



TACARE NEWSLETTER

TAiwan Confidential Aviation safety REporting system

TACARE-11

July 2005

EDITORIAL

We have included 16 cases, both national and international, in this issue of TACARE newsletter. The cases in this issue are as follows:

Six cases regarding Flight Operations:

- A Passenger's Inquiry Regarding Takeoff Procedures
- Kinmen Shang-Yi Airport's Loss of Communication Procedures
- Pressure to Depart
- The "Other Guy" in the Tower
- Lift Here to Deflate Ego
- When in Doubt, Get a Fifth Opinion

Three cases regarding cabin crew operations:

- Cabin Crew's Lack of Training and Operating Experience on Different Aircraft Types
- B757 Cabin Report
- Secure or Not?

Two ATC-related cases:

- Runway Incursion due to Tower Controller's Erroneous Instructions
- Curfew of Kaohsiung International Airport (RCKH)

Two cases regarding ground crew operations:

- Failure to Conduct Proper Security Screening
- Standard Operations of Aircraft Push Backs

Two maintenance-related cases regarding slide operations.

One case regarding airport operations:

- Kinmen Airport's Lighting Issue

It has always been the objective of TACARE to uphold the spirit of "voluntary, confidential, and non-punitive" so as to provide an open forum where information can be freely exchanged. Through the collection, analysis, and sharing of information, we aim to enhance Taiwan's aviation safety by gradually eliminating possible risk factors that may impede flight safety. It is our sincere hope that our readers will continue to provide us with support and recognition, as well as enthusiastically offer us suggestions so that together, we may improve Taiwan's aviation safety.

REPORTS RELATED TO FLIGHT OPERATIONS

A Passenger's Inquiry Regarding Takeoff Procedures

The contributing passenger reported that during takeoff from Airport B onboard Airline A's flight, he felt an extremely short takeoff roll prior to rotation. The aircraft then suddenly began a steep descent maneuver. According to the passenger, such maneuver was repeated 2-3 times prior to a normal climb. The passenger stated that he had never experienced this kind of takeoff procedure even during typhoon conditions. However, the flight's takeoff was under normal weather condition, and the cockpit crew did not address the passengers regarding the takeoff maneuver. Thus, the passenger expressed his concern and questioned the appropriateness of such takeoff maneuver.

TACARE Office

1. After contacting Airline A, the airline expressed that the reported flight maintained a constant pitch of 17.5 degrees after rotation with the wind speed varying between 3 to 14 knots, and wind direction varying from 120 to 190 degrees. The vertical acceleration was between +1.3G to +0.8G. All the parameters indicated that the flight was performed under normal conditions.

Airline A further explained that the aircraft had continuously experienced varying wind directions and wind speeds during takeoff from Airport B. It was possible that the cockpit crew did not find it necessary to explain the takeoff conditions to the passengers since the fasten seatbelt light of the reported flight had already been illuminated.

2. During the flights, cockpit crew will sometimes experience situations similar to the reported weather condition, the majority of which are normal to them. However, it is easy to cause uneasiness to and/or concerns from the passengers due to their lack of understanding of flight operations and conditions. Thus, it is recommended that cockpit crew address the passengers during similar situations to relieve their anxiety.



Kinmen Shang-Yi Airport's Loss of Communication Procedures

The contributor stated that even though Taipei AIP had published the Loss of Communication procedures for once the aircraft passes beyond the Final Approach Fix at Kinmen Shang-Yi Airport, such procedures were not provided in the Jeppesen Chart. The contributor suggested that the special Loss of Communication procedures be amended into the Jeppesen Chart since the majority of the cockpit crew utilize the Jeppesen Chart as their primary means to navigate during approaches.

