Fifty Years and Still Flying







A History of the Development of Radio Control Flying and One AMA Club's Contributions to the Sport.

James Quinn, Editor

Contents

	ACKNOWLEDGEMENTS	iv
	DEDICATION	v
CHAPTER 1	THE EARLY DAYS	01
CHAPTER 2	MAJOR ACCOMPLISHMENTS	04
CHAPTER 3	FLYING FIELDS	08
CHAPTER 4	PATTERN FLYING	12
CHAPTER 5	PYLON RACING	18
CHAPTER 6	NATIONAL AND INTERNATIONAL COMPETITION	22
CHAPTER 7	INTRA-CLUB CONTESTS AND ACTIVITIES	25
CHAPTER 8	DESIGNERS AND PUBLISHERS	28
CHAPTER 9	FLYING FUN AGS STYLE	36
CHAPTER 10	CONNECTION TO THE RHINEBECK R/C JAMBOREE	40
CHAPTER 11	COMMUNITY ACTIVITIES	46
CHAPTER 12	FLIGHT TRAINING PROGRAM	50
CHAPTER 13	FLIGHT CONTROL CENTER	52

Acknowledgements

This document is a record of the first fifty years of the Aeroguidance Society. It has been compiled with the help of many members and reflects the memories of several of the original members. As such, there are spots in this history book that are incomplete because of the lack of documentation. As with most or-ganizations of this type, the founders did not foresee a 50th Anniversary history book. Remembering 50 year old events is not as clear at times as a historian would like. However, the book does contain all of the major activities and accomplishments of the Aeroguidance Society and its members to the best of our collective ability.

As the editor of this book I was honored and awed to solidify this document. Page after page, I stood back and marveled at the ingenuity, dedication, and vision of the Aeroguidance Society membership. Programs during our fiftieth anniversary year reflected that history. Amazing! Even our name "Aeroguidance" has an interesting history. It was selected, as one of our earliest members reflected, to convey the limited control of actually flying an R/C airplane in those pioneering years. Those early radio systems did not inspire great confidence in guiding an airplane through an entire flight. Personally, for two years I tried to "guide" my aero creation with no success until I met up with members of the Aeroguidance Society. Success in those days meant that I could fly my single channel, rudder only airplane twice on the same day. How far we have come.

This Aeroguidance Society History Book is part of the celebration of our Golden Anniversary and is intended to represent many of the accomplishments of the organization and its members.

Photo Credits: Bob Jennings, Editor Dick Allen Bob Noll Terry Terrenoire

Copyright © 2005 Aeroguidance Society, Inc.

Dedication We dedicate this book to: **Our Founders** and The Women of the AGS AGS History v

THE EARLY DAYS

Two of the original Aeroguidance Society members, Dick Allen and Ralph Jackson, are still current members of the club they formed. The Aeroguidance Society is greatly indebted to these two charter members as well as the rest of the RC modelers in the Triple Cities area of upstate New York who recognized the need to form an organization and met over fifty years ago to form the Aeroguidance Society.

Bob Noll

Following are reflections by both Dick and Ralph about how the AGS was formed.

By Dick Allen, original member

The formative meeting of the Aeroguidance Society took place in November of 1954 in the home of Dick Allen, who was duly elected as its first president. At that meeting several principles were established that continue to define the organization to this day:

1] The club shall be open to anyone interested in the Radio Control (R/C) hobby.

2] The AGS shall be an Academy of Model Aeronautics (AMA) chartered club. This means, among other things, that all club members must be members of the AMA. We are AMA Charter Club # 441.

3] The AGS shall hold at least one AMA sanctioned contest per year. This contest has become the longest-running club–sponsored R/C Pattern meet in the country.

The earliest club roster found was that of Dec. 6, 1957. It is believed that most of these listed members were the original charter members of the AGS. Unfortunately, this 1957 roster did not identify officers. Those members identified with an * are included in the group photo on the next page.

Dick Allen* Lou Brummel* Peter Hyde Bob Lord(Jr. Mem.) Frank Plessinger* Wally Spry* Glen Arnold Gordon Gallagher* Ralph Jackson* Chet Osborn Gill Snow* Burr Twining Rex Beach Don Harrington* Harry Lord Dick Payne Dick Spencer John Woodruff*

The earliest known group photograph of the AGS, on the next page, is of an early club meeting circa 1958 at the home of Ralph Jackson in Vestal.



The members and planes shown are listed below from right to left:

Back Row: Lisle Wheeler (holding modified deBolt biplane with which the AGS tried unsuccessfully to set a new FAI distance record), Gordon Gallagher, Frank Plessinger, Charlie Terricone, Thad Ayer (holding Gordy's 5-cylinder engine made from 5 K&B .15s geared to a common shaft), and Ralph Jackson.

Middle Row: Don Harrington, John Woodruff, and Lou Brummel

Front Row: Gill Snow, Wally Spry, and Dick Allen

Planes on Floor: Gordon Gallagher's giant scale Bucher "Jungmeister" and Dick Allen's Pylon Racer "Long Gone".

By Ralph Jackson, original member

In 1953 the FCC provided access to a radio frequency which could be used for controlling model airplanes without requiring a license. The frequency was 27.255 Mhz. Having only one frequency required that only one airplane at a time could be flown at a local flying field. However, having that frequency available caused a large increase in radio control activity. In 1955 there were at least twelve fliers active in our local area so Dick Allen and Ralph Jackson decided it was time to start an R/C Club. We invited the 12 flyers to the first meeting which was held at Dick's home in Endicott. Of those twelve, I can only remember a few whom I think may have been among the original club members. They were: Dick Allen, Ralph Jackson, George Brooks, Burr Twining, Chet Osgood, Gordon Gallagher, Bernard Fox, Stu Landon, Frank Plessinger and Frank Garger. I believe that Stu Landon was a B-17 pilot in World War II. As time went on, the club By-Laws were written and the club name "Aeroguidance Society" was selected. I believe that the first club president was Dick Allen and that he also proposed the club name, which was selected from several suggested names. One important feature of the By-Laws was the provision that an annual Pattern Contest be held.

In those days, there were several local fields, which could be used for flying. They included what was then IBM Owego property and is now a new building, hangar for Lockheed Martin's helicopter landing area. Another place was an empty field near where the Vestal Wal-Mart is located. There was also a good field parallel to Front Street in Binghamton. I believe that the first field which the AGS rented and used as the official club field was parallel to Route 26 in Maine near the intersection of Route 26 and the road which goes to what is now the Greater Binghamton airport. Later, the AGS purchased a field in Maine, which was used for many years. There were some difficulties with the neighbors so we sold that field and purchased our present field in 1975.

The grass on the field in Maine was mowed using an interesting method. A removable post was installed in the center of the take-off area and a rope as long as the radius of the take off area was connected between the post and a lawn mower. The mower engine was started and the mower traveled by itself in a circular pattern around the post. The rope wound around the post reducing the rope length each revolution until the take off area was completely mowed.

In the early days, the airplanes were powered by two-stroke, engines using gasoline fuel. However alcohol based glow fuel was introduced and soon became the most common fuel. Hand starting was the most common method. There were many kits available. My first successful model was built from a kit from Berkeley models, which was a popular source then.

The models in those days were generally of open framework, balsa stick construction. The glue was model airplane cement such as Ambroid. Common covering materials were silk and paper. Clear and colored model airplane dope was used for finishing.

The controls were quite different from what we have today. Some of the radio equipment was handmade but most of the control surface actuators were commercially available then. In the early days it was common to use a large transmitter sitting on the ground with an automobile battery supplying power. A small hand held box with control switches was connected to the transmitter. The early control surface actuators were usually These were gadgets, which were escapements. powered by rubber bands, and had magnet controlled rotating parts, which moved the control surface in steps responding to pulse actuated signals from the transmitter. Most of the very early airplanes had only rudder control.



Pictured above and to the right is Don Harrington, an early Aeroguidance Society member. Don is shown with his 1947 transmitter. Don used the R/C flight package as his MIT thesis, which is shown behind the transmitter; dial three for left rudder!

