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## UNITED STATES OF AMERICA FEDERAL AVIATION AGENCY

WASHINGTON, D.C.

Civil Air Regulations Amendment 60-27 Civil Aero. Manual Supplement No.

> Effective: May 1, 1962 January 19, 1962 Issued:

[Reg. Docket No. 773; Amdt. 60-27; Supp. 83]

# PART 60-AIR TRAFFIC RULES Radio Communications Failure

Draft Release No. 61-13 published as a notice of proposed rule making in the FEDERAL REGISTER on June 16, 1961 (26 F.R. 5404), gave notice that the Federal Aviation Agency proposed to amend § 60.49, Radio Failure, of Part 60 of the Civil Air Regulations. The reasons for the amendment were outlined in detail in the draft release. All comments received in response to this draft release have been reviewed and given due conderation. The majority of comments ceived either endorsed the proposed sideration. recommended certain rision or Only one comment was in anges. opposition to the amendment.

The proposed rule contained the provision that when weather conditions permit, the pilot shall terminate his flight in VFR conditions and land as soon as practicable. One organization and one individual tempered their concurrence with the recommendation to delete this mandatory requirement. It was contended that the ATC system either cannot or does not want to cope with aircraft which experience radio communications failure in VFR conditions. It is emphasized that the question is not whether the system can or cannot cope with the situation but whether the resultant adverse impact upon other users of the system is reasonable compared to the possible inconvenience to one pilot. Air traffic control provides standard separation to all en route IFR aircraft regardless of weather conditions. When a radio communications failure occurs, a near emergency situation is sometimes created, in that it may become necessary for air traffic control to reroute or reclear a substantial number of IFR aircraft in order to maintain proper separation. In essence, air traffic control is often forced, for reasons of safety, to grant priority to the aircraft experiencing the failure. It is not considered logical to permit an aircraft which is in VFR conditions to continue an extended flight to the destination at the possible inconvenience of other aircraft using the

system. As stated in the Draft Release. the simplest way to eliminate such a problem is to remove the source, i.e., to require the pilot of the aircraft experiencing the malfunction to land.

In the original proposal, the requirement to terminate the flight under VFR would not apply to operations conducted within positive control airspace. Upon consideration of the safety factors involved, it has been determined that the requirement to land VFR should also apply to this airspace. Therefore, this regulation provides that, regardless of the airspace involved, when VFR conditions prevail the flight must be terminated as soon as practicable. It should be emphasized the pilot of an aircraft in such circumstances is fully responsible for the separation of his aircraft from

It is not intended that the requirement to "land as soon as practicable" be construed to mean "as soon as possible." The pilot, of course, retains his prerogative of exercising his best judgment and is not required to land at an unauthorized airport, at an airport unsuitable for the type of aircraft flown, or to land only minutes short of his intended destination. The primary objective of this provision of the rule is to preclude extended IFR operations in the air traffic control system in VFR weather conditions. The regulation does not prohibit the pilot experiencing radio communications failure, after landing and cancelling his IFR flight plan, from taking off again and proceeding to the destination in accordance with VFR if he so desires.

The Air Line Pilots Association (AliPA) recommended that in the event of radio communications failure, a pilot would proceed according to the route and altitude filed in the flight plan. rather than via the route and altitude specified by air traffic control. Such a provision would require a pilot to proceed via the filed route which might be a considerable distance away from the route specified in the air traffic control clearance. In a similar manner, a pilot who has been assigned an altitude other than his filed altitude within a route structure would be required to climb or

to descend, as might be appropriate, to the filed altitude. Obviously, pilot action which would disregard an ATC clearance and revert to a filed flight plan is not feasible since it is virtually impossible to develop procedures for transition to flight planned route and altitude which would be applicable in all situations.

ALPA also suggested that, when a climb to a higher route structure is necessary, the pilot should climb to the altitude or flight level specified in the flight plan rather than the cardinal altitude at or above the MEA of the filed route structure. Since pilots often may file multiple altitudes or multiple route structures in a single flight plan, such a regulation would only compound the problems and impair the ability of air traffic control to provide proper separation. It is concluded that one easily determined and easily recalled altitude for application during radio communication failure is imperative to meet the

needs of the pilot and the air traffic control system.

