Front Line Reports

ALL CHANGE FOR THE FRONT LINE REPORT!

As the observant amongst you who can recollect the last edition of HindSight may remember, we needed to find a new Front Line Reporter. Our varied collection of assessors concluded democratically that two candidates met the criteria and both have been offered the role. This means that in some editions we may have contributions from both of them and in others from just one of them. They are Carlos Artero and Maciej Szczukowski.

They are both active Controllers - Carlos Artero in Barcelona Spain and Maciej Szczukowski in Warsaw, Poland.

Whilst warmly welcoming both Carlos and Maciej as HindSight 'Frontliners', I would also like to sincerely thank all the other 'entrants' in our competition. In particular, the piece by the (close) runner up, Eileen Senger, was considered so good that it has been included in the 'From the Briefing Room' section of this issue and she has been invited to become a regular contributor to HindSight. I hope she will accept.

The Editor

Training in safety

Training is safety

By Carlos Artero

As an Air Traffic Controller, I have been trained in many matters many times. However, I dare say that this preparation has not always been as useful as intended, especially for critical situations. In my personal experience, training for some aspects could have been better.

As Air Traffic Controllers we are naturally very concerned about safety, which is actually our main goal, but we are not alone. Everyone from aircraft manufacturers to aircraft mechanics, from pilots to cabin crew, from airport operators to regulators, also works with safety as a priority.

Once a plane is airborne, only pilots, cabin crew and air traffic controllers are involved and, since the plane is already flying, any abnormal or emergency situation may need to be resolved in minutes, thus causing probably the most stressful situations in this business.

Pilots are of course the ones flying the plane, so they must be prepared to act quickly and safely in response to any difficult situation that may occur. Even though their training is ultimately focused on flying safely, this is complemented by a lot of operational learning on subjects like aircraft performance and meteorology. They must know how to fly in different conditions and how to do so safely. Emergencies are just part of their training, but it's so important that they regularly receive emergency training on full flight simulators. Even if they study what they should, everyone would agree that pilots need to experience critical situations in a simulator so they can practice the necessary procedures and have their response observed and assessed.

Now let´s look at the Air Traffic Controller's situation. We have seen that pilots are concerned not only about safety but also about the wider context of flying. But Air Traffic Controllers do not have as much operational context to cope with, as they just monitor the planes on the screen or from the VCR and fill in the strips. Our main concern is safety. Separation, miles, turbulence... And only then, after safety, comes order, speed of the traffic and efficiency.

With that in mind, we now discover that in many European countries there is still no training using simulators. We see that, for example, Air Traffic Controllers receive theoretical training in emergency and critical situations every year. And what happens next is that one day an emergency occurs and we all look for the book to check the steps we are expected to follow. But we have never actually done it before or, wait, yes, we probably did, when we were in the Air Traffic Control School many years ago. Even if the theoretical course is brilliant, it does not show you how you will react under a very

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stressful situation. Even if the theoretical course contains very clear steps, when a real emergency happens, the course will reveal its limitations, since you never really use the steps, just study them.

After finishing Air Traffic Control School, where I had been prepared to face emergency situations in tower, route and approach control, my first destination was the Control Tower of an airport situated in North Spain. Nights were busy as most of the aircraft were cargo carriers.

OK, now I really appreciate the importance of being calm and focused and why we have to practice the emergency procedures... but **NOW** can you tell me **WHERE THE BRAKE IS?!**

I was under instruction, it was midnight and a colleague was controlling while I assisted him. Late passenger traffic was inbound to the airport and a departing cargo plane was taxiing to the holding point of the runway in use. When the approaching aircraft was cleared to land, he did not reply. We tried again with no success. Then he called us asking for the clearance, but he couldn't hear us. We had a problem with the radio, an extremely unlikely problem, since all the systems were duplicated. But it happened. The incoming traffic went around whilst the departing traffic stopped at the holding point. We turned the holding point stop bar lights on. We had a 'Dittel' portable radio which we turned on. It didn't work. Someone had disconnected it from the power and nobody had connected it again, so the battery had run down. We connected it to the power supply and advised the technical department of the failure while the arriving airplane turned left and joined the circuit to try to land again. We found the signals pistol. The first problem was the meaning of the lights. We had studied this many times, yes, but at that particular moment we were nervous and not really sure about using it. We were almost sure that the continuous green signal meant both clear to land and clear to take off. Therefore, we had a problem because if we pointed the green light to an aircraft on short final, the traffic waiting to depart might think that he could take off and the arriving one think that he could land, so the situation would become very risky. The second problem was how to turn the green light on. We had done it before, but never in a stressful situation. And it was surprising that it took quite a while to get that green light, since we had to press two buttons at the same time.

The traffic in the circuit had flown abeam the tower whilst we continued to try and establish the exact meaning of the green light signal. We knew, since we had had the appropriate training, that the explanation was somewhere in the control room very clear and close to us, but at that moment we couldn't remember where it was. As usual, it was dark in the control room to allow us to clearly see the lights of approaching aircraft, and the darkness did not help us at all. The plane at the holding point started to become impatient

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Training in safety
Training is safety (cont'd)

when he called and we did not reply. The other traffic wanted to land. At least both planes were on the same frequency, so they could hear each other and were aware of their respective positions. We didn't find the meaning of the pistol signals in the control room, so we started to search for it in the Regulation Book but it was impossible to find.

By now, the inbound traffic was turning onto a tight base leg. We had to take a decision, so we just aimed at the flying traffic and shot the continuous green light, avoiding aiming at the aircraft waiting in the holding point. The arriving aircraft turned onto final and landed. When he vacated the runway he reported: "vacating runway. We have landed according to the green light". We turned off the stop bar lights at the holding point and at that moment the main radio started to work again. We told the departing traffic to line up and he heard us. He told us that he had stopped at the holding point as cleared, he didn't cross the stop bar, he knew a plane was inbound and he saw us with the pistol. He just took off and soon afterwards everything was fine.

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After the rush we saw that the light signal meanings were pasted on the pistol. It seems incredible that we hadn't noticed it, even taking account of the fact that it was dark. Once it was all over, we also found the meaning of the light signals in the Regulation Book in about ten seconds. The 'Dittel' was now charged enough to work. A technician came into the control room and told us it was the first time that a radio failure had happened since he had started to work at the airport twenty years ago. Nobody had noticed that the 'Dittel' was discharged since we rarely used it.

Even though we had turned on the red stop bar at the holding point, advised the technicians as soon as we found the problem and properly used the signals pistol, we found that under the stressful conditions we worked very slowly and much less efficiently than normally when we were relaxed.

Even though we were familiar with all the theoretical practice, we were not prepared for the human factors, by which I mean managing the situation when we were stressed and had to take decisions quickly. Next time, those involved would be better able to deal with such a situation having seen how they had reacted and what their weaknesses were in tense conditions.

I can drive every day and I can study how to race with the best teacher, but no one would let me participate in a car race unless I have practiced how to compete, know how the car works, know how to drive at high speed and know how I would react.

What is shocking is that a pilot must train on simulators regularly but that Air Traffic Controllers in some European countries still don't, despite the fact that our profession is focused on safety and that our usually stress-free job may become very stressful during an aircraft emergency.

Would you fly in a plane flown by pilots whose last Simulator Emergency Training was ten years ago? Maybe not. Maybe Air Traffic Controllers, Regulators and Air Navigation Service Providers should consider giving all controllers regular simulator training, in order to let us learn how to handle an adverse situation before experiencing a real one.