TACARE Office

Loss communication procedures stated in Flight and Air Traffic Control Regulations, Article 46:

Unless otherwise prescribed by the appropriate authorities, the aircraft shall comply the following procedures when a radio communication failure precludes compliance with Article 45:

1. The aircraft station shall attempt to establish contact on another frequency appropriate to the route;
2. If the attempt specified in (1) above fails, the aircraft station shall attempt to establish communication with other aircraft or other aeronautical station on frequencies appropriate to the route, and select radar SSR MODE A CODE 7600.
3. If the attempts specified in (1) and (2) above fail, the aircraft station shall transmit blind its message twice on both primary and secondary frequencies, preceded by the phrase "TRANSMITTING BLIND".
4. When an aircraft station is unable to establish communication due to receiver failure, the message transmitted shall be preceded by the phrase "TRANSMITTING BLIND DUE TO RECEIVER FAILURE". During this procedure, the aircraft shall also advise the time of its next intended transmission.
5. If in visual meteorological conditions, the aircraft shall continue to fly in visual meteorological conditions, land at the nearest suitable aerodrome, and report its arrival by the most expeditious means to the appropriate ATC unit.
6. If in instrument meteorological conditions or when weather conditions are such that it does not appear feasible to complete the flight in accordance with (5) above the aircraft shall:

- a. Proceed according to the current flight plan to the specified clearance limit and, if the clearance limit is other than the aerodrome of intended landing, thereafter according to the intentions specified in the current flight plan.
- b. Arrange the flight so as to arrive over the appropriate designated navigation aid serving the aerodrome of intended landing at, or as close as possible to, the expected arrival time in the current flight plan.
- c. After arrival over the navigation aid specified in (b), commence descent at, or as close as possible to, the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged, at, or as close as possible to, the estimated time of arrival in the current flight plan.
- d. Complete a normal instrument approach procedure as specified for the designated navigational aid; and land, if possible, within thirty minutes after the estimated time of arrival specified in (b), or the last acknowledged expected approach time, whichever is later.

Back-up Instrument Flight Procedures in Kinmen Terminal Control Area stated in Aeronautical Information Publication / Taipei Flight Information Region, RCBS AD 2.22:

5) Procedures for Radio Communication Failure

In addition to procedures prescribed in the Flight and Air Traffic Control Regulations, aircraft under vector and in IFR conditions shall comply with the following procedures:

- a. Aircraft being vectored for approach
 - Aircraft being cleared for instrument approach shall continue executing the approach. If radio

communications are lost for 1 minute prior to receiving approach clearance, aircraft shall maintain 4000ft or ATC last assigned altitude, whichever is higher, and proceed direct to MKG VOR/BM NDB.

b. Departure aircraft

Aircraft shall continue the flight at the highest of the altitudes for the route segment being flown:

- a) The last ATC assigned altitude.
- b) MEA for the route segment being flown.
- c) The altitude ATC has advised to expect in a further clearance.

After reviewing the Jeppesen approach plate into Kinmen, the TACARE office has confirmed that the special Loss of Communication procedures have not been published by Jeppesen Company. The TACARE office contacted CAA officials who will attempt to e-mail Jeppesen Company regarding this issue. However, the CAA officials were uncertain if the standardized Jeppesen approach plate would have the space for such an addition.

The CAA officials further suggested that although it is common for cockpit crew to utilize the Jeppesen approach plate as the primary source to conduct instrument approaches, it is imperative that cockpit crew still refer to Taipei AIP since it is the official document published by the government.



Pressure to Depart

—Quoted from *CHIRP FEEDBACK No.74*

We were operating from AAA (UK major airport) to a European destination. We had been cleared for a northeasterly departure and taxied to the holding point. Upon entering the runway we had our first opportunity to have a good look at the weather on our departure

using weather radar. We had not faced the right way until this point. A thick band of red with large magenta (turbulence) areas extended from north of the field out to some 20 nm West, completely obstructing our departure route.

Experience told me that this was potentially dangerous weather and, as we could not see any gaps, we quickly requested either a southerly departure or a climb on runway track to 20nm to be able to clear the weather and then turn north to join the SID.

After a minute on the landline, the tower controller informed us that they could offer neither and so we declined to depart. We taxied along the runway and vacated to reassess.

We returned to the holding area to review our options. We decided that as the weather was moving east quite rapidly we might be able to depart in 10-15 minutes. We informed tower that we would hold position and advise our intentions.

We then had to endure the humiliation of being referred to by the tower controller as 'the aircraft that won't turn right' when they was issuing instructions to others to pass us. This seemed quite unprofessional and put a great deal of pressure on us to 'get on with it' and depart. Incidentally, this is completely out of keeping with the exemplary professionalism usually demonstrated by the controllers who I would class as the best in Europe by a mile.

During this time the other aircraft using the runway were all on southerly or westerly routes and so we were the only aircraft affected.

