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- safety data recording, analysis and research
- fostering safety awareness, knowledge and action.

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Aviation Occurrence Investigation AO-2010-012
Final

ATC information error, VH-BCQ

Proserpine/Whitsunday Coast Aerodrome,

Queensland

25 February 2010

Abstract

On 25 February 2010, a Piper Aircraft Corp Chieftain PA-31-350 aircraft, registered VH-BCQ, was being operated on a charter passenger flight from Mackay to Clermont Aerodrome, Queensland. Unable to land at either Clermont or the planned alternate aerodrome of Mackay due to deteriorating weather conditions, the flight diverted to Proserpine/Whitsunday Coast Aerodrome.

The pilot in command requested air traffic services (ATS) to arrange for a person to be on the ground at Proserpine/Whitsunday Aerodrome to ensure that the aerodrome lighting would be on for their arrival. This request was not actioned, but ATS provided the crew with a frequency for the pilot activated lighting system at the aerodrome. However, that frequency was decommissioned 10 days earlier, and a new frequency introduced.

On approach to Proserpine, the flight crew were unable to activate the aerodrome lighting. With critical fuel, and given weather considerations, the flight crew landed the aircraft without runway lighting at around 1957 Eastern Standard Time.

The investigation identified two minor safety issues; one relating to the practices used within the air traffic control group for the effective review and communication of notices to airmen, and the other the risk of out-of-date operational documentation.

The air navigation service provider advised that in response to this occurrence, it will conduct an internal education program to highlight the effect on safety when relevant information is not considered appropriately or reviewed before being provided to pilots.

The incorrect operational documentation has since been updated and the regional council managing Proserpine Aerodrome has instigated safety action relevant to their organisation.

FACTUAL INFORMATION

Sequence of events

On 25 February 2010, a Piper Aircraft Corp Chieftain PA-31-350 (PA31) aircraft, registered VH-BCQ, was being operated on an instrument flight rules (IFR) charter passenger flight from Mackay to Clermont Aerodrome, Queensland (Qld). On board the aircraft were two flight crew and five passengers.

Due to unsuitable weather conditions at the destination, the crew attempted to return to Mackay, but the then unsuitable weather there resulted in the crew diverting to Proserpine/Whitsunday Coast (Proserpine) Aerodrome, Qld. The crew sought to have someone on standby at Proserpine in case the pilot activated lighting (PAL) could not be activated, but without success. The crew could not activate the lights and landed at Proserpine with

the available light at about 1957 Eastern Standard Time.¹

The flight departed Mackay Aerodrome at 1802. An aerodrome forecast (TAF)² for Clermont that was issued at 0628 and valid from 0800 until 1800 that day, indicated that there was a 30% probability from 1300 of wind gusts to 40 kts and thunderstorms at the aerodrome. The flight crew reported that in response, they planned for Mackay as an alternate aerodrome.³ The TAF for Mackay included intermittent (INTER)⁴ periods of deteriorating weather and as a consequence, the flight crew adjusted their fuel planning for flight to Clermont and return, with an additional 30 minutes holding fuel.

At 1851, after an unsuccessful Global Positioning System (GPS) Arrival at Clermont and due to the aircraft having insufficient fuel for a further approach, the flight crew advised the en route air traffic controller at Brisbane Centre that they were conducting a weather diversion back to Mackay. The en route controller advised that there was an amended Area Forecast⁵, which included reduced visibility at Mackay, and that the controller on the next frequency would provide the current TAF for Mackay. On transfer to the next en route controller, the flight crew were advised that there was an aerodrome warning current for Mackay with in-flight visibility reduced to 300 m, and that two large jet aircraft were in a holding pattern as conditions were unsuitable for landing.

The crew reported that they revisited their fuel situation and considered a number of potentially suitable diversion aerodromes. They were conscious that if jet aircraft were having difficulty landing at Mackay, they were unlikely to be able to land there before their aircraft's holding fuel was exhausted. The crew did not alert the en route controller as to the aircraft's fuel status.

At 1902, the pilot in command (PIC) advised the en route controller that the flight was diverting to Proserpine Aerodrome. The PIC reported being aware that once they reached Proserpine, the aircraft would have insufficient fuel to divert to another destination.

At 1906, the controller broadcast a Hazard Alert⁶ for an amended Area 44 Forecast, which included low-level cloud, heavy showers and reduced visibility at Mackay. The PIC contacted the Mackay Aerodrome Controller (ADC) directly by mobile phone to ascertain the actual weather conditions. The ADC advised that the weather was moving in from the north, which placed it between the aircraft and the aerodrome. The crew decided to continue to Proserpine.

