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

Effective: September 23, 1955
Adopted: September 23, 1955

SPECIAL CIVIL AIR REGULATION

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

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.

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, in particular, 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.

During consideration of the comment in response to Draft Release No. 55-3, Pan American World Airways, Inc. (PAA) petitioned the Board to permit qualification of pilots in command commencing September 26, 1955, on the Manila-Saigon-Singapore route by means other than those presently required by § 41.50 of the Civil Air Regulations.

PAA based its request on the following considerations: PAA plans to start operations over this route using B-377 aircraft on September 26, 1955; under the present requirements of Part 41 it would be necessary for PAA to qualify 44 pilots and 12 check pilots over routes and into airports for

the Manila-Saigon-Singapore-Manila route; aside from the economic factor required for movement of this pilot group, the time element would be excessive, requiring eight months; PAA has developed a comprehensive training program based on the use of color motion pictures including 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 are of value to the pilot; these films will also include a running narrative of various conditions pertinent to airport familiarization; an anamorphic lens will be used for wide-screen projections; in addition to viewing motion pictures, each pilot will be required to complete successfully a written and oral examination on the subjects listed in Draft Release No. 55-3 with respect to the route to be flown, including demonstration to a check pilot in a flight simulator of his ability to fly the holding and instrument approach procedure for each required airport; PAA's check pilots in cooperation with the Civil Aeronautics Administration will monitor the effectiveness of this method of airport and route qualifications by periodic spot checking over the route.

The Administrator of Civil Aeronautics has cooperated with PAA in the development of its proposed qualification program and is actively interested in exploring fully the possibilities offered by this new medium of airport qualification. The Board has also been advised that the pilots to serve in the proposed operations consider that they are not in a position either to concur or disagree with PAA's proposed qualification procedures without operational evaluation. The Board is appreciative of the pilots' prudence in this respect, but is confident that the pilots will cooperate fully with CAA, CAB, and PAA in the search for less burdensome means of airport route qualification. In fact, the Board has been advised that procedures have been agreed upon by PAA, CAA, and the pilots whereby the first eight pilots who are qualified for the Manila-Saigon-Singapore route by pictorial means will be accompanied by a check pilot on their initial scheduled trip. An evaluation of these trips will be made prior to the Administrator's endorsement of any means of airport qualification other than those required by § 41.50.

PAA's program will provide a timely opportunity for evaluation of a pictorial means of airport and route qualification by industry and government alike. The Board is of the opinion that a Special Civil Air Regulation is the appropriate vehicle for permitting the controlled introduction of the new techniques. This method will permit PAA, with the Administrator's approval, to proceed with its plans and will also permit other carriers to request of the Administrator similar approval should they be in the position to do so. It should be noted 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. 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 September 23, 1955:

Contrary provisions of Part 41 of the Civil Air Regulations notwithstanding, an air carrier conducting 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 provisions of § 41.50:

(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 his initial operation as a member of the flight crew at each regular, provisional, and refueling airport into which he is scheduled to fly. 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 operation shall not be required if the initial operation is made under VFR weather conditions; And provided further, That such operation 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 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), 32 Stat. 984; 49 U.S.C. 425. 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)