



ARCS NEWS

**AERO RADIO CLUB OF SYRACUSE
CLUB NEWS - FEBRUARY 1993**

NEXT MEETING FEBRUARY 12, 1993 AT WALT'S

Frequency Alert....

At the end of 1992 the Federal Communications Commission issued a Notice of Proposed Rule Making (NPRM - PR Docket 92-235). Implementation of the document would have a profound effect on model frequency use. Developed by the Mobil Land Service, the proposal creates a massive frequency restructuring - the first of its type in 60 years. While the 455 page document

addresses' frequency use in another service (Part 88 of the Code of Federal Regulations) it will also effect part 95 where the RC frequency use lives.

Without becoming too technical the restructuring inserts TWO new frequencies between those presently assigned for modeling use and commercial users. That means we could have a user, higher in

power, transmitting only 2.5 kHz away from many of many of our 72 MHz and 75 MHz frequencies!

Example

Model Channel 12 - 72.030 MHz

New insert 72.0325 MHz

New insert 72.0375 MHz

Present Commercial 72.040 MHz

Not only are these users very close to our frequencies, they are also designated as "mobile" therefore we would never know where they are operating, including right in the pit area at your field! Our equipment will not be free from interference at this spacing!

The technical specifications suggest other concerns may exist as well.

The Academy of Model Aeronautics and Radio Control Manufacturers Association are enlisting your aid in contacting the FCC to express our concern. We've been urged by counsel, to use "every arrow in our quiver" to address this proposal. You and your club are the arrows that can help us make our point. Below you will find a listing for the FCC, and the United States Congress. You are strongly urged to write **NOW** to those people and agencies representing you, expressing your concern! The NOW is very important since the deadline date for comments is February 26, 1993!

The AMA with R/CMA's support is now filing a formal letter of comment through their legal counsel. Three concerns will be used in objecting to the proposal.

1. Safety! RC models are not the stick and tissue items of years ago
2. Economic impact.
3. The number of individuals impacted.

Be assured that we will monitor all actions in this matter carefully and pursue all avenues available. All arrows will be expended YOU are one of them! Your target must be noted in your letter. It is referred to by the FCC as NPRM PR Docket 92-235. Letters are in enclosed for you to

sign and send, and don't delay, time is not on our side.

February 12, 1993

*The Honorable James T. Walsh
United States Congressman
1238 Longworth House Office Building
Washington, DC 20515-3227*

Dear: Mr. Walsh

I am very concerned about proposed rules that are currently under consideration by the Federal Communications Commission (FCC). The proceeding is PR Docket 92-235. If adopted, the new rules will greatly reduce the usability of frequencies currently assigned for model use and increase the risk of accidents and attendant liability for controlling model airplanes.

Our radio control frequencies are in the 72 - 76 MHz band. This band is primarily used for private land mobil dispatch operations. However, our radio control frequencies in this band are far enough apart from the land mobile frequencies that we have been able to share the band without either use interfering with the other.

Now the FCC wants to create more land mobil frequencies by splitting them into narrower bandwidths and rearranging the band plan. As a result, many land mobil frequencies will move closer to the radio control operations. I am told that of the 50 frequencies that are presently available for radio control of model airplanes, only 19 frequencies will be left if these new rules are adopted.

When we fly our model airplanes under radio control, we go to great lengths to assure the safety of the operators and bystanders and the protection of property. Many of our safety precautions involve the careful coordination and use of the radio control frequencies. If the number of usable frequencies is diminished as proposed by the FCC, the remaining frequencies will become congested and the margin of safety will be greatly decreased.

Please understand that many model airplanes have wing spans up to 10 feet and weigh as much as 30 or 40 pounds. The models themselves are expensive to build; but more to the point, they are capable of causing property damage, serious injury, or even death if radio interference causes the operator to lose control of the craft. We often fly our models at organized events and contests where hundreds of operators participate. We need the use of our full complement of radio frequencies in order to assure a safe flying environment.

I do not think it is wise of the FCC to seek to improve conditions of land mobil radio users at the expense of radio control modelers. The FCC may not think we are as important as business users of radios, but we have a considerable investment in our models and in our radio equipment. The hobby provides many hours of enjoyment to thousands of people like myself and contribute to the advancement and development of the commercial aviation industry.

Please help me continue the safe enjoyment of my pastime by not allowing the FCC to carry out its proposals for the 72 - 76 MHz band.

Sincerely,

February 12, 1993

*The Honorable Alfonse D'Amato
United States Senator
520 Hart Senate Office Building
Washington, DC 20510*

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February 12, 1993

*Federal Communications Commission
1919 M Street MW
Washington, DC 20554*

To Whom it May Concern:

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In case you would prefer to compose your own letter I have enclosed the names and addresses of the parties you would contact.

*Senator: Alfonse D'Amato
United States Senator
520 Hart Senate Office Building
Washington, DC 20510*

*Congressman: James T. Walsh
United States Congressman
1238 Longworth House Office Building
Washington, DC 20510-3227*

*Federal Communications Commission
1919 M Street NW
Washington, DC 20554*

Please contact the AMA Technical Department (703) 435-0750 for questions or concerns.

Walt Throne is also accepting the sample letters I enclosed.

Symposium...

