国 际 民 用 航 空 组 织

工 作 文 件

A38-WP/147
TE/56
22/8/13

大会 — 第 38 届会议

技术委员会

议程项目 29：航空安全 — 监测和分析

危险物品报告系统

（由巴西代表拉丁美洲安全监督合作系统（SRVSOP）12 个成员国[1]
并在拉丁美洲民用航空委员会（LACAC）其他 10 个成员国支持之下提交）

执行摘要

需要一个危险物品事件的全球报告系统，以促进各成员国与国际民航组织之间通报危险物品事件并将其标准化。这一系统将存储所报告的数据，供各国作为查明风险和管理安全的一项安全工具加以使用。

行动：请大会同意要求国际民航组织制定全球危险物品报告系统。

战略目标:	本工作文件涉及安全战略目标。
财务影响:	不适用。
参考文件:	附件 18 —《危险物品的安全航空运输》 Doc 9284 号文件：《危险物品安全航空运输技术细则》

1. 引言

1.1 《危险物品安全航空运输技术细则》（Doc 9284 号文件）第 7 部分第 4 章提出了关于运营人报告事故、事故征候及其他危险物品事件[2]（例如未申报和错误申报的危险物品）的要求。

[1] 拉美民用航空组织由 22 个成员国组成：**阿根廷**、阿鲁巴岛、伯利兹、**玻利维亚**、**巴西**、**智利**、**哥伦比亚**、哥斯达黎加、**古巴**、**厄瓜多尔**、萨尔瓦多、危地马拉、洪都拉斯、牙买加、墨西哥、尼加拉瓜、**巴拿马**、**巴拉圭**、**秘鲁**、多米尼加共和国、**乌拉圭**和**委内瑞拉**（拉美安全监督合作系统（SRVSOP）成员国皆用**黑体字**标出）。

[2] **危险物品事故：**与危险物品航空运输有关联，造成致命或严重人身伤害或重大财产损坏或破坏环境的事故。
危险物品事故征候：不同于危险物品事故，但与危险物品航空运输有关联，不一定发生在航空器上，但造成人员受伤、财产损坏或破坏环境、起火、破损、溢出、液体或放射性渗漏或包装未能保持完整的其他情况。任何与危险物品运输有关并严重危及航空器或机上人员的事件也被认为构成危险物品事故征候。

1.2 《危险物品安全航空运输技术细则补篇》（Doc 9284SU）第 S-7 部分第 4 章则载有针对国家的事故、事故征候及其他危险物品事件的规定。这些规定包括有关各国之间对于事件的报告，也包括各国与国际民航组织之间的事件报告。

1.3 国际民航组织一些成员国已经具有妥善的报告危险物品事故和事故征候的系统，因此能够以灵活有效的方式提供和交换此类事件的信息，这对于其领土内危险物品的安全运输带来了重大益处。

1.4 然而，大多数国家没有此类行之有效的报告系统，而且由于缺乏共享信息的统一标准化系统，它们也无法从其他国家的安全经验教训中受益。这一差距就阻碍国家防止本来可以通过基于数据的主动措施予以避免的某些安全事件重演。

1.5 查明危险依靠的是结合应用被动式、主动式和预防式安全数据收集方法。从积极主动的角度而言，各国应该建立机制，确保获得和存储关于危险和安全风险的数据，包括危险物品信息。各国还应该建立机制，通过所存储的数据开发信息，并且酌情与服务提供者和/或其他国家积极交换安全信息。

1.6 一种中央化全球危险物品报告系统将为所有成员国带来重大安全益处，并将使他们能够彼此之间并且和国际民航组织共享关键的安全信息。

2. 运营人的报告要求

2.1 Doc 9284号文件及其补篇规定了运营人的通知要求。这些要求包括危险物品事故和事故征候，以及有关未申报和错误申报物品的事件。其他应该报告的事件包括由于在装载、隔离、分隔或存储过程中不遵守规章或者没有向机长提供危险物品的必要信息所造成的事件。附录A载有关于Doc 9284号文件及其补篇规定的详细通知要求。

3. 针对国家的有关危险物品事件的规定

3.1 《技术细则补篇》第S-7部分第4章突出强调了对危险物品航空运输的事故征候进行研究、报告和分析的重要性。该章节的规定还包括在有关各国之间通知事件、通知的形式和内容、调查事故征候和事故，以及向其他国家和国际民航组织报告事故征候的信息。

3.2 这些规定与《安全管理手册》（SMM）（Doc 9859号文件）规定的安全管理体系和国家安全方案的要求是一致的。

4. 巴西的行动

4.1 巴西在航空业界及其他对空运危险物品具有某种影响的机构和公司推动开展了若干项宣传举措。采取的行动包括若干次由政府专门机构参加的危险物品课程和研讨会、事件调查、建立和管理用于记录事件的数据库、发布出版物和规章，以及与国际民航组织驻利马地区办事处协调开展关于协调监督危险物品的项目。附录B载有巴西民航局（ANAC）推动开展的详细活动清单。