At 1911, the PIC asked the en route controller to arrange for someone to be on the ground at Proserpine Aerodrome to ensure that the runway lights would be on for the aircraft's approach and landing. The pilot reported that since a regular public transport aircraft had just departed Proserpine, he thought there would be someone at the airport who would be able to stay for their arrival.⁷

The controller immediately replied '...there is no one on the ground at Proserpine'. Shortly after, the controller advised that the PAL radio frequency for Proserpine was 120.6 MHz, and of the requirement for three transmissions on that frequency to activate the aerodrome lights (see the section titled *Aerodrome information*).

1 The 24-hour clock is used in this report to describe the local time of day, Eastern Standard Time (EST), as particular events occurred. Eastern Standard Time was Coordinated Universal Time (UTC) + 10 hours.

2 A Bureau of Meteorology statement of meteorological conditions expected for a specified period in the airspace within a radius of 5 NM (9 km) of the aerodrome reference point.

3 An aerodrome specified in the flight plan to which a flight may proceed when it becomes inadvisable to land at, or continue toward, the aerodrome of intended landing.

4 The variation group INTER is used in weather forecasts to indicate significant variations of an intermittent nature, meaning for periods less than 30 minutes.

5 Area forecasts comprise a statement of the general synoptic situation and the meteorological conditions expected to prevail in the designated area. The occurrence flight was carried out in Area 44.

6 A prefix to transmissions alerting pilots to sudden changes to components of the flight information service that would have an immediate and/or prolonged detrimental effect on the safety of aircraft.

7 At that point, there was also sufficient time for someone to drive from Proserpine township to the aerodrome; a distance of 10 km.

In response, the PIC attempted to make his own arrangements through a former aviation employer in Mackay. The PIC's aim was for the former employer to arrange for someone in Proserpine to go to the aerodrome and manually turn the aerodrome lights ON in the event that they did not activate via PAL. However, the former employer was unable to find someone and, as he did not have a copy of the En Route Supplement Australia (ERSA)⁸, he attempted to contact the aerodrome operator via the relevant telephone number in the local telephone directory.

As the former employer's call to the aerodrome operator was outside normal business hours, it went to a remote call centre. The call centre staff was unaware of the location of Proserpine but, at 1932, logged an urgent request for someone to go to the aerodrome in readiness to (if required) activate the runway lighting. That request was not actioned in accordance with the aerodrome operator's out-of-hours procedures, which required the Proserpine airport safety officer's mobile phone number to be provided to the caller.

As the flight crew had not planned to use Proserpine Aerodrome, they had not read the notices to airmen (NOTAM)⁹ information for that aerodrome. The PAL frequency in the crew's copy of the Jeppesen Airways Manual was checked by the crew and found to be consistent with that advised by air traffic control (ATC).

Proserpine Aerodrome PAL frequency 120.6 MHz was decommissioned on 15 February 2010, following an upgrade to combine an aerodrome frequency response unit¹⁰ with the PAL (AFRU+PAL). That system operated on an

amended radio frequency of 126.7 MHz and the change was notified by a NOTAM. The en route controller was not aware of that frequency change.

When the aircraft was about midway between Mackay and Proserpine, the en route controller advised the crew that the aircraft should be able to make a successful approach to Mackay Aerodrome, as the weather conditions there had improved. The crew contacted the Mackay ADC directly by phone and were advised that storms were moving through the airfield. The crew decided to continue to Proserpine and advised the en route controller to that effect.

In response to a telephone call from the PIC's former employer, at 1944 the Mackay ADC contacted the en route controller to query if the crew had been able to activate the aerodrome lights at Proserpine. The former employer had been unable to re-establish communication with the PIC.

The en route controller queried the crew, who advised that they had arranged for someone to attend Proserpine Aerodrome for their arrival. That message was passed back to the PIC's contact in Mackay, who assumed that the situation had been resolved and that no further action was required.¹¹

At 1954, when the aircraft was in the vicinity of Proserpine Aerodrome, the flight crew advised the en route controller that the aerodrome lights were not activated after numerous attempts using frequency 120.6 MHz, and the PAL activation procedures. The controller responded that the PAL frequency was 120.6 MHz and that the system required three 3-second transmissions to activate the lights.

The en route controller then contacted the Mackay ADC to advise him that the lights had not activated at Proserpine. The ADC queried the crew's intentions should they be unable to have the lights activated, as their fuel must have been running low at that point; and advised that the Mackay weather conditions had improved.

