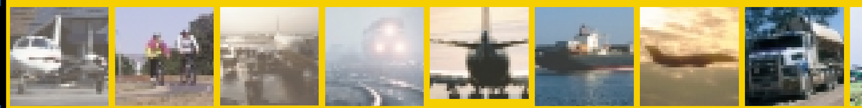

The ATSB makes a significant contribution to the safety of the Australian aviation industry and travelling public through investigation, analysis and open reporting of civil aviation accidents, incidents and safety deficiencies.

It performs air safety functions in accordance with the provisions of Annex 13 to the Convention on International Civil Aviation (Chicago Convention 1944) as incorporated in Part 2A of the *Air Navigation Act 1920*. Part 2A contains the ATSB's authority to investigate air safety occurrences and safety deficiencies.

The ATSB is an operationally independent bureau within the Federal Department of Transport and Regional Services. ATSB investigations are independent of bodies, including regulators that may need to be investigated in determining causal factors leading to an accident or incident. ATSB is a multi-modal bureau with safety responsibilities in road, rail and sea transport in addition to aviation.

*The Australian Air Safety Investigator* is a regular eight-page feature in *Flight Safety Australia* produced with editorial independence by the ATSB. It aims to keep the industry informed of the latest findings and issues in air safety from the bureau's perspective.

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**A Confidential Aviation Incident Reporting (CAIR) form can be obtained from the ATSB website or by telephoning 1800 020 505.**

# Gear up!!!

Occurrence 200105698

THE Piper Chieftain was being flown as a single-pilot operation to conduct a scheduled passenger flight from Adelaide to Kingscote. The Chieftain was one of six aircraft being used by the operator on the route at the time. The other aircraft were involved in passenger charter operation. The six aircraft departed Adelaide at about the same time for Kingscote and the Chieftain was the first to approach the airfield.

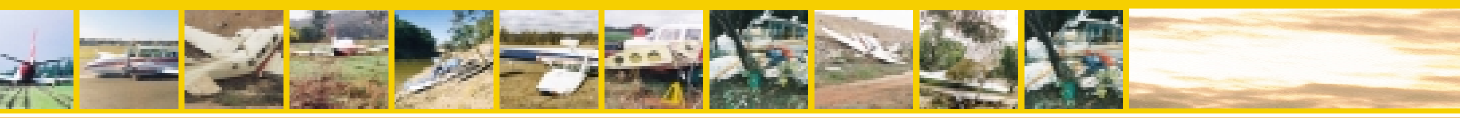
The pilot reported that he decided, based on the Kingscote Automatic Weather Service reports and the weather forecast for the area, to descend to the sector's Lowest Safe Altitude. He intended to descend clear of cloud and approach the airfield to land on Runway 19 via a 5 NM straight-in visual approach. He had also planned to conduct a Sector A Global Positioning System (GPS) instrument arrival should the aircraft not break clear of cloud in sufficient time for a normal visual approach. Due to the weather conditions, the pilot decided to make the Sector A GPS arrival. The pilot reported that during the descent and approach, the pilots of the other aircraft were querying him about the cloud base and weather so that they could plan their arrivals.

The pilot reported that, during the GPS arrival, he had configured the aircraft in accordance with the operator's requirements and aircraft checklist, including lowering the landing gear. The aircraft broke clear of cloud at about 1,000 ft and 2 NM from the airfield. The pilot decided that the aircraft would require excessive manoeuvring to land directly from the approach and chose, instead, to conduct a left circling approach to Runway 19. He reported that he raised the landing gear to reduce the chance of large power changes that may have alarmed the passengers. He then flew the circling approach but did not lower the landing gear.

While the pilot was answering queries from other pilots about the weather conditions on the MBZ frequency, he was also listening to radio traffic on the ATC frequency.

The pilot reported that late in the landing flare, he heard the landing gear warning horn and the scraping of the aircraft on the runway. He initiated a go around and advised the following aircraft of the event, however he did not receive a reply because the aircraft's VHF antennas had been damaged during the scrape on the runway. He then lowered the landing gear and landed without further incident on Runway 24 to help ensure separation from the following aircraft. The Chieftain sustained damage to both propellers, the VHF radio aerials on the underside of the aircraft fuselage and the inboard sections of the flaps.

