliance with applicable Civil Aviation Rules.

It's also an essential component of building an organisation's safety culture.

An organisation can either write it themselves or they can get a contractor to write it for them.

But the exposition ultimately belongs to the operator or organisation, so it is their responsibility to ensure it is correct.

Check before you submit

CAA Airworthiness Inspector Steve Shaw says there's nothing wrong with organisations engaging the services of a manual writer or consultant, but he has a word of warning.

“There's been a considerable amount of time and money wasted due to operators not taking responsibility to review the exposition themselves before it's submitted to the CAA,” says Steve.

“To avoid that happening organisations should work and collaborate with the manual writer during the process.”

The exposition belongs to the operator so it has to be written for their type of operation.

“Decisions about the exposition are the responsibility of the senior persons, in particular the chief executive and/or safety/quality manager, not the manual writer. This also means that the relevant senior person must be the one the CAA deals with when it comes to decisions on the exposition rather than the contracted writer.” »