

Expect the unexpected

By Pedro Contreras Blanco

As part of its Safety Alerts programme, EUROCONTROL has adopted the slogan "Expect the Unexpected" to spread the idea that no complacency or relaxation of standards is acceptable in ATM safety.

Over the active working life of any aviation professional, there are always stories which can be told to illustrate this vital message. If all of these stories were put together, they would fill volumes with a collection of epic stories of triumph, a few delusions and unfortunately also some sad tales. Here are a few taken from my personal experience.

Lanzarote control tower, December 1972

There were three controllers to man the tower, one on duty each day from 0700 to 2300. The tower was accessed by climbing 143 steps, because no lift had been provided. In theory, the solitary duty controller could not leave the control room and go down to the airport cafeteria, and the cafeteria staff were not willing to climb up all those steps with a food tray.

The airport management solution was introduced. A speaker was installed in the AIS department so that, if an aircraft called whilst the duty controller was at lunch, AIS personnel would hear it, and then run the 150 metres to the terminal, and another 100 metres through an obstacle course of assorted tables, doors, and customers through the cafeteria to tell the controller who had come down to eat during a period without scheduled traffic that he was needed. The controller would then have to leave his lunch, climb the stairs quickly back to the control room and respond to the call - taking several minutes at least!



This worked well enough for nearly a week until, on the sixth day, the first test of the system came. Whilst the controller was at lunch, the loud-speaker broadcast a call in English and activated the process. Our colleague in AIS, ran at F1 speed and reached the cafeteria to announce that there was a guiri (foreign) flight calling the tower.

The controller, with barely time to swallow the food in his mouth, sprinted out of the cafeteria and terminal to the tower stairs and arrived back at his position devoid of breath to exclaim "station calling Lanzarote (cough) go ahead". There was no answer, even to a repeat, so a check was made with both Fuerteventura tower and Las Palmas ACC, but neither had heard any request.

Later, the recorded tapes were re-played and from the French accent heard, it was deduced that it had probably been an aircraft transporting material or technicians to mining camps across the water in the Spanish Sahara. At least it was not an emergency.

We controllers decided that we could not accept these additional risks of expecting the unexpected and so we contacted the National Control Service (NCS) headquarters in Madrid at the military Air Ministry, the so called "Monastery of Wind". At a meeting with management the next day, the procedure was changed. The controller would remain in the cab for the entire shift and a waiter would bring up the daily meal and take the tray back down.

This, however, is not the end of the story, as the show still has a finale! Owing to 'industrial relations issues', it turned out that the waiter who brought the tray up was not prepared to also take away the previous day's tray. Time

passed and after 40 days the pile of 'used' trays had accumulated an impressive collection of flying and crawling insects. It had become the first entomological-aeronautical museum, not to mention the smell. Since insects could get into the tower cab through even the smallest gap, everything was sealed tight and that was the end of the 'air conditioning'!

We had had enough, so one day, at the time when the airport management were having their lunchtime vermouth on the airport terrace below, two controllers launched each of the 40 trays one by one, off the top of the tower. Like colourful kites, they fell with majestic elegance. As if unwilling to reach the ground in a hurry, they glided in gentle circles, floating slowly (later it was stated 'dangerously') towards where our viewers looked on in astonishment.

"The controllers have gone mad!" cried the employees, managers, crews, passengers and even the taxi drivers. The passengers, especially those on the terrace, were probably wondering if people like that could be trusted to control aeroplanes. For a few days, comments and photos were published in the local newspaper, and the story became the joke of the island, but the truth of the matter is that the situation was settled. How? Well, it was soon agreed that a waiter would bring up the trays and a security guard, for a bonus, would take them down.

**We should
be careful, because
the unexpected
may await us.**

Lanzarote tower, February 1973

It had been a busy Wednesday. There was lots of traffic, as was normal in those days, with almost 90 programmed movements. Now it was close to sunset and the remaining expected traffic was down to the 6 regulars plus 2 more charters which were spaced so that they would occupy the operational hours until the end of duty at 2300hrs.