The pilot was in a high workload situation, manoeuvring the aircraft in order to set it up for landing, and was probably distracted by the radio broadcasts and weather conditions at the time, which resulted in him forgetting to lower the landing gear before landing.



# Recently completed investigations

As reports into aviation safety occurrences are finalised they are made publicly available through the ATSB website.

## Published May–June 2002

| Occ. no. | Occ. date | Released | Location | Aircraft | Issues |
|---|---|---|---|---|---|
| 200102216 | 18-May-01 | 24-Jun-02 | Maroochydore QLD | Cessna Aircraft Company 402 | Fuel starvation |
| 200005572 | 24-Nov-00 | 24-Jun-02 | 53 km NE Oakey QLD | Amateur Built Aircraft RV-6A | Propeller failure |
| 200003399 | 13-Aug-00 | 19-Jun-02 | 74km SW Maryborough QLD | Short Bros SD360-300 | Engine shutdown due to bearing failure |
| 200103038 | 11-Jul-01 | 14-Jun-02 | 83 km E Longford HLS Vic. | Sikorsky S-76C | Engine failure |
| 200004432 | 30-Sep-00 | 23-May-02 | Canberra ACT | Boeing 767-338ER | Fumes in the flight deck |
| 200105559 | 21-Nov-01 | 17-May-02 | 278km ESE Alice Springs NT | Boeing 737-476 & Boeing 737-376 | Unintentional ATC instruction |
| 200105188 | 24-Oct-01 | 17-May-02 | 22km SSE Timber Creek NT | Beech 200 | Oxygen masks deployed |
| 200003130 | 24-Jul-00 | 16-May-02 | 1km NW Marlborough QLD | Bell Helicopter Co 206L-3 | Fuel and fog |
| 200105060 | 18-Oct-01 | 1-May-02 | Brisbane QLD | Boeing 717-200 | Hydraulic failure |

### *What is the Australian Transport Safety Bureau?*

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal body that investigates, analyses and reports on transport safety. The ATSB is not part of the Civil Aviation Safety Authority (CASA). The ATSB is Australia's prime agency for the independent investigation of civil aviation accidents, incidents and safety deficiences. To report an Aviation, Marine or Rail accident telephone ATSB (toll-free, 24 hours): **1800 011 034.**

# Safety briefs

## Problem with the upper yaw damper computer on a 747

Occurrence 200105429

A Boeing 747-SP38 aircraft was maintaining Flight Level (FL) 430 with autopilot 'A' engaged, when the aircraft yawed abruptly to the right and rolled to a bank angle of approximately 20 degrees. The autopilot was disengaged and the aircraft stabilised in a straight and level attitude. The uncommanded yaw occurred again. The flight crew broadcast a PAN (radio code indicating uncertainty or alert, not yet the level of a Mayday) and received a descent authorisation to FL380.

The upper rudder position indicator showed a rudder displacement of 5-degrees right and the lower rudder indicator showed zero degrees deflection. The flight crew began activating and de-activating the upper and lower yaw damper switches attempting to isolate the problem. During those actions, the aircraft commenced to 'Dutch roll' (lateral oscillations with both rolling and yawing components). The crew then successfully isolated the problem to the upper damper and turned the upper damper switch off. With the aircraft at FL380, normal operations ensued. Autopilot 'B' was then engaged and the flight proceeded without further incident.

Investigation by company maintenance personnel confirmed an anomaly of the upper yaw damper computer. The unit was replaced and the system tested. Normal operations ensued.

Analysis of Flight Data Recorder information revealed that during the event the upper rudder displaced 4.7 degrees. The data also indicated that the maximum roll encountered was 13 degrees to the right.

System redundancy had operated as required to limit the effect of the upper yaw damper anomaly. ■

## Auxiliary power unit malfunction

Occurrence: 200102326

Prior to the first flight of the day, the Boeing 737 aircraft cabin was found to contain smoke and fumes. While the crew returned to the crew room, maintenance personnel inspected the aircraft and found that the auxiliary power unit (APU) had malfunctioned. The cabin was cleared of fumes and the aircraft despatched with an unserviceable APU. For a short time after takeoff, some smoke and fumes were observed in the cabin but cleared.