CHAPTER 2

MAJOR ACCOMPLISHMENTS

By Bob Jennings

Annual Aerobatic Contests for fifty years: (Chapter 4)



Jim McKewon, Matt Struck, and Charlie Lecher scoring

where flying field development could proceed with out fear of sudden loss, as was the case with the prior sites. This flying site served the club well for over ten years. However this site was near the village of Maine and in the late sixties an increase in the use of larger un-muffled engines and an increase of flying activity created a noise situation that caused a greater irritation to some of the local citizens. In 1971 the AGS began a funding plan in the realization that another more isolated location would be desirable. The situation in Maine deteriorated to the point that in 1974 a temporary field was developed in Nanticoke (near Greenwood Park). In 1975 the "New Field Committee" looked at the present property on Warrick Road. Again bonds were sold and this property was purchased in December 1975. In the fall of 1975 the AGS membership was reminded of the problem of temporary sites when use of the Nanticoke site was lost. Arrangements were made to lease the Maine site for the 1976 flying season.

The original club By-Laws required that a contest be held each year (this stipulation remains to the present). In the fulfillment of this requirement the AGS has held an aerobatic contest each year.

AGS owned flying sites for forty-five years: (Chapter 3)

In 1961, after going thru the process of developing and then losing flying locations at least six times the AGS finally purchased sixteen acres on a hilltop on Kay Road in Maine. This purchase was made by selling bonds. These bonds were paid off by income received from the annual pattern contest. The ownership of this site provided a more stable situation



A young Crystal Noll taking a break from constructing a pavilion at our flying site in 1976

Development of the new property was done in 1976 and the present flying field was opened in 1977.



Mall Show Sponsor for twenty-three years: (Chapter 11)

In January 1983 the first show at Oakdale Mall was sponsored by the AGS. This show has been sponsored by the AGS every year since. Starting in 1986 other area clubs began participation in this show.

Fall Float Fly for twenty-two years: (Chapter 9)

In September of 1984 the AGS held the first Float Fly at Greenwood Park. This event has been held in September of each year since. The AGS also sponsored a Spring Float Fly at Nathaniel Cole Park for a few years but this event has been turned over to the Modelers Of Binghamton.





Academy of Model Aeronautics Gold Leader Club for thirteen years:

In 1993 the Academy of Model Aeronautics initiated a new program entitled **GOLD LEADER CLUB**. In that first year of the program the AGS received notification of qualification as a Gold Leader Club and has continued to meet this qualification to the present. Each fifth year a special patch is awarded to members of Gold Leader Clubs. We

have pictured our ten year award to the left. We are looking forward to our 15 year award and many, many more. On the next page (Page 6) is the original page from the "Connector," the Aeroguidance Society's monthly newsletter, informing the membership of the honor of being named a "Gold Leader Club" by the Academy of Model Aeronautics.

AGS ACHIEVES LEADER CLUB STATUS -GOLD LEVEL!

Yes, we have received our certification as a Leader Club by the AMA, at the Gold Level. Last year we decided to embark upon the extra efforts necessary to obtain the Gold Level status by certifying our Safety Code reviews, promotion of the hobby and club to local schools, our 50-channel frequency program, our field safety practices and charitable activities. In particular, we had not done charitable activities in the past, and so we decided to do the "Build A Kit And Raffle It For CHOW" at last year's Mall Show. This activity resulted in the AGS contributing \$150.00 to the local CHOW organization, which is much-needed assistance in this area as in others. The members of the AGS



ACADEMY OF MODEL AERONAUTICS

November 16, 1993

Aero Guidance Society, Inc. c/o Mr. Wynn Aker 2022 Bernard Blvd. Endicott, NY 13760

Dear AMA Charter Club Members:

I would like to take this opportunity to congratulate you on qualifying for the AMA Gold "Leader Club" program.

Your District Vice President will be notified of your new status by forwarding a copy of this letter to him.

The awards for your club will be sent to him and he will be contacting you directly concerning their distribution.

Again, congratulations on your new "Leader Club" status and thank you for your positive contributions to the sport of aeromodeling.

Best regards, ACADEMY OF MODEL AERONAUTICS

auli Jay Mealy

Public Relations

JM/je

Joe Beshar District Vice President



should be proud to be recognized by the AMA as a Leader Club, and at the Gold Level in particular. We have been recognized by the AMA in the past for other items: most recently the AGS was awarded the Club Of Excellence award on the occasion of our 35th anniversary. The AMA Leader Club award is an annual re-evaluation, and as such will necessitate our continued efforts in 1994 to repeat the award. Make sure to stay focused in 1994 on those things that are necessary to achieve the continued recognition.

Thank You to all of the members of the AGS for the hard work every day of the year. It's not just once in a while efforts that yield this type of award: it's every day leadership.

AMA Club Excellence Award:

In 1980 The Academy of Model Aeronautics honored the Aeroguidance Society with a presentation of the Club Excellence Award for hosting 25 years of sanctioned Aerobatic competition without interruption.



AMA President's Award:

At the annual aerobatic contest on August 6, 2005 the Aeroguidance Society was presented the Academy of Model Aeronautics President's Award by AMA president Dave Brown. To date there have only been seven President's Awards in the history of the Academy of Model Aeronautics.



NSRCA Award:

The National Society of Radio Control Aerobatics, a Special Interest Group (SIG), of the Academy of Model Aeronautics honored the Aeroguidance Society with a special award acknowledging 50 years of sanctioned aerobatic competition, the longest continuous R/C sanctioned aerobatic contest in the country!

FLYING FIELDS

By: Bob Noll

The Aeroguidance Society is very proud to be one of only several R/C clubs that owns their own flying field. However, it was not always that way for the AGS and there were many fields along the way until the first club-owned field was purchased in 1961.

Here is a list of the fields and their locations used by the Aeroguidance Society over its fifty-year history.

Year	Location
1955	Open field north of the Vestal Parkway (NYS 434) behind the present Hooters restaurant.
1956	Open field behind West Corners School on Rt. 26.
1957	Ralph Carley's landing strip near Rt. 26 north of Maine, NY. This was a one-runway flying field for Ralph's small single engine plane.
1959	"Lower" Apalachin field west of the Stair Tract housing development. This was a small part of a farmer's field.
1960	"Upper" Apalachin field, just slightly south of the "Lower" Apalachin field. This move was necessary to satisfy the farmer's crop growing plan.
1961	Contractor's field near Glen Aubrey, NY. This was a temporary field until



1962

Maine, NY – This was the Aeroguidance Society's first club-owned field. The AGS was one of the first club owner's of a flying field in the northeast.

AGS History 8

The "Crew" picking rocks at the Maine Field in 1962



A smiling Dick Allen as he rolls the Maine Field in 1962



AGS History 9



1975: Present club owned field off of Day Hollow Road Northwest of Endicott, NY. The original purchase was for 74 acres. Later 2 acres were sold to the Telephone Co. Then in 1985 the club purchased an additional 24 acres bringing the total acreage to approximately 96 acres.







Above is the Aeroguidance Society's current model airplane airport. AGS members and their airplanes are making the letters AGS on one of our runways. They are on runway 6/24. Our cross runway is 15/33. To the upper right of the picture, but just out of the shot, is our large pavilion and storage facility. In the picture is our smaller pavilion inside our fenced off parking lot for our AGS families to picnic, relax out of the sun, and swap flying stories. Our airport is rimmed with a lush forest which is wonderful for hiking. Some of our members even enjoy hunting for deer and other wild game. We also have a small pond located near the lower level of our access road. The parking lot is the termination of the road winding up to our beautiful facility, the highest point in our county. Our GPS coordinates are 42.07.37 N 076.08.00 W. The field elevation is 1685'MSL.

PATTERN FLYING

Pattern flying has been a part of the fabric of the Aeroguidance Society since the club was formed. So much so that the club By-Laws states that the club "shall hold an annual AMA sanctioned contest". This item was put into the first By-Laws and has remained there after fifty years.

While the By-Laws don't state the type of contest that shall be held, pattern flying was the premier event in 1955, so the club interpreted that By-Laws requirement as a pattern contest for all of its years.



The Fifties:

The first contest was held at Tri-Cities Airport in Endicott, NY and was a oneday contest. In 1955 there were not many contests for the early pioneers of RC to demonstrate their flying skills as well as their radio and plane design capabilities. These early contests were attended by many notable RC'ers of the time including the likes of Dr. Walter Good, Howard McEntee, Ed Izzo, Ed Keck, Hal deBolt, Vince Bonema and many, many more.

Only one flight line could be used at these early contests because of the limited frequencies that were available and because of the receiver technology, which had not yet been developed with the selectivity needed for multi-frequency operation.

Many ground-based transmitters were used with the primary class being rudder only. Escapements were the control actuator of choice and most motors did not have carburetors with which to control their speed. High wing planes were seen exclusively until the late fifties.

