

GENERAL INFORMATION

Identification number:	2009008
Classification:	Serious incident
Date, time ¹ of occurrence:	29 January 2009, 16.17 hours
Location of occurrence:	Amsterdam Schiphol Airport
Aircraft registration:	G-JBIS
Aircraft model:	Cessna Citation II/C550
Type of aircraft:	Twin-engine jet aircraft
Type of flight:	Charter flight
Phase of operation:	Approach to runway 22
Damage to aircraft:	None
Cockpit crew:	Two
Passengers:	Two
Injuries:	None
Other damage:	None
Lighting conditions:	Daylight

SUMMARY

A Cessna Citation II/550 abandoned its approach towards runway 22 at Amsterdam Schiphol Airport due to the fact that a towing combination with an Airbus 330 was crossing runway 22 at G2 at the same time.

FACTUAL INFORMATION

G-JBIS, a twin-engine jet aircraft made a flight with two crew members and two passengers on board from Berlin Brandenburg International Airport in Germany to Amsterdam Schiphol Airport in the Netherlands. At 16.16 hours, in the approach stage at a distance of 7.4 miles to runway 22, the crew of G-JBIS contacted the runway controller of Air Traffic Control the Netherlands (LVNL) and was granted permission to land on runway 22.

¹ All times in this report are local times unless otherwise specified.

The tower occupation that afternoon consisted of four people, namely a runway controller², a tower assistant³, a ground controller⁴ and a start-up controller.⁵ The runway controller was responsible for runway 24, which was used as a take-off runway, and all air traffic on runway 22.

At 16.17 hours, the driver of a towing combination with a Boeing 737, with call sign BDD, requested permission over the runway channel⁶ to cross runway 04-22 at G2. See figure 1. The tower assistant verified the position of BDD and asked the runway controller whether permission could be granted. The runway controller answered affirmatively and switched off the stop bar lights. The tower assistant then granted permission to BDD, upon which the vehicle crossed the runway. Approximately one minute later, BDD reported that runway 04-22 was clear again. The stop bar lights were turned on again automatically. Half a minute later, another towing combination with an Airbus 330, with call sign AOA, called in on the radio. This combination also wished to cross runway 04-22 at G2. The driver asked permission to cross runway 22, after which the stop bar lights were turned off. The tower assistant gave a clearance and without stopping the driver of AOA drove onto runway 22. The driver of AOA stated that he had seen an aircraft in the approach phase to runway 22, but because the stop bar lights were switched off, he was under the impression that the aircraft was not flying towards runway 22 but was on the approach to a different runway.

After permission had been granted to AOA to cross the runway, the tower assistant looked on the radar screen and saw G-JBIS straight in front of runway 22 on the screen. In order to confirm this, she looked outside and saw G-JBIS on final. The tower assistant immediately sent a transmission over the radio stating that AOA had to stop. At moment, the crew of G-JBIS initiated a go-around.

After the go-around AOA was granted permission to drive on and after making a visual circuit, G-JBIS landed on runway 22 without any further notable occurrences.

The weather

At the position of the incident, visual meteorological conditions prevailed. Visibility was more than ten kilometres and there was no precipitation. The wind at ground level blew from the direction of 100 degrees at eight knots and there was no cloud below 5000 feet.

² The runway controller is responsible for controlling local traffic (departing and landing) with the exception of traffic under the control of the ground controller.

³ The tower assistant has a general assisting role in the tower which amongst other things includes supporting the runway controller, guiding of vehicles in the maneuvering area under responsibility of the ground controller and crossing of runways by towing traffic under responsibility of the runway controller.

⁴ The ground controller is responsible for controlling the traffic in the maneuvering area except for runways available for take-off and landing.

⁵ The start-up controller provides among other things start-up clearances and transfers flights to the ground controller.

⁶ The runway channel is used by the tower assistant to maintain contact with the towing vehicles.

