Approach and Landing Go-Around

Historically, go-around rates from unstable approaches (UA) have been low, with only a marginal recent increase, keeping them a Commercial Aviation Safety Team (CAST) focus area. Considering the Aviation Safety Information Analysis and Sharing (ASIAS) program's progress in fusing data from multiple sources, CAST desired to gain additional insight using the fusion data. CAST chartered the Approach and Landing Go-Around (ALG) Joint Safety Analysis and Implementation Team (JSAIT) to study and analyze go-around-related event reports to address two primary research questions:

- Question 1: Why are go-arounds infrequent in the National Airspace System (NAS), even in cases where conditions indicate that based on established guidance, the execution of a go-around should have been warranted?
- Question 2: Why do some go-arounds result in undesired aircraft states?

Methodology

The ALG JSAIT identified go-around events occurring from January 2015–December 2018 using an initial report dataset from mandatory and voluntary safety reporting programs. The ASIAS fusion process allowed the ALG JSAIT to analyze these events from a holistic perspective.

Findings and Results

The study found the most significant variation of go-around compliance across air carriers, suggesting training, cultural differences, or other causal factors exist; additionally, the ALG JSAIT determined pilot-controller communications can influence go-around execution and outcomes. Accordingly, the ALG JSAIT developed two safety enhancements (SE) aimed at mitigating undesired states regarding go-around decision making and execution. The first SE focuses on the ALG JSAIT toolkit (Go-Around Decision Map and accompanying narrative) for operators to evaluate and revise their procedures and training curriculums against the toolkit and the Federal Aviation Administration (FAA) Safety Alert for Operators (SAFO) 15004, Scenario-Based Go-Around Training, accordingly.[1] The second recommends forming a working group to explore potential procedural or technological changes to improve procedures, pilot-controller communications, expectations, and other go-around-related aeronautical decision making.

Recommendations

CAST recommends two SEs be implemented:

- SE 236: Improving Pilot Go-Around Decision Making and Outcomes, and
- SE 237: Improving Pilot-Controller Communications within the Constructs of Go-Arounds.

The ALG JSAIT recommends air carriers and other implementers also consider the following recommendations as they perform the SEs' actions:

- Define and set safe margins for go-around points throughout an approach, appropriate to their operational and risk-assessment policies.
- Share best practices and results from the operators' go-around studies with the air carrier community to improve aviation safety in the NAS.
- Focus on manual flying proficiency.
- Clarify landing decision criteria and authority.
- Enhance automated systems knowledge.
- Train flightpath monitoring.

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[1]https://www.faa.gov/sites/faa.gov/files/other_visit/aviation_industry/airline_operators/airline_safety/SAFO15004.pdf

The ALG SEs (236–237), including the ALG JSAIT toolkit (Go-Around Decision Map and accompanying narrative) are available for review at:

http://www.skybrary.aero/index.php/Portal:CAST_SE_Plan