The Sixties:

In the sixties, the club continued to use Tri-Cities Airport and added the R/C scale category to the contest. The contest was expanded to two days to accommodate the large number of entries. Because the club purchased its first flying field in 1961, it decided to advertise the contest to the local public in order to get some revenue to help pay off the bonds that were sold to purchase the flying field. Special advertising including print, radio and TV were used and the results were very satisfying for the club. Some club members attached planes to their cars and put advertisements on the car door to advertise the contest while driving around town. Crowds in the hundreds gathered at Tri-Cities Airport and parking donations and concession profits were significant.



In the sixties, the Annual Aeroguidance Society Contest became the largest contest in the northeast and continued to attract almost all of the R/C pilots who enjoyed competition. It boasted of contestants from most of the states in the northeast and Canada and was twice as large as most other contests of its type. The club constructed a large concession stand for the event and because of the growth of spectators, had to have the help of the Endicott police to control traffic into and out of the airport. For a few years, the concession stand was subcontracted to the Endicott Lions Club.

It should be noted that the profits from contests in the sixties are what allowed the club to purchase its own flying field. This was accomplished by using the profits to pay off the bonds that were sold to raise the funds needed to purchase the first field in 1961.

An important feature at the contests was the model air show that took place on Sunday afternoon while final scores were being calculated. This was before electronic scoring programs were available so the air show filled that time and kept the large crowds entertained. Acts like the flying doghouse, multi-engine



demonstrations, gliders, clown acts, pylon racing etc. amused the crowd and became crowd favorites. Several times the top competition pilots were chosen to do some free-style flying, which was judged by randomly selected spectators.

In the mid sixties, R/C pylon racing was becoming popular and this event was added to scale and pattern. Pylon racing at that time was run as a single plane event, flying against a clock with .19 powered planes. Some R/C pilots of the time flew in all three categories making the contest very multi-dimensional. However, pattern flying was still the premier event. The Saturday evening corn roast continued for many years and one year the club arranged for a small band, which performed on the runway during the festivities.

In the later sixties, R/C pylon racing took on a major change when Formula I and Formula II categories were established. Several R/C pylon-racing circuits were being organizing in upstate New York and Connecticut and it was decided to separate pylon from this contest and hold a different contest exclusively for this growing category of R/C flying. These pylon races were also held at Tri-Cities Airport and enjoyed a very large collection of racers from all over the northeast. The AGS introduced innovations such as a "light board" at pylon #1 to signal cuts and a large 3-foot battery powered starting clock.



nual contest. Having two contests, one for pattern and one for pylon, was quite a burden on the membership and it was decided that a third, scale-only, contest would not be scheduled.

Outstanding pilots with AMA nationals experience attended the AGS contest including Ed Izzo, Ed Keck, Tony Bonetti, Hal deBolt, Ivan Kristensen, and others. The most famous pilot to compete was Bruno Giezendanner of Switzerland. Bruno was a three time F3A World Champion and was visiting a friend in New Jersey. The friend brought Bruno to the contest and Contest Director Bob Noll loaned him a plane, which Bruno used to win first place.

Another change that occurred was the



The Seventies:

The tradition continued into the seventies. However, there were some significant changes that had to be dealt with. Scale competition had become more sophisticated and scale pilots were concentrating exclusively on scale and as a result, were not going to contests that had pattern and scale, but opting to attend scale-only contests. This meant that the scale entries at the AGS contests were diminishing. At the same time pattern competition was growing and the club decided to eliminate scale from this an-



speed of the pattern planes and it was difficult to hold the pattern event at Tri-Cites airport, which remained open to aircraft during the contests. In order to limit flying over the active runway on one end of the R/C flight area, the famous Endicott air horns were used to signal over flys. A club member, with air horn in hand, was stationed near the active runway and the horn blew each time a plane passed beyond the safety limit. One horn was a warning and the second horn signaled the termination of a flight. Pilots were becoming very upset at this limitation, which affected their flying style when it was common to fly quite a distance away to set up for maneuvers. At that time most planes flew ballistically with engines turning over 14, 000 RPM.



As a result of the over fly problem, it was decided to relocate the contest in 1979. Many potential locations in the area were considered and a small private airport in Greene, NY was selected. The seventies saw the last AGS pylon races since interest in Formula I pylon racing diminished within the club. See the Pylon Racing chapter in this book for details of pylon racing in the AGS.

The Eighties:

1980 represented a significant milestone for the Aeroguidance Society and their Annual Pattern Contest. It was time to celebrate twenty-five years since the first contest was held and special advertising and promotion was done to highlight this event. The Silver Anniversary Contest was held at the Greene Airport, about 30 miles north of Endicott. The facility afforded adequate space for camping which had become an important part of AGS contests as well as a facility for the Saturday evening outdoor dinner and party which had become a tradition at AGS contests.

The Raymond Corporation of Greene, NY donated \$250 so we could purchase silver tea services and trays to commemorate our silver anniversary. The club hosted a press conference for print, radio and TV media at the Sherwood Hotel in Greene followed by flight demonstrations at the airport as part of the advertising campaign. The Sunday afternoon model air show continued at Greene and a new group of spectators enjoyed the show.

The Academy of Model Aeronautics selected the club for their Club Excellence Award to recognize its contribution to R/C and each club member in the club at that time received a special patch to wear and the club received a framed certificate to display.

The contests in Greene didn't last very long when the picnic facility and restaurant were sold by the airport owner and a motocross group purchased the picnic and parking area. So in 1982 the contest had to be relocated again and this time the club decided on the Blue Swan Airport in Sayre, PA. Although this represented a forty-mile drive for most club members, the facility was first class and the club supported its use for the contest.

The contest grew in size with contestant numbers exceeding sixty for several years. This growth required using three flight lines in order to give the pilots at least five flights. The Blue Swan Airport quickly gained the admiration of all pilots and the contest became a "must attend" for all serious pattern pilots in the northeast and Canada. Saturday evening banquets were held in Sayre at the Italian Club and the Elk's Club. Special entertainment was a feature of these banquets, which included a Miss AGS Contest by club members dressed in drag, IFR Beer Pour challenges, and Karaoke.



In the fall of 1998 a new special interest group was formed within the Aeroguidance Society. Bob Noll wrote an article in our club's newsletter, The Connector, inviting any interested club members to his home on a Friday evening for an initial meeting. Several members showed up. The group was to be a FLYING group, but before we could get our planes to the R/C airport they needed to be properly aligned and setup for Precision Aerobatic Flight. This group meets every other Friday during the building season at Bob's hangar and Jim Quinn's hangar. They meet every Friday evening in the flying season for practice and coaching. Since its inception in 1998 this group has spawned five NSRCA District I Sportsman champions in seven years! The "Aerobatic



The Nineties:

Attendance at pattern contests declined in the mid-nineties and the AGS contest was no exception. The Saturday evening banquet was replaced with a chicken BBQ at the airport which has remained as the feature of recent contests. The three flight lines were reduced to two and a more leisurely schedule was adopted.

Top pilots with AMA Nationals and International experience continued to attend and the AGS contest was still the contest to attend to see most of the top pilots in the northeast.

Feeding the hungry pilots at Sidney's Airport



Gang" as we refer to ourselves frequently makes up 25% to 50% of contestants at Precision Aerobatic Contests in NSRCA District I.

The Two Thousands:

In 2004 we lost the use of the Blue Swan Airport since the borough of Sayre decided to deactivate the facility and put it up for sale. The search for a different facility included the Greene Airport, which no longer had a motocross track in its back yard. However, an agreement with the owner could not be reached and the contest moved further away to the Sidney, NY Airport. After one year it was decided that this facility was inadequate because of over flys with the active runway.

Fortunately, the club was notified that the old Blue Swan Airport in Sayre, PA might be available. It had not been sold and the local youth soccer association was using the runway for their league play. The Sayre borough was contacted, the soccer group agreed to delay the start of their fall league and the contest returned to Sayre. The contest dates were moved from June to August in order to fit in better with other contest schedules.



AMA President, Dave Brown, presenting the President's Award to AGS President, Frank Gioffredo.

Also Pictured are some of the early AGS members. From left to right they are: Ralph Jackson, Founding Member, Jim Quinn, Art Riegal, Bob Noll, Dave Brown, Frank Gioffredo Kneeling: Bob Jennings, Terry Terrenoire

years of contributions to aeromodeling and to the AMA.

The club also received an award from the National Society of Radio Control Aerobatics (NSRCA, an AMA special interest group) commemorating the longest running annual R/C Precision Aerobatic contest in the USA.