8 ERSA is an airport directory for Australian aerodromes that contains information vital for planning a flight and for use by the pilot in flight. It has pictorial presentations of all licensed aerodromes and includes aerodrome physical characteristics, hours of operation, visual ground aids, air traffic services, nav aids, and lighting.

9 Used to disseminate by all means, information on the establishment, condition or change in any aeronautical facility, service, procedure or hazard.

10 Assists pilots' awareness of the inadvertent selection of an incorrect very high frequency radio frequency when operating into non-towered aerodromes. For an understanding of an AFRU, see the Australian Aeronautical Information Publication GEN 3.4 Communication Services, section 3.4 *Aerodrome Frequency Response Unit*.

11 The crew did not know that the request to the call centre had not been actioned correctly, and that the aerodrome safety officer was unaware of the requirement to attend the aerodrome.

At 1956, the en route controller made three unsuccessful attempts to contact the crew to confirm whether the aerodrome lights had activated. The crew reported that they were conducting an instrument approach to Proserpine runway 11 at that time.

When the aircraft was on final approach, the crew could not see the runway lights, but identified two bright lights in the vicinity. The crew reported that they recognised the lights as being located in the airport's car park from previous flying training and local knowledge. The PIC stated that he was confident that, if he maintained altitude above the car park lights, the aircraft would be clear of any obstacles in the area.

As the PIC manoeuvred the aircraft to confirm that the lights were definitely in the vicinity of the car park, the clouds above the aerodrome separated and moonlight reflected off the wet runway. The PIC conducted a missed approach and positioned the aircraft to align with what the PIC thought was the approximate runway centreline, while the copilot monitored and called the aircraft's altitude. The runway threshold markings came into view and the PIC landed the aircraft at about 1957. There was no-one else at the aerodrome at that time.

Personnel information

Flight crew

The operator's charter contract for the flight required a two-person flight crew. The PIC was endorsed on the PA-31 and held an IFR rating, while the copilot, who was also endorsed on the PA-31, was not instrument rated. Both pilots were familiar with operations from Mackay to Clermont.

The crew reported that the PIC's workload during the flight was very high.

En route controller

The en route controller had almost 5 years experience and had been rated on the control position for about 4 years. On 25 February 2010, the controller commenced afternoon/evening shift at 1430, following 2 days off duty.

Meteorological information

The crew obtained the appropriate meteorological forecasts prior to the flight and had planned accordingly.

Mackay weather

The TAF for Mackay that was issued at 1438 and valid for 12 hours from 1600, contained an INTER for the duration of the TAF, with the visibility reducing to 3,000 m, rain showers and broken¹² cloud at 1,200 ft.¹³

At 1839, an amended TAF for Mackay was issued that was valid from 1800 for a 10-hour period. That TAF included a TEMPO¹⁴ for the duration of the new TAF, with visibility reducing to 1,000 m, heavy rain showers and broken cloud at 800 ft. Another amended TAF for Mackay was issued at 1926, which predicted thunderstorms and cumulonimbus cloud.

Proserpine weather

The Proserpine TAF that was issued at 0811 that day and was valid from 1000 to 2200, had an INTER for the duration of the TAF, with visibility 3,000 m, rain showers and broken cloud at 1,200 ft. This TAF was valid at the time of the occurrence. At 1900, observations from the Proserpine Aerodrome automatic weather station (AWS) generated a SPECI¹⁵, which indicated a south-easterly wind of 13 kts, visibility of 5 km, scattered cloud at 1,700 ft,¹⁶ broken cloud at 4,200 ft and overcast at 8,000 ft, and 0.8 mm of

12 Cloud amounts are reported in oktas. An okta is a unit of sky area equal to one-eighth of total sky visible to the celestial horizon. Few = 1 to 2 oktas, scattered = 3 to 4 oktas, broken = 5 to 7 oktas and overcast = 8 oktas.

13 In aerodrome and trend forecasts, cloud heights are given above aerodrome elevations.

14 The variation group TEMPO is used in weather forecasts to indicate significant variations of a temporary nature, meaning for periods of between 30 and 60 minutes.

15 A SPECI is used to identify special observations: observations when conditions are below specified criteria, or when there have been significant changes since the previous report.

16 In other than aerodrome and trend forecasts, cloud heights are expressed with reference to mean sea level.

rain in the previous 10 minutes. The en route controller advised the crew of the content of that SPECI at 1907.

