



REPORT ON INTERNATIONAL STANDARDS

CTIF Norway, November 13, 2008

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Report Highlights

ICAO RFF Working Group Program

- ❖ **Composition of the Working Group**
- ❖ **Key issues emerging from past RFFWG**
- ❖ **Result of the review of RFFWG work by the AP-1**
- ❖ **Report of the 5 meetings (by subjects)**
 - ❖ Status of work
 - ❖ Recommendations
 - ❖ Continuing projects
 - ❖ Future Work

National Fire Protection Association
(NFPA) Technical ARFF committee update



RFF Working Group Scope of Work

- ***Annex 14 Volume I***
 - Chapter 9.1 Airport Emergency Planning
 - Chapter 9.2 Rescue and Fire Fighting
 - Chapter 2.11 RFF Aerodrome Data (RFF)
- ***Annex 14 Volume II***
 - Chapter 6.1 Rescue and Fire Fighting (heliports)
- ***Airport Services Manuals***
 - Part I Rescue and Fire Fighting
 - Part 7 Airport Emergency Planning



Composition of the RFF Working Group



USA



Canada

(Rapporteur)



Germany



France



United Kingdom



Italy



Singapore



The Netherlands



Australia

Airports Council International



International Air Transport Association



International Federation of Airline Pilots' Associations



International Coordinating Council of Aerospace Industries Associations



International Civil Aviation Organization Headquarters



Key issues emerging from past RFFSG

- Adequacy of Quantity of FF Agents
 - FF agents performance
 - Remission removal
- Impact of New Larger Aircraft
- RFF for Cargo and alternate
- Response time



Result of the review of RFFWG work by the AP-1

- Montreal, 11 to 15 December 2006
 - RFFWG issues well received and accepted
 - New process to justify tasking
 - Future tasks
 - Key remaining issue
 - response times (still being discussed)



Review of the FF agent calculation method

- Task

- Review of existing submissions *IFALPA input on agent quantities. France and Canada papers on agent quantities.*
- Reconfirm old concept in view of new AC technology
- Development of new methodology (concept overview) *Draft paper Canada and IFALPA, Input from the CTIF*
- Agent performance Level C foam *Manufacturer's input*
- Equivalency of complementary agents *CAA-FAA work*

- Recommendations

- Amend Annex 14 introductory note to chapter 9.2
- Continue to analyze and validate new concepts
- Prepare terms of reference for validating level C foams
- Continue development of equivalency test for complementary agents



Aerodrome RFF categories and NLA

- Tasks
 - Confirm that NLA fit in the current system
 - Evaluate the 2005 recommendation to remove the remission
 - France and Canada Papers developed and validated current 10 categories
 - Issue was found with aircraft larger than the average used for the Annex table 9.2 calculations
- Recommendations
 - Amend the Annex 14 to remove the remission based on the 700 AC movements
 - Amend the Annex 14 by making the note under table 9.2 a recommendation to address the aircraft larger than median.

(See page 3 of RFF Tab 2)



Amendments proposed

Publication of service and general section

- A significant change should be expressed in terms of the new category of the rescue and fire fighting service available at the aerodrome.
- *The principal objective of a rescue and fire fighting service is to save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity of an aerodrome. **The rescue and fire fighting service is provided to create and maintain survivable conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid. The rescue may require the use of equipment and personnel other than those assessed primarily for rescue and fire fighting purposes.***

Amendments proposed

Establishment of RFF category

- The aerodrome category shall be determined from Table 9-1 and shall be based on the longest aeroplanes normally using the aerodrome and their fuselage width.
- **Note 1** — *See guidance in the Airport Services Manual, Part 1 for categorizing aerodromes, including those for all-cargo aircraft operations, for rescue and fire fighting purpose*
- **Recommendation** — *At aerodromes where operation by aeroplanes larger than the average size in a given category are planned, the quantities of water should be recalculated and the amount of water for foam production and the discharge rates for foam solution should be increased accordingly.*



Communication requirements

- **Tasks**
 - Review various country regulations and practices
 - Develop proposal for inclusion in Annex
- **Recommendation**
 - Amend Annex to include a new recommendation 9.2.32A



Amendments proposed

- The provision of special telephone, two-way radio communication and general alarm systems for the rescue and fire fighting service is desirable to ensure the dependable transmission of essential emergency and routine information. Consistent with the individual requirements of each aerodrome, these facilities serve the following purposes:
 - direct communication between the rescue and fire fighting service and the flight crew of an aircraft in emergency;



Personnel requirements

- Tasks
 - Review standards and practices
 - Paper produced by UK (task analysis)
 - Develop new material for inclusion in Annex and Manual (will be presented next week at the AOSWG6)
- Recommendations
 - WG consensus in not having prescribed numbers
 - Continue to work on material for inclusion in Annex and Manual



RFF Response time

- Tasks
 - Review request for clarification (Australia)
 - Develop updates to clarify requirements
- Recommendations
 - Amend annex 14 to clarify requirements



Amendments proposed

Response time (second phase)

- Any other vehicles required to deliver the amounts of extinguishing agents specified in Table 9-2 shall ensure continuous agent application and shall arrive no more than one minute after the first responding vehicle(s) so as to provide continuous agent application from the initial call.



