

Safety Reminder 24-004

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WAKE TURBULENCE and its MYTHS

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WAKE TURBULENCE AND ITS MYTHS

for IFR flights on the approach and departure phase

MYTH 1

When wake turbulence separation (WTS) is at risk of being lost or has already been lost, it is sufficient to **ask the pilot** to **report** their **intentions** or **confirm** that they have the **preceding aircraft in sight**.

MYTH 2

During training, an OJTI may intentionally allow a trainee to infringe on WTS minima to test their ability to detect the issue and respond.

MYTH 3

Myth 3 claims that if two aircraft are on the same approach and WTS is infringed, no action is needed as long as there is 1000 feet of vertical separation or the WTS minima are met by the time the preceding aircraft crosses the threshold.

MYTH 4

Myth 4 suggests that **WTS** is **difficult** to apply **to RNP approaches** or RNP-to-ILS approaches because **ATCOs lack direct control over** these types of approaches.

MYTH 5

Myth 5 suggests that **if distance-based WTS** is **infringed** during the approach, but the separation still meets **the acceptable time-based WTS**, the aircraft can safely **continue its approach without any intervention**.

MYTH 6

Myth 6 suggests that if WTS is about to be infringed during an approach, but **strong crosswinds** exist to potentially **disperse the wake turbulence away** from the final **course**, it is acceptable to allow the aircraft to continue.

MYTH 7

Myth 7 suggests that time-based WTS used for take-off will automatically guarantee distance-based WTS for the departure phase until the aircraft is transferred.





REALITY 1

ATCOs remain responsible for ensuring that wake turbulence separation is maintained, and the aircraft **SHALL** be taken out of the approach sequence **BEFORE** wake turbulence separation is lost.

REALITY 2

The OJTI shall always take action to <u>PREVENT</u> a loss of separation, including WTS, and cannot compromise safety under any circumstances, even during training. The separation standards, including wake turbulence separation, are non-negotiable and must be strictly adhered to.

REALITY 3

When both aircraft are established and descending on the approach for the same runway (or parallel runways separated by less than 760m), WTS applies, even when there is 1000 feet of vertical separation between the aircraft.

REALITY 4

While it is true that RNP approaches reduce ATCO intervention, the idea that WTS cannot be effectively applied is a misconception. **Monitoring** the prescribed **speed restrictions** is key. And if needed, **vectoring** (DCT to) can be applied **until** the **IF** (within 90°).

REALITY 5

Since we lack tools to manage time-based WTS during approaches, **distance-based WTS is used**. If longitudinal WTS is at risk of being infringed—even if you anticipate compliance with time-based WTS—the **aircraft shall be taken out of the approach sequence BEFORE** the distance-based **WTS is infringed.**

REALITY 6

The existence of crosswinds does not eliminate the need to adhere to WTS minima.

REALITY 7

Although WTS for take-off is time-based, once both aircraft are depicted on the radar screen, distance-based WTS shall be applied for the departing traffic.

CONCLUSION

When WTS is at risk of being infringed, ATCOs must **take immediate action to maintain the required separation**. While there may be pressure to prioritize traffic flow, it is critical to resist the temptation to overlook even minor WTS infringements. **WTS minima** are not optional guidelines, they are fundamental safety requirements that **must be strictly adhered to**.

How to report?

WTS infringement is a SMI, and must be reported as a mandatory report. Only logging it as a missed approach in the eWB is not sufficient.

