



## NATCA/FAA/Industry Collaborative Safety Programs

May 3, 2019





# EVERY DAY IS A RANNING SA NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION



## Key Collaborative Safety Programs

















- ATSAP was implemented in 2008
- Over 160,000 reports filed

# **WHEN IN DOUBT, FILL IT OUT.**

atsapsafety.com ATSAP



safer-fct.org FCT ASAP ASAP



https://avssp.faa.gov/avs/air cert/report/srp/Lists/submit/ AIR SRP

















- Agreements with twenty-nine (29) partners, including:
  - Military USAF (Air Mobility Command, Air National Guard, Air Force Reserve Command, and Pacific Air Forces
  - Cargo Operators
  - Air Carriers
  - Charter companies
  - Dispatchers



### April 2019 **CISP SAFE** Discussion Sheet



"Safety Awareness for Excellence"

#### **Excerpts from CISP Reports**

"We were told to descend via [STAR] RWY 26 transition. We set up arrival and approach... Upon checking in first, Approach said expect ILS 26. After extensive vectors off the arrival, we switched to [Final Approach]... Controller said expect ILS 25L. We rebriefed and set up 25L. More vectoring due to volume and weather. At approximately tenmile dogleg final, we were told intercept 26 LOC. I told F/O to confirm approach runway with ATC. Approach said ILS 26. F/O said '... unable, we cannot accept.' Controller said 230 heading cleared ILS 26. We said 'can't have last minute changes.'''

"Captain flying the [ARRIVAL] into [APRT]. Captain had briefed the ILS 25L transition with 24R in standby. We had been slowed 250 miles from [APRT]. When we checked in with Approach, we were assigned 25L. They slowed us some more and gave us step down clearance as a heavy 777 was converging on our flight path. Approach then cleared us for 25L approach. Captain set 1900' in for marker altitude LNAV/VNAV PATH. Over [FIX], [APPROACH] queried us about what arrival we were on. F/O responded transition to 25L.

#### When Things Don't Go According to Plan: Part 2

Recent pilot reports received via the Confidential Information Share Program (CISP) highlight the necessity of ATC being prepared for the unexpected: when pilots are unable to comply with controllers.

When an aircraft is given a vector off of a STAR for sequencing/spacing, controllers may not know exactly what the pilot can and cannot do to rejoin the procedure. As a result, the aircraft automation may not recapture the vertical element of the STAR until the next fix altitude bracket. For example, when an aircraft is at or below the next crossing fix altitude bracket, controllers need to provide an amended fix altitude to ensure the aircraft predictably rejoins the arrival. ATC needs to be prepared with a backup plan to get the aircraft back on profile.

The ATIS and assigned STAR tell pilots what runway and approach to "expect," but sometimes the expected approach may be altered due to weather, airport surface conditions, or traffic. If the pilot checks in and is given a different approach or runway, the pilot's workload goes up exponentially in briefing/programming the new approach, all while flying the aircraft. In some cases, expectation bias may lead a pilot to read back the new assignment correctly, but fly the previously expected approach. Controllers should always be prepared for the eventuality of pilots saying "unable" to the change(s) when not as expected.

An example highlighted by pilot reports is the ANJLL 4 STAR into LAX. The chart provides notes to pilots indicating they should "Expect ILS or RNAV (RNP) RWY 25L approach." Several reports indicate issues with expectation bias leading pilots to incorrectly fly the 25L approach after being charged to the 24P approach.















#### **Event Report Dashboards**

(All Data is Notional for Demonstration Purposes)

These dashboards are designed for the anaylsis of CISP reports. Changes in reporting rates and report counts may result from changes in safety events or may reflect changes in reporting culture...

#### Category Benchmark Dashboard

The Category Benchmark Report analyzes each reporting category and compares the reporting rate to the cohort reporting rate of all other carriers at the same facility.

#### Category Report Viewer

The Category Report Viewer displays a list of all reports for user selected categories and subcategories. Individual reports can be selected from this list for viewing.