RFF for Cargo and Alternate airports

- Tasks
 - Review ICAO annexes
 - Review paper on RFF for Cargo (*France*)
 - Review presentation on alternate (*The Netherlands*)
- Recommendations
 - Clarify the definition of adequate alternate airport in Annex 6
 - WG consensus on a reduced level for Cargo only
 - ICAO secretariat to confirm that Annex 14 chapter 9.1 and 9.2 are not intended for Alternate airports (Annex 6)
 - Annex 6 work currently underway



Protective clothing and ancillary equipment

- **Tasks**
 - Review input from the CTIF on extrication equipment
(Task group, Australia member)
 - Review paper on protective clothing performance
(Task Group, France member)
 - Draft appropriate standards and guidance
- **Recommendations**
 - Continue equipment Task Group
 - Amend manual Part 1 Chapter 6.1.8 for protective clothing
 - Produce draft input for inclusion in Annex and manual on ancillary equipment



Manuals update

- Tasks
 - Review and update manuals
 - Review adequacy of FF training manual (*UK*)
 - Task group for medical requirements (*Singapore*)
 - Task group for Ancillary Equipment (*Australia*)
- Recommendations
 - Amend Part 7 manual for medical supplies
 - Continue work to develop amendments for Part 1 manual for ancillary equipment
 - Rescind current training manual and insert a note in the attachment A of the Annex 14 giving guidance on where to obtain training information.



Summary of upcoming amendments to Annex 14

- Clarify part 2.11 by removing the word « significant »
- New Objective and Mission statements
- Removal of the Remission Factors ?????
- Calculation of agents on largest AC (upgrading the Note to a Recommendation)
- Changing recommendation to a standard for complementary agents qualifications and discharge
- Clarification of response times and deleting recommendation 9.2.22
- Revision of guidance material on training and level of protection
- Pandemic planning (this one was fast tracked)



Summary of upcoming amendments to the Manuals

- Part 1
 - Update on protective clothing requirement
 - Cargo airports guidance
- Part 7
 - Update on forecasting quantities of medical supplies



RFFWG

Future work

- RFF vehicle specifications.
- Response time (*multi stations and difficult terrain*)
- Response time for heliports located on aerodromes
- Reserve extinguishing agents storage
- Aircraft information charts and category
- Submit input to heliport WG for inclusion in Annex 14 volume II as it relates to:
 - Helicopter RFF and category*
 - Emergency planning requirements*
 - New systems, Study Deck Integrated Fire Fighting Systems*



National Fire Protection Association (NFPA)

Technical ARFF committee update

Last Technical ARFF committee meeting, Denver, USA, June 2008

Documents falling under the scope of the ARFF committee are:

- NFPA 402 (2008) -Guide for Aircraft Rescue and Fire-Fighting Operations
- NFPA 403 (2009) -Standard for ARFF at Airports
- NFPA 405 (2004) -Standard for the recurring proficiency of ARFF personnel
- NFPA 408 (2004)- Standard for Aircraft Portable fire extinguishers
- NFPA 412 (2009)- Standards for Evaluating ARFF foam Equipment
- NFPA 414 (2007)- Standards for ARFF vehicles
- NFPA 422 (2004)- Aircraft Accident/Incident Response Assessment
- NFPA 424 (2008)- Guide for Airport/Community Emergency Planning



National Fire Protection Association (NFPA)

Other Airport related documents

NFPA 407 (2007): Standard for Aircraft Fuel Servicing
Next Cycle begins 2011

NFPA 418 (2006): Standard for Heliports Next Cycle
begins 2010

NFPA 1001 (2008): Standard for Fire Fighter
Professional Qualifications Next Cycle begins 2012

NFPA 1003 (2005): Standard for Airport Fire Fighter
Professional Qualifications Next Cycle begins 2009



National Fire Protection Association (NFPA)

Systematic review process

Proposals (ROP)

Call for Proposals period

Beginning of Cycle

Report on Proposals (ROP)

- Public Proposals
- Technical Committee action on each Proposal
- Committee-generated proposals.
- Formal written ballot



National Fire Protection Association (NFPA)

Systematic review process (continued)

Comments (ROC)

- 60-day comment period (Following publication of ROP)
- Panel reconvenes and acts on all public comments
- Written ballot
- Report on Comments (ROC),
- Public review for a seven-week period.

Motion on the floor (annual meeting)

- NITMAM



Questions

Thank You

Bernard Valois

Aircraft Rescue and Fire Fighting, Aerodromes Standards,

Normes de sauvetage et lutte contre les incendies d'aéronefs aux aérodromes

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