STATEMENT OF THE HONORABLE LANGHORNE M. BOND, FEDERAL AVIATION ADMINISTRATOR, BEFORE THE HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE, SUBCOMMITTEE ON AVIATION, CONCERNING THE FAA PROPOSAL FOR "CONTROLLED VISUAL FLIGHT" RULES. MARCH 20, 1979.

Mr. Chairman and Members of the Subcommittee:

Thank you for inviting me to appear before you today to discuss the FAA's notice of proposed rule making which would establish Controlled Visual Flight rules.

Before I get into the substance of the proposed rules, let me first make one important point about these proposals, and that is to emphasize that they are just proposals. For reasons I will enumerate in a moment, I reached the conclusion that some refinement of our national airspace system was necessary to reduce the threat of midair collisions. These proposals represent, in our view, one means of accomplishing that objective; but there may exist other alternatives which will meet that same objective. That, of course, is why we are so vitally interested in the public comment we are receiving on these proposals, and why I am so appreciative of having the

opportunity today to hear firsthand the views of the members of this subcommittee who share my concern for the promotion of aviation safety.

I'd like to briefly touch upon one other point, Mr. Chairman, before discussing the proposals. That concerns a statement I have heard recently. The statement is to the effect that our proposed rules would not have prevented the tragic midair collision in San Diego. The statement may very well be supported by the facts once the NTSB concludes its proceedings, but that is not really relevant. The point I want to make is that these proposals are not intended to address the specific circumstances of the San Diego tragedy. As you know, the FAA has already performed an internal study which led us to deal with a number of procedural deficiencies we noted at San Diego, and to treat the site specific issues we encountered. The true relevance of the San Diego accident to our current proposals is that the accident caused us to focus systemwide on the general threat of midair collisions, and, based upon that review, we

have generated for public analysis and comment proposals which address the issue of midair collisions on a systemwide basis.

Let me describe briefly for you what our proposals are--and I want to state once again that they are proposals; proposals which will be considered in the context of the more than 38,000 comments we have already received from the public.

Our notice of proposed rule making proposes two basic changes in the air traffic system.

First, we are proposing to lower the floor of the Positive Control Area from the present 18,000 feet to 10,000 feet over the states east of the Mississippi River and approximately one-third of the State of California. It would be lowered to 12,500 feet over the rest of the country.

Present FAA regulations permit only aircraft operating under instrument flight rules (IFR) in positive control airspace

above 18,000 feet, which means the pilots must be instrument rated, file an instrument rules flight plan, receive air traffic control clearance to enter the airspace, and follow air traffic control instructions. Some special equipment is also required, including an altitude-reporting transponder which transmits information to ground controllers on both an aircraft's identity and altitude.

However, our second proposed change would expand an operational concept called Controlled Visual Flight (which has been applied for years in TCAs) to make it apply in that portion of the Positive Control Area between 18,000 feet and the lowered floor. This would allow non-instrument rated pilots to use the airspace when weather permits. They would receive separation service from air traffic control instead of operating solely on a "see and avoid" basis as they now do. Implementation of positive control below 18,000 feet would begin approximately six months after the rule making is completed.

An adjunct to the proposed rules would be regulatory actions to raise the "ceilings" of 21 existing Terminal Control Areas (TCAs) to meet with the lowered PCA "floor" and to establish 44 new Group II TCAs. The current Group III TCA concept would be deleted as unnecessary. Nonregulatory Terminal Radar Service Areas (TRSAs) would also be established, on a high priority basis, at 80 additional airports.

Terminal Control Areas are terminal airspace configurations in which positive control is exercised over aircraft operating within the defined TCA airspace. Terminal Radar Service Areas provide positive separation to all IFR aircraft and to those VFR aircraft which accept the service. I should note that the vast majority of VFR aircraft do take advantage of the air traffic separation service in TRSAs, both on arrival and departure.

The establishment of new TRSAs will not involve rule making as there is no regulatory requirement imposed on airspace users;

rather, their establishment will make available, on a voluntary basis, added services to participating VFR pilots.

Insofar as the establishment of new TCAs is concerned, a number of persons who have commented on our proposal have apparently been led to believe that our current rulemaking proposal serves as the vehicle for establishing the additional TCAs. This is not correct. Each TCA proposal will be handled by separate rulemaking with full public participation including informal public airspace meetings at each site.