At around 6,000 ft on approach to Sydney, fumes were again detected; most noticeably in the rear of the cabin. A fast approach and normal landing ensued. Cabin staff reported that the smell dissipated when the airconditioning packs were selected to HIGH.

Company maintenance investigation found that the APU malfunction was the result of a cooling fan shaft failure. The failure allowed APU turbine oil to leak from around the shaft seal from where it was sucked into the APU inlet prior to the APU control unit initiating an auto-shutdown. The oil then entered the airconditioning system ducting and later exited into the cabin as fumes and oily smoke during that system's normal operation. ■

## Helicopter vs Powerlines

Occurrence: 200100443

The pilot of a Bell Long Ranger 206L-1 was returning to base following a crop-spraying task. While transiting a ridgeline of the Connors Mountain Range, the helicopter collided with wires and impacted the ground about 200 metres beyond the wires.

The pilot received fatal injuries and the helicopter was destroyed in a post-crash fire. Witnesses had observed a helicopter approaching the ridgeline at a very low height.

The helicopter had struck two three-strand lightweight high-tensile steel wires of a powerline supplying a repeater site. A wire strike protection system (WSPS) had not been fitted to the helicopter. The wires were aligned on 060 degrees magnetic, with a maximum height of 31.5 metres for the upper wire and 30.1 metres for the lower wire. The position of the wires was not annotated on the relevant Visual Terminal Charts and they did not have high visibility devices attached.

One main rotor blade severed the upper wire. The lower wire contacted the fuselage in the area of the forward canopy, progressed up to the fibreglass trans-mission cowl, and separated the top lip of the cowl. That wire, together with the separated section of cowl, then contacted the flight controls above the main rotor swashplate, causing static overload and separation of the white colour-coded main rotor pitch change rod. Directional control of the helicopter was lost following the separation of the control rod.

It is likely that the oblique angle of approach to the wires limited the pilot's ability to detect them, and 'contour flying' offered minimal reaction time for the pilot to avoid the wires had they been detected. ■



Australian Transport Safety Bureau

## Ramifications of incorrect component installation

Occurrence 200105660

While in cruise flight, the crew of the SA 227 aircraft noticed the left engine oil pressure fluctuating. A visual inspection of the engine in-flight revealed nothing unusual. A short time later, the left engine oil warning light illuminated and, in accordance with company standard operating procedures, a precautionary engine shut down was carried out. The crew then diverted the aircraft to the nearest available airport and conducted a single engine approach and landing. A post flight inspection of the aircraft revealed no measurable oil remaining in the left engine.

An inspection of the aircraft, immediately following landing, found that the engine oil had leaked from a loose right-angle oil line fitting that was situated on the left engine's Beta Manifold. A subsequent maintenance investigation by the operator discovered that the fitting had become loose after it had been forcibly contacted by the left starter generator's 'micarta' electrical connector block. That contact had occurred following the rotation of the generator on its mounts due to a loose attaching clamp and several missing locating pins.

An inspection of the generator's attaching 'v-band' clamp revealed evidence of deterioration of the thread and nut that tightened the clamp. Three of the four locating pins that positioned the generator on the mount were also noted to have been missing, with the remaining pin partially depressed into the surface of the mount. The generator had been removed, and re-installed, during contractor maintenance approximately two weeks prior to the incident.

The starter generator and mounts were replaced with serviceable items and the engine was ground run with no problems noted. The aircraft was returned to service.

Following the incident the contract maintenance personnel were briefed on the occurrence and the ramifications of incorrect component installation. ■

## Helicopter joyflight lucky escape

Occurrence 200101788

The pilot of an Enstiom 280C helicopter was conducting about 30 joyflights, with each flight lasting for about 3 minutes and carrying two passengers. After the helicopter had been refuelled the second time, it departed for the twenty-seventh flight of the afternoon. Witnesses reported that transition from the hover to forward flight appeared normal, and that they had then stopped watching the helicopter. A short time later they heard the sound of impact. The helicopter had struck a tree prior to impacting the ground. The occupants were not injured.

