UNITED STATES OF AMERICA
CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

Civil Air Regulations Part 41
Interpretation No. 1
Adopted: March 23, 1949

ADDITIONAL CREW COMPLEMENT REQUIREMENTS
FLIGHT RADIO OPERATORS

The following interpretation of Part 41 of the Civil Air Regulations is being promulgated pursuant to § 205(a) of the Civil Aeronautics Act. It is adopted as part of the regulations. Its purpose is to assist the Administrator, the air carriers, and the airmen affected in determining the effect of Civil Air Regulations Amendment 41-1, dated October 5, 1948, on the number of flight radio operators required for certain types of operations.

Since this is an interpretation of the regulations, notice and public procedure are unnecessary, and it may be made effective without prior notice.

In consideration of the foregoing, the Civil Aeronautics Board hereby issues the following interpretation of the requirements of Part 41:

MINIMUM CREW COMPLEMENT -- FLIGHT RADIO OPERATORS

We have been asked for an interpretation of the effect of Civil Air Regulations Amendment 41-1, dated October 5, 1948, on the minimum number of flight radio operators required on a scheduled flight of over 12 hours from airport to airport, where radio telegraphy is necessary for communication with ground stations over a route segment of the flight which is less than 12 hours in length.

Section 41.312 of the Civil Air Regulations provides that "when one flight radio operator is required the flight-time limitations prescribed in § 41.3041 apply. When two or more flight radio operators are required, the flight-time limitations of § 41.3042 apply." Section 41.3041 states that where a crew consists of two pilots and an additional flight crew member, a "pilot may not be scheduled to fly more than 12 hours during any 24 consecutive hours." Since aircraft with which the regulation is concerned require two pilots at the controls at practically all times, the phrase "scheduled to fly" as used in this section does not necessitate precise definition with respect to the flight time of pilots since they are on duty throughout the flight. However, the expression is ambiguous when applied to radio operators whose duty watch, from a safety standpoint, need not in all instances be continuous from airport to airport while the aircraft is in the air. As applied to such airmen the term "to fly" when used as part of the phrase "scheduled to fly," may be interpreted in two possible ways -- it may mean the entire time the aircraft is in the air, or it may mean the time the radio operator is on flight duty on the aircraft.

In dealing with this problem it is necessary to bear in mind that the Board's power over maximum hours of service of airmen derives from section 601(a) of the Civil Aeronautics Act and relates solely to promoting safety of flight in air commerce. It is evident that the Board does not consider that an airman's being in the air for more than 12 hours creates a hazardous condition in and of itself, for exactly such a situation is contemplated in § 41.3042 with respect to pilots. In effect, what is required by that section is that when the flight is to be of more than 12 hours' duration, provision be made for a relief pilot to permit the captain and first officer to be relieved from time to time of the strain of a continuous flight watch. The same principle is applicable to radio operators. Where the radio operator's flight watch is scheduled for more than 12 hours in a given 24, it is apparent that a second operator must be carried to relieve the first. However, what is essential is that after 12 hours of duty the radio operator be relieved, not that he be relieved by another operator, and consequently, if such relief is afforded by reason of the fact that the radio operator's services are not required for the operation of the aircraft for more than 12 hours, the same safety standard would appear to have been met.

Prior to the adoption of Amendment 41-1 on October 5, 1948, which specifically defined what was intended by "route segment," it may not have been clear in all cases when a radio operator was required to be on flight duty under the regulation. However, since the adoption of § 41.39(g), the Administrator is permitted to specify the exact limits of a route segment, which may be considerably more confined than the route between the airports of take-off and landing for the flight. Thus, under the regulations, the time scheduled over the route segment or segments for which the Administrator has determined radio telegraphy is necessary represents the minimum on-duty time for which a flight radio operator is required. If the air carrier desires to maintain a radio flight watch beyond the minimum time thus prescribed or to utilize the services of the airmen in some other certificated capacity on the flight, of course, the time so spent must be included as part of the airman's on-duty flight time.

Accordingly, we interpret "scheduled to fly" as used in § 41.3041 and as applied to radio operators as meaning "scheduled for flight duty on the aircraft." Thus, only one flight radio operator is required on a scheduled flight of over 12 hours from airport to airport where such operator is only required or assigned for duty as an airman over a route segment which is less than 12 hours in length.

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan
Secretary

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