



DUTCH
SAFETY BOARD

Summary

Loss of separation following go-around



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The Hague, September 2020

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The Dutch Safety Board

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Dutch Safety Board
Chairman: J.R.V.A. Dijsselbloem
M.B.A. van Asselt
S. Zouridis

Secretary Director: C.A.J.F. Verheij

Visiting address: Lange Voorhout 9
2514 EA The Hague
The Netherlands

Postal address: PO Box 95404
2509 CK The Hague
The Netherlands

Telephone: +31 (0)70 333 7000

Website: safetyboard.nl
E-mail: info@safetyboard.nl

N.B. The full report is published in the Dutch language. If there is a difference in interpretation between the Dutch report and English summary, the Dutch text will prevail.

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GENERAL OVERVIEW

Identification number:	2018017
Classification:	Incident
Date, time of occurrence:	29 March 2018, around 19.56 hours ¹
Location of occurrence:	Airspace near Amsterdam Airport Schiphol
Registration aircraft 1:	PH-BGK
Aircraft type:	Boeing 737-700
Aircraft category:	Commercial – fixed wing
Type of flight:	Commercial Air Transport (passenger)
Phase of operation:	Approach followed by go-around on runway 18C
Damage to aircraft:	None
Flight crew:	Two pilots
Injuries:	None
Registration aircraft 2:	PH-HXF
Aircraft type:	Boeing 737-800
Aircraft category:	Commercial – fixed wing
Type of flight:	Commercial Air Transport (passenger)
Phase of operation:	Takeoff from runway 24
Damage to aircraft:	None
Flight crew:	Two pilots
Injuries:	None
Light conditions:	Daylight

¹ All times in this report are local (summer) times. Local time is UTC + 2 hours.

On Thursday 29 March 2018, at around 19.56 hours, an incident occurred in the airspace of Amsterdam Airport Schiphol. A Boeing 737-700, which was engaged in a go-around on Runway 18C, experienced an undesirable loss of separation from another aircraft, a Boeing 737-800, which had just started its takeoff procedure from runway 24. Because the two runways converge, the aircraft found themselves on a course which was set to intersect.

Shortly before landing on runway 18C, the crew of the Boeing 737-700 reported their intention to perform a go-around. At that time, the runway controller had already issued clearance to the Boeing 737-800 to start its takeoff procedure from runway 24. The runway controller wanted to instruct this aircraft to abort its takeoff, but because the wrong flight number was used in the instruction to abort the takeoff, the crew did not respond to the instruction and the aircraft took off. The runway controller recognized the potential conflict and issued instructions to both the Boeing 737-700 and the Boeing 737-800 to perform divergent turns in order to establish a greater separation between the two aircraft. The crews of both aircraft immediately complied with these instructions, also because they had themselves recognized the potentially hazardous situation. The smallest separation between the two aircraft was around 960 metres (0.5 NM horizontal and 300 feet vertical).

This occurrence took place because the procedures in the Operations Manual of Air Traffic Control the Netherlands (LVNL) allows the possibility of the simultaneous use of two converging runways for aircraft landing and taking off. Although the basic rule is that clearance to take off is only issued after the landing on the dependent runway has actually been confirmed by the runway controller, there is an exception to this basic rule. The Operations Manual offers the possibility, under certain conditions, of permitting reduced separation, so that it is possible that takeoff clearance is given before it has been confirmed that the landing aircraft has actually landed. In the event of a go-around by the landing aircraft, if immediate measures are not taken, the two aircraft can find themselves undesirably close together. This situation has arisen twice in the past.

The procedure for reduced separation has not been explicitly approved by the Human Environment and Transport Inspectorate (ILT). The procedure was already present in the former manual of LVNL at the time when the manual was converted into the current Operations Manual. This Operations Manual in its entirety was approved by the ILT, such that the above procedure was implicitly permitted. The ILT was however unable to trace back the actual way in which the former manual was converted into the Operations Manual. The procedure for reduced separation was not considered during subsequent amendments to the Operations Manual, which were approved by the ILT.

This occurrence is also the subject of a joint investigation by the parties involved, in the framework of the joint sector Integral Safety Management System (ISMS). The investigation and report have been concluded. All that remains is the decision-making on the measures to be taken.

The Dutch Safety Board has arrived at the following conclusions:

- The runway controller observed the aircraft taking off from runway 24, and was confronted with a potential conflict when the crew of the landing aircraft on runway 18C announced their go-around. Runway 24 and 18C are converging runways. Attempts to cause the aircraft to abort its takeoff failed, resulting in a potential hazardous situation. Thanks to the almost simultaneous intervention by the runway controller and the response from the two crews, no actual collision hazard occurred.
- Allowing reduced separation during the use of dependent takeoff and landing runways is a procedure which can result in the occurrence of undesirable and potentially hazardous situations. Aside from the uncertainty about the legitimacy of this procedure, the question is whether the advantage gained – namely increased capacity – outweighs the potential hazard that can arise. With that in mind, LVNL should maintain the basic rule that takeoff clearance will only be issued after the landing on the dependent runway has actually been confirmed by the runway controller or if the landing aircraft is still at least 2 NM from the runway threshold.

RECOMMENDATIONS

Removal of the procedure from the Operations Manual

The procedure 'Reduced separation during the use of dependent takeoff and landing runways' of Air Traffic Control the Netherlands is used to increase the air traffic capacity of Schiphol. However, the use of dependent runways can create an undesirable and potentially dangerous situation under certain circumstances. Such incidents have occurred before. The Dutch Safety Board therefore issues the following recommendation:

To Air Traffic Control the Netherlands

1. Remove the procedure "Reduced separation between takeoff and landing traffic" from the Operations Manual and adhere to the standard procedure for using dependent runways.

Review of procedures in the Operations Manual

Because this procedure was established in the past, the Human Environment and Transport Inspectorate did not have to give permission for this procedure. It is not clear whether all procedures in the Operations Manual regarding dependent runway use, are compliant. The Dutch Safety Board therefore issues the following recommendation:

To the Minister of Infrastructure and Water Management

2. Have Air Traffic Control the Netherlands' procedures regarding the use of dependent runways assessed against current legislation and regulations.



Visiting address

Lange Voorhout 9
2514 EA The Hague
T 070 333 70 00
F 070 333 70 77

Postal address

PO Box 95404
2509 CK The Hague

www.safetyboard.nl