Example of decision-making and processing of occurrence reports and events in an organisation – CASE RED

Page 1 contains an example of an AOC organisation and an event that led to the occurrence report filed by the flight crew and the processing of the event by the organisation. Both the organisation and the event and related examples are fictitious. However, they represent realistic situations and operations models. **CASE RED** is an example of processing the incident in a situation where **THE ORGANISATION DOES NOT RECOGNISE ITS ROLE IN THE PROBLEM-SOLVING PROCESS**, **THE CAUSES BEHIND THE INCIDENT ARE ONLY LOOKED FOR IN THE CREW'S (INDIVIDUALS') ACTIONS**, and the actual **ISSUE IS NOT SOLVED**. The crew is **BLAMED** and the issue is **NOT PROCESSED CONFIDENTIALLY**.

Page 2 describes how the processing of the case progresses and defines the decision-making points at different organisational levels. Page 1 contains further information for the decision-making points on page 2. The chart on page 2 is derived from Patrick Hudson's decision-making chart *(GAIN working group - Roadmap to a Just Culture - Enhancing the Safety Environment, 1997).* The chart was modified on the basis of authorisation given by *Global Aviation Information Network* in the document in question *("Derived from a document for which permission to reprint was given by the Global Aviation Information Network")*. The chart focuses on utilising safety information produced by personnel in the organisation's safety management (SMS processing).

CASE: EFRO A32S foreign AOC, 30/9/20XX

INFORMATION ABOUT THE ORGANISATION: The company is financially sound with no need for economy measures. The flight crew has not been pressured to save in de-icing/ice prevention, for example. The company's home country does not have winter conditions, and the company flies rarely to destinations where winter conditions must be considered. Rovaniemi (EFRO) is a new destination for the company. The destination had been added to the company's destination selection on a tight schedule one month prior to the incident. The company was in a hurry to operate in the autumn and winter season. The Winter Operations Manual (WOM) is pending for final approval with an entry into force on 1 October. The de-icing agreement is still waiting for the Accountable Manager's (AM) approval.

INCIDENT DESCRIPTION BASED ON THE FLIGHT CREW'S OCCURRENCE REPORT: The country of departure X had sunny, autumnal weather. Flight planning was done as usual. ARR EFRO 0300Z CAVOK BECMG SN -> 0420Z in METAR -RASN -> 0520Z SN TM/DP difference less than 3. There was CAVOK during approach. There was a four-hour turnaround on the ground, during which the crew was provided with updated time-specific weather information. There were several aircraft on the apron. It started to snow during the turnaround. The pilots noticed that the aircraft next to them was being washed. They concluded that this was done because the aircraft was staying the night. The pilots discussed the need for de-icing but thought that the warm fuel would defrost the wing. During DEP, the weather was T00/DM01 BKN/OVC, and the front had already passed the airport. The departure and take-off went normally. When the cabin seat belt light had been turned off, a pilot from another company who was travelling home asked the cabin crew to convey the following message to the cockpit: "The wings were covered by a thick layer of snow during take-off. Why wasn't the aircraft de-iced?". The pilots discussed the situation and decided to file an occurrence report.

BACKGROUND INFORMATION THAT IS NOT EVIDENT FROM THE OCCURRENCE REPORT: The summer holiday season was ending in the country of departure X. The pilots had recently returned from vacation: the captain two weeks and the co-pilot three weeks ago. Both pilots were flying to Rovaniemi for the first time. Other than that, the pilots were quite experienced (CPT 4000 h, FO 2500 h) and had piloted A32S for a long time. The crew CRM was at a good level, and the team did the flight planning and made all decisions together. The pilots' annual refresher day had been scheduled for 15 October, i.e. two weeks from the time of incident. When the company introduced Rovaniemi as a new destination, winter operations had been added to the agenda of the refresher day.
Incident-related background information: during flight planning, the pilots had access to an SWC map showing the front passing by during the turnaround at EFRO. In addition, the TAF report forecasted BECMG -SN for the time of turnaround, which was not considered in flight planning. During the turnaround, there was dense snowfall, and wet snow was visible on the wings. The pilots thought that the warm fuel would defrost the wings but they neglected to consider the de-icing of the rudder, for example. At the time of departure, the air traffic controller did not have a visual line of sight to the aircraft by the pier. In addition, the air traffic controllers were changing shifts at the time of departure.

BACKGROUND INFORMATION ON CASE PROCESSING, **CASE RED**:

1A: The management does not assume its responsibility to follow the principles of Just Culture or participate actively in safety management. The management has not received adequate SMS training and has a lack of understanding of the organisation's safety management. Company personnel does not dare to bring up issues because of the company culture.

1B: The crew is blamed for the incident and the causes behind the incident are only looked for in the crew's actions.

1C: The pilots reported the incident. The crew finds the situation unfair and decides to not report issues in the future. They strive to hide any mistakes where possible. In addition, word is spread about the unfair treatment among the personnel, which makes the already poor reporting culture worse.

