

RWY AHEAD

by Libor Kurzweil



CROCO AHEAD

6:30

Little Julia is usually the first one up. She is followed by her younger brother Lucas and together they attack their sleeping parents for the first time today. Their screaming would even wake up the dead. We continue pretending that we are still asleep, not willing to admit that it is already morning. The desire to wake up in the morning cannot possibly differ more between generations.

A few moments later, we are feeling better. This morning "ritual" works perfectly and leads to good mood for all, not just our family. Mum's cheeks warm up with an aromatic coffee and Dad is exploring the contents of the fridge, bringing food to the table. Little Julia has dropped a piece of bread to the carpet and, in a moment, a second one. Both times butter-side

down. The statistical probability doesn't work in such cases. Lucas is mischievously giggling. "You know, Julia, there is nothing wrong with making a mistake. But only the less smart ones repeat their mistakes. Make sure you don't drop it again...", I am trying to come up with a pearl of wisdom first thing in the morning and give her some advice she can use throughout her life. It was just a matter of several seconds and a piece of peeled orange is flung to the ground. Lucas is giggling.

7:00

Martin is enjoying another moment of delight. He will always love moments like this. To drive his Škoda along the new rebuilt TWY, with the brand new painted marking and centreline lights shining in the grand finale of a ten-hour working test. Everything is the way it should be, the construction fence is gone and only the sweeper remains to clean the new surface. "Great job, it deserves some pictures in the corporate album" says a grinning Martin. He has worked as a site construction manager for many years. He likes doing work that produces tangible results and this definitely applies to the construction industry. He would not want to do anything else.

LIBOR KURZWEIL

has a Ph.D. in Airport Operations from the Czech Technical University in Prague.

He has worked for Prague Airport for 13 years, the first 9 years in the Airport Strategy, Capacity Planning and Development Department and then as Director of Quality, Safety and Process Management.



7:10

"Vacate via Delta, continue Fox-trot and Hold short of RWY 12/30", instructs the TWR frequency not long after both reversers of a Boeing 737 could be heard rumbling in the morning silence. Just another in a long line of instructions with which the control tower unconsciously brings an end to the best week of the year for 160 holidaymakers...

The crew thanks the passengers and comments on the smooth landing and beautiful morning weather. "Now we just have to cross RWY 12/30 via the taxiway as straight as Champs-Élysée towards Terminal 2", the First Officer said.

7:11

Dad, with considerable help from Mum, had cleared away the breakfast mess from the carpet a long time ago, kissed everybody good-bye and is making his way towards the city through a typical traffic jam from the north. "Hold short of Prague" applies to everybody no matter what day of the week it is. And you will not get priority even if you are running low on fuel.

7:12

The morning shift in the control tower has an extra reason to be happy. The construction work on Foxtrot ends today after two months and the runway system and all procedures will return to standard operations. It had created an enormous amount of stress and now only the last few hours and minutes are left. In the middle of this positive moment, a red alert from the A-SMGCS goes off. The charter flight from the Mediterranean, which had been instructed to "Hold short of 12/30" a while ago, first confirmed the instruction and then crossed. The crew of the flight that just departed from RWY 30 learns about what happened down below them from the radio. They were not alone on the runway this time...

7:45

Dad is just approaching the airport in his car. As the airport Safety Manager, he is going through the assessment of the first six months of 2016 in his head, thinking about how to best turn the collected findings into safety recommendations. The bird strike rate was down as was the number of laser incidents. The A380 also made him happy. The big bird had begun using the airport regularly a few weeks ago and everything has been working the way it is supposed to. A sore point for Safety was the Apron, where they could never manage to make it through the year without

scratching a plane again. And always at least one or two RWY incursions. "Is it ever going to be possible to complete a year with zero incidents for these two?", he asks himself as he is passing crowds of passengers looking forward to their flights in the departure hall. "Their good mood is always contagious," he thinks.

8:30

The Safety departments of airport operator and ATC are five kilometres apart as the crow flies. The morning coffee aroma was still in the air in both workplaces while another incident happened in front of their windows. It was just like during breakfast at home with pieces of food falling to the floor one after another, the second Safety event at the airport was very similar to the first one. Precisely 81 minutes after the charter flight incident, the story of RWY being crossed following the instruction "Hold short of" happened again.

8:35

An incident like this has never happened before and so it was no wonder that an emergency call rang on the hot line between the two Safety departments. The second incident speeded everything up and both places were loudly calling for a quick response. What is going on outside? This question is hanging in the air and the first speculations are starting to emerge. Did anything happen to the holding point? Is it related to the construction ending on Foxtrot? Did the cargo Jumbo blow away the mandatory instruction signs like it used to in the past? And even if it did, there are still painted markings on the taxiways saying 'RWY AHEAD'. "In short, we have to look at the place immediately, take some photos and, if necessary, take the area concerned out of operation" is the first fast decision made at the airport.

8:45

"Ruzyně Tower, both holding points on the Foxtrot TWY are in working order and without any defects", reports the airport operations officer from his yellow Toyota to the tower and later the Safety Department. The infrastructure passed the test

without any reservations, it can stay in operation and the incidents will be the subject of standard incident investigations, conducted by the airport Safety Department with cooperation from ATC.