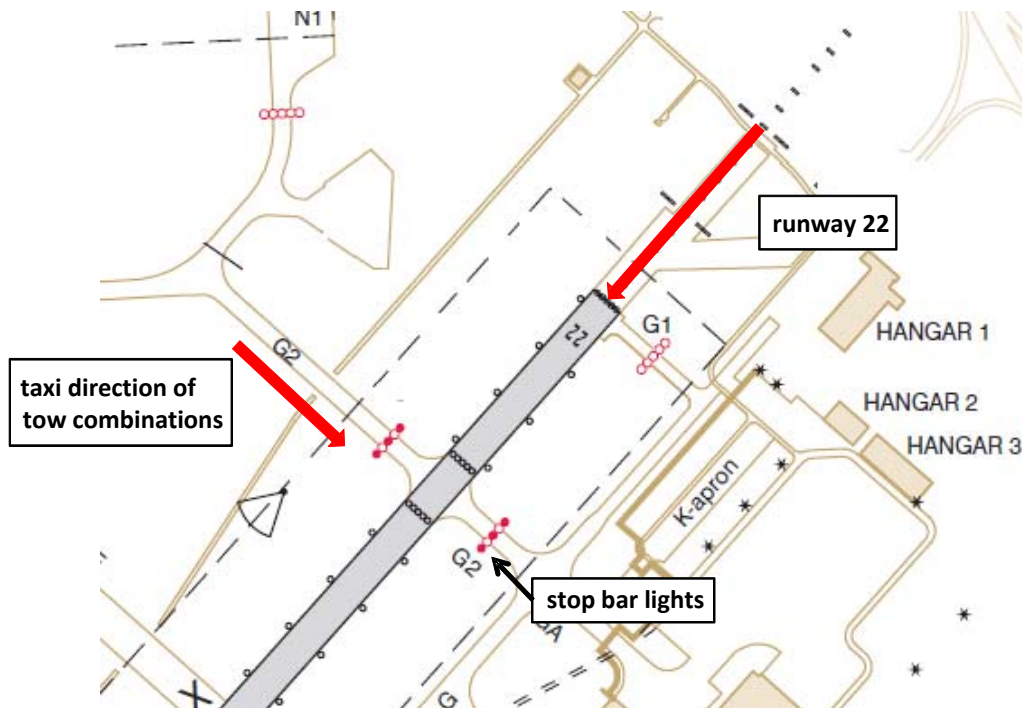


Figure 1: intersection of runway 22 with taxiway G2 at Amsterdam Schiphol Airport

INVESTIGATION AND ANALYSIS

This report is based on statements made by the on-duty air traffic control staff and towing vehicle personnel, the Air Safety Report of the crew of the Cessna Citation, the transcripts drawn up by LVNL of the tower frequency and the runway channel, the investigation report of LVNL entitled "2009-01-29 TWF64-sleep kruist baan 22" ("2009-01-29 TWF64- towing vehicle crosses runway 22") and the weather report of the Royal Netherlands Meteorological Institute.

At 16.16 hours, the crew of G-JBIS called in on the tower frequency to report that they were 7.4 miles from runway 22 and were approaching. The runway controller responded by granting clearance to land on runway 22. Assuming that the average speed of the Cessna Citation on its approach is 150 miles per hour meant that runway 22 could not be used for approximately three minutes. By granting permission to the towing combination AOA to cross the runway and giving clearance to G-JBIS to land on the same runway, the safeguard that would have prevented a runway incursion⁷ was removed.

Stop bar lights are situated near the taxiways for use when driving onto the runways. When these lights turn red, vehicles may not be driven onto the runway and must wait behind the line. The first towing combination requested permission to cross runway 22 at G2 at 16.17 hours. This permission was granted and the stop bar lights were switched off by the runway controller. One minute later, the driver reported that he had crossed runway 22. The tower assistant confirmed this report. The stop bar lights were automatically turned red again by detection of the crossing of the tow combination. The driver of the second tow combination (AOA) requested permission to cross, which was granted to him by the tower assistant, after the stop bar lights had been turned off. Due to the fact that the lights were off, the driver assumed that the aircraft that he observed

⁷ A 'runway incursion' is any occurrence at an airport involving the unauthorised or unplanned presence of an aircraft, vehicle or person on the protected area of a surface designated for aircraft landings and departures.

to be in the direction of approach to runway 22 did not have the intention to land on runway 22.

At the time of the incident, there was little activity in the tower. There was no other traffic, nor were there any other disturbances such as a telephone ringing. This peaceful atmosphere may potentially have contributed to the fact that the clearance to land that was given to G-JBIS was no longer in mind when permission was granted for the towing vehicle to cross.

CONCLUSION

By granting permission to both G-JBIS and the second towing combination to use runway 22 at the same time, a runway incursion could have occurred.