

AC NO: 135-5A

DATE: 11/23/76



# ADVISORY CIRCULAR

## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

**SUBJECT:** MAINTENANCE PROGRAM APPROVAL FOR CARRY-ON OXYGEN EQUIPMENT  
FOR MEDICAL PURPOSES

1. PURPOSE. The purpose of this advisory circular is to provide a means whereby air taxi operators may submit a maintenance program to comply with Part 135, Section 135.114 of the Federal Aviation Regulations.
2. CANCELLATION. Advisory Circular 135-5, dated August 19, 1975, is canceled.
3. BACKGROUND. Section 135.114(a)(1)(iii) requires that equipment used for storage, generation, or dispensing of oxygen, and carried aboard aircraft, must be maintained in accordance with an approved program. FAR Part 135 does not prescribe specific rules for maintenance and test of pressure cylinders; however, when approved by the Administrator, the provisions of Operations Specifications are rules which require precisely the same consideration as the Federal Aviation Regulations. In exercising this authority, the Administrator has, in the interest of safety, adopted the rules and regulations of the Department of Transportation as an acceptable method for controlling the hydrostatic and life limits of pressure cylinders through Operations Specifications.
4. GENERAL. Air taxi operators wishing to submit a maintenance program required by Section 135.114 should be encouraged to contact their certificate holding district office prior to development of their program. In this manner, both the operator and the FAA inspector will become mutually aware of the elements necessary for FAA approval.
5. APPLICATION OF DOT 49, CFR 173.301(c). Section 173.301(c), Retest of Container, states: "A container for which prescribed periodic retest has become due must not be charged and shipped until such retest has been properly made."
  - a. Based on an interpretation made by the DOT Office of Hazardous Material, Section 173.301(c) is to be applied as follows:

"Cylinders which remain charged or partially charged on the due date of its hydrostatic test may remain in service beyond the test date providing that the cylinder is retested prior to its next full or partial refilling."

- b. Standards used for approval of pressure cylinders are those established by the Hazardous Materials Regulations Board. CFR 49, Chapter 1, Parts 171-179, prescribe the manufacturing standards and maintenance specifications that pressure cylinders must meet to be eligible for transportation purposes.
6. PREPARATION OF OPERATIONS SPECIFICATIONS, (OMB-04-R0075) FAA Form 1014. Air taxi operators wishing to submit a maintenance program for carry-aboard oxygen equipment should submit an application to amend their Operations Specifications. Operations Specifications are prepared by the operator using FAA Form 1014. The format shown in Figure 1 should be used for amending Operations Specifications relating to the inspection and maintenance of pressure cylinders. It is not intended to list all pressure cylinders on one page. Figure 1 illustrates the various systems which use pressure cylinders and how they will be listed when entering them in the proper sequence and ATA chapter of the approved Operations Specifications. (An example of an acceptable application for amendment of Operations Specifications is shown in Figure 2.) Before approval of a maintenance program, the inspector reviewing the program will consider:
- a. If the schedule for the performance of the inspection and maintenance, whether it be by the time in service, calendar time, system cycles, or by combination, is adequate and in accordance with the provisions of DOT CFR 49, Part 173, currently in effect.
  - b. If the instructions and procedures for the conduct of the maintenance program, including the necessary checks and tests, are in sufficient detail for the maintenance personnel to correctly perform the maintenance without further guidance.
7. REVIEW AND APPROVAL. Operations Specifications - Aircraft Maintenance, Part D, will be reviewed for accuracy and completeness. Operations Specifications may be approved only by those inspectors authorized to perform such functions. (An example of an acceptable Operations Specification is shown in Figure 1.)


  
R. P. SKULLY  
Director, Flight Standards Service

FIGURE 1. OPERATIONS SPECIFICATIONS - Aircraft Maintenance

<small>UNITED STATES OF AMERICA</small> <small>DEPARTMENT OF TRANSPORTATION</small> <small>FEDERAL AVIATION ADMINISTRATION</small> <small>WASHINGTON</small>			<small>Form Approved</small> <small>OMB No 64-R0075</small>
<b>Part D</b>			
<b>OPERATIONS SPECIFICATIONS</b> <b>Aircraft Maintenance</b>			
	<u>Overhaul Period</u>	<u>Inspection &amp; Check Period</u>	
<u>Oxygen, Chapter 35</u>			
Bottle - Oxygen Portable (DOT-3A)	5 or 10 years*	(See CFR 49, Part 173.34(e)(11), (c)(14), (e)(15), and 173.302(a)(1).)	
Bottle - Oxygen Crew (DOT-3HT)	3 years*	(See CFR 49, Part 173.34(e)(13) and 173.302(a)(1).)	
Bottle - Oxygen Passenger (DOT-3HT)	3 years*		
<p>*Inspections, hydrostatic test, and life limits will be accomplished as set forth in Part 173, Chapter 1, Subpart B&amp;G of CFR 49 currently in effect.</p>			
Effective date _____			

**FIGURE 2. OPERATIONS SPECIFICATIONS - Reverse**

FEDERAL AVIATION ADMINISTRATION  
Washington, D. C.

Operating Certificate No. 16-EA-2

ABC Air Taxi, Inc. hereby makes application for amendment of the Operations Specifications appearing on the reverse side hereof, as follows:

**To establish an approved maintenance program for carry-on oxygen equipment for medical purposes for aircraft operated by ABC Taxi, Inc.**

Reasons and supporting data (if insufficient space attach additional page):

**To comply with Section 135.114**

I CERTIFY that the statements submitted in connection herewith are true and that I am duly authorized to make this application on behalf of the applicant.

(to be signed by applicant)

Date July 22, 1976

(Signature)

President

(Title)

INSPECTOR'S RECOMMENDATIONS:

(Signature)

(Title)

The Operations Specifications set forth on the reverse side hereof are .....

Amendment No. ....

By direction of the Administrator:

Effective date .....

(Signature)

Supersedes specifications dated .....

(Title)

Received for the applicant by:

(Signature)

Date .....

(Title)