The pilot reported that the helicopter's engine did not appear to develop full power during the transition and climb, and that he had overpitched the rotor in an attempt to fly over the tree.

No fault was found during wreckage examination that might have prevented the helicopter from operating normally.

The accident flight was affected by a number of conditions that had changed from the previous flights. The changes included an increase in the helicopter's all up weight due to the added fuel, and a reported calming of the wind above the trees. Both of those changes would have increased the power required for the helicopter to maintain the previously flown departure profile. Consequently the pilot would have needed to adjust the departure path or transition technique to account for the decreased helicopter performance. The investigation was unable to determine if maximum power had been achieved.

Because no fault could be found with the engine, it was considered likely that the departure path or transition technique had not been sufficiently adjusted to account for the changed conditions. The pilot's low level of experience and the repetitive nature of the flying may have also been factors in the accident. ■

## Depressurisation problem

Occurrence 200003725

The Embraer Brasilia aircraft was operating a Regular Public Transport flight from Dili, East Timor to Darwin NT. The aircraft had departed Dili and had climbed to cruise at flight level 230. Shortly after the aircraft had levelled off, the pilot in command detected pressure changes occurring in the cabin; indicated by popping of his ears. That change was verified on the cabin rate of climb indicator, which had moved from zero to indicate a climb of 500 ft/min.

Initial checks to override the automatic pressurisation controller did not rectify the problem and the crew immediately commenced a descent. Because the rate of cabin pressure loss was not excessive, a normal descent profile was adopted at about 1,800 ft/min. During the descent, the cabin rate of climb suddenly increased to about 1,000 ft/min. The rate of pressure loss was not uncomfortable and the aircraft was rapidly approaching FL140. The crew did not don supplemental oxygen masks during the first part of the descent.

The flight attendant recalled that she was at the rear of the aircraft when she saw some things fall from the overhead lockers and she realised that they were the passenger oxygen masks. At almost exactly the same time the interphone sounded and she moved to the front of the aircraft to answer the call. She was briefed that there was a slight depressurisation problem and that they had commenced a descent to 10,000 ft. The pilot warned her that the passenger masks may deploy and she advised that they already had. She was then instructed to get the Emergency Procedures card and perform the emergency briefing. The flight crew were not wearing supplemental oxygen masks when she spoke to them at that stage of the descent.

The crew donned their oxygen masks during the later stages of the descent and after the passenger oxygen masks had been automatically deployed.