5. 国际民航组织驻利马地区办事处的行动

5.1 2012年11月，拉丁美洲地区安全监督合作系统（LATAM RSOO，也称为SRVSOP）全体委员会第25次会议批准了协调监督危险物品项目，该项目目前是由拉美地区安全监督合作系统成员国予以推动和付诸实施的。

5.2 预期该项目的模块2将于2014年1月启动，包括建立一个综合的危险物品事件报告系统，能够接受、存储和生成源于拉美地区安全监督合作系统每个成员国危险物品事件的统计数据和信息。

5.3 这一综合系统将为所有成员国提供一个标准化的工具，能够立即报告危险物品事件。但是尽管该系统预期将为拉美地区安全监督合作系统国家带来巨大的安全益处，但它尚未成为一个全球解决办法。关于拉美地区安全监督合作系统的详细信息可通过其网站查询，网址为：http://www1.lima.icao.int/srvsop/。

6. 危险物品专家组（DGP）的行动

6.1 危险物品专家组成员在专家组会议和危险物品专家组全体工作组（DGP/WG/WHL）会议上处理了关于危险物品事件报告的问题以及制订全球报告系统的必要性。在2012年10月举行的危险物品专家组全体工作组会议上提交了两份工作文件。虽然这两份文件都得到好评，但是迄今为止尚未取得较大进展。关于危险物品专家组就此题目的详细进展情况载于附录C。

7. 关于全球危险物品事件报告系统的必要性

7.1 危险物品的航空运输与日俱增，伴以技术的不断发展，就有必要开发新的工具为安全服务。

7.2 在一些国家开展的试验以及最近涉及锂电池运输的事件（包括其在航空器上的使用）都针对世界各地飞行中锂电池存在的风险提供了警告。

7.3 一种中央化全球报告系统将能使各国之间以及各国和国际民航组织之间迅速可靠地报告事件和共享数据，并且能使那些没有充分资源开发当地报告工具的国家也能够平等获得这些关键安全信息，并且具有和任何其他国家一样的报告能力。最后，这一积极主动的预防方法将便于尽早查明危险和管理风险。

7.4 附录D载有一个应用实例。

7.5 附录E列出了关于发展和建立全球危险物品报告系统所需的最基本步骤。

8. 结论

8.1 鉴于建立一个中央化危险物品事件报告系统为各国和运营人带来的安全管理能力方面的益处，请大会根据所提供的信息，同意要求国际民航组织制定全球危险物品报告系统工具。

— — — — — — — —

APPENDIX A

NOTIFICATION REQUIREMENTS ESTABLISHED ON DOC 9284 AND ITS SUPPLEMENT

Paragraph 4.4 of Part 7 of the *Technical Instructions for the Safe Transport of Dangerous Goods by* Air (Doc 9284), presents requirements for reporting of accidents and incidents involving dangerous goods by operators to their respective authorities.

Paragraph 4.5, on the other hand, presents requirements related to undeclared and misdeclared dangerous goods. Such occurrences must also be reported to the appropriate authorities.

Paragraph 4.6 addresses other types of occurrences involving dangerous goods that must also be reported by the operator to the State of the Operator and the State of Origin. Such occurrences are those caused by noncompliance in loading, segregation, separation or accommodation, or the absence of necessary information about dangerous goods to the pilot-in-command.

Paragraph 4.7 brings requirements about the types of information to be provided in cases of accidents and serious incidents involving the transport of dangerous goods as well as requirements for information to be provided to emergency response service.

Paragraph 4, Part S-7 of the Supplement to the Technical Instructions introduces provisions relating to dangerous goods occurrences. This chapter highlights the importance of research, reporting and analysis of incidents involving the transport of these items by air. The provisions of this chapter also include information about occurrences notifications between the States involved (Doc 9284, Part S-7, paragraph 4.2), format and contents of notifications (Doc 9284, Part S-7, paragraph 4.2), investigation of incidents and accidents (Doc 9284, Part S-7, paragraphs 4.3 and 4.6) and also reports of incidents to other States and to ICAO (Doc 9284, Part S-7, paragraphs 4.4 and 4.5).

— — — — — — — —

APPENDIX B

ACTION PROMOTED BY ANAC

Some of the actions undertaken by ANAC and that are in progress or under consideration are:

- Conducting of courses in air transport of dangerous goods with the participation of aviation industry employees, Ministry of Health, National Health Surveillance Agency, Brazilian Institute of the Environment, etc.;

- Conducting seminars in transport of biological and infectious substances involving aviation industry employees, Brazilian Designated Postal Operator, Ministry of Health, National Health Surveillance Agency, Brazilian Institute of the Environment, etc.;

- Conducting seminars on the transport of lithium batteries;

- Conducting of courses on the air transport of dangerous goods specific to employees of the Brazilian Designated Postal Operator, with a view to obtaining authorization for the transport of lithium batteries in the mail;

- Participation in events of safety with the theme of awareness on the transport of dangerous goods by air;

- Maintenance of a database of dangerous goods occurrences and investigation of all types of events reported;

- Creation and updating of regulations and instructions on the transport of dangerous goods by air;

- Publication of the Brazilian State variations, including a requirement for sending monthly reports for all operators operating in Brazilian territory (BR3) in order to optimize the monitoring of the transport of dangerous goods by air in national territory;

- Participation in the electronic AWB project (CT-e), system responsible for storing and treating electronically all data relating to the carriage of domestic cargo in the national territory;

- Coordination of the Project for Coordinated Surveillance of Dangerous Goods Transport together with the ICAO Regional Office in Lima.