The Future:

Interest in precision aerobatics competition continues to grow within the Aeroguidance Society. There are now eight members who are competing and some new members who have shown interest in pattern flying. Given the club's By-Laws and the vitality of the club membership, continuation of the AGS Annual Precision Aerobatic Contests will certainly continue for many years to come.

The Golden Anniversary Contest:

The AGS 50th consecutive precision aerobatics contest was held at the Blue Swan Airport in Sayre on August 6-7, 2005. All contestants received commemorative trivets and buttons. Gold pocket watches were awarded to all first place winners. Picture plaques with the pilot's picture overlaying a special picture of the Aeroguidance Society flying field. That field picture was taken from the air with members and their planes forming the letters A G S on our main runway, 6/24. (This picture is seen on the cover.) At this contest, the club received two very special awards. Dave Brown, AMA President, presented AGS President Frank Gioffredo with the AMA President's Award for the club's fifty

PYLON RACING

By Bob Noll



Byron Lichtenwalner & Bob Noll - Open Pylon 1961

contest exclusively for pylon racing. Those races were held at the Tri-Cities Airport in Endicott, NY and pilots came from New York State, Pennsylvania, New Jersey, Maryland, and most of the New England states.

An innovation that the AGS pioneered was the use of automobile headlights to signal number 1 pylon cuts. These lights were mounted to a large black plywood board in order to provide a contrast for the lights against the sky background. A 12-volt automobile battery supplied power and each pylon judge had a button switch to operate his signal light.

These pylon contests were held thru the early seventies when club interest in Formula pylon racing diminished. During the almost ten years of AGS pylon contests, most of the outstanding pylon pilots from the northeast attended and took home awards which included the treasured AGS silver bowls and a custom jacket in one of those years.

The Aeroguidance Society (AGS) began holding AMA sanctioned R/C pylon racing in the early 1960's. At that time RC pylon racing was flown, one plane at a time, against a clock. Planes were powered by .19 cu. in. engines and the most popular designs had become deltas. Formula I and Formula II had not yet been invented.

Initially, pylon racing was combined with pattern and scale. In the late sixties, a separate two-day event was initiated. This was done when Formula I and Formula II became popular as several pylon-racing circuits were formed in the northeast. It is believed that the AGS was the first club to hold a two-day



Crystal Noll and her dad's Formula I Minnow.

A few of the more known pilots were; Hal deBolt, John Shroeder,

Pete Reed, Mike Helsel, Greg Doe, Adam Sattler, Bryon Sattler. AGS club members who raced at many races in the area were Dick Allen, Ralph Jackson, Bob Noll, Art Riegal and Bill Underkofler.



1/2A pylon racing was popular among some club members and so intra-club 1/2A races were held for many years in the late sixties and into the seventies. A fixed design class was flown using the Carl Goldberg Junior Falcon. We called this event Formula Falcon. The canopy and landing gear did not have to be used since hand launching was used. Only rudder and elevator control was used and originally the Cox QZ .049 was the engine of choice. This temperamental reed valve engine was later replaced with the Cox TD .049 which proved to be, not only a faster engine, but also a more reliable engine.

In the seventies, Quickie 500 pylon racing was invented and the club decided to replace the Jr. Falcon for their intra-club races. Initially any legal .40 could be used but the club soon decided to have a single engine and prop class. The OS .40FP was chosen because of its low cost and the sound level produced. The club has a 96 dbA maximum sound level and this engine with an APC 9" x 7" prop satisfied this requirement. When the .40FP was discontinued the





engine of choice became the OS .40LA.

Club interest in this type of pylon racing continuously grew and the Southern Tier Racing Circuit (STRC) was formed in the nineties. While the AGS club races were always open to pilots from other clubs, it was decided that the STRC would create more interest within the local clubs for pylon racing.

STRC member clubs were the Valley R/C Club of Sayre, PA and the Modelers of Binghamton, Binghamton, NY and the Aeroguidance Society in Endicott, NY. In the earlier days of the STRC, each member club hosted two races and the STRC schedule therefore included six races during the summer. At the same time the Aeroguidance Society held club races and the AGS racing season included the six STRC races and six club races.



new pilots begin in the Busch Grand National class.

Points are recorded for all ten races and a pilot's best six races are used to determine the season places in both classes. The first place Busch Grand National pilot must move to the Cup class the following season.

Our golden anniversary year saw the Quickie 500 racing to be one of our most competitive years ever. The 2004 season ended with a three way tie for second place and 2005 picked up right where 2004 left off. Rules were modified for the 2005 season to change the prop from the APC 9X7 to APC 9X6. This change allowed for easier acceleration for take-offs and smoother transitions from turns to straight-aways Each plane flies three heats for each racing session. Three points are awarded for first, two points for second, and one point for third place finishes in each heat.

The AGS emerged as the club with the most racing talent and interest and after about four years of racing at the member fields, the STRC decided to hold all of its races at the AGS field. Because of the AGS interest and activity, the AGS developed a cadre of members who were very competent in race operations. The AGS also constructed a remotely operated "horn" box for the cut officials which was located behind the plots as well as a flag system to record pylon cuts. The use of this equipment added significantly to race operations.

For the past three years, there were ten STRC races hosted by the AGS. There are no other club races held and participation in Quickie 500 pylon racing has continued to grow within the club.

In 2001, the club decided to have two classes of Quickie 500 racing. Due to the increasing popularity of NASCAR, it was decided to color and number our planes according to our favorite NASCAR drivers' cars and thus was born the Winston Cup (now Nextel Cup) and Busch Grand National classes. Experienced pilots fly in the Cup class and



The 2005 season saw very few pilots scoring nine points for a racing session and even fewer pilots scored multiple nine point races. When the last plane landed after the final heat of the 2005 season the scores were processed only to find a two way tie for first place. Following the rule book a fly-off between the top two finishers was needed to break the tie for first place. Racing doesn't get much closer than that!

Several members of the Aeroguidance Society have raced at AMA Nationals competition. Bob Noll raced in Formula I and Formula II as well as Quickie 500. Dick Allen and Ralph Jackson raced in Formula II. Bob Noll won the 1968 National Miniature Pylon Racing Association (NMPRA) season championship in Formula II. Bob's NMPRA Championship plane, The Continental 600, was designed by Hal deBolt and published by Bob in Model Airplane News.



Pylon racing has very deep roots within the AGS, starting in the sixties and continuing uninterrupted for over forty years.

NATIONAL AND INTERNATIONAL COMPETITION

By Bob Noll

During its fifty-year history, members of the Aeroguidance Society attended many AMA National Championships. A few members also represented the United States in International competition.

The Academy of Model Aeronautics sponsors a national competition each year. In the early days, these "NATS" were held at Naval Air Stations around the country on a four-year rotation. Sites were Lakehurst, NJ, Glenview, IL, Los Alamitos, CA and Dallas, TX. When the US Navy discontinued their support in the late seventies, the "NATS" were held at many locations around the country, based on the ability of AMA to obtain sites and support from local clubs.

Here is a list of those members and the events they competed in:



RALPH JACKSON

1963 NATS - Los Alamitos, CA 1st place Class II – rudder and elevator -Stark Shark 4th place scale with B-24 Liberator
1971 NATS – Glenview, IL 5th place scale with Handley-Page 0-400.
1979 NATS - Nebraska

2nd place in scale with Windecker Eagle

DICK ALLEN

1952 Air Force World-Wide Meet -2^{nd} place R/C 1953 NATS -3^{rd} place R/C (tied with Walt Good) 1957 NATS -1^{st} place R/C Class I - rudder only -Lancer 1958 & 1961 NATS -2^{nd} place R/C Class I 1969 & 1970 NATS -2^{nd} place R/C Pylon Formula II



Ralph Jackson's four engine B-24 Liberator

Ralph Jackson's 3rd place World Champion Piper Comanche

N7262P

Ralph Jackson's Windecker Eagle

1988 NATS – Virginia 1st place in FAI Large Scale with large Piper Comanche 3rd place in FAI Scale with small Piper Comanche

1974 World Championships – Lakehurst, NJ 3rd place in Scale with Piper Comanche

1980 World Championships – Ottawa, CA Competed in scale with Windecker Eagle

BOB NOLL

1967 NATS – Los Alamitos, CA Competed in pattern and pylon

- 1969 NATS Willow Grove, PA 4th place in Formula II pylon racing
- 1970 NATS Glenview, IL Qualified in top 20 in pattern, unable to fly in finals and returned home for father's funeral. 5th place in Formula II pylon racing
- 1974 World Championships Lakehurst, NJ Member of USA pylon team
- 1976 NATS Dayton, OH 4th place scale with Steen Skybolt



AGS History 23





HALE WALLACE

1965 NATS – 5^{th} in scale with Cessna Skymaster 1969 NATS – 2^{nd} in scale with a P-63 5^{th} in Formula I pylon with a deNight Special

1970 World Scale Championships 4th place with a Chipmunk



BILL UNDERKOFLER

1955 NATS – Glenview, IL Flew in rudder only. Plane went out of control and crashed into big water tower.

1969 NATS – Philadelphia, PA Advanced to finals in Formula I and Formula II pylon racing. 14th place in Formula I 10th place in Formula II

INTRA-CLUB CONTESTS AND ACTIVITIES

By Doug Breneman

The Aeroguidance Society has held many intra-club activities throughout the past 50 years. Some of these activities include the Annual Dinner, the Intra-club Contest, the AGS Picnic, the CHOW Breakfast Fun Fly, our Monthly Programs, Project Night, and our Annual Auction.