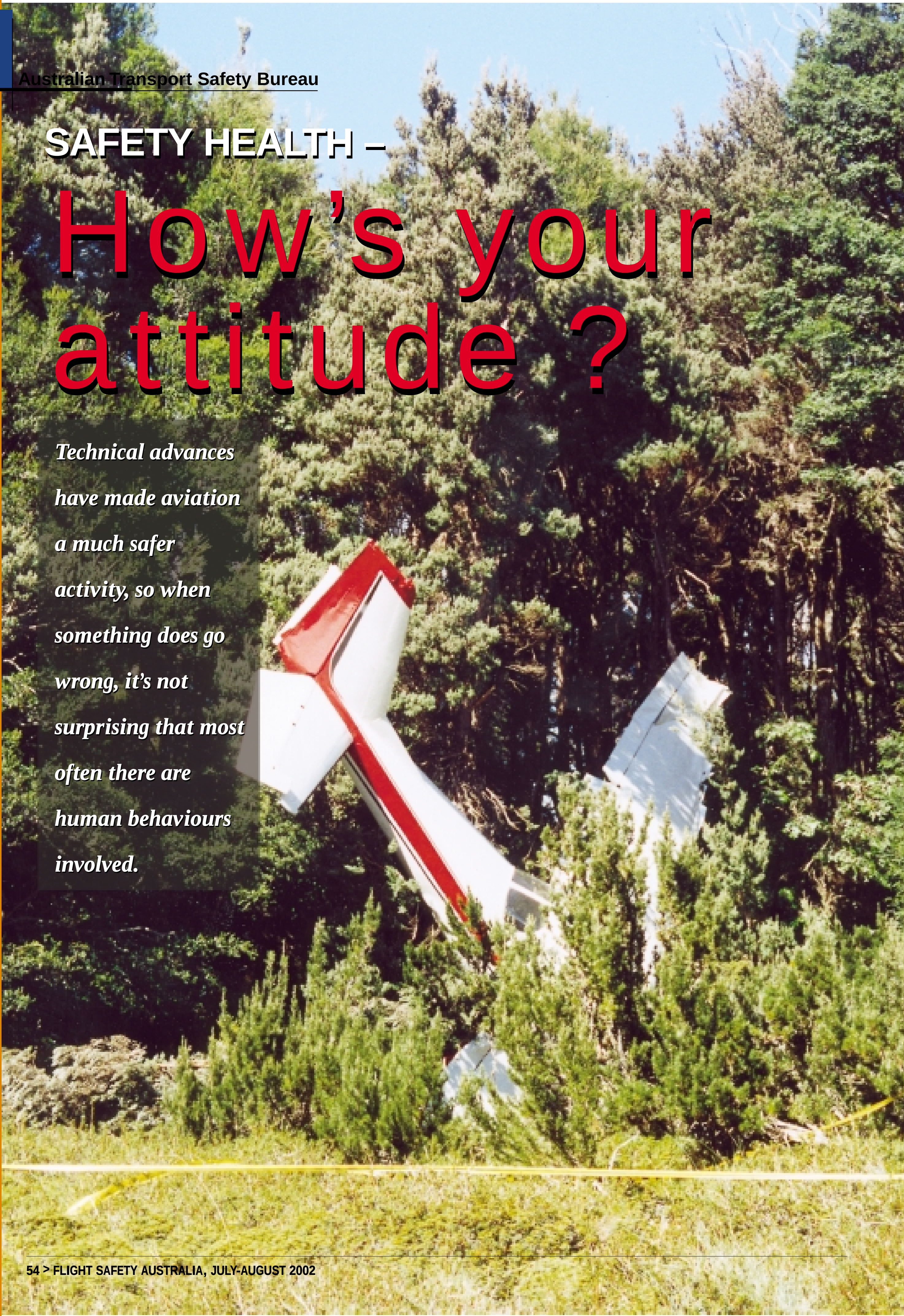
The aircraft was established in VMC and the weather along the planned route was forecast to be fine. The pilot in command decided to continue to their planned destination and the aircraft landed without further incident.

No injuries were reported as a result of the incident. ■

## SAFETY HEALTH –

# How's your attitude ?

***Technical advances have made aviation a much safer activity, so when something does go wrong, it's not surprising that most often there are human behaviours involved.***



HUMAN errors and violations don't happen in isolation. They happen in context and in patterns. In other words, they happen within a safety culture.

Safety culture is a term that is becoming more common in aviation organisations, especially with regard to safety management systems. Like any national culture, safety culture is built on the beliefs and attitudes of the people who operate in it.

'Safety culture is believed to be a key predictor of safety performance,' says Bronwyn Evans, a PhD student in the area of safety culture and researcher with the Australian Transport Safety Bureau (ATSB).

'Safety culture is created by the behaviours that individuals learn from working in an organisation. It's a complex mix of values and expected reactions that's sometimes described simply as 'the way we do things around here'. Particularly important to safety culture are the individual's perception of management commitment to safety, supervisory staff's commitment to safety, and communications within the operation,' she explains.

In the past, the performance of safety management systems has been measured by the number of accidents or incidents, based on the belief that if there are fewer accidents then the system must be safer. In other cases, specific accidents were investigated believing that it would uncover what not to do next time. Safety checklist systems have also been used to assess safety in workplaces. While they are more useful than the other measures mentioned, they still do not provide the full picture.

In order to more actively address accidents and safety in general, it is necessary to look at what is going right and wrong in the system before an accident occurs. In this way it is possible to identify what is working well and not so well, and to encourage or limit the actions accordingly. In short, what is needed is a way to look at how people perform activities before an accident occurs.

The ATSB is currently undertaking a project to do just this. The project will take the form of a survey of safety culture across the aviation industry. The survey will be repeated about every two years.

