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

Effective: September 24, 1957 Adopted: September 23, 1957

SPECIAL CIVIL AIR REGULATION

REQUIREMENTS FOR PILOT ROUTE QUALIFICATIONS IN SCHEDULED INTERSTATE AIR CARRIER OPERATIONS AND SCHEDULED AIR CARRIER OPERATIONS OUTSIDE THE CONTINENTAL LIMITS OF THE UNITED STATES

Section 40.303 (c) of Part 40 of the Civil Air Regulations requires in part that each pilot in command make an entry into each regular, provisional, and refueling airport into which he is scheduled to fly. Section 41.50 of Part 41 of the Civil Air Regulations provides in part that a pilot in qualifying over a route shall make at least one round trip or two one-way trips over the route, including a familiarization flight at each regular, provisional, or refueling airport, with one of the air carrier's check pilots. Sections 40.304 and 41.51 governing the maintenance and re-establishment of route qualifications require under certain circumstances that the provisions of \$\$ 40.303 and 41.50 be complied with by the pilot in command. The Board, on September 20, 1956, promulgated Special Civil Air Regulation SR-418. This regulation permitted air carriers, with the approval of the Administrator, to qualify their pilots at airports by means other than by physical entry. SR-418 terminates on September 23, 1957.

Civil Air Regulations Draft Release No. 55-3 was circulated on January 20, 1955 (20 F.R. 550; January 25, 1955). This draft release dealt with the overall problem of pilot airport and route qualification and considerable emphasis was placed on recent developments of motion picture panoramic views of airports and their environs which showed excellent promise of providing an effective means for insuring pilot airport qualification. The Board expressed the view that the regulations should be amended in a manner that would encourage further research and development of the visual training aids programs by various commercial sources and at the same time provide more acceptable airport qualification rules for use in the meantime. Furthermore, the Board stated that it would seem appropriate to permit methods of airport qualification other than physical entry, provided that such alternative methods had the approval of the administrator.

Following publication of Draft Release 55-3, the Board promulgated a series of Special Civil Air Regulations (SR-413, SR-41h, and SR-418) as a vehicle for permitting the controlled introduction of new techniques in airport and route qualification. These included the use of pictorial means which enable pilots to qualify at specified airports by using within the training programs, color motion pictures or slides showing clear daylight views of the complete physical layouts of the airports, surrounding terrain, obstructions, approaches to all runways, restricted areas, and conspicuous reference points that are of value to pilots. Also under these special regulations air carriers were authorized to conduct operations at an airport in close proximity to an airport into which pilots were qualified when the Administrator found that such pilots were adequately qualified at the new airport. In making such findings the Administrator took into consideration such things as the familiarity of the pilots with the layout, surrounding terrain, location of obstacles, and instrument approach and traffic control procedures at the new airport. In addition, under SR-418 (21 F.R. 7265; September 25, 1956) initial qualification into an airport was expressly permitted if such initial entry were made under VFR weather conditions at the particular sirport involved.

The Bureau of Safety circulated Civil Air Regulations Draft Release No. 57-19 on August 12, 1957 (22 F.R. 6595). In this release the Bureau proposed to continue for an additional experimental period of one year the provisions of Special Civil Air Regulation No. SR-418 with the additional provision that maintenance and requalification of route and airport qualifications could be accomplished in accordance with SR-418. Information received by the Bureau from the airline pilots and the CAA has indicated that the pictorial methods of airport qualification have been successful and in many cases were considered to be superior to actual entry. All interested persons, in responding to Draft Release 57-19 indicated furthermore that SR-418 should be extended.

As was indicated in Draft Release 55-3, Jamary 20, 1955, one of the principal purposes of these special regulations has been to provide sufficient opportunity for evaluation of pictorial means of airport and route qualification by industry and government alike in order to guide the Board in its final action in amending the Civil Air Regulations. In the light of the favorable experience to date, there is every reason to believe it will be appropriate to take final action to amend the Civil Air Regulations upon the termination of the special regulation prescribed herein or sooner. Accordingly, prior to the termination of this special regulation, a proposal to incorporate its substance into Parts 40 and 41 of the Civil Air Regulations will be circulated for comment in accordance with public rule making procedure.