Annual Dinner Party

Early each year, usually in February or March, the AGS members along with their spouses and friends attend the Annual Dinner Party. This is a night of good food and good fun. This activity has been held at many banquet halls and restaurants including places such as Gance's, Russell's Steak House, the Vestal American Legion, and the Sherwood Inn. The entertainment for the evening has been varied and has included Casino Night, Trivia Night, Murder Mystery Night, Cider Mill Playhouse Night, and even a Hawaiian Luau. This activity is unofficially led by the current vice president of the



AGS and is mandated by the AGS By-Laws as the annual 'social activity".

Intra-Club Contest

The Intra-club Contest is one of the three AGS Activities listed in the AGS By-Laws. It started at the very beginning of the AGS as an aerobatics competition and continues to be a team activity. It is a fun event. There are team names and trivial "prizes" for all competitors but the most important prize is "bragging rights." This activity was renamed the "Celebration of Flight" in the late 1990s by Jim Quinn to attract members who are not the "contest" type. Over the years there have been multiple "events" including a mystery spot landing, a two minute drill, a tag team pylon race, a drag race, a limbo, and the famous "nut on the prop" relay race Le Mans start, among others. All persons are welcome and can "compete" whether novices or veterans. This event brings together many members who do not see each other very much at the club field during the flying season. The team concept is used in order to level the playing field and minimizing the effect of the better pilots. The events are designed to allow trainers and simple planes to be competitive.

Annual Picnic

In past years, the Intra-club contest was held along with the Annual AGS Picnic. This activity has been held since the sixties and has been held at several different locations. Although most picnics have been held at the club field, other locations include parks in Endicott and the 1997 Annual AGS Picnic was held at Highland Park and led by Dave Lewis. Many fun activities have been done at the Picnic including a softball game, other games, crafts, a sing-along, a magic show, and often a campfire. Of course there was also fun flying. Recently this event has been led by Jim Quinn along with a large cast of helpers. The food is of course one of the highlights. There has been Barbequed meat, Phil's Chicken House Chicken, smores, hors d'oeuvres, dishes to pass, and so much more. This is a special event to bring together the AGS families for good fun and good food.



"Our Chefs" ~ Rosemary and Bob Frey

sausage, pancakes, orange juice and coffee, we have a fun fly-in.

Monthly Programs

Why would an Aeroguidance Member want to attend a monthly meeting? Of course we are interested in the business aspects of our Society, but more than business we are interested in aviation. To that end the Aeroguidance Society has always stressed the importance of a program each month. Three of our twelve monthly meetings are held at the AGS R/C airport so we can have programs that include flying demonstrations and hands on engine

Fly-In Breakfast for CHOW

The CHOW Fly-in Breakfast is one way that our club gives back to the Community. We have collected hundreds of dollars and many pounds of food for the Community Hunger Outreach Warehouse. We have a delicious breakfast and the "cost" is bringing food or money for CHOW. The first annual CHOW Fly-in Breakfast was scheduled for September 14th, 1996 and was to be led by Dave Lewis. Unfortunately, due to inclement weather, the event had to be cancelled. So the first annual CHOW Fly-in Breakfast was held on September 13th, 1997. Its initial mandate was to collect food and funds for CHOW and "to meet flyers from other clubs and share a day of flying". From 1999, this activity has been run by Bob Frey and his wife Rosemary. After the breakfast, usually eggs,



AGS History 26

programs. There is enough talent among the AGS members that many of the programs are presented by club members. Frequently, however, guests are invited to give a presentation. If it deals with flying, it is an AGS program. Pictured in this segment is a replica of Glenn Curtiss' famous pusher. A program on this historic replica was presented by one of our own club members, Bob Frey. Bob has received national recognition for this historic model. A feature of every meeting is "Show and Tell." This monthly miniprogram features new items, construction tips, and recently built models.



Terry "Mr. Auction" Terrenoire looking for an opening bid.



Annual Auction

Aeroguidance Society elections are held annually in October. To help the new officers with their first meeting the program is set for them. Each year we host an auction for our members. Along with being great fun there are those treasures you've always wanted, but couldn't afford. At auction time members get another chance to purchase those longed for items. Thanks to the generosity of our members many of the items up for auction are donations to the club treasury. This annual event has guests from other aeromodeling clubs bidding for many of the items up for auction.

Project Night

One of our best attended meetings of the year is our annual Project Night. Every April our members bring the pride and joy of their building season's best efforts to display for the pleasure of our members. With such a talented club you can expect to see a great variety of airplanes. In this picture one of our members, Darrell Sperbeck, shows his creative approach to a twin engine Duraplane.

Summary

There have been many activities throughout the history of the AGS. These are events designed to bring our own club together, to welcome other clubs to join with us, and to give back to our community.

DESIGNERS and PUBLISHERS

By Ken Maroni

During 50 years of model R/C designing, building and flying there are many that have contributed to the hobby.

In my short time as an AGS member, I have been inspired by many modelers. There are three in particular



Bob Noll's Yankee as seen at the WRAMS show

around today and he flew it at the 2004 Vintage Radio Control Society's Spirit of Selinsgrove Reunion.

As the years passed, Bob designed and built the "Yankee," .60 size pattern plane, which he also had published in the September 1974 issue of American Aircraft Modeler. This plane was so successful that he built two Yankee aircraft and won many pattern trophies with them. One of the plane's highlights was that it qualified in the top twenty at the 1975 Nats.

Another amazing plane that Bob Noll designed and built was the Steen Skybolt, .60 size Sport Scale plane. Once completed it proved to be an excellent plane. It too was published in the June 1977 issue of Model Airplane News. Bob, being the detailed builder and excellent flyer he is, won 4th place with the Skybolt at the 1976 Nats in Sport Scale. He designed the plane using the three view drawings obtained from a fellow member, Hale Wallace, who built the full-scale plane, flew it and kept it at the Tri-Cities Airport.

that I would like to acknowledge and tell about their background and accomplishments.

The person I would like to start with is Bob Noll. Bob started out with the Continental 600 Formula II pylon racer which was a Hal deBolt design. Bob built the prototype, inked the drawings and had it published in the April 1969 issue of Model Airplane News. With this design, he won the 1968 National Miniature Pylon Racing Assoc. (NMPRA) Championship in Formula II. Bob went on to win 2nd place NMPRA trophy for Formula II pylon racing in 1969. This airplane is still





To this day, Model Airplane News still lists Bob's designed (Skybolt) in their annual plans issue as one of the best selling scale plane designs.

My second selection is Ralph Jackson. He was born April 29, 1923 in Amsterdam, New York. In 1944 he graduated with a Bachelors of Aeronautical Engineering degree from New York University. While he was in college, he designed a control line model named the Mighty Molecule. It was published with plans and a construction article in the 1944 issue of Aircraft Age magazine. Between 1944 and 1950, Ralph served twentysix months in the US Army Air Force. In 1950 he moved to Endicott New York and worked as a mechanical engineer for the IBM Corporation for thirty four years. During his working career, he helped design computers which controlled the Saturn-5 rockets that started the Apollo space modules on their way to land our astronauts on the moon. Other designs he worked on where used in the B-70 and the B-52 still being flown today. Now retired and at the age of 82, Ralph is still designing and building model airplanes.

Ralph's modeling career started with him carving model airplanes from solid balsa at the age of 12. By the late 1930's he began to work with rubber powered flying models. His first radio controlled model was a Berkley Buccaneer which had its first successful flight in 1948. At that time the only control surfaces were the rudder and elevator. The receiver and transmitter were hand made.