The purpose of this project is to assess the state of safety health of the aviation industry by measuring the safety attitudes of those who function within the industry. These safety attitudes directly relate to the creation of a safety culture, which then affects safety behaviour, and ultimately the number and type of accidents and incidents that occur.

This phase of the project is targeted at pilots, but subsequent phases will look at other areas within aviation and also other transport modes. The results will help build a clearer picture of the strengths and weaknesses in order to better understand where improvements to safety may be made.

> **"Safety culture is believed to be a key predictor of safety performance"**

'Although many other factors have a part to play, measuring safety culture offers insight into the strengths and weaknesses of safety management systems' Ms Evans continues.

'The ATSB project will enable safety culture to be measured on a large scale so that we can make comparisons of safety performance between sectors of the industry and between operators within the industry. The ATSB will be providing another indicator of just how healthy the aviation industry is.'

There are two main sections of the survey. The first will measure the perceptions that can influence employees' attitudes to safety, the way employees perform their work, and the way that employees interact with each other about safety issues. Each of these factors can have a direct impact on safety outcomes such as accidents.

The second section is designed to access the experiences of all pilots who are currently flying. By measuring both the individual perceptions and the general experience of safety of the pilots who fly regularly, it is possible to build a better picture of safety across an organisation and/or industry.

Measuring now will give the added bonus of providing a baseline of safety health before the introduction of new regulations regarding safety systems management. Subsequent survey results will be compared to this original data in order to establish trends in safety health.

Rob Graham, Director Safety Investigations at the ATSB says that the project is designed to give the ATSB better understanding of the industry.

'This research will help the ATSB to be more active in the industry. We hope to get a better understanding of what issues may lead to the next major accident and research these issues before an accident occurs.

'The results of the survey will be used with our own accident and incident data to give us a better understanding of the safety health of the aviation industry. It will not identify specific operators but look at industry experiences as a whole. It's a way to highlight the areas that are working, in addition to those that are not,' Mr Graham explains.

The research will involve pilots involved in a variety of flying operations. Within the next few months, the ATSB will be mailing 5000 surveys to a randomly chosen sample of ATPL, CPL and PPL holders. If you receive a survey, you can have your say about how safe you think aviation is as an industry by completing the survey and returning it to the ATSB. By assisting with this research you are helping the industry reach higher standards of safety, and of course all responses will be kept confidential.

Pilots who fly regularly and have not been sent a survey can have their say via a web-based version of the survey that will appear shortly on the ATSB web site at www.atsb.gov.au .

At this stage, the research is focused on pilots however, future surveys will focus on other areas of the industry. The ATSB will review the results of this phase before deciding which group or groups to study next – cabin crews and LAMEs are high on the list of options.

The results of the survey will be released in a report toward the end of next year.

# Confidential Aviation Incident Reporting

UNDER the CAIR system, the reporter's identity is protected, effectively separating the reporter from the report. Before a report is entered into the CAIR database, it is 'de-identified', so that any person subsequently receiving the information is unable to determine from whom the report originated. After the CAIR manager decides what to do with the de-identified information, the original report is either destroyed and the reporter is advised of the action that CAIR has taken with the de-identified information.

Please note that, although information reported to CAIR might be very sensitive, CAIR does not act upon anonymous reports. CAIR must be able to contact a reporter to clarify any aspect of a report or to seek additional information, and to ensure that the reporter's motivation is only to promote aviation safety.

The ATSB aviation database is currently being upgraded. When the upgraded system is operational, reporters will be able to submit CAIR reports online, something that has not been permitted for security reasons up to now. Under the upgraded system, reporters will be able to submit their reports online, secure in the knowledge that the reports are safe from unauthorised access.

**John Robbins**
**Manager CAIR**

## Reverse taxiing (CAIR 200200052)

*A twin engine aircraft operated by* [operator]*was observed to reverse out from its parking position on the apron. There was no marshaller or safety person monitoring the area behind the aircraft. The aircraft reversed out in a sweeping turn of about 25 metres before completing its three-point-turn and taxiing away. This would appear to be a dangerous practice. The apron at Cairns airport is too small and congested for the number of aircraft that are parked on the apron to operate safely.*

**CAIR Note:** This is the second report received in recent weeks regarding aircraft reverse taxiing at Cairns. The earlier report concerned a different aircraft type operated by a different operator.

