

# DON'T LET THAT **AIRPORT** **MISLEAD YOU**



*Wrong Surface Operations*

One Occurrence. Every Single Day.

A wrong-surface event occurs when an aircraft lands or departs (including attempts) on the wrong runway, taxiway or wrong airport.



## FY 2016 — FY 2021

NUMBER OF WRONG SURFACE ARRIVALS:

# 1,353

NUMBER OF WRONG SURFACE DEPARTURES:

# 895

INVOLVED  
*General Aviation*

**81%**  
ARRIVAL

OCCURRED AT  
*Level 9 ATC and Lower*

**86%**  
ARRIVAL

OCCURRED DURING  
*Daylight Hours*

**87%**  
ARRIVAL

OCCURRED WITH A  
*Visibility of 3 Statute  
Miles or Greater*

**97%**  
ARRIVAL

NUMBER OF  
*Facilities With 3 or  
More Events*

**155**  
ARRIVAL

**82%**  
DEPARTURE

**90%**  
DEPARTURE

**87%**  
DEPARTURE

**121**  
DEPARTURE



NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION

# Principal Causes of Wrong Surface Operations:

- 1 AIRPORT GEOMETRY:** AIRPORTS LOCATED IN CLOSE PROXIMITY WITH THE SAME RUNWAY ALIGNMENT, PARALLEL RUNWAYS WITH STAGGERED THRESHOLDS.
- 2 COMMUNICATION:** PILOTS WILL READ BACK AN AMENDED LANDING CLEARANCE BY ATC CORRECTLY BUT LANDS ON THE RUNWAY INITIALLY PLANNED, BRIEFED, AND/OR USUALLY ASSIGNED.
- 3 EXPECTATION BIAS:** PILOTS ANTICIPATE THE WIDEST, BRIGHTEST, LONGEST, OR CLOSEST SURFACE IS THEIR RUNWAY OF INTENDED LANDING.
- 4 DISTRACTIONS:** PILOTS DEAL WITH PASSENGER ISSUES OR COMMUNICATE WITH DISPATCHERS DURING CRITICAL PHASES OF FLIGHT.
- 5 ENVIRONMENT ISSUES:** CONDUCTING OPERATIONS INTO A RISING/SETTING SUN, MANEUVERS TO AVOID CLOUDS AND OBSCURATION.

## Best Practices:

- All pilots should recognize they are prone to a wrong surface operation.
- Be prepared! Preflight planning should include identifying if the airport of intended operation has a high-risk configuration.
- Reduce cockpit distractions during approach and landing phase of flight.
- Use visual cues: verifying right versus left runways, runway magnetic orientation, and known landmarks.
- Utilize navigation equipment such as Localizer/GPS (if available) to verify proper runway alignment.
- When cleared to land early or prior to entering the pattern, exercise care and verify with ATC if there is any doubt as you get closer to the airport.
- Don't assume a positive outcome (expectation bias) and avoid just going through the motions (complacency). Work to ensure things are correct.
- Actively listen! Know and use proper phraseology to eliminate communication errors.
- Most importantly, don't let your equipment become a distraction and take your attention away from looking outside the aircraft. IPads, screens, and avionics displays can provide good information unless they lead to too much "heads down time." It's the equivalent of texting and driving.
- If ever any doubt, **ASK ATC to CLARIFY.**

