International Civil Aviation Organization

WORKING PAPER

A41-WP/506[1]
TE/183
2/8/22
(Information paper)
English and Spanish only

ASSEMBLY — 41ST SESSION

TECHNICAL COMMISSION

Agenda Item 33: Other issues to be considered by the Technical Commission

INSTRUMENT FOR PROFICIENCY CHECKS ON THE OPERATING STAFF OF THE SEARCH AND RESCUE SERVICE (SAR)

(Presented by Venezuela (Bolivarian Republic of) supported by Bolivia (Plurinational State of), the Dominican Republic and Panama)[2]

EXECUTIVE SUMMARY

This Working Paper sets forth a proposed instrument for proficiency checks on the operating staff of the Search and Rescue Service.

Action: The Assembly is invited to:
a) Take note of the information set out in this Working Paper;
b) Recognize the importance of applying an instrument for proficiency checks on the operating staff of the Search and Rescue Service (SAR) and request the Council to order the preparation of technical guidance on this subject to assist and support States.

Strategic Objectives:	This working paper relates to Strategic Objective of Air Navigation Capacity and Efficiency.
Financial implications:	
References:	Annex 12 — *Search and Rescue* Doc 9995, *Manual of Evidence-based Training* Doc 9941, *TRAINAIR PLUS Training Development Guide— Competency-based Training Methodology*

[1] Spanish version provided by Venezuela (Bolivarian Republic of).
[2] Member States of the Latin American Civil Aviation Commission (LACAC).

1. INTRODUCTION

1.1 Proficiency checking, as a certification tool, is the process whereby evidence of the skills, knowledge and attitudes (S,K,A) of a person is collected and analysed, in real or simulated conditions in accordance with the provisions of a proficiency standard (PS), in order to determine whether a person is proficient or not yet proficient in the implementation of a specific task. By using this approach, the competencies of the operational personnel of a search and rescue service can be checked in the light of their ability to use their skills and experience, in order to deal with a wide range of circumstances in the execution of the tasks assigned to them.

2. BACKGROUND

2.1 The main airlines and aviation enterprises frequently use proficiency checking instruments (PCI) as a certification tool applied to candidates for a function or post governed by these standards, entailing job-specific performance, whether in real or simulated conditions, and the use of PCIs such as line-check formats for crews of different aircraft.

2.2 Most of the organizations that conduct search and rescue (SAR) operations are aware of the risks and challenges these entail, and therefore provide regular training using realistic simulations in helicopters and other aircraft, and in different scenarios. In order to check the proficiency of different posts, an instrument capable of verifying the skills of search and rescue professionals is required, so as to ascertain their competence for the safe performance of the operations concerned and thus efficiently identify the weaknesses and strengths of the staff evaluated. This would make it possible to improve the training programmes applied to the different posts and their different activities.

3. ANALYSIS

3.1 The role of the Search and Rescue Service (SAR) is to locate persons in distress, assist them and move them to a safe place where they can receive proper individual assistance. The availability of an SAR service, with trained, accessible staff who attend efficiently to persons in distress, presupposes a prior proficiency check, using an acceptable and efficient instrument.

3.2 Job descriptions based on a traditional breakdown of working hours and movements are of increasingly limited usefulness. This approach has ceased to be of practical use in determining how to achieve complex and dynamic objectives. It is therefore necessary that the analysis of required competencies should include situations and variables that reflect the scope or extent of apprenticeship, such as dealing with unforeseen situations, communication, teamwork, intelligence and emotional skills, as well as the connection of all these capacities with technical specialization, since this determines the depth of the apprenticeship.

3.3 The proficiency checking instrument is the process followed to establish the competencies brought into play under a work activity in order to perform that activity efficiently. The coverage may range from the job itself to the broader concept of the area or scope of employment.

3.4 Multiple job proficiency models are used worldwide, depending on the approach it is wished to apply to the individual’s apprenticeship, the position they occupy in the structure and their responsibilities in relation to the functions they perform in the organization. Various approaches can be used simultaneously, without this having an adverse effect on the coherence of the system.

3.5 The functional approach relates to tasks or specific results predefined through the proficiency checking instruments (PCI) which the individual has to demonstrate, based on an analysis of the functions comprised within the process. Generally speaking, an operational model is used, and only technical aspects are covered. Such models call for the following evidence: the results of observations on the performance of an operation and associated knowledge.

3.6 The proficiency checking model focuses on identifying the capacities of the person, which involves performance in the different areas of activity in any of the SAR operator posts within the organization. This model is applied at all levels of the organization and is confined to the capacities that stand out in defined and not predefined circumstances: analytical capacity, decision-making, leadership, communication, i.e. performance in effectively impacting circumstances, in order to reduce risks from any impacting human factor. In this case, the performance to be demonstrated by the individual does not derive from the processes of the organization, but from an analysis of their basic capacities and their reaction to those circumstances.

4. CONCLUSION

4.1 Although initiatives already exist to improve efficiency in the different competencies within the field of aeronautics and general aviation, there is very little guidance in the area of SAR regarding how to evaluate and/or verify these competencies on the basis of a defined benchmark.

4.2 This Working Paper seeks to propose the design of a proficiency checking instrument in relation to a search and rescue service, taking as reference the behavioural indicators evaluated in the ICAO Manual of Evidence-based Training (EBT), in order to determine the proficiency of candidates based on proficiency standards, which could signal an important step forward towards resolving this deficiency. In this case, certain topics are considered with reference to the proficiencies and impacting human factors, in order to develop a better perspective contributing to an understanding of the key topics in this field.

4.3 Similarly, different types of indicators are discussed, which have to be evaluated as a first priority and have the potential to measure capacities and proficiency; a general guidance framework is defined concerning how the indicators of impacting factors will provide indications making it possible to assess and/or verify the impact on proficiencies and minimize negative consequences. Generally speaking, the proficiency checking framework set out in this document may contribute to improving the proficiency and know-how of SAR operators, from any post in the organization. Moreover, through this tool the evaluators will be able to use the proficiency checking instruments in a more efficient and straightforward manner, in order subsequently to collect the evidence of proficiencies and produce the relevant certifications.

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