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The CONNECTOR

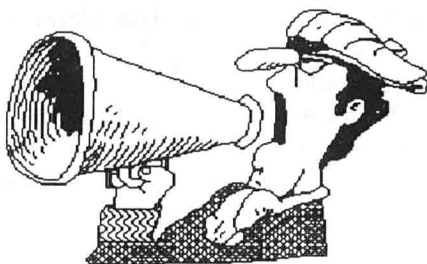
Newsletter of the AeroGuidance Society, Inc.
AMA Chartered Club No. 441

Volume 43 Issue 11

September 1998

Meetings of the AGS are held the 3rd Tuesday of every month at 7:30 PM at the Vestal American Legion.
Changes to time or location will be published in this newsletter.

The Prez Sez
Dave
Lewis



The AGS club picnic was August 23 at Highland Park. Those of you who couldn't make it missed a relaxing afternoon. The weather was warm and breezy, and as I predicted, it didn't rain on my picnic! Lunch featured interesting and varied dishes. After lunch, some of the young folks took to the pool. An informal horseshoe pitching contest got under way. The team of Bob Noll and Hank Martin won the "grand Zucchini" award. Several folks took a spin on the carousel. My thanks to Bev and Joe Perrucci and Charlie and Cathy Hatton for their assistance.

The following Sunday was the annual intra-club contest. The feature event was the egg drop bombing runs. Credit Terry with the most unique "bombing" run. Terry bounced in to a landing and launched the egg toward the target on the second bounce. After timed slalom runs the contest was scored. Bob Noll-1st, Terry-2nd, Jim McKeown-3rd, Bob Frey-4th, new member Jim Gibbore rounded out the top five. A sack of goodies from GJ's was divided up and all entrants went home winners!

September 26 and 27 will be the 15th Annual Float Fly at Greenwood Park. Contrary to rumors the lake will NOT be drained. If you don't have a plane with

floats come out and watch. This event usually features a beautiful collection of Cubs as well as some other interesting planes.

One of our executive objectives for this year was to build our membership through increased public relations effort. At the end of 1997 we had ten members that for various personal reasons did not continue their membership. As of this writing twelve new members have joined our ranks for a net increase of two. Please do your part to make our new members feel welcome.

One last call! The blue notebook that contained engine sound data disappeared from the flight control center at the field. If anyone knows where it might be, we would like it back no questions asked!

NOTICE!
Club Meetings
are back at the
Vestal American Legion

In This Issue

A Message From Our President

A Letter from AMA

Pylon Racing Report

Fall Float Fly Information

Toys for Tots Fly-In

Intra Club Contest Report

Mowing List

Calendar Of Events

Traveler's Advisory

And Much Much More

BE A WINNER ATTEND AGS MEETINGS

Last Month's Winner

Jim McKeown

This Month's Prize

**\$60 GJ's Gift
Certificate**

The Aeroguidance Society, Inc.

P.O. Box 39
Vestal, NY 13850-0039

PRESIDENT:

Dave Lewis 748-2513

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(A-B)

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(C-H)

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(J-K)

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(L-Q)

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(R-Z)

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Committee Chairman

MEMBERSHIP

Scott Edwards 648-4774

PROGRAM

Tom Kopl 687-7424

ACTIVITIES

Frank Gioffredo 748-9858

FIELD

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LIBRARIAN

Jim McKeown 754-7204

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Chuck Krapf 692-4962

SAFETY

Joe Perrucci 785-1713

EDITOR:

Bob Noll 754-5279

AGS Board Meetings

Board meetings of the AGS will generally be held monthly on the Monday of the week following the general membership meetings and are open to all members who wish to bring business to the board. Please contact our President prior to the meeting to notify him of your interest and to get the location of the meeting.

From The Editor...

Lanny and I had a great time at the Family Picnic a few weeks ago. We especially enjoyed the company of the other wives who were there and it was good to see Jean Giles who, not long ago, was still in Wilson Hospital recovering from her surgery. If you weren't there you missed a great affair with delicious food.. And by the way, Hank Martin and I will brag about our horseshoes championship until next year.