The 17th annual Central New York Model Aircraft Show was held at the state fairgrounds on January 23. As usual the ARCS displayed their stuff in effort to grab the coveted "Best Booth Award." Needless to say, we were victorious (what else would you expect). I would like to personally congratulate Rich Settembre for his efforts put forth in coordinating the booth. In case you didn't know, Rich is our resident expert on the Wright Brothers (just ask him). Let's not overlook the other parties involved, Tom Brennan, who graciously supplied the booth header and accessories (as usual, he did it for free). Dave Mathewson for his patience in putting up with Rich (just kidding). Gerd Wirickx, who's stamp is flying all over the county. Thanks guys for winning the award.

Renewals.....

As a reminder to the general membership, the 1993 flying season as just around the corner (although, I do find it hard to believe myself, as I'm writing this letter, it's snowing like crazy) I thought it would be appropriate to remind everyone it is imperative to renew your A.M.A card (just because we are chartered the A.M.A & S.F.A it is still a requirement of this club to possess a valid A.M.A. card)

Calendar of Events...

The WRAMS show at the Westchester County Center in White Plains. The dates of the show are Saturday and Sunday Feb. 23-24, 1993

The Toledo show at the Seagate Centre, April 2,3,4,.

Broken Prop Award...

Be careful, your name could go here!

1992-1993 ARCS CLUB OFFICERS

President

Mike Gosson - 488-6123

Vice President

Dave Mathewson- 487-5998

Secretary

Fritz Ceratt- 689-6329

Treasurer

Gary LaVancher- 469-1348

LESSON 2: FLIGHT CORRIDOR AND SPLIT S TURN...

Last issue we covered the general differences between the various trainer model aircraft, sport models, and pattern planes, as to their capabilities to do aerobatics. In competition, a lot of emphasis is placed on centering the maneuver in front of you, and positioning the flight path parallel to the flying field. But since these articles are aimed at the noncompetitive sport flier, let's discuss why proper positioning is still important.

Proper positioning of aerobatic maneuvers by the sport flier has to do with preventing disorientation. There is no quicker way to crash your model than to practice aerial maneuvers in all sorts of cock-eyed positions relative to yourself. I have seen pilots do loops viewed head on; I have seen Immelmans done directly overhead; and I have seen maneuvers end with the plane swooping dangerously toward the pilot and other people assembled at the flight line. All of these positions can quickly lead to disorientation and to panic. Once you are controlling your plane in a state of panic, the outcome is likely to be a crash. The proper position for a model aircraft performing an aerobatic maneuver is on a flight path running parallel to the flight line, out about 300 feet from yourself. The proper location, within that overall flight path, to execute the maneuver is directly opposite, that is, centered on yourself. An entry and exit altitude of 100 to 200 feet is suggested. You may have to forego practicing many of your aerobatic maneuvers on days of noticeable crosswinds. It takes considerable practice to learn to fly a maneuver crosswind without the plane blowing in on you, or drifting way out. So let's leave that complication for the competition pilots. You, as a sport flier, practice your maneuvers without crosswinds.

Keeping a plane flying level and relatively parallel to the flight line requires mastery of two skills: trimming and the Split S Turn. I won't spend much time on trimming because you should by now know how to set your trim controls to achieve straight and level flight. However it is surprising how many times I have assumed the controls of another pilot's plane, only to find it wanting to both sink and to roll. The other pilot was instinctively holding "up" in his elevator stick, and also holding some aileron correction to overcome the roll, without being conscious of either of these corrections. Unfortunately, when the other pilot would attempt

some simple maneuver, these out of trim conditions would complicate his efforts, resulting in a bad maneuver and perplexity on his part. So get your plane trimmed into straight and level flight. You must be relaxed as you enter or exit a maneuver, and you can't achieve these moments of relaxation if you are not able to let the plane fly itself for awhile. Now the Split S Turn. This form of turning the plane around is employed in model aerobatics to help bring the plane back into the same exact flight corridor we are practicing to hold. The Split S is really a vertical turnaround, instead of the horizontal turn you learned as a student pilot. Employing a vertical turnaround makes it easier to hold your relative in-out flight path, and it also helps hold the proper altitude, which is why the Split S is almost universally used in model aerobatics. When you reach the far end of your flight corridor, and desire to bring the plane back toward you, you perform the Split S by pulling the model into a moderate climb, anywhere up to 45 degrees. Then, roll the plane on its back by applying full aileron, adjusting the wings to level. Once the wings are level, pull back on the elevator stick ("up"), which means you are now coming down out of an ordinary inside loop, back into level flight, and back toward the field. Diagrammatically speaking, you will find the Split S Turn to be almost identical to a "One Half Reverse Cuban Eight." The only difference is that it is not necessary to achieve a perfect 45 degree upward climb in a Split S Turn. In fact when flown by full scale aircraft, or in a combat situation, the plane may simply stay in relatively level flight, roll inverted, and then do a downward half loop, coming out in the desired opposite direction, but at a much lower altitude. But since we are flying so close to the ground, and since we are also interested in coming back at the same altitude we went out, we introduce the upward climb at the beginning of the maneuver, as pictured here. Once you have a feel for the Split S, simply spend time practicing your straight and level flight corridor, back and forth. You will tend to fly too close to yourself. The 300 feet distance out from yourself that is recommended for aerobatics is farther out than you think. It may also take some practice to avoid getting your flight path angled away from the flight line. Strive to be parallel. As you burn off fuel, some down trim in the elevator may be necessary. Good Luck!

