

Runway Safety

2 - march 2005

Team Zürich

NEVER CROSS A «RED STOP BAR»

Zürich Airport: Flight XY received the clearance to taxi from the «G-Stands» via taxiways E and A to the holding point RWY 28. On its way to RWY 28 the aircraft XY crossed RWY 28 on taxiway E without clearance and the crew realised this only once they were crossing the RWY.

At the same time flight Z started its take off run on RWY 28. Luckily the aircraft Z was already airborne when XY crossed RWY 28 and thus passed over XY by 40 m!

Fiction? No! This is exactly what happened in Zürich in the year 2002.

As one can expect the investigation revealed a chain of errors and several contributing factors. Nevertheless, at the crossing of taxi-

way E and RWY 28 a «Red Stop Bar» is installed and was activated. This should have been a last line of defence and considered by the crew of XY as a wall of concrete.

There has been elaborate and broadly supported research into the causes of RWY incursions. The European Action Plan for Prevention of RWY Incursions EAPPRI gives a comprehensive list of measures to avoid RWY incursions. Not surprisingly, one easy rule to be followed by pilots, drivers and correspondingly by controllers is:

NEVER CROSS A «RED STOP BAR»

The RWY incursion in Zürich in 2002 would not have happened then!

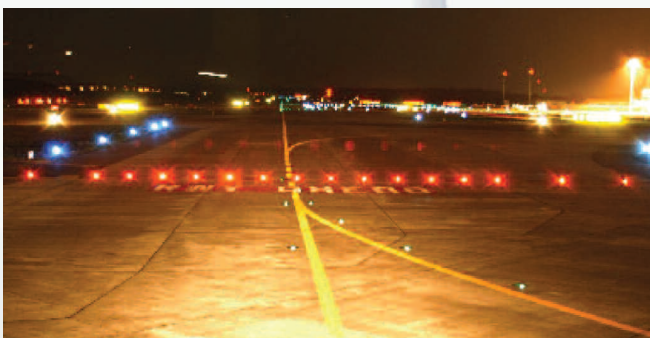
The rule states as well clearly that there should be contingency procedures in case a «Red Stop Bar» can't be switched off (for whatever reason). Basically the TWR considers a RWY crossing where the «Red Stop Bars» cannot be controlled by the TWR as closed. If however there is no alternative, the controller has to state in his crossing clearance «disregard the red lights». By all standards this should be an exception.

And be aware, sometimes the «Red Stop Bars» are not at a position you would expect them. There, Zürich is no exception as you can see below.

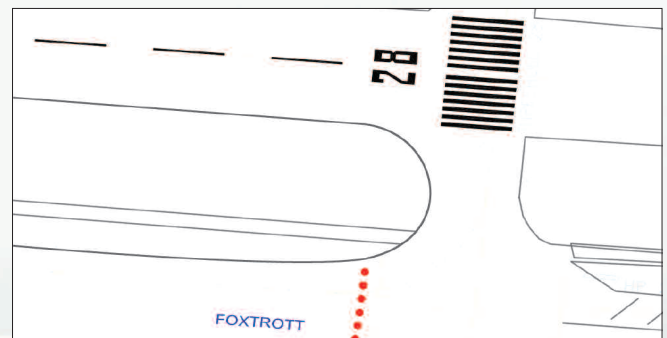
At Zürich Airport, taxiway holding positions are generally equipped with a runway holding position marking, «RUNWAY

AHEAD» marking, red stop bar lighting, runway guard lights (Wig-Wag) and mandatory signs. The following gom of the

taxiway center line is switched off when the stop bar is on.



Picture shows the Stop bar on TWY E, crossing RWY 28 from south to north.



Non typical position of the Stop bar at the Holding 28, Taxiway

Another simple rule provided by the EAPPRI is the following:

INFORM THE TOWER IF UPON RECEIPT OF THE LINE UP CLEARANCE YOU ARE NOT READY FOR TAKE-OFF

In return the ATC controller is asked to inform the crew if they are to hold on the RWY for a prolonged period of time.