In this issue you will see a copy of the letter that the club received from the AMA regarding our "Five Year Leader Club Award". We believe that we are the first club to attain this recognition in District II. Don't forget to ask our Treasurer for your patch and don't just throw it in a drawer, sew it to your club jacket and wear it proudly. And when you are at GJ's, check out the nice plaque on our free standing bulletin board.

On page 6 you will see an advertisement for a new event in the area. It's the Toys for Tots Charity Fly-In on September 19 at the Kirkwood Airpark. This is an open fly for all types and sizes of planes as long as the engine is a .40 cu. in. or larger. How about putting this one on your calendar and help the AGS with a good club representation. I plan to make it a biplane outing and fly my Ultimate and Bucker Jungmann there.

By the way, flying the Bucker Jungmann has been a very pleasant experience complete with its YS 120 Air Chamber motor. I find that it is a very smooth flying biplane and has much less p-factor effect than other bipes I have flown. The greatest thing of all is that there is almost no exhaust on the plane after flying. I guess the shape of the cowl must be just right.

From The Office of the VP

by Jim McKeown

August has now passed and we are entering that time of year when we feel that there hasn't been enough flying. There is still a significant time before we will be forced to enter the winter season.

Don't forget the AGS activities for September. The connector will be out before the Annual Fly in Breakfast on September 12 and the final Pylon races on September 13. I strongly urge you to support these activities. Another annual activity which occurs in September is the fall float fly at Greenwood Park on September 26 and 27. Get those floats on your plane and have a ball! If you don't plan on flying, come out and help put on this event. Dave Lewis is the CD and will welcome any help.

The intra club contest was a little short on attendance but those of us who attended had a great time. I still haven't figured how to drop an egg out of a cup to land in the target. The weather was perfect and we had some great fellowship.

I have indicated that I am willing to run for Vice President again next year. Hopefully, this will make an easier job for the nominating committee. Dave Lewis will be absent from the September meeting and has asked me to officiate.

I also, on a one time basis, have inherited the job of organizing the monthly raffle. It is my understanding that several of the raffled items have been traded at GJ's for similar value. In view of this, figure out what you need from George's this month because the prize is a \$60 gift certificate. You can get those new servos, a two channel radio, covering materials or a myriad of other items all for your participation in the raffle but only if you win. I feel that Dave has done a super job on running this raffle in the past and I hope that he will continue the good work in the new administration.

Again thanks to all for your support throughout the past year.

The CONNECTOR is prepared on an IBM computer. Submissions are happily accepted on 3 1/2" diskette as ASCII or wordprocessing file (preferred). Please send material to Bob Noll, by FAX at 785-1514 (full time dedicated line), by modem at 754-5279 (requires phone call to alert), or by mail to 2317 Acorn Dr., Vestal, NY 13850.

Subscriptions to *The CONNECTOR* can be obtained at minimal cost of \$8.00 by contacting the editor.

SECRETARY'S REPORT

by Bob Frey, Secretary

President Dave Lewis called the meeting to order at 8:20 PM. 20 Members and one guest, Art Reigal, were in attendance. New Associate Member Jim Gibbore was also present.

There were no corrections to the July Minutes as published in the Connector. The treasurer's report was given by Charlie Hatton.

Committee Reports:

Spiedie Fest - Terry Terrenoire reported that we had 53 buddy box flights and sold a number of Delta Darts. We should be able to contribute about \$100 to Catholic Charities.

Club Picnic - Dave Lewis reported that the picnic is scheduled for Sunday Aug. 23 at Highland Park in Endwell, 11:00 am to 5:00 PM. Lunch is set for 1:00 PM. Contact Bev Perrucci (754-3062) if you plan to attend.

Racing - Jim Quinn reported that the next AGS race is on Sept. 13 at 4:00 PM.

Intra Club Contest - Aug. 30 at 2:00 PM at the AGS Field.

Fly In Breakfast - Sept. 12. - Bring a donation to CHOW.

Nominating Committee - Jamie Arnold, Tony Cammarata and Tom Kopl are the committee. Contact them if you desire to run for a club office.

Publicity - Terry Terrenoire reported that he will make 2 presentations in September and that the AGS will have a booth at the Carousel Festival in 1999.

Membership - Our membership is increasing. Two persons, Galen Richmond and Eric Peterson were voted into full membership.