Mr. Chairman, when the concept of TCAs was first proposed in the late 1960s, many concerns were expressed by the general aviation community. I believe it fair to say that TCAs have not turned out to be the "monsters" that they were represented by some to be. In defining the concept of TCAs, we considered carefully the objections raised and were able to make certain modifications consistent with general aviation concerns while preserving the added aviation safety we expected, and have

received, from TCAs. For example, TCAs were divided into Group I and Group II classifications, with fewer requirements for those in Group II because of the lower traffic density at those locations contrasted with those in Group I. It might be helpful for me to again note that our proposed new TCAs are under consideration for inclusion in the Group II category only.

We will carefully consider the comments received on each TCA proposal with a view toward accommodating, through corridors and similar means as much as feasible, the needs and desires of the general aviation community.

Let me make one last point about our establishment of new TCAs. This will not be an "overnight" process. It will be accomplished on a phased, orderly basis; in fact, our current planning for the establishment of the proposed new TCAs calls for several phases culminating in 1983.

In our notice of proposed rule making, we have cited numerous statistics which we feel demonstrate a need for the actions we

are proposing. I won't belabor you with a rehash of all those statistics, but I would like to highlight a few of them.

Insofar as the enroute airspace is concerned, our analysis has shown that a risk of midair collisions exists in the airspace between 10,000 feet and 18,000 feet where uncontrolled VFR aircraft mix with controlled aircraft at high closure rates. For example, in the period January 1976 through September 1978, there were 114 reported near midair collisions between 10,000 and 18,000 feet. Sixty-one of these near midairs involved an air carrier aircraft, 89% (or 54 incidents) of which involved an encounter with an uncontrolled VFR aircraft. Yet, in the airspace above 18,000 feet, where positive control is exercised, there are only an average of 10 near midair collisions reported annually to the FAA. Further, the 10 reported near midairs experienced per year above 18,000 feet should be contrasted with the 1,006 reported near midair collisions from January 1976 to September 1978 that occurred below 18,000 feet. I should point out that these statistics do not fully represent the total of near midair collisions experienced in the system; they represent only those incidents reported to the FAA.

We are proposing to lower the floor of the positive control area to 10,000 feet to offer the demonstrably superior protection of positive control to those persons transiting this higher risk airspace in which, today, VFR aircraft are permitted to mix with the controlled air carriers at high speeds. But rather than imposing on general aviation the instrument requirements and added training requirements necessary for IFR operations, we are proposing to permit Controlled Visual Flight. As noted before, the control to be exercised over these VFR aircraft would offer greater protection from the threat of midair collisions without requiring the special pilot qualifications necessary for IFR operations.

I should also point out again that, in addition to instituting Controlled Visual Flight as a less restrictive means of operation on general aviation than IFR would be, we are proposing lowering positive control airspace to 10,000 feet in only the more densely travelled airspace in the continental

U.S., notably in the East and in a portion of the State of California.

While this effort would provide added protection in the enroute environment where unrestricted speed makes visual avoidance of other traffic more difficult, thus providing a higher level of safety to air carrier passengers, it would also provide the same safety in terms of separation protection to general aviation pilots and the passengers they carry. We should bear in mind that only one midair collision since 1972 has involved an air carrier while midair collisions involving general aviation aircraft alone have occurred at an average rate of 32 per year over the last five years.

Providing added safety protection in the enroute environment is, of course, only one aspect of reducing the threat of midair collisions systemwide. The terminal environment and the roughly 30-mile radius encompassing terminals comprise another element that must be considered. In fact, the vast majority of reported near midair collisions occur below 10,000 feet (892 of

the 1,006 referenced earlier occurred below 10,000 feet). Of these 892 near midairs below 10,000 feet, 196 involved air carriers. Eighty-six percent of these air carrier incidents involved a conflict with a VFR aircraft--put another way, almost 9 out of 10 air carrier near midair collisions below 10,000 feet involved an aircraft which was not under air traffic control. The largest portion, 77%, of these 129 air carrier near midairs occurred within 30 miles of a terminal.

More specifically, in the airspace for which we are proposing TCAs or TRSAs, 106 near midair collisions involving air carriers were reported between January 1976 and September 1978. Fully 87% of these (or 92 incidents) involved an encounter with a VFR aircraft.

An analysis of these statistics reinforced for us the belief that the greatest near-term protection from midair collisions we could provide the travelling public is through expanding the control over aircraft in the terminal environment. This is why we are proposing to establish 44 new Terminal Control Areas in

the airspace around busy terminals which handle from 650,000 passengers to over 5 1/2 million passengers every year with substantial increases in passengers expected for the forseeable future. Since the inception of TCAs, our experience clearly reflects the safety increases from the establishment of TCAs. In 1968, before TCAs were established, there were 271 near midair collisions for those 21 locations now served by TCAs. For those same locations, there were but a total of 64 reported near midair collisions over a period of three full years (1975-1977). This averages out to 1 reported near midair collision per TCA each year. On the other hand, using the 1968 record of near midairs, there was an average of 13 reported near midair collisions per site. To further perceive the benefits of TCAs, it is helpful to focus on this dramatic reduction of reported near midairs in the context of the substantial traffic growth experienced since 1968.

