At a contest in High Point, NC, Dick Smith and I had a conversation about the common mistakes that most flyers make, and as a result he sent me a letter detailing them. Dick Smith has judged at many pattern contests including the Nationals.

"As I indicated to you, and with the competition season drawing to a close, I feel flyers could benefit from some of my observations while sitting in the judge's chair during the past year. They pertain to common causes for downgrades in maneuvers that are the easiest to correct, and such that if corrected would result in higher flight scores.

"While I may not recall the particulars of a flight long after completed, there are certain aspects of flights that seem common to many and it's these I would like to present to flyers for their consideration in correcting as may be appropriate. If one or more applies to a flyer, and corrections are made, then higher scores of at least 1/2 to 2 or more points per maneuver will result. The causes for downgrades are not new as they are delineated in the AMA Competition Regulations and the FAI Sporting Code. The astute flyer will quickly see whether my observations fit his/her flying style and go for the higher scores.

"First, however, let me say that I sure hope I don't raise anyone's ire with this summary and my comments. Based on past experience I've found that suggesting improvements to an individual can be touchy but not when in a group, so am taking this tact (group). So, here we go.

"The ten (10) most frequent causes for downgrades during maneuvers that are the easiest to correct and their impact on scoring are:

- 1. No line established between maneuvers. Major
- 2. Flying too close in (i.e. maneuver exceeds 60 degree vertical box). Minor/Major.
- 3. Spin entry not from level flight and/or from a stalled condition. Minor/Major.
- 4. Stall turns have a pivot radius more than 1.5 wingspans. Major.
- 5. Flying out beyond 175 meters from pilot. Minor/Major.
- 6. Radii of loops not constant and/or with flat segments. Minor/Major.
- 7. A/C does not snap. (Must be in a stalled attitude as evidenced by a definite break in the nose flight path) Major.
- 8. Radii of quarter loops in a maneuver (incl. entries and exits) not same. Minor.
- 9. Length of horizontal leg in Top Hat (upright and reverse) not equal to vertical legs. Minor/Major.
- 10. A/C jumps off ground during takeoff; climb out too steep; application of throttle too sudden. Minor.

"As you will note I have not addressed flying out of the box since these downgrades are mostly driven by some of the aforementioned downgrades so that correcting them will minimize any out of box downgrade. It should be obvious that a flyer may be setting himself/herself up for a double hit (i.e. two maneuvers being downgraded in a row) when

flying the first maneuver incorrectly. This occurs when the A/C comes out of one maneuver and goes into the next poorly positioned. An example might be when a center maneuver is flown in too close/high after which the A/C is flown out of the box during the T/A. A good judge will anticipate this sort of flight path and downgrade accordingly.

"One last point, and one I would like to direct to the Novice (but applicable to all), and that is that I seldom see Novice flyers flying lines between maneuvers while in the box. Its just one maneuver into the next. Here again, it's an automatic 2 point deduction for the upcoming maneuver when no line is flown between two maneuvers (see my Cause for Downgrade #1). Thus, the highest possible score for the maneuver, assuming perfection, is now only 8! Even though a judge may wish to let a flyer know about a defect, restraint must be shown during the contest in fairness to all. However, I would think the older and more experienced flyers would be bringing such defects to the Novice flyer's attention whenever observed.

"I hope my comments will help those wondering why they receive the scores they do and will be encouraged to analyze their flying precision and criteria. When considering that one can easily improve a maneuver's score by 1/2 to 2 or more points by just correcting the causes for downgrade I have indicated, it just doesn't make sense to do otherwise. Also, I am confident that it will make contestant judging more sensitive in these areas.

"All for now. Best regards.

I especially want to thank Dick for taking the time to send me this information.