Example of decision-making and processing of occurrence reports and events in an organisation — CASE GREEN

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 GREEN is an example of CONFIDENTIAL and SOLUTION-ORIENTED processing in the spirit of JUST CULTURE and GOOD SAFETY CULTURE. The organisation GENUINELY RECOGNISES ITS ROLE in the problem-solving process and utilises the experience as an SMS source in its risk management and safety management. The authors of the occurrence report are given PROPER FEEDBACK about the progress of the process. Risk management measures targeting an individual are JUSTIFIED IN A GENUINE AND HONEST MANNER (e.g. possible additional training).

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 4,000 h, FO 2,500 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 GREEN:

- 1A: The management learned about the incident, the conclusions made and the need for action via SMS. The management reviews and confirms the need for changes in the timing and scheduling of the MoC process.
- 1B: The parties responsible for the processing conduct a thorough investigation of the incident and react to the findings reported. The causes/contributory causes identified included the lack of a de-icing agreement and Winter Operations Manual (WOM, pending for final approval) and lack of training (to be provided on 15 October). The underlying factor was the time pressure in the MoC process related to the start of traffic to and from EFRO. If there was more time, the schedule issues could have been identified. The management was informed of the incident and the related conclusions and needs for changes. The organisation's processes will be improved as necessary.
- 1C: The pilots reported the incident and they were interviewed for further information and praised for reporting the incident. The pilots will be given more training during refresher days together with other personnel.
- 1D: The crew acted correctly and the causes behind the incident and the need for changes were identified to be at the organisational level.
- 1E: The incident will be presented as an anonymous example as part of winter operations training during the refresher course. The parties involved will be praised for reporting the incident and the lessons learned will be shared with the course participants.

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. **Unintentional deviation Routine violation** Situational **Incident analysis** Optimising in the from instructions and **Personal Reckless personal Exceptional Compliance with** of instructions and violation of (imagined) (people = operations models / optimising optimisation violation instructions and procedures instructions and interests of the possible cause: lack of employees procedures procedures organisation situational awareness involved in the or judgement incident) People did the job People didn't People thought People thought it People thought People thought it 1. Did they follow Did they think they their own way realise that their following the was better for the everyone in the was better for all procedures and were following the NO because they don't course of action procedures would NO company to do the organisation themselves to do NO procedures and instructions? NO care about the was abnormal. not get the job the job that way.

Nature of person's actions in the incident

The management Management - need was informed of the for further measures incident and the conclusions and confirmed the need for development in the timing and

YES

scheduling of the MoC

B. The incident was

thoroughly investi-

gated, the person

responsible reacted

to the findings and

the management was

informed. The neces-

sary improvements

C. Participated in the

praised for reporting

the incident. Will be

given more training

with other personnel.

D. No need

E. More training for

incident was used as

example for others.

all pilots. The

an anonymous

process and were

were made.

process.

Supervisors and other key SMS personnel - need for further measures

Employees involved in the incident

Need for a reprimand or disciplinary measures

Guidance, more training and information (safety promotion)

instructions?

YES

Think why people

thought they were

doing nothing

Analyse the

with the

No need

Process owners

must evaluate the

functionality and

procedures and

quality of

instructions.

incident as part of

risk management

wrong.

would do what they did. YES

> Take active steps to identify why the procedures are not followed, incl. adequacy of procedures.

Analyse the incident as part of risk management

Help the Report your own organisation non-compliance analyse whether the current instructions or procedures should standard methods. be adjusted.

> Active training on the importance and development of procedures and instructions at all organisational levels

> > Process owners must evaluate the functionnality of procedures and instructions. If functional, compliance must be ensured.

job that way.

YES

YES Be active and learn why the procedures were not applicable

done.

in this case.

Determine the grounds for changing the procedures. Assess the scope of the issue.

The party responsible must be informed of the potential need to change the instructions or procedures.

Feedback about neglected/poorly carried out tasks in the organisation.

Direct the persons in charge to inform personnel about existing and new procedures and tell them to observe them and report needs for changes.

YES

Think about your

own attitude and

the procedures.

Need to discuss the

optimisation with the

measures are decided

to communicate

ground rules.

person. Possible

administrative

afterwards.

motive for

readiness to follow

Set boundary Set limits and conditions. Evaluate boundary procedures. This may be a real target conditions for acceptable actions. for improvement.

Think why the Understand that situation wasn't some people can recognised before, act like this. Assess incl. preventive risk the scope of the management phenomenon from measures. Identify the perspective of the potential for improvement. risk management.

Tell the persons responsible for development about your ideas for new procedures. Make sure you are competent enough.

Remind the organisation that partial optimisation doesn't necessarily serve all interests.

Direct the persons in charge to inform personnel about existing and new procedures and tell them to observe them and report needs for changes.

organisation's procedures. YES

How was the person in question hired?

Were there any prior signs of similar behaviour?

Reason to consider is the person suitable for this industry

> Assessment of administrative measures to be taken

Instruct and oblige Instruct and oblige people in charge to persons in charge react in similar situations. about the common

YES

Determine whether this was a black swan event, i.e. unpredictable situation

Analyse the incident as part of the risk management process (uniqueness/scope of methods/ resilience)

Participate actively in correcting the issue

Were the existing procedures followed? If not, would people have identified the issue had they followed the procedures?

Takeaways to be utilised from the perspective of SMS