At 1949, the AWS generated a new SPECI, with changes that included a southerly wind of 10 kts, scattered cloud at 1,400 ft, broken cloud at 2,100 ft and overcast at 4,700 ft, and 0.2 mm of rain in the previous 10 minutes.

Aerodrome information

The Proserpine Aerodrome main runway was runway 11/29. It had a sealed bitumen surface and was 2,073 m long and 45 m wide. Other than that available from the en route controller, there was no air traffic control service at the aerodrome.

The activation of the aerodrome lights was via the AFRU+PAL frequency of 126.7 MHz and required three 1-second pulses to activate. Following successful activation, the AFRU would transmit a confirmation (or readback) message indicating that the aerodrome lights were on.

The aerodrome lights could also be activated manually through the main lighting cubicle that was located within the aerodrome's secure area. That required an airport safety officer to access the lighting cubicle.

The AFRU+PAL system at Proserpine was serviceable at the time of the occurrence.

Airport safety officers were available 24 hours a day and at the aerodrome every day of the week from 0800 until the last regular public transport aircraft had departed, which was generally between 1900 and 2030. Outside those hours, the duty airport safety officer was available via after-hours telephone numbers that were published in ERSA and in Jeppesen Airways Manuals.

The aerodrome operator provided contact outside business hours through the diversion of its main telephone number to a call centre. The telephone number was listed in the local telephone directory for both 24-hour enquires and after-hours emergencies.

In response to after-hours calls to the aerodrome operator, call centre staff were to provide the caller with the duty airport safety officer's mobile phone number. The number for the airport safety officer that was provided to the call centre was later confirmed to be correct.

Air traffic control

The handover and acceptance (takeover) of a control position was required to be conducted in accordance with documented procedures. In assuming responsibility for a position that held delegations relevant to ATC operations, the person coming to the position required a handover by the active controller. The minimum information to be considered in the changeover of responsibility included relevant NOTAMs for the airspace.

The en route control console provided access to an electronic version of the current ERSA information, which could be shown on the situation display adjacent to the controller's main screen. Current NOTAMs for the control area could also be recalled and displayed on an auxiliary screen.

Alternately, a collection of hard-copy NOTAMs was also available for review. The practice in the ATC group was to highlight only those NOTAMs that were considered relevant, as the printed document was around eight pages in length and contained items that were not applicable to their airspace.

Prior to assuming the control position on the day of the occurrence, the en route controller read the current hard-copy briefing material, including the weather and NOTAMs that was relevant to the airspace controlled by his ATC group.¹⁷ The controller reported that he did not read the NOTAMs in detail, and was unaware of the frequency change for the Proserpine Aerodrome PAL system.

The en route controller stated that he did not understand the reason for the PIC's request for the arrangement of a person to be at the aerodrome for the aircraft's arrival. He accessed an electronic version of the aerodrome directory rather than accessing the NOTAMs, and provided the flight crew with the (incorrect) listed PAL frequency of 120.6 MHz.

¹⁷ That hardcopy briefing material was printed at about 1200 that day.

Aviation briefing and airways documentation

The NOTAM for the change to the Proserpine Aerodrome PAL lighting system and frequency was issued as a permanent change from 15 February 2010. NOTAMs promulgated as permanent changes were incorporated into aviation documentation in accordance with published amendment calendars and then removed from the NOTAM database.

In Australia, there were two main aerodrome directories used by the aviation industry: ERSA, which was administered by the ATS provider and the privately-produced Jeppesen Airways Manuals. The ERSA was revised every 12 weeks in accordance with the Aeronautical Information Regulation and Control (AIRAC) document amendment calendar, which was based on the International Civil Aviation Organization (ICAO) AIRAC cycle. The Jeppesen manuals incorporated the information contained in ERSA and were also revised in line with the ICAO AIRAC cycle.

As the frequency change for the AFRU+PAL system at Proserpine Aerodrome was not notified until after the cut-off date for the AIRAC cycle on 11 February 2010, and the ERSA and Jeppesen documents that were current at the time of the occurrence did not contain the revised frequency information. The frequency and system changes were subsequently updated in both documents at the next AIRAC date.

The investigation identified that two of the three after-hours contact telephone numbers listed for Proserpine Aerodrome in the Jeppesen manuals were incorrect. Although the flight crew were in possession of Jeppesen Airways Manuals, they reported that they did not refer to them prior to their attempts to have someone attend their arrival at Proserpine.