Board Meeting - The next AGS Board meeting is Aug. 24 at Bob Noll's.

Old Business:

AMA labels for airplane identification are available for 25 cents each from the club treasurer. Members who bring a new plane to show and tell will receive a free label.

New Business:

Terry Terrenoire reported that a bus trip is being set up for the WRAMS show this fall. Also Terry can order EAA calendars for those who want them. Terry presented the club with a plaque and jacket patches from the AMA for our five years as a Leader Club.

Old Business: None

Trip Reports:

Bob Frey and Dick Allen attended a fun fly at South Montrose.

Raffle:

Jim Mckeown won the OS 46 engine.

Show and Tell:

Terry Terrenoire showed his Northstar sea plane.

Tony Cammarata demonstrated a tool with various size bits stored in the handle.

Program:

Tom Kopl and Joe Perrucci gave a brief program about flight line safety at the start of the meeting.

Winterizing Your RC Airplanes and Engines

by Tom Kopl, Program Chairman

Bill Underkofler has offered to do the September program on winterizing our model planes and engines. Bill is a long time airplane modeler and will share his expertise with us on preparing our model airplanes and engines for winter storage.

Come to the Sept. meeting and learn how to store your airplanes and engines using the tips Bill will be talking about.

(Ed: Hey Tom, it's only September and I don't want to think about this yet! There's plenty of good flying weather ahead. Don't rush me!)

AGS Events

(at club field unless noted otherwise)

September 26, 27 10 AM

Fall Float Fly

Greenwood Park, Lisle, NY

September 12 9 AM

Fly-In Breakfast

September 13 4 PM

STRC Race #5, AGS Race #5

October 4 4 PM

STRC Race #6, MOB Field

October 20 7:30 PM

Annual Meeting

November 15 TBD

Field Winterizing

Come to the AGS FLY-IN BREAKFAST

Saturday September 12
9 AM at the club field

Pancakes, Sausage, Eggs,
Juice & Coffee

And plenty of flying with our
guests after breakfast.

Don't forget a food item for
CHOW is your admission!

DID YOU KNOW.....

that the AGS has held more float flys than any other club in our area? Do you know when the first AGS Float Fly was held?

See answer on page 5.

DEADLINE FOR ALL CONNECTOR INPUTS IS THE FIRST TUESDAY OF EVERY MONTH. ARTICLES SUBMITTED FOR INTEREST, ADVERTISEMENT OR ANNOUNCEMENT WILL BE CONSIDERED ON A SPACE-AVAILABLE BASIS.

Racing '98

by Jim Quinn

I got back from AirVenture '98 after the deadline for last month's CONNECTOR and when I returned my Sonerai II wingman, Vic Giles, had just taken his wife Jean to the hospital for valve replacement surgery the next morning. So I spent my first day back from Oshkosh, and many days to follow, actually, at the Decker Center. I am sorry the report for STRC Race #3 is late.

AGS RACE # 4

August 11 was our fourth AGS race of the '98 season. The wind was out of the north so we were using runway 15/33. This meant we had a 9 1/2 lap race, not the full 10 laps we fly on runway 6/24. We only had three races at the starting line for this event. Todd Kopl had to scratch for the evening because of a dead airborne battery pack. So the race was down to just two racers, Bob Noll and Jim Quinn. Can you predict the finish order of these three races? Even though the outcome was predictable, no points are awarded without completing a full 10 (9.5) laps. So the races began. Before the first heat Bob remarked to Jim that he just didn't want the two of us to have a mid-air. Remember, Bob's first heat of the STRC season was a mid-air, he had just finished a race at the MOB field where two AGS members were involved in a mid-air.

The title of this evening of racing might have been, "Jim, let me take you to racing school." or "Jim, follow me for the fast way around the course." If you guessed Bob had three first place finishes and Jim always finished second, you were right! As always I am very grateful to all the help we have to keep this important club activity going.