The Air Traffic Control Association (ATCA) suggested that when a climb to a higher route structure is necessary, the pilot should be required to exercise his emergency authority and initiate climb at his discretion. Such a requirement would eliminate the provision to "initiate climb ten minutes after passing the first compulsory reporting point over which the failure prevented communications with air traffic control." ATCA contended that the controller would not. in all cases, be able to provide standard separation in the event of such a climb. This contention may be valid in some cases; however, the ten minute delay before initiating climb will provide a margin of safety which is considered indispensable. In addition, to require a pilot to use such emergency authority is not feasible since in most cases pilots do not consider radio communications failure to be an emergency situation.

British Overseas Airways Corporation suggested that transponder procedures be developed for use during radio communications failure. While such procedures would be very advantageous, the lack of decoding equipment in ATC facilities at present prohibits the adoption of this suggestion. The implementation of transponder procedures is contemplated when adequate decoding equipment becames available.

The one comment in opposition to the amendment contended that it would not be possible for military jet aircraft to complete certain flights if radio communication failure provisions require that the operation be conducted at Flight Level 240. It was recommended that the rule be amended to require a cruising altitude advisory prior to take-off in order that the pilot might proceed to his destination at the flight level advised by ATC. Procedures currently in effect provide that when a pilot is not issued a clearance within the filed route structure, the pilot must be issued an advisory as to when he may expect a clearance to an altitude in the requested structure. Since this procedure appears to satisfy the objective of this recommendation, it is not considered necessary to alter the provisions of the rule.

It is virtually impossible to promulgate a rule which provides definitive action for every conceivable eventuality associated with radio communications failure. Such a rule would be too voluminous for ready comprehension and application. Conversely, it is not intended to promulgate a rule so brief or general as to be ambiguous. It is not intended to attempt to regulate emergency or near emergency situations. For example, the rule omits reference to the problems arising from a missed approach. The circumstances would be so unpredictable in such a situation that it is considered that an emergency would exist and, as such, would not be subject to regulation.

Concurrently with the adoption of the rule contained herein, detailed procedures which shall be followed in the event of radio communications failure

will be published in the Flight Information Manual. All necessary supplementary data will be consolidated in this pub-The Flight Information lication. Manual will henceforth be the sole source of PAA supplementary material applicable to radio communications failure.

In consideration of the foregoing, Part 60 of the Civil Air Regulations (14 CFR Part 60) and Civil Aeronautics Manual 60 are amended as follows:

1. By amending \$60.49 to read as follows:

### § 60.49 Radio communications failure.

In the event of two-way radio communications failure the pilot shall comply with the following procedures, unless otherwise authorized by air traffic

- (a) VFR conditions. If the failure occurs in VFR conditions or if such conditions are subsequently encountered, continue flight under VFR and land as soon as practicable.
- (b) IFR conditions. If the failure occurs in IFR conditions or if the provisions of paragraph (a) of this section cannot be followed, continue flight to the airport of destination.
- (1) Route. Via the route specified in the last air traffic control clearance received or, if no route has been specified. via the planned route.
- (2) Altitude. At whichever of the following altitudes or flight levels is the higher:
- (i) At the altitude or flight level specified in the last air traffic control clearance received;
- (ii) At the minimum safe altitude; or (iii) At the lowest cardinal altitude or flight level (1,000-foot level), at or above the MEA of the highest planned route structure.

When climb to a higher route structure is necessary, climb shall be initiated, unless required earlier by the minimum safe altitude, 10 minutes after passing the first compulsory reporting point over which the failure prevented communications with air traffic control.

(3) Holding. When holding instructions have been received, depart the holding fix at the expected further clearance time received or, if an expected approach clearance time has been received. depart the holding fix so as to arrive over the radio facility to be used for the approach at the destination airport as nearly as possible to the expected approach clearance time.

(4) Descent. Descent from the en route altitude or flight level shall be initiated at the radio facility to be used for the approach at the destination airport at whichever of the following times is the

later:

(i) The expected approach clearance time, if received:

- (ii) The estimated time of arrival as determined from the flight plan, as amended with air traffic control; or
- (iii) The actual time of arrival over the facility.

## §§ 60.21-1, 60.49-1 [Rescinded]

2. By rescinding \$\$ 60.21-1 and 60.49-1 of Civil Aeronautics Manual 60.

This amendment shall become effective May 1, 1962.

(Sec. 307; 72 Stat. 749, 49 U.S.C. 1348)

Issued in Washington, D.C., on Jap uary 19, 1962.

N. E. HALABY. Administrator.

(As published in 27 F.R. 768, January 26, 1962)

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