12:10

"This is really good today," comments the sweeper driver on his lunch "beef Stroganoff" with satisfaction and returns to complete his afternoon work. "The construction site is done and there is only a little section of the Echo taxiway left." He did his job really thoroughly and extended one drive along the TWY all the way across the holding point up to the unservisability markers. His sweeping was interrupted by the assistant to the TWR Ground controller, responsible for controlling the vehicle movements on the manoeuvring area, who had heard the third red A-SMGCS alert of the day. The machine quickly turns 180 degrees on the red and white markers 60 meters from the RWY centreline. The driver can hear the departing Boeing 737 almost over his head.

19:00

The SMS database stubbornly resists and for some reason, does not want to accept new entries on that day. As if a machine operating with zeros and ones could not believe that there were three incidents of the same kind on the same day.

20:30

"They had a long day and are already asleep", whispers Mum as Dad comes home after the busiest day in 14 years. It is impossible to cope without a glass of wine and, while drinking it, we are thinking what our little daughter would say if she knew that mistakes not only happen at a large airport, but can happen again even before you know it. "Each of them happened to somebody else", might be the excuse. "And why, and why and why?" the inquisitive child's voice would continue asking.

We have to find some answers to every "why" – this is the reason a SMS exists.

What happened to the crews?



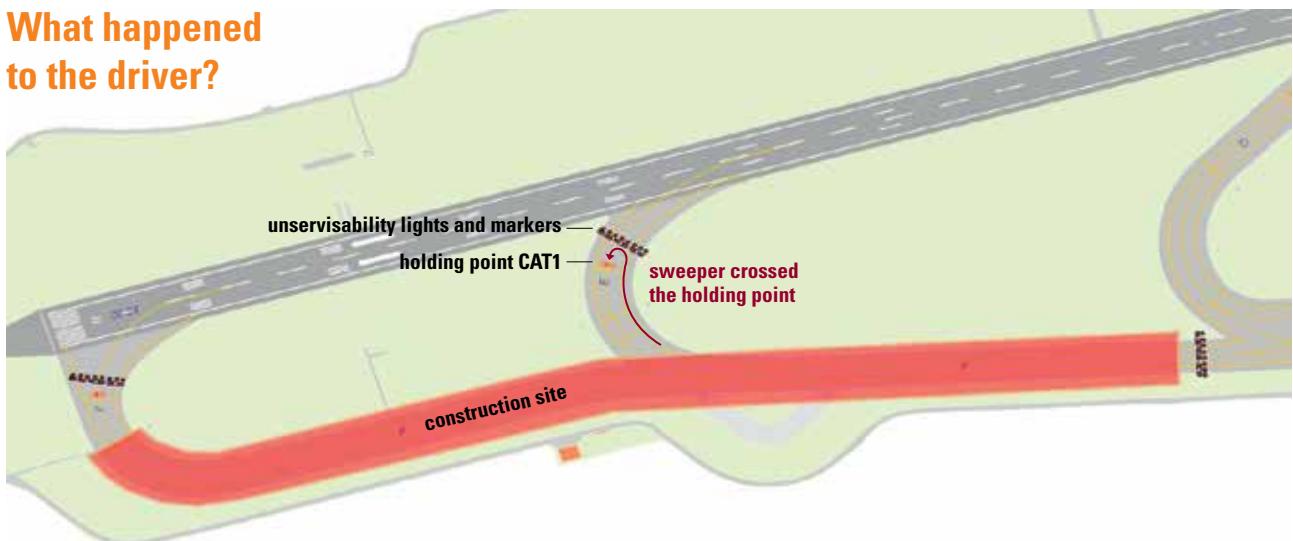
When vacating RWY 24, they were instructed to taxi via TWY D and F and "Hold short of RWY 12/30". The restriction is not very common, crews are more used to receiving permission to continue all the way. The instruction was given when the crews were busy with their routine tasks after landing. When they reached the holding point, the first crew crossed in good faith that it had received a "green light as usual". The second crew was not so sure but the last-minute transmission

to the TWR "we are crossing..." was blocked by another transmission.

Since that strange day there hasn't been any other Safety incident. The place is already equipped more than ICAO/EASA standards. RWY AHEAD Marking and extended centreline marking are implemented.

RECOMMENDATION:
awareness campaign for pilots:
read-back procedures, holding
points, "hold short of".

What happened to the driver?



The sweeper worked independently on TWY E. This TWY was closed until the holding point and the sweeper did not need permission from TWR to be on it. It occurred at time when the large construction project was ending on TWY F and the surface was being prepared to be opened. The fence had been removed. A closure was marked with unservability lights

and markers for aircraft coming from the RWY. To make the signs more visible for the crew and make sure an aircraft did not enter a "dead end", they were installed 60 meters from the centreline. The sweeper driver, operating in the closed section, interpreted them as closure limits. He crossed the holding point even though there was visible traffic

on the RWY. This shows that the commencement and completion stages of construction are the most critical ones.

RECOMMENDATION:
install unservability lights
and markers at the holding
point level. ↗