After a short time another northbound company aircraft (a different type) entered the runway and kindly informed us that he could now see a gap in the weather on radar. We accepted line-up clearance and saw the earlier gap to the west had indeed moved onto our route and we were able to accept take-off

clearance. Having been issued with and acknowledged our take-off clearance, the engines were still spooling up when the tower controller re-issued the clearance with a strong tone of impatience. We had wasted no time and were already accelerating.

We departed safely but were certainly in a less than perfect state of mind after our experience.

I understand the pressure there is to 'keep the show on the road' at a congested airport such as AAA and I regard the ATSU in question as the elite aerodrome unit within Europe. The controllers do an almost miraculous job, which is the key to this airport's success.

I declined the departure clearance with a great deal of reluctance and only because acceptance of the clearance would have posed a serious threat to the safety of my aircraft. However, on this occasion I felt unduly pressured to 'fit in' and accept a clearance that I believed to be unsafe. I wonder whether in other circumstances (a less confident or less rested crew) the pressure to depart would have won out and the safety of the aircraft compromised.

CHIRP Office

From an ATC perspective, there will be occasions when an alternate departure routing may not be available due to traffic considerations. In such a case, the option not to depart is preferable from both a flight deck and ATC radar controller perspective, as opposed to requesting a weather avoidance deviation from the standard departure routing shortly after take off.



The "Other Guy" in the Tower

—Quoted from ASRS CALLBACK No.301

There was a Piston in front of me in the runup area. I reported ready in sequence to the tower. I read back instructions to hold short. Tower advised that a King Air was at seven miles inbound on the ILS..... The twin was cleared to take off and I was immediately cleared to "position and hold." I waited at the hold line because the twin did not take off immediately. Instead, He hesitated and then began to move down the runway. I moved into position on the runway as he moved out of the way. The runway has about 1,000 foot displaced threshold. I was in position at the end and could see pretty well down the runway..... I waited for take off clearance..... I was beginning to wonder where the King Air was..... It appeared that the Tower was working the departure and arrivals pretty tightly. As the seconds ticked by, I became concerned. I didn't feel like I would be in actual danger if the King Air came in because of the displaced threshold. But I didn't like being on the runway and not knowing where he was. I decided to ask the controller if he wants me off the runway, but just then I was given take off clearance. I assumed that the King Air must not be as close as I had feared and or they wouldn't be clearing me to take off.

Ientered IMC very soon after rotation..... Then I heard the King Air pilot report that he was "on the missed." He said, "We can't see thing." I was shocked to hear this. I had just lifted off and initial climb rate was more than 1,100 feet per minute. Now I had a King Air, theoretically climbing out of 250 feet AGL right behind me..... I maintained runway heading, staying where the controllers expected to be..... I heard two partial transmissions..... The controller didn't seem to know what to say or do in response to the developing situation..... There was a few seconds of silence then transmissions from what sounded like a different person, "King Air XXX turn right immediate; heading 330"..... Then I was given an immediate left turn..... I leveled off(probably an instinctive "duck"), then I heard the sound and felt the vibration. Turbo

prop engines - somewhere very close. The sound faded and I resumed my climb. I broke through the overcast into the clear..... I never saw the King Air.

I think everyone had the mindset that the King Air was landing. I know I was thinking that the way and I suspect that the controller was as well. I think the spacing between my aircraft and the King Air was managed as if we were in VMC..... I think we all got into the situation because things took a little longer than expected. The twin was slow to departure. My take off clearance didn't come immediately. Maybe the King Air's right turn on the missed approach didn't start immediately.

ASRS Office

As with pilots, controllers' abilities improve with experience. In this incident there may have been controller training in progress that eventually required a supervisor to take over. However, as the reporter pointed out, everyone involved probably made assumptions and certainly each contributed factors that collectively led to a very close call.



Lift Here to Deflate Ego

—Quoted from ASRS CALLBACK No.302

While parked at the gate and before any passengers had boarded, a flight attendant reported that she thought an over-wing exit was not properly secured. I went back to inspect the exit, and it did not appear to be sealed properly. I then opened the over-wing exit to try to readjust the door. The over-wing slide deployed. I had completely forgotten about the slide deploying automatically. No one was injured. Maintenance responded very quickly to begin fixing my big blunder.... Moral of the story — don't touch anything; call maintenance; think before you act.



