Airside Sync: Bringing **PIREP and RCR** together for smarter reporting

Airside Sync has the possibility to enhance runway condition reporting by seamlessly integrating PIREP and RCR data, providing automated, real-time insights. This integration not only ensures better compliance and decision support but also enables detailed analysis. By combining PIREP observations with RCR data and other reports, the system quickly triggers alerts for reassessments, allows for in-depth analysis of discrepancies and trends, ultimately improving safety and operational efficiency through more informed decision-making.

For decades, pilot reports (PIREPs) have played a critical role in runway condition assessment, yet many airports still rely on manual methods that slow down the impact of this vital piece of data and with that the decision-making and thus create inefficiencies. With the introduction of digital PIREPs in Airside Sync, airside teams gain valuable decision support during assessments. The system automatically correlates information according to regulations and alerts users when discrepancies require a new assessment. Teams can also analyze how well PIREPs align with reported runway conditions (RwyCC) over time.

By integrating PIREPs directly with SNOWTAM and Runway Condition Reports (RCR), airports gain instant updates, automated compliance checks, and a seamless connection between pilot observations and official runway assessments. The result? Ensured compliance, enhanced information awareness, faster responses, safer operations, and improved coordination across airside teams.

The consequence of PIREP on SNOWTAM

Under the Global Reporting Format (GRF), a new runway condition assessment and subsequent issuance of a new SNOWTAM are required when:

- Significant Changes in Runway Surface Conditions: Any notable alteration in the type, depth, or coverage of contaminants on the runway necessitates a reassessment. For instance, if the runway's contamination increases or decreases beyond 10% coverage in any runway third, a new assessment is warranted.
- **Pilot Reports Indicating Different Braking Action:** When pilots report braking actions that differ from the current runway condition report, especially if they experience reduced braking effectiveness, it prompts a new evaluation to ensure

the reported conditions align with actual runway performance. Specifically if two consecutive PIREPs report a braking action of "POOR", and a RWYCC of 2 or better has been reported for the given runway, OR a single PIREP reports a braking action "LESS THAN POOR", this triggers an alert and require immediate reassessment.

• Weather Changes Affecting Runway Conditions: Environmental factors such as snowfall, rain, or temperature fluctuations that could alter the runway's state require immediate reassessment to maintain accurate and current reporting.

These protocols ensure that runway condition reports remain accurate and up-to-date, supporting safe aircraft operations during varying weather conditions.

The power of combining RCR and PIREP in one system

By integrating RCR and PIREP in Airside Sync, airports gain a comprehensive view of runway conditions with instant comparisons between pilot reports and official assessments. This ensures compliance, enhances decision support, and facilitates post-ops analysis. The system also improves reporting efficiency and alerts airside teams to discrepancies, ensuring better decision-making throughout the process.

• Ensure regulatory compliance

One of the main features by integrating PIREPS in Airside Sync, is the ability to correlate PIREPs and SNOWTAM-assessments and thereby utilizing the automated discrepancy detection system. The platform continuously monitors the PIREP inputs and compares them to the currently acting SNOWTAM. When a discrepancy, according to the GRF regulations, is identified— specifically, when two consecutive PIREPs report worse conditions than the latest SNOWTAM — the system immediately triggers an alert. This warning proposes that a new assessment should be conducted and, if necessary, an updated SNOWTAM to be issued to maintain regulatory compliance.

Airside Sync includes an automated system that informs and, when necessary, alerts users about critical updates, such as the validity of active SNOWTAMs and detection of potential influencing events. The Significant Change Indicator actively monitors all inputs to ensure runway condition reports remain as accurate as possible.

The system alerts users about:

• Upcoming Expiry:

Warns that the current SNOWTAM is nearing expiration and requires attention.

• Expired SNOWTAM:

Signals that the latest SNOWTAM is no longer valid due to time-restraint, prompting potential reassessment.

• Significant Change Detected:

Triggers when a significant change is detected, prompting a new assessment and potentially issuing a new SNOWTAM. All according to the definition of a "significant change" OR Pilot Reports prompting a reassessment as described above.

• All Clear:

Confirms that current conditions are consistent with the latest reports. The moment a discrepancy is detected, Airside Sync issues a clear notification.