The evening was lovely, a soft 'alisio' breeze from the north-east, a calm sea and the sky slowly taking on the orange colour which gives one the impression of a tropical environment, away from the rigours of winter on the distant mainland. The busy time of the morning and afternoon traffic has now passed into calmness. Maybe it was too calm and too relaxing.

While we were absorbed in these thoughts, a Cessna 178 called on frequency for a two-hour local flight VFR, as it often did for either a charter flight or for an aerial photography session. We informed them that the only notified traffic we had was the expected arrival of a Norwegian-operated Boeing 737, which was still under the control of ACC Canarias.

Moments later, the Cessna was cleared to take off and to climb to and maintain 3500 feet, operating between Punta Papagayo and Famara on the west of the island, with a reminder to call before returning to the CTR.

After 20 minutes, the 737 called giving its estimated time at the VOR/DME 'LT' and descending from FL100 to 5000 feet. It was cleared to route direct to the VOR as on the flight plan and then to continue with a procedural VOR/DME approach to runway 22, maintaining 5000 feet until overhead the VOR.

Expect the unexpected (cont'd)

The sun, now transformed into a huge bright orange ball, filled the mountains, water and sky with shades of fire, and tried to hide between the White Mountain and sea to sleep. Then suddenly, over the frequency, was heard the almost trembling voice of Victor, the pilot of the Cessna, reporting that he had just had a very close encounter with a huge Boeing 737 heading in a southerly or south-easterly direction, with less than 300 feet of vertical separation and about 500 meters of horizontal distance.

A DME distance from the 'LT' was requested, confirming that, at 20 nm, at least the Cessna was outside the CTR! Searching for the 737 in the sky, we looked north of the airport, since that would be his route to the 'LT', but there was no trace. We called him on frequency, requesting his current position, and there was doubt in the voice which responded "Ah! We are abeam your airport just to the west flying over the coast and we are now proceeding to the 'LT'."

His altitude was requested and he responded "descending to 4000 ft". We asked for an explanation for his deviation from clearance and told him of the near-collision with the Cessna 178. We heard "Sorry, sorry indeed, sir. We are flying over the coast because many of the passengers are employees of Scandinavian Travel Agencies and everyone on board was astonished by the marvellous and exceptional sunset. Very sorry indeed."

Was it the sun, the magical environment and his unthinking reaction which were to blame?

The investigation of the incident confirmed the deviation from clearance by the B737 and an official apology was received from the captain and his airline.

This incident also taught us to remain attentive and expect the unexpected

Madrid/Barajas, July 1974

It was dawn, close to sunrise, and at the apparently sleeping airport there was not even the slightest movement of traffic. Various refuelling and catering trucks were beginning their work around aircraft with early departures.

Over the Barajas tower radio-repeater frequency came the first communications between the duty controller and, in strongly-accented English, the Russian navigator of Cubana de Aviacion flight 652. Everything was normal, the IL62 was in sight, and its lights were mixed with the emerging clarity of the newly dawning day. The controller cleared the aircraft to land and it could now be seen flying over San Fernando. Suddenly, the startled voice of the Russian radio navigator was heard: "Barajas tower. We have an ass in sight, just on the runway centre-line." The controller was now in doubt, since 'ass' also means 'buttocks' in English, and of course requested confirmation. "Yes sir, yes. One animal, one horse or cow, in the middle of RWY 33," replied the Russian. "Ahhh! one donkey!" replied the controller. The CU652 without continuity announced: "We miss the approach and go around." The controller transferred the flight to the approach frequency for what would now become an arrival on RWY 01.

Out of the tower window, the outline of the donkey could now be distinguished just before the intersection of the two runways, and the arrival

of a vehicle with three marshalls, who tried to move it by means of the rope hanging from its neck. However, the spirit of this particular donkey, combined with the well-known stubbornness of all donkeys, defeated their attempts, and the animal proved impossible to capture. They were now joined by two agricultural-type tractors, normally used for grass cutting, together with more personnel. They finally managed to get close, tie the rope to the back of the tractor, and drag the donkey clear of the runway.