When in Doubt, Get a Fifth Opinion

—Quoted from ASRS CALLBACK No.302

During preflight inspection, I noticed a large amount of clear ice on the aircraft surfaces.... I wanted to check the upper wing surfaces for ice from an over-wing exit. Not being able to see clearly through the emergency exit window, I thought that opening the exit door would give me a better view of the amount of ice on the wings. I hesitated for a moment, questioning if the aircraft had over-wing escape slides. I did not notice any placards on the door with pictures of slides and their use in an emergency. I then asked a flight attendant if this aircraft had wing escape slides, and she said, "No." I said, "Are you sure?" She said, "Let me check with the other two flight attendants." They also indicated that the aircraft did not have wing escape slides. I then opened the right wing emergency exit door and the slide deployed.



REPORTS RELATED TO CABINS

Cabin Crew's Lack of Training and Operating Experience on Different Aircraft Types

According to the contributor, due to Airline B's dispatch practice, cabin crew who are based in Station C serve only on a specific aircraft type, and therefore seldom have opportunities to serve on other types of aircraft. The contributor's concern was that when these cabin crew are dispatched to another type of aircraft, their lack of experience with that aircraft's procedures could become a safety hazard during emergency situations. The contributor felt that the annual Mockup training and evaluation is not enough to familiarize cabin crew with emergency procedures of different types of aircraft. Thus, the contributor suggested that Airline B dispatch cabin crew to

various types of aircrafts in order to maintain their familiarity with Airline B's entire fleet of aircraft.

TACARE Office

1. After contacting Airline B, the airline expressed that all cabin crew receive identical training, and that the dispatch center has records of each cabin crew, ensuring that cabin crew will only be dispatched to aircraft for which they have been trained. As a result, cabin crew based at Station C will only be dispatched to aircraft where they are based.
2. It is possible that cabin crew who seldom or never serve on a different aircraft might not be proficient on the aircraft's standard and emergency procedures. Therefore, from safety's point of view, Airline B might take the contributor's suggestion into consideration.



B757 Cabin Report

—Quoted from ASRS CALLBACK No.303

During climb out, our aircraft experienced sudden and abrupt turbulence.... It occurred 15 minutes after takeoff as I was setting up my beverage cart in the galley area. I did not pull the cart out. The aircraft took a sudden drop and I was forced to the floor. My elbow and shoulder hit the bulkhead. I crawled to a seat that was unoccupied. I buckled the seat belt and remained seated until the cabin stopped bouncing around. The captain called on the intercom to find out if we were hurt and told us to remain seated. I was totally unaware that there was severe weather in the area and that we would be going in or around thunderstorms. ... I would have remained strapped in my jump seat if informed prior to departure of any expected turbulence.

ASRS Office

Keeping cabin crews informed about anticipated adverse weather conditions can help to avoid injury and aid in planning cabin service procedures.



Secure or Not?

—Quoted from *CHIRP Cabin Crew FEEDBACK No.15*

In Charge Cabin Crew Members frequently pass "cabin secure" to the flight crew when the galleys have not been secured. On a number of occasions (pre take-off) the report has been given and the pilots have gone to turn onto the runway only to notice us still securing the galley on the flight deck door CCTV system.

In Charges need to remember that cabin secure means the WHOLE cabin not just the passengers.

CHIRP Office

JAR-OPS 1.325 Securing of passenger cabin and galleys states that a) an operator shall establish procedures to ensure that before taxiing, take-off and landing all exit and escape paths are unobstructed and b) the commander shall ensure that before take-off and landing and whenever deemed necessary in the interests of safety, all equipment and baggage is properly secured.

Operators should have an SOP in place to ensure that the cabin secure check includes galleys and that this is not given until these areas are secure.



ATC-RELATED REPORTS

Runway Incursion due to Tower Controller's Erroneous Instructions

—This report was received via *Singapore Confidential Aviation*

Incident Reporting (SINCAIR) programme

Aircraft 'ABC' was at the holding point for Runway XX waiting for Take-Off clearance. Both pilots were aware of traffic on short final by monitoring ATC communications and TCAS. When the traffic was still at short final at 300 ft (on TCAS) and still IMC, the tower cleared aircraft 'ABC' to line up and hold. Just as the pilot was about to advise the ATC that aircraft 'ABC' would hold position due to an aircraft on short final, ATC called again to advise aircraft 'ABC' to hold position.

