

UNITED STATES OF AMERICA  
FEDERAL AVIATION AGENCY  
WASHINGTON, D.C.

Civil Air Regulations Amendment 42-27

Effective: February 1, 1960

Issued: January 28, 1960

**PART 42—IRREGULAR AIR CARRIER  
AND OFF-ROUTE RULES**

**Requirements for Use of Oxygen  
Masks by Flight Crew Members of  
Turbine-Powered Airplanes**

Currently effective § 42.27-T(c) provides that on and after February 1, 1960, when operating at flight altitudes above 25,000 feet, one pilot at the controls of the airplane shall wear and use an oxygen mask at all times and all other flight crew members on flight deck duty shall be provided with oxygen masks, connected to appropriate supply terminals, which shall be worn in a manner that will permit immediate placing of the masks on their faces for use, properly secured and sealed.

The date for compliance with this regulation was to have been November 30, 1959, but was deferred for 60 days in order to make further studies of this matter upon representation that this requirement is not necessary to achieve the highest degree of safety in air transportation and that compliance with this regulation may detract from the required crew coordination and adversely affect safety. These studies have been made during the intervening period.

No evidence has been presented during this time which validates the contention that the regulation is not necessary to achieve the highest practicable degree of safety; neither has the claim been substantiated that the regulation would adversely affect safety. It is concluded, therefore, that the original basis for the regulation remains valid and that it should remain in effect.

During the course of the study it was noted that the various types of masks in-

tended to be used in compliance with this regulation differ in the facility with which they can be donned. For example, some masks can be placed on the face with one hand so that they are properly secured and sealed. This is accomplished by having retaining means already in place on the head. This feature permits the mask to be placed on the face with minimum delay and without disturbing headphones, glasses, or hats. Thus, the crew member can proceed with emergency procedures quickly and without distraction. Therefore, it is believed that if all crew members are provided with masks having these characteristics, safety would not be adversely affected by permitting the aircraft to be operated at flight altitudes up to 30,000 feet without requiring one pilot at the controls to wear and use an oxygen mask. Therefore, the regulation is being relaxed to the extent that a pilot need not wear a mask at or below 30,000 feet if all flight crew members are equipped with masks having these characteristics. In order for any air carrier to take advantage of this relaxation, it will be necessary for existing masks to be reevaluated by a satisfactory demonstration of these characteristics to a representative of the Administrator.

It should be emphasized, however, that the Federal Aviation Agency will continue to study the need for and use of oxygen masks by flight crew members. If shown necessary by service experience, additional rule making action will be undertaken.

Since this amendment grants relief by extending the altitude above which masks shall be worn in compliance with a requirement of the Civil Air Regula-

tions, the Administrator finds that notice and public procedure hereon are not necessary, and that this amendment may be made effective immediately.

In consideration of the foregoing, § 42.27-T(c) of Part 42 of the Civil Air Regulations (14 CFR Part 42, as amended) is amended as follows, effective February 1, 1960:

§ 42.27-T Supplemental oxygen for emergency descent and for first aid; turbine-powered airplanes with pressurized cabins.

\* \* \* \* \*

(c) *Use of oxygen masks by flight crew members.* When operating at flight altitudes above 25,000 feet, one pilot at the controls of the airplane shall wear and use an oxygen mask at all times and all other flight crew members on flight deck duty shall be provided with oxygen masks, connected to appropriate supply terminals, which shall be worn in a manner that will permit immediate placing of the masks on their faces for use, properly secured and sealed: *Provided*, That the one pilot need not wear a mask at or below 30,000 feet if all flight crew members are equipped with a quick-donning type of oxygen mask which is demonstrated to be satisfactory to a representative of the Administrator.

(Secs. 313(a), 601, 604, 72 Stat. 752, 775, 778; 49 U.S.C. 1354(a), 1421, 1424)

Issued in Washington, D.C., on January 28, 1960.

E. R. QUESADA,  
Administrator.

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