Ralph was one of the founding members of the Aeroguidance Society, Inc. The Aeroguidance Society is well know for conducting organized Pattern Contests every year from about 1953 to the present. The clubs 50th Pattern Contest was held at the Blue Swan Airport in Sayre Pa. on August 5th, 6th and 7th 2005. Ralph participated in the contest effort primarily as a judge for over 40 years. He served as president and secretary of the club several times. He was editor of the club new-letter, "The Connector" for a term of six years and then for an additional year some years later.

With all the designing and building Ralph was doing, he still found time to compete flying pattern and scale models from the 1950's to 1980's. He got first place in Class 2 Pattern with the Stark Shark and fourth place in Scale with a 4-engine B-24 at the 1963 Nationals in Los Alamitos, Ca.



In 1974 he won third place in scale with a 1/6 scale Piper Comanche at the World Championships. He flew in scale competition with a 1/6 scale Windecker Eagle at the 1980 World Championships and got first place in Giant Scale at the 1981 WW1 Jamboree at Old Rhinebeck Aerodrome.

In the 1988 Nationals, Ralph pulled in first place in the FAI Large Scale with a $\frac{1}{4}$ scale Piper Comanche and third place in FAI scale with a $\frac{1}{6}$ scale Piper Comanche.

Ralph was also involved as a member of Airborne Control Laboratories in NY and participated in the design and manufacturing of several RC systems including the Digilog VI, a transitional system between analog and digital technologies.

Through the years, he has designed and built 14 aircraft, two of which have been published. The Windecker Eagle was published in Flying Models in 1974 and the earlier stated Mighty Molecule was also published. Here is a list of his planes that he designed, built, and flew; Aero Commander, 1960, B-24 Liberator, 1963, Handley-Page 0-400, 1971, Piper Comanche, 1973, Windecker Eagle, 1974, Fokker D-7, 1983, Piper Comanche-100", 1988, deHaviland



DH-2, 1989, Ryan PT 22, 2001, Jodel, 2002, Curtiss Fledgling, 2003, and the GeeBee R6 under construction, 2005.

My third selection, Dick Allen, was born in Elmira on September 2, 1928. Dick built gliders and rubber powered airplanes in grade school. During high school he started with control line flying. While studying hard for his degree, he found time to enter U-Control stunt competitions.

He graduated from Lehigh University with a Bachelor of Science in Engineering Physics. He was in the US Air Force from 1950 to 1954 and left as a First Lieutenant.

After college and the US Air Force, Dick worked for the IBM Corporation for 30 years. Being retired, he still finds time to design, build and fly RC airplanes.

Dick Allen started in RC in 1951 while stationed at Wright Field. In 1954 he was a founding father and the first president of the Aeroguidance Society.

AGS History 30

As a pioneer in one of the most interesting hobbies, Dick helped organize RC clubs in Elmira and Endicott NY. He helped organize and was the first contest director for the Aeroguidance Society Pattern meets as well as the Rhinebeck RC Jamboree. These meets went on to become the longest running club sponsored pattern and scale meets, respectively, in the United States.

In 1966 while Dick was living for a short time in Poughkeepsie, NY, three of his friends, Byron





Lichtenwalner, Bob Noll and Bill Underkofler, from the Aeroguidance Society stopped by to see him after having just attended a World War 1 air show at Old Rhinebeck Aerodrome. They were excited about the show and thought it would be great to have a RC contest there for scale models of World War 1 aircraft. While Dick lived in Poughkeepsie, he was a member of the IBM RC Model Club now known as the Mid Hudson RC Society. At a club meeting he proposed that the club should sponsor a RC meet at the Aerodrome. As time passed, the idea started to come together and they also had the support

from Cole Palen (Aerodromes former owner and founder). After getting all the rules together and set, the first meet was September 23, 1967. There were a total of 17 entrees, five of whom were from the Aeroguidance Society. In September 2005 they held their 38 annual RC meet at the Aerodrome in Old Rhinebeck NY.

Dick's first major contest was at the Air Force Worldwide Model Airplane Championships and he took second place in RC. In 1952 he won 2nd place in the Air Force Worldwide Model Airplane Championships. 1953 brought another year of competition for Dick. He got third place in the US Nationals (Nats)

Along with competing, Dick worked with club members. In 1956 he was a co-designer with Ralph Jackson of the Lancer for class I and II.

In 1957 he placed first in the Nats for class I (rudder only) RC with the Lancer. With the same airplane, Dick went on the get second place in the Nats for 1958. In 1969 & 1970 he placed second in the AMA Nats RC Pylon II racing. Being one of the first members to participate in the meet at Old Rhinebeck Aerodrome, he also competed there. In 1977 & 1979 he got first place in the maneuver event. Through the years Dick has been very busy with organizations, clubs, competition and family needs, however, he still found time to design RC models. In 1963 he designed the Stark Shark for class I and II. He posted the highest single flight score in class III at the 1963 Nats. Ralph Jackson won class II at the 1963 Nats with his Stark Shark. The Stark Shark was published with plans and a construction article in the American Modeler Magazine.

Dick's Junkers J-10 Tin Donkey 60" wingspan was another design. It too was published with a construction article and plans in the Model Builders magazine.

Planes weren't the only designs Dick developed. He designed and worked on the development of better mufflers. He published the Mousseler, which reduced the sound while increasing the power of the most .40 to .60 glow engines.

In 1996 he published another airplane known as the Mini MAX 1200Z. This appeared it the 1996 issue of Model Airplane News. As noted above, Dick published the Junker J-10 Tin Donkey with a 60" wingspan. In 2000 he published the larger version with an 87" wingspan in the Model Airplane News.

Since the year 2000 he has designed others, which fly as well at the ones noted. Many of Dick's designs were built with the help of AGS members. One AGS member in particular is Bill Underkofler who has dedicated a lot of time and effort in helping Dick with his creations.

With the inspiration of these three dedicated modelers I too became interested in designing and building RC model airplanes. I was born in Flushing NY on January 22, 1949. I attended Aviation High School and graduated with both my A&P tickets along with an academic degree. The A&P tickets are earned by



testing through the FAA. These tickets allow me to work on the airframe and power plant of full-scale aircraft.

I started in model planes when I was 14 with 1/2A control line. I graduated up to large control line with 60-foot radius circle. Being a city dweller, I used to fly off one of the clover leafs of the Long Island Express Way. Green grass was not abundant in my town.

I joined the Aeroguidance in 1999 and my first RC model kit was a LT-40. With the excellent training that the Aeroguidance gave me, I was able to solo the following spring.


The second plane I built was a $\frac{1}{4}$ scale J-3 Piper cub. I enjoyed building and flying it. Being an AGS member, I was able to meet Bob Noll, Dick Allen and Ralph Jackson all of which are wellknown model builders. Meeting and speaking with them, inspired me to build my own planes. For the next 1 $\frac{1}{2}$ years, I studied as much about model aerodynamics as I could get my hands on.

In 35 years away from the hobby the technology has changed. With the new technology and materials available, the construction techniques have also changed. The only way I was going to learn the new technology and construction techniques was to build airplanes using this knowledge.

The first design I built was Dick Allen's Mini Max. I redesigned it to a 40 size airplane. The finished plane looked great and flew fantastic. From then on, each winter was my design build time. The second plane I designed and built was a ¹/₄ scale of a RV-7. The RV-7 is manufactured by Van's Aircraft. This plane was developed from the 3 view drawings. The plane did have a slight aerodynamic problem, but it's being corrected. The RV-7 will be my first attempt to publish an airplane of my own design. Since then I have built Dick Allen's 80" MinMax. I designed it with a canopy and not an open cockpit. At present I am



building a ¹/₄ scale Extra 300. This plane will incorporate all the newest building techniques to date. It is expected to be finished in the spring of 2006.

With the Aeroguidance Society celebrating its 50th year of RC flying, I volunteered to design and build a club airplane. The airplane's looks and features are taken from our club logo. The plane is a full design, one of a kind, designed by me and built and flown by Bob Noll. The plane was a big success, first flown at our Aviation Day.

ABSOLUTE ACCURACY VIDEO SERIES

In 2000, Robin's View Productions released a series of videos with Bob Noll as narrator, to help those modelers interested in building precision aerobatic planes. The following text is from an advertisement for these videos. These videos have helped many modelers around the world build better planes.

Watch master craftsman, Bob Noll perform many critical building tasks in screen-filling close-up detail. The sharp close-ups, unique to these videos, allow you to critically watch the subtle hand motions required to perform many building tasks.