It should be clearly understood that this regulation will not relieve any air carrier of the responsibility of showing that each pilot in command is thoroughly qualified for the routes and airports which he is scheduled to serve.

Interested persons have been afforded an opportunity to participate in the making of this regulation, and due consideration has been given to all relevant matter presented. Since it would not be in the public interest to permit existing authority to lapse for 30 days, and since this regulation is permissive and imposes no burden on any person, the Board finds that good cause exists for making this regulation effective on less than 30 days' notice.

In consideration of the foregoing, the Civil Aeronautics Board hereby makes and promulgates the following Special Civil Air Regulation, effective September 24, 1957:

Contrary provisions of Parts 40 and 41 of the Civil Air Regulations notwithstanding, an air carrier conducting scheduled interstate operations or scheduled operations outside the continental limits of the United States may, subject to the approval of the Administrator, comply with the following provisions in lieu of the applicable provisions of 88 40.303 and 40.304 or 41.50 and 41.51:

- (a) The air carrier shall be responsible that each pilot in command is thoroughly qualified for the route over which he is to fly aircraft in scheduled air transportation as a pilot in command. An air carrier shall not utilize a pilot as pilot in command until he has been qualified for the route on which he is to serve at least in accordance with paragraphs (b), (c), (d), and (e) of this regulation and the appropriate instructor or check pilot has so certified.
- (b) Each such pilot shall demonstrate adequate knowledge concerning the subjects listed below with respect to the route to be flown. Those portions of the demonstration pertaining to holding procedures and instrument approach procedures may be accomplished in a synthetic trainer which contains the radio equipment and instruments necessary to simulate the navigational and letdown procedures approved for use by the air carrier:
 - (1) Weather characteristics.
 - (2) Navigational facilities,
 - (3) Commication procedures,
 - (4) Type of en route terrain and obstruction hazards.
 - (5) Kinimum safe flight levels,
 - (6) Position reporting points,
 - (7) Holding procedures.
 - (8) Pertinent traffic control procedures, and
- (9) Congested areas, obstructions, physical layout, and all instrument approach procedures for each regular, provisional, and refueling airport approved for the route.
- (c) Each such pilot shall make an entry as a member of the flight crew at each regular, provisional, and refueling airport into which he is scheduled to fly. Such entry shall include a landing and take-off. The qualifying pilot shall occupy a seat in the pilot compartment. He shall be accompanied by a pilot who is qualified at the airport.
- (d) Such pilot shall not be required to mest the entry requirements of paragraph (c) of this regulation when:
- (1) The initial entry is made under VFR weather conditions at the particular airport involved; or
- (2) The air carrier shows that the pilot airport qualifications can be accomplished by an approved pictorial means; or
- (3) The air carrier notifies the Administrator that it intends to conduct operations at an airport inclose proximity to an airport into which the pilots involved are presently qualified by entry, and the Administrator finds that such pilots are adequately qualified at the new airport. The Administrator, in making such finding, shall take into consideration at least the familiarity of the pilots with the layout, surrounding terrain, location of obstacles, and instrument approach and traffic control procedures at the new airport

(e) On routes on which navigation must be accomplished by pilotage and on which flight is to be conducted at or below the level of the adjacent terrain which is within a horizontal distance of 25 miles on either side of the center line of the route to be flown, the pilot shall be familiarized with such route by not less than two one-way trips as pilot or additional member of the crew over the route under VFR weather conditions to permit the qualifying pilot to observe terrain along the route.

This regulation supersedes Special Civil Air Regulation No. SR-118 and shall terminate September 23, 1958, unless sooner superseded or rescinded by the Board.

(Sec. 205 (a), 52 Stat. 984; 49 U.S.C. 425 (a). Interpret or apply secs. 601, 604, 52 Stat. 1007, 1010, as amended; 49 U.S.C. 551, 554)

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan Secretary

(SEAL)