

SSA STRONGLY PROTESTS THE PROPOSED APC REGULATIONS

The following letter from the SSA addressed to Daniel E. Barrow, Acting Chief, Airspace and Procedures Division, Air Traffic Service, Federal Aviation Agency, Washington, D.C., is printed here to acquaint the members with the reasons why the proposed lower APC floor should not be imposed on soaring. The points covered in the letter have been developed by the SSA Air Space committee (Doc Mosher, Chairman) and also by H. C. N. Goodhart and Philip Wills in England.

Subject: Docket #64-WA-9

Dear Mr. Barrow:

As was mentioned in previous letters and during our recent telephone conversation, The Soaring Society of America, Inc., (SSA) is extremely concerned over the impact which the implementation of the proposals contained in the above Docket will have on general soaring operations throughout the United States. Area Positive Control down to the 18,000 foot level, and later at even lower altitudes, will, for all practical purposes, eliminate gliding (soaring), and can be virtually guaranteed to "shut-down" soaring throughout this country. As any glider pilot can testify, altitude is the very crux of glider operation — the higher the altitude a glider pilot can attain, the more opportunity he has to translate this into distance, which, in the long run, is the ultimate object of almost every soaring flight. As a result, every sailplane pilot endeavors to reach and maintain high altitudes. In the western part of the United States particularly, this means frequent penetration of the 18,000 foot level and almost constant flight above 14,000 feet during the average cross-country trip.

Although SSA has now worked out arrangements with FAA whereby sailplanes can penetrate into APC space in certain local and specified areas, this arrangement would certainly not be satisfactory at altitudes lower than 24,000 feet. SSA does not feel that the use of "waivers" and special "non-rule procedures" that are issued in the field will be satisfactory for general operations. These have the habit of accumulating accretions of "safety restrictions" that are not realistic, particularly when they are issued by local authority. For example, we can easily point to the present arrangements for glider flight above 24,000 feet — there is considerable dissimilarity in the wording (and effect) of the three existing Center Operations Letters which are in SSA files. In any event, to be of value to soaring, any proposed arrangement would have to encompass virtually all the airspace overlying the entire United States up to 24,000 feet.

The SSA has made a careful study of

the enroute IFR Peak Day Air Traffic from PAA figures covering the year 1963. This, surprisingly, shows that only 8% of the total IFR Peak Day Traffic is carried at the medium altitude levels (14,500 to 24,000 feet). No facts were available to indicate the amount of usage of the medium altitudes on an hourly basis. However, as jet traffic comprised 45% of the number of aircraft using medium altitudes, and jet assignments at these levels are usually on a short term basis, being used primarily for climb and descent, it would appear that the actual density of aircraft at these levels is even less than 8% on an overall basis.

The Soaring Society of America urges that the implementation of APC at altitudes below 24,000 feet be postponed until such time as statistically valid evidence is available to show that such additional control is necessary, and, furthermore, that such additional control will accomplish the overall aim of decreased collision hazard. In addition, the SSA would like to obtain information at which the acceptable risk of collision has been set — in other words, we feel that as long as there is any flying there is some risk of collision however remote; and we would like to know the probability of collision to be anticipated under APC, and also what this risk would be under a regime which did not have APC at the altitudes under discussion. Only by an objective study of such statistical facts can the advantage or disadvantages of increased control be determined. In the past there has simply been a feeling that risk of collision is a bad thing and therefore every reasonable step should be taken to eliminate the risk. As far as it goes, this elementary feeling is right, but the two-follow-up questions which must be answered are:

1. How bad is the collision risk? (Here we want a statistical figure, not an emotional outburst.), and
2. How much control is reasonable

Unless the above questions can be answered at least in some degree, it is not possible to design a logical control system; and if one is designed, the next question that should be answered is: How effective is it in reducing the risk of collision? Only then can a rational opinion be formed as to whether it is reasonable or not, for it must always be born in mind that control will restrict traffic, hence an unnecessary and unreasonable degree of control will restrict the use of the air unnecessarily and unreasonably. A valid statistical approach such as this has hardly been used at all in introducing current systems of air traffic control. It could be that some of the present air traffic regulations even contribute to collisions rather than to their elimination. The number of collisions which have occurred in controlled airspace between aircraft under control is a noteworthy percentage of all collisions.

During the very time that the FAA long-range plan for the National Airspace Utilization System was being prepared, the following paragraph was ap-

ended to an FAA summary of mid-air collisions:

"From this record, we must conclude that the elimination of all collision accidents *cannot be effected by the positive control of air traffic*, or by the segregation of slow and fast aircraft. The record can be substantially improved by the exercise of constant vigilance on the part of all pilots."

Thus, even within FAA, it is obvious that there is a variance of opinion as to the merits of positive control of air traffic.

Past records are an excellent source of valid statistical data, and the SSA wishes to point out that *never, anywhere* in the world, has there been a collision between an airliner and a glider. This figure is hardly susceptible of improvement. Traffic density in the great majority of United States airspace is currently so low that the risk of collision in much controlled airspace arising from human error may well be greater than the random risk in uncontrolled airspace. Hence we get the remarkable suspicion that in some areas air traffic control achieves increased accountability for collisions at a cost of increasing the risk of them happening. If, for instance, it could be agreed that gliding was nationally valuable to the extent of taking an actuarial risk of one collision in 250 years, this could be compared with the current risks of a fatal airliner accident from all other causes, and would readily indicate whether the risks involved were justified.

The SSA wishes to point out that the points and questions raised in this letter apply equally to powered aircraft. Approximately 85-90% of SSA glider pilots are also holders of power aircraft ratings. They include astronauts (2), airline captains (dozens), engineers, scientists, photographers — they all have certain things in common; they all have a great love of flying, they are vitally interested in air safety, they are in favor of increased control over their flying when it can be validly proven that this will decrease the risks involved, they are opposed to control placed on their utilization of public airspace when it has not been proven that this additional control brings about increased safety, and not a single one of their sailplanes is equipped with a radar beacon transponder.

The SSA is looking forward to the meeting scheduled for Wednesday, 27th May, with FAA in Washington in order to discuss Docket 64-WA-9 and its expected impact upon the United States gliding movement. In this letter SSA has endeavored to briefly touch upon some of the points which it would like to discuss in additional detail at that meeting.

SSA wishes to thank FAA for the extension of time which has been granted in order to permit the Society to make comment and attend informal conferences on this subject. However, as has been indicated by specific requests from the General Aviation Council, a 40-day time period, as was originally allowed in the original publication of 64-WA-9 is not sufficient time for any group, large or small, to formulate and present in proper form their opinions to the Agency. SSA has its own magazine SOARING, and all possible haste was made to advise our membership of 64-WA-9, and that information has been printed in the