ANALYSIS

Weather issues

Given the weather forecasts available to the crew prior to their departure from Mackay, the quantity of fuel uplifted for the flight to Clermont Aerodrome was appropriate. The subsequent deterioration in the weather between their departure and the decision to return to Mackay

resulted in the requirement for 60 minutes of holding fuel for arrivals at Mackay.

The flight crew were not aware of the deteriorating weather conditions at Mackay while transitting to Clermont. They were about 10 minutes into the return flight to Mackay when they received information from air traffic control (ATC) about the weather warning and deteriorating weather conditions at Mackay. The aircraft did not carry sufficient fuel to satisfy the 60-minutes holding fuel required at Mackay.

The copilot's lack of an instrument rating meant that the flying duties during flight in instrument meteorological conditions could not be shared by the flight crew. Consequently, the pilot in command's (PIC) workload in terms of the control of the aircraft and management of the flight, was elevated. In addition, the options to ensure the safety of flight were constrained by the remaining fuel and the aircraft's proximity to suitable aerodromes.

The decision to divert to Proserpine appears in any event to have been reasonable in the circumstances. In addition, given the aircraft's fuel state and the limited options available to the crew if a landing at Proserpine was not possible, the PIC's attempt to minimise risk by having a person attend at Proserpine Aerodrome to ensure the availability of the airfield lighting also appears to have been prudent. However, the risk that the lighting might in any case be unavailable was increased as a result of the incorrect operational information provided to the crew, and of a number of breakdowns in communication and procedure.

Incorrect frequency information

The notice to airmen (NOTAM) for the change to the pilot activated lighting (PAL) frequency at Proserpine Aerodrome was included in the en route ATC group briefing material for 10 days prior to this incident. The operational relevance of that NOTAM to the area being managed by the group, and the controller's self-briefing process over that time, should have ensured that the controller was aware of its content.

The investigation could not determine the extent that highlighting only the 'relevant' NOTAMs in the printed controller briefing material induced an acceptance of 'skimming' the document. However, it could be expected that requiring individual controllers to read each NOTAM in

detail and to ascertain its relevance, would ensure a more reliable understanding of any potential effect on operations in the group's area.

Notwithstanding the 'skimming' issue, there was an additional opportunity for the amended PAL frequency to be advised to the controller during the control position and airspace handover brief. Although that handover brief should have contained information about relevant NOTAMs, there was no evidence that this occurred.

Responses of persons involved

When the PIC requested that ATC arrange for someone to be at the aerodrome for the flight's arrival to ensure that the lights would be on, the en route controller did not recognise the importance of the request. Had the PIC made the aircraft's fuel state and situation clearer to the controller, it is likely that the importance and relevance of the PIC's request would have been better understood, and the controller may have taken more proactive action in response. As it was, the controller was unaware of the aircraft's fuel state and did not identify the potential issue that the flight crew was trying to address.

Despite the en route controller's lack of understanding of the situation, there was the opportunity for the PIC to reassert his requirements and concerns to the controller. The management of the situation without involving ATC ensured that the en route controller remained unaware of the situation and further increased the PIC's workload.

In any event, the breakdown in the call centre procedures meant that the PIC's contact was unable to arrange for the duty airport safety officer to attend the aircraft's arrival. As a consequence, the flight crew undertook the landing based on local knowledge of the aerodrome layout, and the fortuitous illumination by the moon of the wet runway.

Airways manuals

The out-of-date contact information in the aircraft's Jeppesen Airways Manuals meant that any attempt by the flight crew to obtain the contact details for the Proserpine airport safety officer from those manuals would have been unsuccessful. The manuals are in widespread use in the Australian aviation industry and the

promulgation of incorrect data represents unnecessary safety risk.

FINDINGS

From the evidence available, the following findings are made with respect to the information error that occurred on 25 February 2010 at Proserpine/Whitsunday Coast Aerodrome, Queensland and involved Piper Aircraft Corp Chieftain PA-31-350 (PA31) aircraft, registered VH-BCQ. They should not be read as apportioning blame or liability to any particular organisation or individual.

Contributing safety factors

- The aircraft was unable to land at Clermont due to weather. Weather in the Mackay area had deteriorated after the aircraft's departure and was no longer suitable for landing as the planned alternate aerodrome.
- In the instrument meteorological conditions encountered during the flight, the workload of the pilot in command was increased as the copilot did not hold an instrument rating.
- The Proserpine/Whitsunday Coast Aerodrome pilot activated lighting frequency change was not briefed in the air traffic control airspace handover to the oncoming en route controller.
- The en route controller did not read the notices to airmen in detail and was unaware of the frequency change for the Proserpine Aerodrome pilot activated lighting.
- The en route controller advised the incorrect pilot activated lighting frequency and system operating procedure for Proserpine/Whitsunday Coast Aerodrome to the crew.
- Practices within the air traffic control group did not ensure that notices to airmen were effectively reviewed and communicated. *[Minor safety issue]*
- The en route controller did not effectively address the pilot's request to arrange for a person to attend the airport for the aircraft's arrival, to ensure that the runway lights would be on.
- The flight crew were not assertive in effectively communicating their requirements and limited fuel endurance to the en route controller.