More recent statistics compiled from October 1, 1978 through March 13, 1979, show 196 near midair collision reports filed with the FAA; 30 percent (or 59 of these incidents) occurred

within the airspace we have proposed for PCA, TCAs, or TRSAs. Sixty-eight of the total reported near midair collisions involved an air carrier.

Our proposal to raise the ceilings of existing TCAs to adjoin positive control airspace is intended to offer the vast majority of fare paying passengers the protection of positive control from takeoff to landing by reducing their exposure to uncontrolled traffic in all phases of flight.

We recognize that these airspace proposals have generated controversy. We welcome that interest because the public attention focused on our proposals will help us to shape them in the most reasonable manner feasible. We have done our best to develop a program that goes far toward protecting the flying public while at the same time we have sought, and are continuing to seek ways, to minimize the program's potential burdens on those who use the airspace.

The impact of lowering the positive control airspace should not be as significant to general aviation as the establishment of

new TCAs. For aircraft that presently operate above 12,500 feet, we do not expect there to be any added avionics necessary for Controlled Visual Flight operations. These aircraft are already required to have an altitude encoding transponder and, thus, could be expected to have the other, less sophisticated equipment necessary for CVFR (i.e., a VOR or TACAN, and a two-way radio). For other aircraft, which may not possess a transponder, VOR/TACAN, or radio, there could be added avionics costs. Many aircraft, of course, do not operate at or above 10,000 feet and would presumably be unaffected by the lowering of positive control airspace.

The potential impact on users will be greater, however, in the proposed new TCAs. In the TCAs we are proposing to establish, a two-way radio, a VOR or TACAN receiver, and a transponder would be required. For those aircraft not so equipped, the choice is either to divert their flights to less busy airports or to purchase the required avionics. We recognize that this choice may not be so simple as in the case of the lowered PCA where many operators may elect to fly below 10,000 feet. As an

aside, however, I should point out that we are engaged in a comprehensive program to better equip and improve satellite airports which could provide a meaningful alternative for some of the general aviation community. In addition, our informal airspace meetings will focus on the best means of reducing the burdens of the new TCAs to an absolute minimum.

It may be helpful if I point out for you the costs of the types of equipment which an aircraft owner may need to purchase. It's, of course, important to bear in mind that the items which may be needed would vary from aircraft to aircraft; that new production aircraft would be fully equipped as a general rule; and that many general aviation aircraft are already fully equipped. The range of costs for installed avionics are:

Transponder	$550-$850
Encoding altimeter	$600-$950
Nav/Com (VOR/VHF)	$1,200-$3,000

It should also be realized that the costs of avionics have been coming down and are expected to continue to do so.

Mr. Chairman, I am fully aware that there are those who say that these proposed rules are unduly burdensome, but I assure you I will do my best to minimize such burdens while maximizing the safety benefits for all airspace users. I sincerely believe these rules are a logical evolution of our air traffic system and a reasonable exercise of my statutory mandate to promote aviation safety. While much thought went into the development of these proposals, I fully expect to benefit from the substantial public input we are now receiving. I am not wedded to a particular system--I am committed to air safety.

I expect, Mr. Chairman, that subsequent witnesses will present testimony which expresses a number of concerns they have about the FAA proposals. We are aware of these concerns and intend to weigh them heavily in our rulemaking process. For example, I would expect testimony to be offered that our air traffic system does not have the capability to deal with the expanded control we would be exercising under our proposals. I can assure you, Mr. Chairman, that none of our proposals will be

implemented without my personal satisfaction that we have adequate capacity. Another concern that will likely be expressed today is a concern that access to affected airspace will be more difficult; this concern will be given careful consideration in shaping any rules which may emerge from the proposal. I expect you will also hear that our typical "wedding cake" configuration used for TCAs is an inefficient use of airspace from the perspective of the general aviation community. There will likely be suggestions that some form of corridor be used to separate controlled aircraft from uncontrolled aircraft. They may very well be correct that, in certain terminal areas, this concept could prove to be a more efficient use of airspace while still offering a high level of safety. In our separate rulemaking actions, we will carefully consider the various alternatives in hopes of achieving safe and efficient use of the airspace.

Mr. Chairman, that completes my prepared statement. My associates and I are prepared to respond to questions you may have.