We only have one AGS race left this season, on September 13. You will probably have read this article in the CONNECTOR by then. Please come out to the field that afternoon for some great spectator enjoyment and I know the racers would like to support. This last AGS race of the season is also an STRC race so we should have quite a few planes racing that afternoon. There are some interesting possibilities for season points coming out of our final race. With the current rule

changes for 1998 we are counting four (4) races for season points, not three (3) as in the past. No one can catch Bob Noll who is currently leading and is already season champion. His closest competition, Len Martin with 18 points, can finish no higher than 27 points for the season if he gets three more first places, which is his style. Second place, however, is anyone's race. Len Martin (18) or Tony Vyziak (17) or Jim Quinn (16) or even Jamie Arnold (11) each have the mathematical possibility of finishing in second place. That is quite a racing season to have four of the seven racers each able to finish in second place, depending on the outcome of the final race of the season! Nice racing gentlemen.

So our hat goes off to the 1998 AGS Quickie 500 Champion, BOB NOLL. Bob is always very well prepared for the races, he brings a wealth of racing and just basic flying skills, and just flies a smart race. Congratulations Bob, 1998 Champ!

The statistics look like this:

Place	Pilot	Points
1.	Bob Noll	28*
2.	Len Martin	18
3.	Tony Vyziak	17
4.	Jim Quinn	16
5.	Jamie Arnold	11
6.	Todd Kopl	06
7.	Terry Terrinore	--

* Designates AGS 1998 Quickie 500 Champion.

STRC RACE # 3

The MOB hosted our third race of the season. What you see is not always what you get and the race results are no exception to that rule. Last season's points leader, Bob Noll has climbed back up to third place after his mid-air in the first race of the season. Remember only 4 of the 6 races count for points. Bob had a strong race at the MOB field with a second and two firsts. Len Martin continues to be a major contender with his Intimidator special, the black number 3. I guess Len has the number 3 on his airplane because he usually scores three points. He had two firsts (three points each) and regretfully his final race was a DNF for no points.

Tony Vyziak also had a DNF for his final race of the evening, but not before he finished second and third in his other two races. The real tragedy of the DNFs for two

AGS members was the result of a mid-air. Len and Tony are two of our best racers. Hopefully, we will see the two of them racing again very soon. Terry Terrinore was our third DNF from the AGS that evening. Terry's other two races were a second and a first place. Todd Kopl and Jim Quinn from the AGS were not at the MOB race.

Jim Champion from VRC had a first and two seconds to make him the current points leader with 21 total points. Dan Luchaco also of VRC had a great night finishing first in all three of his races, which makes Dan second in over all points with 18. Remember that Dan had DNFs for all three of his races at the AGS. In 6 races Dan has finished first ALL six times! Luke Giroux of the MOB had two seconds and a third while fellow MOB member Vinnie Quartararo had two thirds and a second. John Hall of the MOB was back for this race after an absence from the AGS race and finished with three third places.

Thanks for a great day of racing Brian!

STRC RACE # 4

The host for the fourth STRC race of the season was Dan Luchaco and our friends from Sayre. The site for the races, however, was the AGS field. About 5:00 Jim Quinn was talking with Bob Noll about the weather conditions for flying that evening. We both agreed that the races should be postponed until Wednesday. When I called Dan to discuss the weather with him, his wife said a group had already left for our field. So off the field I went. As we waited more and more pilots and helpers were arriving. Finally two pilots took a test flight and the races were on.

There was no more rain, but the wind was BLOWING. One flier decided not to fly because of the wind conditions. I don't think I have flown my full size Sonerai II in such windy conditions, much less than a 3.5 pound Scat Cat. Were we racing or surviving? Oddly, all the pilots flew all the heats and there were no equipment problems. The landings were not always the most graceful, some of us landed several more times than the initial touch down, once a pilot made a great landing and as he was rolling out a gust picked him up 6 or 8 feet off the ground, some of us landed in the tall grass, but no one damaged an airplane on landing. We all

(Racing 98 continued)

flew every heat. When the evening was over Dick Allen observed that this type of weather was why he spends the winters in Florida. But it was only the middle of August Dick!

So how did we race? Despite the wind and survival flying the fastest racers usually finished in front. So the races were as competitive as always, the wind not withstanding. There were a few exciting moments, especially as we rounded the northern pylon. On down wind the planes appeared to be really moving. It was a great visual about ground speed vs. air speed. It is hard to appreciate that the planes flew the same speed up wind and down wind, but such is the case. Their indicated airspeed would be more or less constant. So who finished where?