Note: As the incident took place in IMC conditions, there was no visual contact between the two aircraft.

TACARE Office

1. TACARE office has forwarded this report to the related agency for further review.
2. The cockpit crew in this case have demonstrated good airmanship in utilizing all available information and maintaining vigilant and good situational awareness. TACARE working group believes such practice will effectively enhance flight safety.



Curfew of Kaohsiung International Airport (RCKH)

The contributor pointed out that an alternative is necessary when Taipei's CKS International Airport (RCTP) is below operating minimum. Kaohsiung (RCKH) had often served as the alternate airport for diversion in such cases. However, due to the arrival times of certain international flights, Kaohsiung International Airport could not serve as the alternate destination because it is closed between 2400 to 0630 Local time due to noise abatement considerations. As a result, certain international flights have had to choose other airports such as Hong Kong and Naha

as alternated destinations, which had often caused inconveniences for dispatch and ground operations. Therefore, the contributor suggested that the CAA consider opening Kaohsiung International Airport as an alternate destination after 2400 Local time if CKS is below operating minimum.

TACARE Office

After consulting with the agency in charge of this issue, it was emphasized that RCKH could not serve as an alternate destination for RCTP after curfew hours because aircraft landings late in the evening would interrupt the daily lives of local residents and cause undue protests. The agency suggested that the cockpit crew file other airports as alternate destinations for RCTP if adverse weather conditions had been forecasted. However, RCKH can still serve as the alternate airport in emergency situations.



REPORTS RELATED TO GROUND OPERATIONS

Failure to Conduct Proper Security Screening

The contributor had accompanied an acquaintance to Airline D's check-in counter to complete check-in procedures. Upon check-in, they waited for the baggage to clear the x-ray screening. During the screening process, the airport police suspected that a luggage contained an unidentified compressed gas bottle. However, the airport police could not open the luggage since the owner had already proceeded to the terminal. After several failed attempts, Airline D's ground staff requested that the police officer allow the baggage to be loaded on the aircraft so as to avoid delay. As a result, the suspicious compressed gas bottle was loaded onto the aircraft without proper identification and screening. The contributor felt that

airport baggage screening should be performed thoroughly, and that it is inappropriate to jeopardize the safety of the passengers and crew just to avoid possible delay.

TACARE Office

1. The TACARE office has forwarded the report to both the Aviation Police Bureau and Airline D suggesting that these agencies enforce the screening process and emphasize the importance of security check to the internal staff.
2. When a dangerous object is suspected in a checked baggage, it is imperative that the screener open the luggage and properly identify the content of the luggage before allowing it to be loaded onto an aircraft. If the owner of the luggage is not present during screening, ground staff should utilize public announcement systems or other means to locate the owner of the suspicious baggage and ensure that the owner is present during the screening.
3. It is imperative for passengers to wait for their checked baggage to clear x-ray screening prior to proceeding to the terminals, such actions will save baggage screeners and ground staff from undue inconveniences.



Standard Operations of Aircraft Push Back

The following report summarizes a discussion forum on the internet. The discussion was of ground staff's complaint on certain cockpit crew's disregard for proper pushback procedures. The contributor believed that this was a serious issue that should not be overlooked.

The contributor, while serving as a ground staff in a local airport, had experienced several occasions when

the cockpit crew requested ground crew to commence pushback prior to air bridge disconnection. In some instances, cockpit crew would request ground crew to commence pushback without closing the aircraft door. The contributor thought that such actions could cause damage to the aircraft, and that it is also hazardous for cockpit crew to release parking brake before notifying ground crew. Furthermore, cockpit crew would sometimes order ground crew to speed up the pushback procedure as requested by Air Traffic Control. However, the contributor did not believe that ATC would issue such an instruction. In addition, the contributor had overheard cockpit crew proceeding checklist items during pushback, making it evident that the aircraft checklist items had not been completed prior to pushback.

In other occasions, cockpit crew would turn on taxi lights after pushback had been completed but prior to ground crew disconnection from the aircraft. This suggests that the cockpit crew have already requested taxi clearance from ATC Tower before the ground crew disconnected from aircraft. The contributor stated that cockpit crew should not take shortcuts to save time at the expense of flight safety.

