Affects Part: 40
Distribution: General

Regulation No. SR-414

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

Effective: December 23, 1955
Adopted: December 23, 1955

SPECIAL CIVIL AIR REGULATION

REQUIREMENTS FOR PILOT ROUTE QUALIFICATIONS IN SCHEDULED INTERSTATE AIR CARRIER OPERATIONS

The Board has received a petition from American Airlines, Inc., (American) dated December 2, 1955, requesting permission to qualify its pilots into airports at Pittsburgh, Pennsylvania, and Houston, Texas, by means other than those presently required by § 40.303 (c) of Part 40 of the Civil Air Regulations. This section requires in part that each pilot in command make an entry into each regular, provisional, and refueling airport into which he is to be scheduled to fly.

On January 20, 1955, the Bureau of Safety Regulation published Civil Air Regulations Draft Release No. 55-3, "Scheduled Air Carrier Pilot Airport Qualification Without Prior Take-off and Landing." This proposal was concerned with the overall problems of pilot airport and route qualification. 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 objective of this draft release was described in the preamble in part as follows: "The Bureau is of the opinion that, with necessary safeguards, the regulations should be amended in a manner that will encourage further research and development of the visual training aids program by various commercial sources and at the same time provide more acceptable airport qualification rules for use in the meantime. Accordingly, it would seem appropriate to permit methods of airport qualification other than physical entry, provided that such alternative methods have the approval of the Administrator." Response to the draft release was generally favorable.

Following publication of the draft release, Pan American World Airways, Inc. (PAA) petitioned the Board to permit qualification of pilots in command on the Manila-Saigon-Singapore route by means other than those presently required by Part 41 of the Civil Air Regulations which applies to air carrier operations outside the continental limits of the United States. The PAA request was based, among other things, upon the consideration that PAA had developed a comprehensive training program utilizing color motion pictures showing clear daylight views of the complete physical layout of the airports, surrounding terrain, obstructions, approaches to all runways, restricted areas, and conspicuous reference points that would be of value to the pilot. The Board was also advised that certain

procedural safeguards had been agreed upon by the Civil Aeronautics Administration, PAA, and the pilots concerned. The Board considered that PAA's program would provide a timely opportunity for evaluation of a means of airport and route qualification by industry and government alike and was of the opinion that a Special Civil Air Regulation was the appropriate vehicle for permitting the controlled introduction of the new techniques. Accordingly, the Board adopted Special Civil Air Regulation No. SR-413, effective September 23, 1955, to permit PAA, with the Administrator's approval, to proceed with its plans and also to permit other Part 41 carriers to request of the Administrator similar approval should they be in a position to do so. Special Civil Air Regulation No. SR-413 terminates on September 23, 1956.

American bases its request upon considerations which are substantially the same as those which the Board found justified the issuance of SR-413. In lieu of actual entry, American proposes to familiarize its pilots with the layout, obstructions, approaches, and the relationship of approaches to obstructions at the Pittsburgh and Houston airports through the use of color slides taken from such positions in the air as will best display these features and their relationship to each other. Also, American advises that any pilot qualified by this method will be accompanied by a flying supervisor on his first scheduled flight. In addition, American states that the pilots concerned concur in this request. The Civil Aeronautics Administration has cooperated with American in the development of its proposed qualification program and is actively interested in exploring fully the possibilities offered by this medium of airport qualification.

The Board is of the opinion that American's program will provide an excellent opportunity for further evaluation of a pictorial means of airport and route qualification, and that it is appropriate to promulgate a Special Civil Air Regulation to permit the controlled introduction of the new techniques in air carrier operations conducted pursuant to Part 40 of the Civil Air Regulations. This will permit American, with the Administrator's approval, to proceed with its program and will also permit other carriers to request of the Administrator similar approval should they be in a position to do so. It should be clearly understood that this temporary 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. Furthermore, nothing in this regulation should be construed to prejudice final action by the Board on the proposals presented in Draft Release No. 55-3.

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 imposes no additional burden on any person, this regulation may be made effective without prior notice.

In consideration of the foregoing, the Civil Aeronautics Board hereby makes and promulgates the following Special Civil Air Regulation, effective December 23, 1955.

Contrary provisions of Part 40 of the Civil Air Regulations notwithstanding, an air carrier conducting scheduled interstate operations may, subject to the approval of the Administrator, comply with the following provisions in lieu of the provisions of § 40.303:

(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), and (d) 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) Communication procedures,

(4) Type of en route terrain and obstruction hazards,

(5) Minimum 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. **Unless impracticable, such entry shall be made under day VFR** to permit the qualifying pilot to observe the airport and surrounding terrain, including any obstructions to landing and take-off. The qualifying pilot shall occupy a seat in the pilot compartment and shall be accompanied by a pilot who is qualified at the airport: Provided, That such entry shall not be required if the air carrier shows that

pilot airport qualification can be accomplished by other means approved by the Administrator.

(d) 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 shall terminate September 23, 1956, 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)