We had two racers from the AGS, Bob Noll and Jim Quinn. Jim and Jim Champion from Sayre had one extra heat to fly which finished the STRC race of June 26 which was postponed due to the low ceiling at the field. When the racers pulled up off the course in the last flown heat of the evening they disappeared into the cloud that covered the field, so the decision was made to fly the final heat of the evening the next time we raced at the AGS field. Luke Giroux of the MOB was back in college so he did not participate in the make up heat. Jim Champion finished first and Jim Quinn was second.

In STRC Race # 4 Bob Noll had a good evening. He finished with 9 total points for the evening, which is 3 first place finishes. Bob has a total of 24 season points. Remember, Bob had a mid-air in his first race which gave him a total of zero points out of a possible 9. There are two races left and only the best four races count for season points. Bob is still seriously in the hunt for first place. Jim Quinn was the other AGS flier for this event. Jim finished with 2 third places and a first place for a total of 5 points. Jim now has 14 season points. Like Bob, Jim has missed one STRC race also.

There were 5 other racers battling the wind and each other for STRC #4. Jim Champion of VRC had a great evening. He had 2 firsts and a second place finish for a total of 8 points. Dan Luchaco also of VRC had a great night too with 1 first and 2 second places for 7 points. The rest of the racing field was made up of MOB members. Brian Tyler had 6 points with a

first, second, and third place finish. Regretfully, Brian had some bad fuel in his second race and limped to a finish on only 1/4 throttle, just to keep his engine running for 10 laps. Vinnie Quartararo finished with 4 points with one second and one third place finish. John Hall had his Bayer Aspirin Special on the line for 6 points. All of John's finished were second place. We were all hoping John's sponsor, Bayer, would have a free sample for each racer after that evening of windy racing. The race itself is enough excitement, but adding in the wind and Bayer certainly spelled welcome relief at the end of the evening.

The current points leader for the season is Jim Champion with 29 points. His two closest competitors are Dan Luchaco with 25 points and Bob Noll with 24 points. Dan and Bob have only flown 3 races, however, so season points are still not a clear issue. Actually they won't be clear until the final race of the season.

Current points standings are:

Place	Pilot	Club	Points
1.	Jim Champion	VRC	29
2.	Dan Luchaco	VRC	25
3.	Bob Noll	AGS	24
4.	Brian Tyler	MOB	17
5.	Tony Vyziak	AGS	15
	Luke Giroux	MOB	15
	Len Martin	AGS	15
8.	Terry Terrenoire	AGS	14
	Jim Quinn	AGS	14
10.	Vinnie Quartararo	MOB	13
11.	John Hall	MOB	9
12.	Todd Kopl	AGS	8
13.	Kevin Lantz	VRC	4

The races are fun, the competition is serious, the volunteer help great. Thanks to everyone who has made Racing '98 a positive and strong club activity.

See you at the races.

Did You Know answer

Way back in the 60's and 70's several club members would occasionally visit the pond in front of the then IBM Owego facility to try their hand at flying from the water. However, the first AMA sanctioned float fly was held at Greenwood Park in the fall of 1983.

AGS MOWING LIST

by Tom Kopl, Field Chairman

The AGS field rules require the presence of two club members for operation of mowing equipment. As a result it is expected that pairs of members will sign up on the mowing list. At least one member must be familiar with operation of the tractor, the other member can use the push mower to do the trim cutting and/or clean the outhouse. The members signed up for mowing will be responsible for finding a suitable replacement if they are unable to maintain their commitment for the scheduled time.

The field should be cut no earlier than Thursday and no later than Saturday noon.

Sept 10 - 12 Terry Terrenoire
 Gib Vandling

Sept 17 - 19 Ralph Jackson
 Dick Allen

AGS On Line

Dick Allen	RCALN@aol.com
Jamie Arnold	harnold@binghamton.edu
Steven Bard	sbard@juno.com
Tony Cammarata	TCANDEC@aol.com
Scott Edwards	sedwards@spectra.net
Bob Frey	RAFREY637@aol.com
Pat Harding	Pharding@stny.lrun.com
Charlie Hatton	chatton@stny.lrun.com
Ralph Jackson	RJANDOJ@aol.com
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Bob Noll	BOBRC@aol.com
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Joe Perrucci	BJKMISTY@aol.com
Bob Punkar	RTPUNK@aol.com
Jim Quinn	JAQFly@ix.netcom.com
Tim Rogers	thr@stny.lrun.com
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Bill Underkofler	junderk@spectra.net
Gib Vandling	gvandlin@stny.lrun.com
	GCVandling@aol.com

Bold type denotes additions or changes.