Vol.1, No. 1: Perfect Airframe Alignment

Straight, accurately built models fly better! In this video, Master Modeler, Bob Noll takes you step-by step in extreme close-up detail through all procedures required to achieve a perfectly aligned airframe. Included are plans for two of the fixtures that Bob uses in his demonstration, and a bonus coupon for discount on "Bob's Alignment Gadget" and "Height Gauges". The techniques learned from this video can be adapted to any type of model. Run time: 67 min.

Vol. 1, No. 2: Perfect Foam Wing Construction

This video starts with an inspection of the cores for accuracy and then goes through every aspect of foam wing construction in extreme close-up detail. Installation of servo bays and retract wells, servo lead hole spurring, sheet preparation and indexing, covering, trimming, facing, aileron cut-outs and framing, root rib attachment, accurate leading edge templating and shaping and final sanding are all thoroughly covered. Run time: 106 min.

Vol. 1, No. 3: Perfect Removable/Adjustable Stabilizer

The ability to remove and adjust the stabilizer on your plane offers many advantages. First and foremost is the capability to infinitely fine-tune its flight trim. Another advantage is the ease of finishing both the stabilizer and fuselage. And from a practical point of view, the ease of transportation with the stab halves removed makes this a feature you will want to include on your next plane. Run time: 73 min.

Vol. 1, No. 4: Perfect Engine MountingTechniques

Proper soft mounting of engines will extend the life of the model and the radio equipment, and will reduce noise emission. Proper alignment of the engine mounting system is also critical to conform to the designer's intended right and down thrust measurements. In this video, Bob shows how to properly install several soft mounts in both a fiberglass fuselage as well as a built-up fuselage with removable cowl. Run time 60 min.



Bruce Blake and Bill Underkofler at Toledo

Valley Electronics

Valley Electronics was formed in the early 1950's by two of the original Aeroguidance Society members: George Brooks and Ralph Jackson. Their first product was a single channel radio control system consisting of a transmitter and receiver. The receiver was a miniature version of a receiver developed by R/C pioneer Walter Good. It was a superregenerative radio designed for operation on the 27.255 megacycle "Citizens Band" which was available at that time. It included four subminiature vacuum tubes and a Sigma 4f relay. Power requirements were provided by a 60 volt dry cell battery and a 1.5 volt dry battery. The transmitter sent a

tone-modulated signal. The tone could be turned on and off by the pilot to cause the relay to operate and cause an escapement-type of actuator to move the aircraft rudder in a manner which would result in a turn.

Another product produced by Valley Electronics was the Robot Synchro, a proportional R/C actuator

which consisted of a control arm driven through a differential and reduction gears by two low-current electric motors. Both motors ran continuously and were never in a stalled condition regardless of control surface position. Self-neutralizing fully proportional control was obtained when the transmitter was equipped with a keying attachment which provided variable length pulses of the output tone.

A third product was the Robot JR, a proportional R/C actuator designed to provide simultaneous control of the model airplane rudder and elevator when used with any single channel receiver and transmitter keyed with a variable pulse rate and width control box

Airborne Control Laboratories

Bill Smail displays the ACL system

Airborne Control Laboratories was formed in the early 1960's by four Aeroguidance Society members: Glen Arnold, Bruce Blake, Ralph Jackson and Bill Smail. Their primary product was the ACL Digilog VI proportional control system which was a significant advance in the art of R/C model control. It combined digital and analog features to provide proportional control of six channels, each driving a feedback servo.

The superheterodyne receiver was fully transistorized. The design and production tasks were divided among the four members as follows: Electronic design-Bill

Smail, Mechanical design-Ralph Jackson, Assembly-Glen Arnold, General organization and procurement-Bruce Blake.

Flying Fun AGS Style

By Rick Allabaugh and Jim Quinn

New Years Day Fun Fly

As the name implies, this event is held January 1st of each new year. Before becoming a club tradition in the 1970's, several Aeroguidance Society members would informally get together to fly on this day. Based on conversations with club members, this event was held primarily at Moore Park in Vestal, NY. Due to the unique weather we have in Binghamton, club members have flown on this day in snow, rain, and sunshine. Everything from wheels to skis have been used and more recently this event has been popular with hand launching small electric models. One of the big advantages of electrics over glow



fuel power is their ease to start during cold weather. During this time of the year, you wouldn't want to tinker with fussy, cold glow fuel engines. Just plug in the battery, flip the switch, and the motor is running. Anyone who has flown in this event has at one time or another experienced "numb thumbs". But with the warm chili, coffee, and good conversations with fellow AGS members, this is one event not to miss.



Winter Fly

This event is typically held in the second to third week in February. Similar to the New Years Day Fun Fly, this started out as a very informal group of Aeroguidance Society fliers who, in the 1960's, would get together and fly at Tri-Cities Airport in Endicott, NY. Then in the 1970's, this informal group started a club tradition and the Winter Fly was born. Over the years, this event has been flown at Hickories Park in Owego, NY, Moore Park in Vestal, NY, and a field owned by Main Endwell School District. Being the middle of winter, this event has typically involved flying off snow with skis. However, there have been times where wheels were required to take off. Once again,

the Activity Chairperson would provide warm food and drink. Even if you don't fly in the cold, it's a great event to come and watch.

Year of the Zagi



Late in 2001 many AGS members decided to build a ZAGI and join in for a full year of interesting flying. The only requirement was that the plane to be flown must be a ZAGI. Most of our members built the standard ZAGI right out of the box with a speed 400 motor and the 1700ma nicad battery pack that was recommended. The year began with a New Year's Day event called, "Enduro ZAGI." The pilots launched their ZAGIs in 30 second intervals with the goal to see whose ZAGI could fly the longest. It was cold enough that the winner's 12 minute plus flight challenged his thumbs on the

sticks as it did his flying skills to keep the plane in the air. The "ZAGI Master" hosted racing and combat events through out the winter months. One of the most challenging events was the "30/30 ZAGI." This event was held in the month of June and each participant had to fly a minimum flight of one minute on each of the 30 days of the month. Interest in ZAGI flying continues to be strong with new ZAGIs appearing regularly.

Aerobatic Primer



In an effort to promote Precision Aerobatic flying among AGS members an Annual Primer was initiated for all interested AGS members. This event begins with a morning of "Ground School." During the Ground School the airplanes are checked to be sure the control surfaces are hinged properly; that the throws are sufficient, but not extreme; that there is no slop in the linkages, etc. Each maneuver in the AMA 401 sequence is "flown" with a stick plane and the requirements for scoring a perfect 10 are explained. There is a lunch served around noon and the flying starts right after lunch. Several of the

regular aerobatic competitors serve as morning instructors, chefs at lunch, and judges for the afternoon's flying. The flying begins with one of the host pilots flying the 401 sequence. Each Primer Pilot then flies the sequence one maneuver at a time with a host pilot as a coach.

Each Primer Pilot flies six rounds with the best four flights used to determine final placements. Awards and prizes are given to each participating pilot and grateful pilots put their equipment away knowing their flying skills have improved.

Combat



The Aeroguidance Society is host to a plethora of flying styles. If it flies the AGS likes it. Combat is a very specialized skill and requires unique equipment. Being able to fly your own plane and be aware of out of bounds limitations while at the same time trying to get close enough to another contestant's airplane to cut his streamer without damaging either airplane is a most exacting discipline. The number of combat pilots in AMA DII is not great, but the skill and dedication of these pilots is most admirable. We have been the proud hosts to many AMA sanctioned events throughout the years.

Float Flying



For almost a quarter century the Aeroguidance Society has promoted and sanctioned flying off water with its annual Float Fly. At one point the AGS hosted a spring and fall event. In recent years another R/C area club asked to host the spring event so the AGS now hosts the fall event only. The site for most of these fall classics has been a beautiful county park located north of Endicott. Greenwood Park is nestled among the beautiful rolling hills of Broome County. A great variety of airplanes usually grace the air above the lake at Greenwood Park. You can expect to see classic J-3 Pipers on floats. One J-

3 was even equipped with a remotely operated camera to take aerial photos. Amphibians are plentiful the most popular of which are currently the high performing Seamasters. Of late electric models abound. Such exotic electric models as Howard Hughes' Spruce Goose grace the sky.