The CU652 landed without further event on RWY 01, perhaps still with vision of the stray donkey in his mind. As for the animal, its fate is unknown, but the reason for its adventure was clear. The airport perimeter fence, admittedly in somewhat poor condition, easily allowed the local people to take their donkeys, horses, goats, etc. down to graze in the green areas. All the animals were, of course, restrained by a rope tied around the neck with its other end attached to an iron stake driven securely into the ground. The airport 'enclosure' also provided for pleasant diversions, hunting the perennial airport tenants, such as rabbits and hares, whose activity also made an interesting spectacle for airport employees, pilots, and passengers. Besides the wildlife, families also came in summer to picnic, and young lovers too. Everyone enjoyed being inside the fence, in the green surroundings sheltered by small pine trees. It was another world!

Once again, we see the importance of not assuming that all will be 'normal'... expect the unexpected.

EXPECT THE UNEXPECTED!

Madrid ACC in the 1970's

There are situations which repeat themselves and even though they were dealt with long ago, they are still remembered as events which characterised particular traffic scenarios and especially the quiet times, which are so different from busy periods

To orient ourselves, it happened in the old Madrid FIR/UIR west sector, the space between the VOR/DME 'NVS', VOR/DME 'ZMR' and VOR/DME 'STG'. It was usually quite busy between 0700 and 0830. The sequence varied little from day to day, but more than once, it went more or less like this:

- Flight IB952 from KJFK, destination LEMD, passing STG, in radio contact with the Zamora Radio relay station and later with LECM (ACC Madrid) when the RTF range allowed.
- Flight AO117 from LEMD, destination LEVX, with an ETA between 0750 and 0830.
- Just at, or a few moments after, shift change, on the night-to-morning change, the ATC service in the West Sector was procedural - no radar was available.
- IB952 requested descent either directly or via the ZMR relay, and was accordingly cleared to FL130 or FL150 at its discretion.
- The enormous western sector of Madrid ACC was still without any other traffic.

- The atmosphere was calm and relaxed; one sector supervisor entered as another left. Conversations and comments were about shift events or with the supervisor or with adjacent sectors for updates.

- Shortly afterwards, AO117 made initial contact with destination Vigo, overflying VOR/DME NVS and climbing to FL130.

- The shift remained calm without any further flights. It was monotonous, even boring.

- After a while, AO117 wanted a higher level and here began the sequence which has been so often repeated and which appears more like a witches web of human behaviour with its factors (now so fashionable) based on simple mistakes or misunderstandings.

- AO117 was cleared to climb to FL170 as in the flight plan.

And there it was, the conflict with IB952 descending to FL130 or FL150. We should point out that there were variations in these crossing conflict events. At times, it was the IB952 which was cleared down to FL130/150, while the AO117 climbed to FL170, and on other occasions the Zamora Radio Relay Communicator acted like a controller, "taking into account that one of the two aircraft had passed over his VOR" and issued a re-clearance on his own judgment.

Although statistics about these events were never compiled and they were relatively infrequent, they did keep happening in the western sector.

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retired after working as Air Traffic Controller, Iberia Air Flight Dispatcher, Flight Operations Regional Manager in South America, Montreal and Nairobi, PANS-OPS expert, ICAO OCP-IFPP, and Spanish AENA Safety Manager from 2000 to 2007.



Many supervisors and flight crew still remember them to this day.

While we could cite a larger number of often more complex examples, our simple repeated case is a valuable, if modest, lesson to the effect that we must learn from our mistakes. Human beings, with all their complexity, sometimes generate situations which, if left uncorrected, could escalate into serious incidents affecting safety. Nobody should turn their back on the traffic display or fail to remain aware of traffic movements in relation to constraints. Continuous attention must be maintained. It is necessary to always remember that many incidents happen at times when workload is light. That is when the mind becomes relaxed and one can lose the focus which our role demands.

So, instead of waiting until a difficult situation develops, we should remain vigilant – and please, always expect the unexpected!