ACADEMY OF MODEL AERONAUTICS

5151 East Memodal Drive Muncie, Indiana

June 19, 1998

Mr. Terry Terrenoire
Aero Guidance Society, Inc.
101 Smithfield Drive
Endicott, NY 13760

Dear Mr. Terrenoire:

CONGRATULATIONS! The Aero Guidance Society, Inc. has been an AMA Leader Club for the past five years.

Enclosed is a patch for each club member and a mounted certificate to recognize your clubs accomplishments. This is our way of saying THANK YOU for the dedication given to the hobby we all love and enjoy.

If you have any questions or need more patches, please contact me at 765-287-1256, ext. 271.

Again, the Academy of Model Aeronautics appreciates your efforts!

Sincerely,

April Hathaway
Programs Coordinator

Enclosures

I'm Proud!

by Bob Noll

I'm proud to be a member of the AGS and particularly proud of the club's accomplishments. All members will be receiving one of the patches that we have received to commemorate our accomplishment of attaining the AMA Leader Club Award for the past five years.

Sew the patch on either side of the front of your club jacket.

Subj: AOL version 4.0

Date: 98-09-02 11:07:17 EDT

From: XBEAMER (Dave Lewis)

To: BobRC

Bob, I just downloaded version 4.0 of AOL to try and fix a problem I was having. The download is free and takes about two hours. The new version corrected my Internet problem and has a lot of new features I haven't had time to try. Everything seems to run faster.

One of the new goodies is the ability to set automatic spell check on outgoing mail.

The address book now is alphabetized which I think is an improvement. I have a large address book and sometimes have trouble finding people.

You can get a "return receipt" from AOL members when you send them a note.

Toys For Tots Charity Fly-In

Kirkwood Air Park, Kirkwood, NY

Sept. 19, 1998

10 AM to 5 PM

All local area clubs are invited.

NO REGISTRATION FEE

All aircraft types, .40 size and up.

**Directions: From Rt. 81 South, take Exit #1
Follow yellow Air Show signs.**

Admission to the general public will be a toy or \$5.00.

**Clubs that participate will be mentioned in the newspaper
and on several radio stations.**

TRAVELER'S ADVISORY

August 22, 23 Rochester, NY
Rochester International Airshow
Featuring F15 Eagle, F117A Stealth
and F16 Fighting Falcon

September 12, 13 Rhinebeck, NY
Rhinebeck Jamboree for Vintage and
Classic Scale

September 19 Kirkwood, NY
Toys for Tots Fly-In
Kirkwood Air Park

More info on District II activities can be found on the AMA District II web site and in Model Aviation.

WHAT'S THE DIFFERENCE

by Dr. Guenther Eichhorn

ROLLS

Aileron rolls are flown with the rudder and elevator in the neutral position during the roll. The aileron is fully deflected in the direction of the roll. This is the easiest of the rolls to fly. The aileron roll is started by pulling the nose up to 20 - 30 degrees above the horizon. The elevator is then neutralized and the aileron fully deflected in the direction of the roll.

The controls are maintained in that position till the roll is completed. After the roll is completed the nose is usually 20 - 30 degrees below the horizon. The aileron roll is not a competition maneuver.

Slow rolls have to be flown normally on a straight line (exception is the avalanche). The roll rate has to be constant and the longitudinal axis of the plane has to go straight. This requires constantly changing rudder and elevator control inputs throughout the roll. Hesitation or point rolls include stops at certain roll angles. Allowed are 2 point, 4 point and 8 point rolls.

Snap or flick rolls also have to be flown normally on a straight line. A snap roll is similar to a horizontal spin. It is an autorotation with one wing stalled. In the regular snap, the plane has to be stalled by applying positive g forces. In an outside snap, the plane is stalled by applying negative g. In both cases rudder is then used to start autorotation just like in a spin.