TACARE Office

1. There are occasions where cockpit crew would rush to complete checklist items (e.g. pushback procedures) under time pressure. Thus, it is imperative that ground crew should ensure all safety checks and procedures are completed prior to complying with cockpit crew's request for pushback. The only way to enhance safety and avoid unnecessary hazards is by complying with standard operation procedures.
2. The TACARE office would like to thank the contributor for filing this report. Flight safety will be enhanced only by the cooperation of every single person in the aviation community.

REPORTS RELATED TO MAINTENANCE

Two Issues Regarding Slide Operations

—Quoted from ASRS CALLBACK No.302

Self-inflating escape slides are a valuable asset to the safe and efficient evacuation of commercial aircraft. However, as the following reports show, escape slides can cause embarrassing delays and have the potential to cause severe injury.

- Just as every firearm should be treated as if it were loaded and ready to fire, aircraft escape slides should always be considered armed and dangerous until their status can be positively verified. Several ASRS reports from maintenance technicians offer some loaded lessons on slide handling.

.... We were now able to arm the door slide, however, when the slide armed, the yellow flag went behind the door handle because we had previously removed the cover/guide in our troubleshooting. At this point the job was complete. We then attempted to put the cover/guide back on, but were unable because the door handle has to be in the up position to reinstall the cover. With the armed flag out of sight, we did not realize that the door was armed and lifted the handle to reinstall the cover/guide. The slide deployed.

- A review of the B767 maintenance manual showed that I should have deactivated the slide bottle before performing any maintenance on the slide.

The lavatory service valve was inoperative and it was decided to service the center lavatories with a hose through door 3R. I asked a flight attendant if the door was disarmed and the flight

attendant said, "Yes." There was no sign indicating the door status nor any "armed" or "disarmed" flags. I pulled the handle and the slide deployed. I learned the hard way that B757-200 doors 3L and 3R are always armed.

REPORTS RELATED TO AIRPORT

Kinmen Airport's Lighting Issue

The contributor indicated that the removal of Kinmen Airport runway 24's VASI caused flight crew's lack of vertical path guidance during visual approaches. Furthermore, the contributor believed that the intensity of obstruction lights on runway 06 would affect flight crew's visual accuracy during approach.

TACARE Office

1. The CAA indicated that Kinmen Airport's runway 24 was equipped with a VASI device. However, during CAA's flight test conducted in 2004, it was discovered that aircraft using runway 24 would have to pass Tai-Wu Mountain to maintain visual contact of the VASI, which would place the aircraft above the 3 degree glide path. Therefore, the aircraft would then have to change attitude by pushing its nose down to establish the proper glide path. By that time, the aircraft would be relatively close to the runway and such corrective action would cause the approach to be unstable. The CAA had also considered moving the VASI another 1,000 meters from the runway, but that would reduce the available landing distance of runway 24. As a result, the CAA felt that it was best to remove the VASI from runway 24.
2. The CAA indicated that the intensity of runway 06's obstruction lights is set according to ICAO standards and that the intensity could be adjusted with the background lighting.

請選填下列資料。在收到您的初報後，我們會儘快依照您選擇之聯絡方式與您聯繫。

Please fill in the blanks. TACARE office will contact you via the method chosen.

報告人資料 Reporter Information

姓名 Name

聯絡電話 Phone Number ()

職稱 Job Title

服務單位 Firm

- 航管 ATC
 飛航組員 Flt. Crew
 空服員 Flt. Attendant
 機務 Maintenance
 航務 Flt. Ops.
 其他 Others

聯絡方式 Preferred Way of Contact

- 打電話給我 call me, 號碼 No.: () _____
 我來找你們 come to your office, 日期及時間 date & time: _____月 M _____日 D, _____點 H _____分 M
 (安排面談確認電話號碼 phone number for appointment confirmation: () _____)
 已敘述如下，不必再聯絡 Description is provided, no further contact necessary

黏貼線

摺疊線

廣告回函

台灣北區郵政管理局登記證

北台字第13518號

郵資已付免貼郵票

行政院飛航安全委員會
飛安報告工作室 收

105 台北市復興北路 99 號 16 樓



摺疊線