"Significant change" indicator								
Safe Sky Airside Sync has a function to indicate and notify about the need to publish a new SNOWTAM, whether it is due to : - Expired time - "Significant change"			0920 sin 29 mg ≪ Obshboard III Map III Naport	Atlas - Aerodromis ZMMX - RWV 17-35 Rumway 17-35 Ges the 1700ar Biał UTC model: A a Tawn 3 < LANDING DIR - CLORED 17 Zone A Zone S Zone C 35				
This indi	icator has 4 shapes: The time since last published SNOWTAM is <i>approaching</i> 8h and thus close to expire			Archive A	WET SNOW ON TOP OF CONFACTED SHOW 75 % a 3 mm 75 % a 3 mm		WET SNOW 75 % 4 mm	
[1		The time since last published SNOWTAM is <i>more than</i> 8h and thus there is no valid SNOWTAM			RWYCC 3 CLEARED LENGTH CLEARED WIDT DRIFTING SNOW LOOSE SAND	RWYCC S H SNOWBANKS ADJ SNOW FROZEN SAND CHEMICAL TRE	VBANKS	
4	A significant change has been detected (according to the data known to Airside Sync) and a new report should be published			(1) Log out	Zone A (#0.37	Zone B µ=0.39	Zone C	
~	All is ok				RWY 17-35 Remarks			
09/39 Tue Mar 11 *** 😤 100 % 💼								
Airside Sync • ZZZZ • PIREPs D								
O Dash								
🖽 Map								
Repo								
							ing Action	
🚱 Galle						Pear		
		Significant change detected A new SNOWTAM should be published due to a significant change reported from PIREP. Please perform a new assessment.						
						Pour		
		т						
		Today vs:si uic	(eric@kastelo.ne	атг-так				
ि Task ﷺ Task								

• Facilitates decision-support in runway-assessment

Another key ability when integrating PIREPs with Airside Sync is that the latest registered PIREP data is displayed in the runway assessment view. This allows users to consider the most up-to-date PIREP information as valuable decision support, offering a more complete and accurate picture of current conditions.

• Analysis and statistics

Another benefit of having PIREP and RCR/SNOWTAM data in the same system is the ability to conduct analyses and generate statistics and identify discrepancies between the reported RwyCC and the experienced PIREPs. From these analyses reports can be generated, for instance monthly or seasonal analyses, to evaluate if discrepancies occur more frequently and if they are more frequent under specific conditions or related to specific individuals etc. This enables deeper insights into patterns and helps improve decision-making.

Airside Sync as your PIREP-platform

Airside Sync offers two ways to manage and utilize PIREPs: either PIREP-information can be imported and utilized in Airside Sync by integrating existing systems where you enter and manage PIREPs, or PIREPs can be entered, managed and archived directly into Airside Sync. This powerful new feature gives you complete control over your reporting process, making it fast, simple, and reliable. This flexible setup ensures compatibility with your current workflow while enhancing reporting efficiency with instant alerts and seamless data management.

Interested to learn more and to test Airside Sync - A smarter approach to PIREP and RCR reporting

Airside Sync makes managing PIREP and RCR reporting easier and more efficient by offering both integration with existing PIREP-systems as well as fully supported PIREP-functionality directly in Airside Sync. By bringing PIREPs and RCRs together in one platform, you ensure compliance, gain real-time insights, automated alerts, and a unified reporting process that enhances both accuracy and efficiency.

Discover how Airside Sync can enhance your runway condition reporting. Contact <u>sales@safe-sky.net</u> to learn more about PIREP-functionality in specific and the functionalities for airside reporting in Airside Sync in general.

About Airside Sync

Airside Sync from Safe Sky Industries is a digital platform for airports to assess, report, and analyze different conditions at the aerodrome, providing unparalleled benefits compared to analog reporting with pen and paper or radio transmission. Airside Sync supports a vast range of airside operations, reporting, and information sharing with multiple report modules (RCR/SNOWTAM, FOD, WLM, Task Management) as well as supporting modules (Analytics Support, PIREP, etc.).

About Safe Sky

Sweden-based Safe Sky Industries is a world-renowned developer and provider of digital solutions for the aviation industry. These solutions increase efficiency, improve safety, facilitate visualization of operational status, and provide reliable decision support. All in accordance with CDM. Safe Sky develops both custom-built solutions and a range of more generic tools aimed at maximizing operational efficiency.