#### Causal Factor Benchmark Dashboard

The Causal Factor Benchmark Dashboard analyzes the causal factors of each report and compares the facility reporting rate to the cohort reporting rate of all other carriers at the same facility...

#### Causal Factor Report Viewer

The Causal Factor Report Viewer allows the user to choose causal categories and factors for further investigation. A list of all reports with these causal categories and factors and is diplayed for review. Individual reports can be selected from this list for viewing.

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#### ATC Facility



#### A Note on Cohort Airline Metrics

Because ASAP and ATSAP CISP records are selectively shared, it is misleading to compare reported trends between <Your Airline> and a comparison cohort of airlines.

It is useful to know if other airlines are experiencing similar issues. Throughout this workbook, the following holds true:

: 2 or more CISP participating airlines have associated reports

X: 0 or 1 CISP participating airlines have associated reports



#### Explore Event Rates by ATC Facility

Identify ATC Facility of Interest Make Selection Below





Report Counts







#### **Report Category Benchmarks**

#### Directions:

JFK

Select Contributing Taxonomy information to filter (1) associated information for the other report type and (2) *Monthly Trend Details*.

ATC Facility

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#### ASAP Contributing Taxonomies

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AIRCRAFT PERFORMANCE OR PILOT ACTIONS	Non-Conformance With A Clearance	Course	$\sim$				
	Non-Conformance With A Clearance	Surface Movement	$\sim$				
	Aircraft Performance Or Pilot Response	Timely Aircraft Turn	×				
	Non-Conformance With A Clearance	Wrong Surface Alignment/Landing	<ul> <li>Image: A second s</li></ul>				
	Pilot Reaction	Evasive Action	×				
	Pilot Reaction	TCAS-RA	×				
AIRPORT AND SURFACE	Airport Lighting	Type Of Lighting	~~~				
			(	0	2	4	

#### ATSAP Contributing Taxonomies

			ATSAP Count			
			-1	0	1	2
Coordination	Relief Briefings	Relief Briefings	<ul> <li>Image: A second s</li></ul>			
	Airspace.Airspace Type/Limitations	Class-B	×			
	Airspace.Airspace Design	Poor Or Outdated Desigr	×			
Airspace and Proc	Airspace.Adjacent Airspace/International Providers	Adjacent Airspace/International	×			
Airport and Surface	Runway Configuration.Configuration Name/Number	13L/13R/22L	×			
AC Perf Pilot Actions	Non-Conformance With A Clearance	Wrong Surface Alignment/Landing	×			

#### Contributing Taxonomy Trend



ASAP Count





Re	port	Topi	c Ana	lvsis

#### Directions:

JFK

Select Topic information to filter (1) associated information for the other report type and (2) *Monthly Trend Details*.

ATC Facility

Topics represent groups of safety reports that are similar in context. These Topics are automatically generated from free-text language in report narratives, using Natural Language Processing (NLP) techniques. Topics are useful, as they may describe safety issues not represented by the Taxonomy or Event Category values. Topic names are automatically generated from common terms present in report narratives. If multiple reports share the same Topic, then many (but potentially not all) of the terms from the

For example, all reports classified into the taxi|ground|cross|taxiway Topic must contain at least 50% of the individual terms: taxi, ground, cross, and taxiway. Each safety report may be represented by 0 or more Topics.

#### **ASAP** Topics



Topic name are present in each report's narrative.

What are Topics?

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#### ATSAP Topics



#### Topic Trend





# Where does all the safety data go?



- ASIAS Aviation Safety Information and Sharing
- GA ASIAS
- NASA ASRS
- Training
- ATO Top 5 Safety Issues
- Safety Risk Management Panels



# Systemic Correction



- Nearly 200 national formal Corrective Action Requests have been issues
- Hundreds of informal corrections accomplished through the sharing of information.

### • Examples:

- Chart Publication Changes
- Rocket NOTAMs
- ATC On the job training
- NOTAM Info and Dissemination
- Untimely Maintenance







BREAKING NEWS Dreamlifter Prepares For Takeoff Northeast Wichita

LIVE

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