— — — — — — — —

APPENDIX C

ACTIONS AT THE DANGEROUS GOODS PANEL

The issue of occurrences involving dangerous goods has been treated by members of the Dangerous Goods Panel (DGP) in panel meetings as well as meetings of the DGP Working Group of the Whole (DGP/WG/WHL)

At the Working Group of the Whole Meeting held in October 2012, two working papers relating to occurrences with dangerous goods were presented. One sought to define the terms "dangerous goods event" and "dangerous goods discrepancy" understanding that there is a gap in the Technical Instructions for some types of minor occurrences that are not considered accidents or incidents involving dangerous goods and identifying the need for a term that summarizes all abnormal occurrences involving the transport of dangerous goods by air. The other paper, on the other hand, discussed the need to create a database for reporting dangerous goods occurrences.

Both working papers were well accepted. However, it was understood that the first paper needed further discussions on the subject to be approved. This discussion would be addressed by the creation of a working group suggested by the other working paper.

At the Working Group of the Whole Meeting held in April 2013, participants talked again about the creation of a dangerous goods occurrence reporting system. Members recognized that the working group to be created did not have much progress in the work that would be done by correspondence and recognized the difficulty of conducting a job of this size without meeting face to face.

It was also concluded that the needs of a global system were different from the needs of a national occurrence reporting system and that the functions and information of the system should be well defined, since there is sensitive data that States cannot share about their occurrences.

It was suggested that the Secretariat of the DGP get in touch with UNECE to verify if efforts could be combined with a view that organization has started the development of a dangerous goods occurrence report system. Members also suggested the formation of a new working group on the occasion of the meeting and it was decided to conduct this job by correspondence again. The issue would be addressed by the working group during the DGP/24 meeting.

— — — — — — — —

APPENDIX D

EXAMPLE OF APPLICATION

A dangerous goods occurrence with a package loaded in State A with destination in State B, carried by a State B operator, occurred in a State C territory.

Taking into consideration that the event has been classified as a dangerous goods incident, according to Part 7;4.4 of the *Technical Instructions for the Safe Transport of Dangerous Goods by* Air (Doc 9284), the occurrence must be reported by the operator for the State of Operator (B) and the State in which the incident occurred (C).

Considering that the incident was a spill of corrosive substance in the cargo compartment of the aircraft and that it has been determined at the time of the occurrence that the cargo had not been loaded in accordance with Chapter 2 of Part 7 of the *Technical Instructions for the Safe Transport of Dangerous Goods by* Air (Doc 9284), this incident should have also been reported to the State of Origin (A), as established in 7;4.6 (a) of the Technical Instructions

Thus, there would be three different States that should have been notified about the occurrence by the operator.

Considering that a number of similar occurrences with the same State (A) as State of Origin has been observed, according to S-7; 4.5.1 of the Supplement to the *Technical Instructions for the Safe Transport of Dangerous Goods by* Air (Doc 9284), the State in which the incident occurred must report the occurrence to the State of Origin and to ICAO, as this information may prevent the recurrence of similar incidents.

Assuming that the operator has notified the incident only to the State in which the event occurred (C), the fact that this State reports the occurrence in a centralized system used by all States and also by ICAO would make that the communication of the incident arrive fast and efficiently to all other States that should be aware of the fact and still to the ICAO. Thus, the operator could be questioned by the other States involved (A and B) on the lack of reporting in accordance with the requirements of the Technical Instructions

In addition, the report and the conclusions of the investigation of the incident could be made available online to all States involved in the occurrence and to other States that are interested but do not have experience with the subject in order to act in a case of similar occurrence in their territories.

— — — — — — — —

APPENDIX E

STEPS REQUIRED TO DEVELOP THE GLOBAL DANGEROUS GOODS REPORTING SYSTEM

The development of the system should involve at least the following steps:

- Inclusion of definitions of occurrence and discrepancy with dangerous goods in the Technical Instructions;
- Identification of the needs and scope of the system;
- Setting the language or languages to be used (at least the English);
- Identification of different types of classification for dangerous goods occurrences (e.g.: by type of occurrence - discrepancy, incident, accident; by type of volume - cargo, baggage, mail; etc.);
- Establishment of the types of occurrences that must be reported by States to ICAO;
- Establishment of the types of occurrences that must be reported by the State in which the event occurred to other states involved (State of Operator, State of Origin, etc.);
- Definition of the fields, information and data to be entered in the reports and the format of information and data of such reports;
- Definition of information that may or may not be shared among the States involved in the occurrences, among other States and between these and ICAO, considering confidentiality reasons;
- Establishment of the types of reports to be generated by the system.

— END —