




MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE,
ET DE L'ÉNERGIE

 DSAC Direction générale de l'aviation civile Direction de la sécurité de l'Aviation civile	OPERATIONAL DIRECTIVE N° F-2011-01 Edition 3b	Date of issue - edition 3 :	August 27, 2012
		Effective date – edition 3 :	August 27, 2012
	Applicability :	Subject :	PERMANENT
Any operator of aircraft meeting the criteria of paragraph 1		Deactivation or removal of chemical oxygen generators and restoration of supplemental oxygen in lavatories	

This version is the translation of the original version of the edition 3 of the F-2011-01 OPERATIONAL DIRECTIVE written in French.

[Erratum: Edition 3b introduces an editorial correction in §7.2 regarding a translation error from edition 3 in French \(remaining unchanged\): replacement of “crew” by “passengers”. Edition 3 requirements unchanged.](#)

INTRODUCTION

Instructions laid down by the operational directive refer to:

- Council Regulation (EC) No 300/2008 on the establishment of common rules in the field of civil aviation security, including Article 6, "More stringent measures applied by Member States"
- Council Regulation (EC) No 216/2008 on common rules in the field of civil aviation, including Article 14, allowing States to grant exemptions from the substantive requirements,
- Council Regulation (EC) No 3922/91 as amended, concerning the technical requirements and administrative procedures applicable to commercial air transport, including Article 8, allowing States to grant exemptions from the substantive requirements,
- The decree of May 12, 1997 amended and extended to overseas territories, including Article 4, authorizing the issuance of operational directive by the Minister of Civil Aviation.
- The decree of June 28, 2011 on technical requirements applicable to public air transport by aeroplane in Saint-Pierre and Miquelon, French Polynesia, New-Caledonia and Wallis and Futuna, including Article 3, authorizing the issuance of operational directive by the Minister of Civil Aviation.

and in exemption to:

- Regulation (EC) 2042/2003 on the continuing airworthiness of aircraft (Part M), Section A. 902 (b) 2), dealing with compliance with the type certificate issued by the European Aviation Safety Agency Air.
- Regulation (EC) No 3922/91 as amended, concerning the technical requirements and administrative procedures applicable to commercial air transport, paragraphs OPS 1.030 concerning the Minimum Equipment List and OPS 1.770 for supplemental oxygen.
- The decree of May 12, 1997 amended and extended to overseas territories, paragraphs OPS 1.030 concerning the Minimum Equipment List and OPS 1.770 for supplemental oxygen.
- The decree of June 28, 2011 on technical requirements applicable to public air transport by aeroplane in Saint-Pierre and Miquelon, French Polynesia, New-Caledonia and Wallis and Futuna, paragraphs OPS 1.030 concerning the Minimum Equipment List and OPS 1.770 for supplemental oxygen.

0. BACKGROUND OF PUBLICATION

The FAA has considered as credible the threat of hostile acts using chemical oxygen generators located in aircrafts lavatories..

In conjunction with DHS / TSA, the FAA has issued a Sensitive Security Airworthiness Directive (SSAD). This AD requires U.S. carriers or those serving the territory of the United States with an U.S. registered aircraft, to deactivate within 21 days any chemical oxygen generator located in the lavatories. To assess the impact of this measure on flight safety, the FAA issued a safety assesment available at the following address:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rqFinalRule.nsf/fe46da51fda4c40985256aca00749e6e/8bd5a6f72a284c908625784d005276b8!OpenDocument#_Section1



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This analysis published by the FAA, based on a study involving 2800 occurrences of depressurization occurred over the past 40 years, stated that during these depressurizations no loss of human life has been deployed. The analysis of real cases of depressurization, identifies that the probability of the need to use the oxygen system after rapid depressurization is only one case per 100 million flight hours.

Combined with the likelihood that the lavatories are actually occupied at the time of depressurization, the total probability of risk is about 5 cases in a billion flight hours, quite negligible compared with aeronautics standards.

The EASA Board said that it shared the FAA analysis regarding the acceptability of the risk and that it would consider favourably any request for exemption requested by Member States which could decide to take over the content of the SSAD.

The French-DGAC has taken into account the results of this study and, after analysis, shares the position of the FAA and EASA on the acceptability of the risk.