Barrel Roll is a not competition maneuver. The barrel roll is a combination between a loop and a roll. You complete one loop while completing one roll at the same time. The flight path during a barrel roll has the shape of a horizontal cork screw. Imagine a big barrel, with the airplanes wheels rolling along the inside of the barrel in a cork screw path. During a barrel roll, the pilot experiences always positive G's. The maximum is about 2.5 to 3 G, the minimum about 0.5 G.

WING-OVER or HAMMERHEAD

Wing-Over is a competition maneuver in glider aerobatics. You pull up and at the same time bank the plane. When the bank increases past 45 degrees, the nose will start to drop while the bank keeps

increasing and the plane keeps turning. Halfway through the maneuver, the plane has turned 90 degrees, the fuselage is level with the horizon and the bank is 90 degrees. The plane is above the original flight path. The nose then keeps dropping below the horizon and the plane keeps turning, while the bank is shallowed. When the bank drops below 45 degrees, the nose is pulled up towards the horizon and the plane reaches horizontal flight with wings level after 180 degrees of turn. At the completion of the maneuver, the plane is at the same altitude as on entry and flying in the opposite direction.

Hammerhead starts with a quarter loop into a vertical climb. When the plane stops climbing, it pivots around its vertical axis (which is now horizontal). The nose moves in a vertical circle from pointing up through the horizon to pointing down. After moving vertically down to pick up speed again, the maneuver is finished with the last quarter of a loop to horizontal flight. This figure can have optionally rolls on both the up-line and the down-line. The quarter loop is flown just like the first part of a loop. When the plane is vertical, the elevator backpressure is released completely. During the vertical line up, some right aileron and right rudder is needed to maintain the vertical attitude because of the engine torque and p-factor. When the plane has slowed enough, full rudder initiates the turnaround. It is followed by right-forward stick (right aileron and forward elevator) to keep the plane from torquing off. The pivot is stopped with opposite rudder when the nose points straight down. When the pivot is completed, the ailerons and rudder are neutralized. Elevator and rudder are used to keep the nose pointing straight down. The pivot must be completed within one wingspan. Rolls on the downline require only aileron input if the plane is trimmed correctly. This maneuver is sometimes called a hammerhead stall. This is not an accurate name because the airplane never stalls. The airspeed may be very low, close to zero, but since there is now wingloading during the turn-around, there is no stall (at zero g wing loading, a wing does not stall). The plane is flying throughout the maneuver with all the control surfaces effective (even sometimes only marginally so).

The previous paragraph is true even for gliders that don't have the support of the propeller slip stream. The missing slip stream makes it much more difficult to keep some flow over the control surfaces during the turn-around in a glider.

GLITCH - What you holier when you pull up elevator while flying inverted at 10 ft altitude.

(Information for this article is from the web site http://acro.harvard.edu/IAC/faq_aerobatics.html)

Tech Tip

by Jim Maroldo

Here is an article concerning the routing and securing of radio system wires in your model. The author, Jim Maroldo, is an electronic technician, a hobby shop owner, and an RC modeler.

Over the years we've seen many different ways to install radio gear in our models, some clean, some not so. One of the most often neglected areas, however, is the wire dressing within the model itself.

Most of us know that the receiver antenna should be routed as far away as possible from any power leads to avoid any stray pickup of interference (you do know that, right?). A corollary to that is that all leads should be fastened somehow to the framework of the model. This is often not a problem with the smaller planes as things are often pretty cramped anyway, but in the larger stuff, we find lots of open space within the cabin area. If leads are left to fly around loose, they will eventually fail due to metal fatigue. One of our club's members had this happen to a power switch once which resulted in the loss of his aircraft! The post-mortem didn't reveal any obvious cause for the loss of control until we disassembled the RX switch. While the insulation was completely intact, one of the wires inside was broken at the strain relief just as neatly as if it had been done with a knife!

The moral of this story is simple: a tie-wrap or two, placed at strategic locations along the servo and power leads will go a long way toward a long life for that new plane!

(from By-Lines & Fly-Lines, Thom Lambore, Editor)

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