- The Whitsunday Regional Council's out-of-hours call centre did not action a caller's request for the attendance at the aerodrome of the Proserpine/Whitsunday Coast Aerodrome airport safety officer, in accordance with the Council's documented procedure.

Other safety factors

- Two of the three out-of-hours contact telephone numbers for the duty Proserpine/Whitsunday Coast Aerodrome airport safety officer, listed in the Jeppesen Airways Manual, were incorrect. *[Minor safety issue]*

Other key findings

- The flight crew's knowledge of the aerodrome layout and the brief illumination of the wet runway by the moon contributed to the safe landing of the aircraft.

SAFETY ACTION

The safety issues identified during this investigation are listed in the Findings and Safety Actions sections of this report. The Australian Transport Safety Bureau (ATSB) expects that all safety issues identified by the investigation should be addressed by the relevant organisation(s). In addressing those issues, the ATSB prefers to encourage relevant organisation(s) to proactively initiate safety action, rather than to issue formal safety recommendations or safety advisory notices.

All of the responsible organisations for the safety issues identified during this investigation were given a draft report and invited to provide submissions. As part of that process, each organisation was asked to communicate what safety actions, if any, they had carried out or were planning to carry out in relation to each safety issue relevant to their organisation.

Airservices Australia

Monitoring of notices to airmen

Minor safety issue

Practices within the air traffic control group did not ensure that notices to airmen were effectively reviewed and communicated.

Action taken by Airservices Australia

Airservices Australia has reviewed the procedures for the review and communication of notices to airmen and considers that if correctly applied, the procedures are sound. However, as a result of this incident, Airservices will conduct an education program to highlight the effect on safety, when information pertaining to a controller's area of responsibility is not considered appropriately or reviewed prior to that information being provided to pilots.

ATSB assessment of action

The ATSB is satisfied that the action taken by Airservices Australia has adequately addressed the safety issue.

Jeppesen

Aerodrome contact telephone numbers

Minor safety issue

Two of the three out-of-hours contact telephone numbers for the duty Proserpine/Whitsunday Coast Aerodrome Airport Safety Officer, listed in the Jeppesen Airways Manual, were incorrect.

Action taken by Jeppesen

Following advice of this safety issue, Jeppesen revised their data for Proserpine/Whitsunday Coast Aerodrome, including the telephone numbers, and published it in their next amendment cycle.

ATSB assessment of action

The ATSB is satisfied that the action taken by Jeppesen has adequately addressed the safety issue.

Whitsunday Regional Council

Although not identified as a safety issue, in response to this incident, the Whitsunday Regional Council proactively addressed the procedural contravention and has advised that all call centre personnel are now aware of the correct procedures.

In addition, Proserpine/Whitsunday Coast Aerodrome will proactively implement an internal requirement to conduct recurrent testing of the after-hours call out procedures.

SOURCES AND SUBMISSIONS

Sources of Information

Sources of information during the investigation included:

- the flight crew of VH-BCQ (BCQ)
- the en route controller
- Airservices Australia (Airservices)
- Whitsunday Regional Council
- a number of Proserpine/Whitsunday Coast Aerodrome airport safety officers
- the Bureau of Meteorology (BoM)
- Jeppesen.

Submissions

Under Part 4, Division 2 (Investigation Reports), Section 26 of the *Transport Safety Investigation Act 2003* (the Act), the Australian Transport Safety Bureau (ATSB) may provide a draft report, on a confidential basis, to any person whom the ATSB considers appropriate. Section 26 (1) (a) of the Act allows a person receiving a draft report to make submissions to the ATSB about the draft report.

A draft of this report was provided to the aircraft operator, the flight crew of BCQ, the BoM, the en route controller, Airservices, the Civil Aviation Safety Authority (CASA), Jeppesen and the Whitsunday Regional Council.

Submissions were received from the copilot, the BoM, Airservices and CASA. The submissions were reviewed and where considered appropriate, the text of the report was amended accordingly.