1D: The crew's assignments for the next month are cancelled and they are ordered to take unpaid leave for one month. This deepens the crew's sentiment of unfair treatment. As a result of the organisation's actions, the crew members blame themselves for the incident, decreasing their professional self-confidence, which is one of the key areas of competence in this profession.

1E: The incident is not used as an example and the lessons learned are not identified or taken into account. The risk of similar (not only related to de-icing and ice prevention) incidents occurring in the future becomes higher. The time allocated to the change management process (MoC) is still too short due to the limited time between making business decisions and implementing them in practice. Other pilots are told about the incident as a warning example in a non-confidential manner. This makes the already poor reporting culture worse.

The decision-making chart is an example of the principles of processing aviation occurrences within an organisation – Just Culture as part of safety management

The chart below focuses on utilising safety information produced by personnel in the organisation's safety management. The chart is derived from Patrick Hudson's decision-making chart (GAIN working group - Roadmap to a Just Culture - Enhancing the Safety Environment, 1997). The chart was modified on the basis of authorisation given by Global Aviation Information Network. Reading instructions: Start from the yellow box. Choose the situation that suits the case in question. Then go over the column below it. In this case, stop at the first box and continue down because the persons involved followed the valid instructions.

Incident analysis (people = employees involved in the incident)	Compliance with instructions and	Unintentional deviation from instructions and operations models / possible cause: lack of situational awareness or judgement	Routine violation of instructions and procedures	Situational violation of instructions and procedures	Optimising in the (imagined) interests of the organisation	Personal optimising	Reckless personal optimisation	Exceptional violation
Nature of person's actions in the incident	1. Did they follow all procedures and instructions?	NO → Did they think they were following the procedures and instructions?	NO → People thought everyone in the organisation would do what they did.	NO → People thought following the procedures would not get the job done.	NO → People thought it was better for the company to do the job that way.	NO → People thought it was better for themselves to do the job that way.	NO → People did the job their own way because they don't care about the organisation's procedures.	NO → People didn't realise that their course of action was abnormal.
	YES	YES	YES	YES	YES	YES	YES	YES
Management – need for further measures	A. The management does not assume its responsibility to follow the principles of Just Culture or intervene in the supervisors' actions. The management's SMS understanding is poor.	Think why people thought they were doing nothing wrong.	Take active steps to identify why the procedures are not followed, incl. adequacy of procedures.	Be active and learn why the procedures were not applicable in this case.	Set boundary conditions. Evaluate procedures. This may be a real target for improvement.	Set limits and boundary conditions for acceptable actions.	How was the person in question hired?	Determine whether this was a black swan event, i.e. unpredictable situation
Supervisors and other key SMS personnel – need for further measures	B. The crew is blamed. The causes behind the incident are only looked for in the crew's actions.	Analyse the incident as part of risk management	Analyse the incident as part of risk management	Determine the grounds for changing the procedures. Assess the scope of the issue.	Think why the situation wasn't recognised before, incl. preventive risk management measures. Identify the potential for improvement.	Understand that some people can act like this. Assess the scope of the phenomenon from the perspective of risk management.	Were there any prior signs of similar behaviour?	Analyse the incident as part of the risk management process (uniqueness/scope of methods/ resilience)
Employees involved in the incident	C. The crew becomes embittered. They decide to not report issues and hide any mistakes in future.	Report your own non-compliance with the instructions or standard methods.	Help the organisation analyse whether the current procedures should be adjusted.	The party responsible must be informed of the potential need to change the instructions or procedures.	Tell the persons responsible for development about your ideas for new procedures. Make sure you are competent enough.	Think about your own attitude and readiness to follow the procedures.	Reason to consider is the person suitable for this industry	Participate actively in correcting the issue
Need for a reprimand or disciplinary measures	D. The crew's shifts are cancelled for 1 month; unpaid leave 1 month	No need	Active training on the importance and development of procedures and instructions at all organisational levels	Feedback about neglected/poorly carried out tasks in the organisation.	Remind the organisation that partial optimisation doesn't necessarily serve all interests.	Need to discuss the motive for optimisation with the person. Possible administrative measures are decided afterwards.	Assessment of administrative measures to be taken	Were the existing procedures followed? If not, would people have identified the issue had they followed the procedures?
Guidance, more training and information (safety promotion)	E. Other pilots are told about the incident as a warning example in a non-confidential manner and the crew is blamed.	Process owners must evaluate the functionality and quality of procedures and instructions.	Process owners must evaluate the functionality of procedures and instructions. If functional, compliance must be ensured.	Direct the persons in charge to inform personnel about existing and new procedures and tell them to observe them and report needs for changes.	Direct the persons in charge to inform personnel about existing and new procedures and tell them to observe them and report needs for changes.	Instruct and oblige persons in charge to communicate about the common ground rules.	Instruct and oblige people in charge to react in similar situations.	Takeaways to be utilised from the perspective of SMS