DGAC believes that the dissemination of information made public about this threat worldwide through the FAA SSAD renders the aircraft using these generators more vulnerable to potential hostile acts. As such, the French-DGAC has published the following temporary operational directive – editions 1 and 2.

The FAA has since convened a committee comprising representatives from industry and authorities which issued its findings in late 2011 to define the conditions for the final reinstatement of oxygen in the lavatories. It made mandatory by Airworthiness Directive AD 2012-11-09 issued on 23 May 2012 the installation of a system of supplemental oxygen using an acceptable method. This AD has entered into force August 10, 2012. This Airworthiness Directive has not been adopted by EASA.

In line with its policy set up from the publication of edition 1 of this directive, DGAC requires by this edition 3 the installation of supplemental oxygen in the lavatories using an acceptable method.

1. APPLICABILITY

Instructions laid down by the operational directive applies to any aircraft:

- operated under an AOC issued by France,
- and, for "PASSENGERS" operations,
- and registered in the French registry,
- and AIRBUS, BOEING, BOMBARDIER, EMBRAER or FOKKER type,
- and, powered by jet engines,
- and, with a maximum approved passenger seating of 20 or more,
- and equipped with chemical oxygen generators in the lavatories.

2. APPLICABILITY DATE

This operational directive comes into force on the effective date.

3. REVISION AND TERMINATIVE ACTIONS

This directive supersedes the edition 2 of the operational directive F-2011-01. It covers the requirements of deactivation or removal of chemical oxygen generators located in the lavatories required by operational directive F-2011-01 edition 2 and mandates the restoration of a system of supplemental oxygen acceptable in these lavatories.



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4. OPERATIONAL DIRECTIVE

a) unless already performed through the implementation of editions 1 and 2 of this operational directive, within 21 days after February 17, 2011, effective date of edition 1 of F-2011-01 directive, perform the following action: for security reasons and for any aircraft to which paragraph 1 refers, any chemical oxygen generator located in the lavatories must be either turned off or removed permanently. This must be done without any passenger on board. The associated oxygen masks must be removed.

b) within 37 months after the effective date of this operational directive – edition 3, ie. before September 27, 2015, install a supplemental oxygen system that meets the requirements of paragraph c) below in the lavatories of any aircraft to which paragraph 1 refers.

c) any modification or STC to comply with paragraph 4) b) of this operational directive must be approved by the European Aviation Safety Agency (EASA) as a major modification within the meaning of Part 21 and the means of compliance must be acceptable to the DGAC regarding security issues.

Are considered as an acceptable means of compliance regarding security issues without the need for further approval by the DGAC:

- Any system of oxygen not using a chemical oxygen generator,
- Any system of supplemental oxygen recognized as acceptable in terms of security by the FAA in the context of AD 2012-11-09 for which modification or STC received approval from the European Aviation Safety Agency.

For any other system, the acceptability of alternative means of compliance regarding security issues is discussed in paragraph 5 below.

The operator shall establish an up-to-date list of the aircrafts on which this operational directive has been implemented. This list should be communicated without delay to the authority on request.

5. ALTERNATIVE MEANS OF COMPLIANCE

Any operator may submit to the DGAC a request for approval of an alternative mean of compliance with standards of security equivalent to the above provisions. This application request should be sent to the following address: operations-avions@aviation-civile.gouv.fr.

6. MAINTENANCE PROVISIONS

The application of this directive must be conducted in accordance with guidelines and precautions issued by manufacturers, if available.

The operator must take arrangements so that the chemical oxygen generators removed or disabled as well as the associated oxygen masks are not replaced during a maintenance action after the application of this directive.

For aircrafts already in operation and on which edition 1 of the directive has been applied, the oxygen masks for which the generators have been disabled must be removed within one month following April 18, 2011, effective date of edition 2 of this directive.



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7. TEMPORARY OPERATIONAL PROCEDURES

Prior to the application of the requirements of paragraph 4) b) of this operational directive - edition 3, the operator must establish operational procedures to ensure that adequate on a particular aircraft, the captain has information about the application of this directive. Operational procedures of the operator must cover at least the measures in paragraphs 7.1 to 7.4 below.

These procedures are no longer required after compliance with paragraph 4) b).

