

RECOMMENDATIONS

Note: in accordance with the provisions of Article 17.3 of Regulation No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation, a safety recommendation in no case creates a presumption of fault or liability in an accident, serious incident or incident. The recipients of safety recommendations shall report to the safety investigation authority which issued them, on the measures taken or being studied for their implementation, as provided for in Article 18 of the aforementioned regulation.

Risk of abnormal proximity in the event of a go-around during specialised simultaneous operations, in the case of an aircraft complying with a *Windshear* procedure and strong crosswind situations

The distance between the centrelines of the south parallel runways at Paris-Charles de Gaulle airport is below the minimum centreline-to-centreline value set out in the RCA in the case of specialised simultaneous operations.

However, this regulation stipulates that parallel runways with a centreline-to-centreline distance below this value can be used simultaneously subject to the approval by the competent air traffic services authority, of a study taking into consideration the geometry of the runway layout and the associated control means.

The BEA has no knowledge of a study that takes into account the combined risk associated with an aircraft flying a missed approach due to a windshear warning and a strong crosswind situation when specialised operations were introduced at Paris-Charles de Gaulle.

Due to the implementation in March 2022 of requirement ATS.TR.255 of Regulation (EU) No 2017/373 laying down common requirements for providers of air traffic management/air navigation services¹, the French air navigation service provider (DSNA) submitted the Alternative Means of Compliance (AltMOC) 2022/06/21-IR ATM/ANS-AMOC FR No 015 to demonstrate an equivalent level of safety in the particular runway configuration at Paris-Charles de Gaulle. This file was approved by the French civil aviation safety directorate (DSAC) in June 2022.

The arguments for demonstrating compliance presented in the DSNA AltMOC are undermined by this event in the specific case of a missed approach due to a windshear situation.

In such a situation, in accordance with the operational procedure, the crew must keep the wings level and the horizontal profile of the aircraft's flight path will depend on the surrounding conditions. Due to strong crosswind, the aeroplane's track will deviate from the published go-around path. This deviation could result in a loss of separation with an aeroplane taking off from the parallel runway. This situation may become critical when runway spacing is below the standards prescribed by ICAO and the European regulation.

¹ [Version in force at this date.](#)

The BEA has brought to light at least three loss-of-separation events that occurred over the last five years and presenting similar factors.

Consequently, the BEA recommends that:

- *whereas while complying with a Windshear procedure, the crew must keep the wings level and cannot respond to any possible lateral vectoring instruction issued by the controller;*
- *whereas the arguments for demonstrating compliance presented in the Alternative Means of Compliance (AltMOC) file 2022/06/21-IR ATM/ANS-AMOC FR No 015 to demonstrate an equivalent level of safety in the particular runway configuration at Paris-Charles de Gaulle are undermined in the specific case of a missed approach due to a windshear situation;*

the DSNA revise the demonstration of compliance with regulatory requirement ATS.TR.255 of Regulation (EU) No 2017/373, in particular the point relating to the minimum distance between runway centrelines and the divergence between departure and go-around paths for specialised simultaneous operations, so that it takes into account the observations highlighted by this incident; [Recommendation FRAN 2023-013]

the DSAC reassess its decision to approve the AltMOC submitted by the DSNA on the specific issue of the alternative means of compliance to AMC4 ATS.TR.255. [Recommendation FRAN 2023-014]

Adaptation of specialised operations

In the documents that it has published on parallel or near-parallel runway operations, the International Civil Aviation Organisation (ICAO) recommends that independent parallel approaches to parallel runways spaced by less than 1,525 m between their centre lines shall be suspended under certain meteorological conditions, as prescribed by the appropriate ATS authority (windshear, turbulence, downdrafts, crosswind and significant meteorological conditions such as thunderstorms) which might otherwise increase final approach track deviations to the extent that safety may be impaired.

It does not make an equivalent recommendation for the case of specialised operations on parallel or near-parallel runways.

The serious incident of this report shows that weather conditions can be the cause of path deviations that can result in losses of separation between traffic during specialised operations on parallel or near-parallel runways.

The BEA has brought to light at least three loss-of-separation events that occurred over the last five years and presenting similar factors.

Although the runway centreline-to-centreline distance at Paris-Charles de Gaulle is less than the ICAO recommended standard, a similar scenario is still possible for operations on runways meeting this standard. In such a case, the runway centreline-to-centreline distance provides greater margins, but the BEA is not aware of any study that demonstrates that the loss of separation would be avoided regardless of the runway centreline-to-centreline distance and weather conditions.

Consequently, the BEA recommends that:

- ***ICAO assess the appropriateness of recommending the adaptation of specialised simultaneous operations when certain meteorological conditions prescribed by the appropriate ATS authorities (windshear, turbulence, downdrafts, crosswind or other significant meteorological conditions such as thunderstorms) might cause an increase in deviations from the published flight paths to the extent that safety may be impaired. [Recommendation FRAN 2023-015]***