**Response from CASA:** While it is an acceptable practice to use the reverse taxi capability of the aircraft, the operator's procedures require the presence of a marshaller or safety person to oversight the action. CASA discussed the issue with [operator's] Chief Pilot who recognised the extreme safety implications of this reported action. The Chief Pilot has advised that a marshaller or safety person will be present for all future reverse taxi operations for the operator's aircraft.

CASA will continue to conduct routine and unscheduled surveillance of this organisation.

**Response from aerodrome operator:** In reference to your CAIR report relating to Aircraft Reversing Out of Parking Positions at [location], the following letter has been forwarded to the companies in question. Please advise us if you consider further action is required.

The Cairns aerodrome operator has received a Confidential Aviation Incident Report (CAIR) from the ATSB relating to aircraft reversing out from bays without a marshaller in attendance. The report identified a [operator and aircraft type 1] and a [operator and aircraft type 2]. As noted in the report the [aerodrome] Domestic Apron has limited space and the reversing of aircraft without the use of a marshaller could result in an incident or accident. Could you please ensure that a marshaller is in attendance when there is a requirement for any aircraft to reverse out from a parking position.

## Circuit directions (CAIR 200201877)

*At Port Macquarie aerodrome, right hand circuits were conducted in the past that kept circuit traffic away from the township. The current practice is that all circuits are left hand, which results in aircraft flying over the township. This practice is particularly dangerous when twin engine aircraft simulate an engine failure after takeoff and they climb asymmetric and slowly over the built up areas. Why cannot right circuits be mandated in the ERSA to keep circuit aircraft away from the township? Left circuits could be conducted on runways 03 and 10, with right circuits mandated for 21 and 28.*

**Response from aerodrome operator:** At Port Macquarie aerodrome, right hand circuits were introduced by the Civil Aviation Authority (CAA) and operated on Runway 21 during the late 1980s and early 1990s. Council as the owner and operator of the aerodrome was not consulted regarding the introduction or the abandonment of the special procedures. However, it is understood that they were introduced following the commencement of seaplane operations from the Hastings River. Further it is understood that the procedures were dropped following complaints from local operators regarding safety concerns.

There was a period when the seaplane operations from the river ceased. However, when the operations recommenced special procedures were only introduced for the seaplane operations and no special procedures were placed on the aerodrome circuits. All circuits remain left hand.

Over recent years Council has only received a small number (less than five) complaints regarding low flying aircraft or safety concerns regarding aircraft operations. The majority of other aviation complaints relate to aircraft noise issues. Residents making complaints regarding safety concerns are advised to make their complaint directly to the Civil Aviation Safety Authority (CASA). Generally all reports or advice received by Council contain insufficient 'details to assess either the factual accuracy or possible gravity of the report' and as Council does not have the expertise to evaluate or investigate the matters the residents are referred to CASA.

Right hand circuits for runway 21 may

reduce aircraft flights over residential areas. However right hand circuits for runway 28 would not reduce aircraft flights over residential areas.

Council does not monitor or record the air activities associated with pilot training at the aerodrome nor does it receive advice from operators. Therefore it is difficult to provide any further information regarding the practices as outlined in the CAIR report.

## Non-compliance with noise abatement procedures

(CAIR 200201596)

*I have noticed a trend with some* [operator and aircraft type] *aircraft that are on approach to runway 14 at Coolangatta, where they are not complying with the noise abatement procedure. Not only is this a noise concern for local residents, but it is a serious safety hazard. The aircraft are low and fast. The pilots display a 'cowboy' type of attitude with their flying. The aircraft are turning onto final south of Currumbin Hill, rather than doing a left pattern to runway 14 over water.*

*Please ensure that all crews are advised of the correct procedure before there is an accident.*

**Response from Airservices Australia:** Noise Abatement Procedure for Runway 14 Arrivals in Coolangatta. Although a response was not expected by ATSB I thought it useful to provide you with follow-up information.

As a result of the report Airservices will:

- Consult with Coolangatta AEC to clarify the matter
- Raise the matter with [operator].