7.1 - Protection of the crew

- Provision of respiratory support

Within four months following April 18, 2011, effective date of edition 2 of this directive, the operator must provide the crew with a portable respiratory assistive device suitable for the prevention of high altitude hypoxia and establish specific procedures for its use.

Provided the approval of the Authority, the operator may implement an alternative solution with the same objective of protecting the crew and ensuring an equivalent level of safety.

- Extent of protection

In case of depressurization, the cabin crew should check, as soon as flight conditions permit, the presence or absence of crew in the lavatories in order to provide them with assistance if their condition requires.

7.2 - Protection and warning to passengers

- Warning

The operator must ensure that the passenger is informed that the system of oxygen supply in the lavatories is disabled. To this end, within four months following April 18, 2011, effective date of edition 2 of this directive, a placard must be applied within the lavatories specifying that the system of oxygen supply is disabled and instructing the passengers to evacuate immediately the lavatories to reach the nearest place with a source of oxygen available at the announcement of the crew. The operator must ensure consistency between the wording of the placard and the wording of the announcement.

The announcement of the crew for passengers in the lavatories must be included in crew procedures regarding depressurization.

- Extent of protection

In case of depressurization, the cabin crew should assess, as soon as flight conditions permit, the presence or absence of passengers in the lavatories in order to provide them with assistance if their condition requires.

7.3 - Impacts on the minimum equipment list (MEL)


The MEL should be amended to be consistent with the objectives of this directive.

- Item: oxygen supply in the lavatories

The MEL should be amended to reflect the inclusion of this directive, including the fact that despite the deactivation of the oxygen supply system in the lavatories, they are not unserviceable under the application of the F-2011-01 directive.

- Item: oxygen supply in galleys

The MEL must impose a corrective period of up to 3 days for oxygen supply systems located immediately near the lavatories.

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• Item: first-aid oxygen

The MEL must impose a corrective period for oxygen first aid of a maximum of 10 days.
Note: the first aid oxygen bottles installed in excess of the minimum amount prescribed by regulation may nevertheless have a longer corrective period.

7.4 - Documentary Aspects

The relevant parts of the Operations Manual should be amended in accordance with these procedures within one month following April 18, 2011, effective date of edition 2 of this directive.

8. EXEMPTIONS

The following exemptions are granted until the compliance with the requirements of paragraph 4) b) of this directive edition 3 is met.

• Airworthiness aspects related to Regulation (EC) No 2042/2003

In exemption from Regulation (EC) No 2042/2003, MA 902 (b) 2), an aircraft for which the application of this directive has led to a deviation from the type certificate approved by the EASA are permitted to fly.

This directive stands for an exemption to MA 902 (b) 2) of Regulation (EC) No 2042/2003, for all aircraft types identified in paragraph 1, operated in public transport or in general aviation.

• Operational aspects of Regulation (EC) No 3922/91

Under this directive, the absence or deactivation of chemical oxygen generator in lavatories does not lead to declaring lavatories unserviceable.

*** OPS 1030 - Minimum Equipment List**

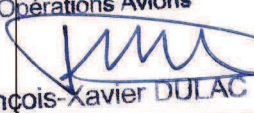
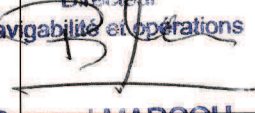
This directive grants authorization in accordance with OPS 1.030 b) to permit the operation of aircraft in deviation from the approved minimum equipment list, only as regards the item on the chemical oxygen generators in the lavatories.

Where such authorization is against the master minimum equipment list, this directive stands for an exemption to allow the operation of aircraft in deviation from the master minimum list of equipment.

*** OPS 1.770 - Supplemental oxygen**

This directive stand for an exemption to the application of OPS 1.770 b) 2) iv) concerning the immediate availability of automatic presentation oxygen masks for each occupant of the plane. This exemption only concerns the oxygen masks removed under application of this directive.

Note: In application of Regulations (EC) No 3922/91, Article 8 and No. 216/2008, Article 14, the DGAC notifies the issuance of this directive to the European Commission and the European Aviation Safety Agency.

Rédaction	FX DULAC Chef du pôle Opérations Avions	Approbation	B. MARCOU L'Ingénieur général des ponts et chaussées
Signature	 François-Xavier DULAC	Signature	 Bernard MARCOU