**Response from operator:** The company did have a problem with one flight that we know of.

The aircraft was cleared for a visual approach and the pilot in command interpreted the clearance as allowing him to track the aircraft for a left base for runway 14.

The AIP has subsequently been amended to clarify the requirement for aircraft on a visual approach to continue to track via the STAR.

We have also advised all pilots by way of our internal operational circular system of the newly published requirements.

I trust this clarifies the situation.

We have no objection to you advising the reporter of the content of our reply provided we are quoted in full.

**CAIR note:** As CAIR does not retain any record of the reporter's identity (all that is retained is the de-identified information) the reporter would have to contact the CAIR Manager to obtain further feedback details.

## Arrival procedures at uncontrolled aerodrome

(CAIR 200200037)

*A situation occurred last month at Ayers Rock aerodrome where two RPT aircraft had the same ETA for the circuit and we were RPT rolling for takeoff from Runway 13.*

*One aircraft was inbound from Perth and the other was from the Oodnadatta track G222. The Oodnadatta track is close to the reciprocal of the Runway 13 centreline. There were the usual GA movements for sightseeing.*

*The sky was hazy and overcast. It was very difficult to visually acquire traffic due to lack of contrast. We rolled, assuming that the inbound traffic from Oodnadatta would deviate and join crosswind overhead the upwind threshold, well above circuit height.*

*At 18 degrees nose up until 1000 feet, it is impossible to visually acquire traffic 12 o'clock low. But with the aid of TCAS, I located traffic 3-4 NM from the upwind threshold still tracking for a left downwind and crossing the runway centreline as we rolled into a left turn onto 025 to intercept track for Alice Springs.*

*The separation was fine but safety at Ayers Rock Airport for all can be enhanced if there were standard RNAV arrivals published which put higher speed traffic on very predictable flight paths.*

*If this were also published in the ERSA then other users would know exactly where to look for high speed joining RPT and so give them greater situational awareness as well.*

*You may say that it is the responsibility of crew to provide for their separation. Whilst this is true, Murphy's Law says that unless we develop some standard procedures, one day a chain of events will lead to an accident where there is potential for one.*

*I believe that other factors such as weather and distractions could have translated the situation above into a near miss or collision. The inbound crew would be busily slowing the aircraft down, configuring for landing and, with other distractions, could easily miss our rolling call.*

*There can be large amounts of radio chatter-Ayers Rock radio relaying traffic, Melbourne centre relaying IFR traffic, taxiing reports, circuit reports and so on. One standard arrival for each Runway would remove quite a few variables.*

*I am used to monitoring many aircraft in a circuit after many years as an experienced flying instructor. It is easy to find joining traffic, track them in your mind and cope with the distractions of the student when you know they are following a standard arrival procedure. I'm very comfortable with 'see and be seen' and little worries me in aviation, but something troubles me about the Ayers Rock traffic environment and I am a little uncomfortable there. My gut feeling is that you need to devise and publish standard RNAV arrivals for RPT for the benefit of all traffic.*

**Response from Airservices Australia:** The reporter is asking for what is, in effect, a STAR for G Airspace or MBZ operations – a new innovative idea which Airservices cannot introduce arbitrarily. The request for standard predictable procedures has merit, as long as the majority adheres to them. Enforcement could well be a problem.

The notion has been passed to those responsible for air traffic management within Airservices for consideration. I would suggest that this report also be addressed to CASA for their consideration.

**Response from CASA:** Civil Aviation Regulation 163A requires that all pilots maintain vigilance so as to see and avoid other aircraft. The pilot in this report was aware of other potentially conflicting traffic. The pilot could have remained on the ground until he had sighted the potentially conflicting aircraft which, as an arriving aircraft, had priority over his use of the runway for departure.

The pilot has suggested that standard Area Navigation (RNAV) arrival procedures be published in the Enroute Supplement of Australia (ERSA). The Authority considers that it would not be possible to provide only two standard arrival routes, one for each runway, which would satisfy the requirements of eight inbound ATS routes. Additionally, it would be impractical to provide a sufficient number of standard arrival routes to service the ATS routes with the expectation that all participating aircraft would be aware of each of the associated tracks. ■

ATSB is part of the Commonwealth Department of Transport & Regional Services