'Round the Year Club

Flying once a month for all twelve months of the year was certainly a challenge in the 1950s and 60s. To promote year round flying the Aeroguidance Society introduced a sub group within the Society to meet that challenge. Irritable engines, uncertain radio systems, and marginal weather at times were among the factors that influenced a pilot to fly or not to fly on a particular day. For these and many other reasons the "Round the Year Club" also had a nickname, "The Nut Club." At our annual banquets a variety of awards were presented to our members. One of the awards was a gold painted walnut mounted on a tasteful wooden base and proudly presented to deserving pilots.

In our anniversary year a new practice was proposed and approved by our membership. When some of us started piloting R/C airplanes there were a variety of challenges most of which dealt with the radio systems we were using to guide our airplanes. The airframes themselves were usually quite stable. Some of them were more free flights than fully functioning airplanes. The modern trainer has little to do with our training airplanes of the 1950s. The airframes are stronger, the engines are rock solid, electric power is to simply flip a switch, and most of all the radio equipment is almost fool proof. The modern trainer usually has full control functioning ailerons, elevators, rudders, and throttle con-



trol. With this in mind the Aeroguidance Society has adopted the full size practice upon solo flight to cut the tail out of the soloing pilots shirt and display them proudly in the pavilion at our R/C airport.

Indoor R/C

Indoor R/C flying is becoming more and more popular. With the advent of electric power and especially since the amazing developments in battery technology, brushless motors, and superior speed controls flying indoors is now within the reach of most R/C pilots. Thirty years ago, however, flying R/C indoors was quite different. The inserted picture shows several Aeroguidance Society members achieving this goal in 1974! Quite an accomplishment with 1974 technology!



AGS History 39

THE RHINEBECK R/C JAMBOREE

Myon Carey Hark Farel WWL SQUADRON Jo Hose J967 Bet Nell Bit Undersoffer Hele Wallee Bit Undersoffer Get Wallee Bit Undersoffer Get Wallee Bit Wallee Bit Undersoffer Get Wallee Bit Wallee By: Bob Noll and Dick Allen

The Old Rhinebeck Aerodrome is a true "living" museum of antique aviation located in Rhinebeck, New York. It contains one of the largest collections of early aeroplanes in the world, many of which regularly take to the air in all their glory during our weekend air shows. The Aerodrome features aeroplanes, automobiles. motorcycles, early engines and memorabilia from 1900-1935. In addition to the airshows, there are four museum buildings displaying aircraft from the Pioneer, World War I, and the Lindbergh/Barnstorming eras.

These were the golden years of aviation.

In 1966 three Aeroguidance Society members, Byron Lichtenwalner, Bill Underkofler and Bob Noll traveled to the aerodrome with their families to witness one of the weekend airshows. After returning to work at IBM Endicott, the three discussed the idea of building WWI RC planes. They thought this would lead to some interesting projects.

Bill decided to build a Sopwith Triplane and Bob chose a Nieuport 27 for which plans were available from Model Airplane news. During lunch in the IBM cafeteria, the three discussed the possibility of having a special scale RC event for WWI models. Using an unused napkin, Bob scratched out some basic rules based on the AMA scale RC event. The AMA rules would be used with the specific criteria that the planes had to be replicas of pre-1919 aircraft.

The excitement of building WWI models was carried to the Aeroguidance Society club meeting and several other members, who joined the excitement, decided to build WWI planes. Jim Hoover built a Halberstadt; Hale Wallace chose a Bristol Bullet; Ralph Jackson decided on a Fokker D-7. Hank Farrell also chose the Fokker D-7 and Myron Cary decided on an SE-5.

Now that the idea of building the models was underway, something had to be done about having a unique contest to showcase the planes. Dick Allen, a past member of the Aeroguidance Society, had recently



transferred with IBM from Endicott, NY to Poughkeepsie, NY. A phone call to Dick was all it took to get him excited about our projects and the idea of a special scale contest for these WW I planes.

Dick presented the idea of holding this very special contest at the Olde Rhinebeck Aerodrome to his new club, the IBM R/C Model Club of Poughkeepsie, and the rest is history.

There were thirteen contestants at the first WW I Jamboree and Aeroguidance Society members won all events. Bob Noll won the scale event, Jim Hoover won both the maneuvers event as well as the bomb drop & spotlanding event. The team of Hale Wallace and Hoover won the dogfight event. It was a clean sweep for the Aeroguidance Society.

Part II of this chapter is written by Dick Allen titled "How the Rhinebeck R/C Jamboree Began". An article about the first Jamboree appeared in the January 1968 issue of American Aircraft Modeler. A copy of that article follows Dick's thoughts.

PART II

How the Rhinebeck R/C Jamboree Began

1996 was the thirtieth anniversary of what has become one of the largest and longest running R/C Scale contests in the world, consistently drawing about 100 entrants. Since I was the Contest Director for the first one (Saturday, September 23, 1967) and have flown in 28 of them since then, I have frequently been asked how it all began. This is that history.

In the fall of 1966 I was living in Poughkeepsie, NY, having moved there recently from Endicott, NY. Three of my friends from Endicott's Aeroguidance Society (AGS), Byron Lichtenwalner, Bob Noll, and Bill Underkofler stopped by to see me after having just attended a WW I airshow at the Olde Rhinebeck Aerodrome. They were excited about the show and thought it would be a really neat idea to have an R/C contest there for scale models of WW I aircraft. We brainstormed the idea at length.

At the next meeting of my club, the "IBM R/C Model Club of Poughkeepsie" (Now the "Mid-Hudson R/C Society") I proposed that the club should sponsor an R/C meet at the Aerodrome. While there were some negative comments regarding the fact that the club had never sponsored any sort of contest, etc. before, the general reaction was positive providing we could get the Aerodrome's support.

By the time we could set up a meeting with Cole Palen, the Aerodrome's owner and founder, winter was fast approaching. Cole not only accepted the idea, but was enthusiastic about it. He offered to help out, and to donate some WW I aircraft instruments for trophies.

AGS History 41



Cole's friend and fellow Aerodrome pilot Dick King (both of them model builders) was equally supportive of the idea.

So we went back to the Poughkeepsie club with the good news. By this time the club's enthusiasm was starting to build and they agreed to take on the project. We formed a Rules Committee consisting of myself (Chairperson), Bruce Blake, Ed Lorenz, Bud Standley, and Jim Taylor. I told my Aeroguidance friends that the meet was a "GO", and asked them to send us their thoughts on the rules. In response I received a letter from Bill Underkofler (probably the most talented all around R/Cer that I will ever meet) summarizing the Aeroguidance Society's thoughts. They proposed in some detail an aerobatic event with a

small bonus for scale appearance. I discussed this with Cole Palen who showed me a book with many authentic WW I maneuvers described and drawn. Some of these maneuvers were added, the scale bonus was defined, and this because the Rhinebeck "WW I Maneuvers" event.

The Rules Committee, meeting at my home in Poughkeepsie, decided that we wanted more than just one event. To be successful, we felt we had to appeal to anyone who liked to fly WW I airplanes—from museum scale to just recognizable scale. We also decided that non-scale airplanes—such as "Das Ugly Stick" would not be allowed. To that end we established three more events:

- 1. "AMA Scale" Using AMA rules, but limited to pre 1919 aircraft and using any 5 maneuvers from the "WWI Maneuvers" event. Some in the club wanted this to be the only event, but I believe that had we done so the "Rhinebeck R/C Jamboree" would have long since disappeared.
- 2. "Team Combat" Simulated combat between two military aircraft. This event was later replaced with a "Freestyle" event.
- 3. "Balloon Burst, Bomb Drop, and Spot Landing" Later renamed the "Mission Event."

All airplanes entered were required to have proof of scale, but only "AMA Scale" and "WWI Maneuvers" planes were judged for scale appearance.

We knew we would have strong support from the AGS, but realized that to be successful we would also have to draw participants from other clubs. To encourage that, I wrote an information sheet describing the philosophy, the events, and the Aerodrome. This was sent to magazines, clubs, and individuals in February, 1967. The rules were finalized and distributed in March of 1967.

The day of that first meet (September 23, 1967) dawned bright and sunny. George Buso (he of golden throat) had initiated his now famous Anti-Rain Dance which has, for 30 years, kept the Jamboree from



being rained out. We were gratified by a total of 17 entrants, 5 of whom were from my old club, the AGS. I had been told that we would only need one balloon for the "Balloon Burst." Imagine everyone's surprise when Jim Hoover nailed the balloon on the first pass of his first flight! He was flying a Halberstadt which some "experts" had predicted would not fly because the horizontal tail's area was only 10% of the wing's area. Dire predictions of carnage in-

flicted by the Aerodrome's plane eating trees also turned out to be unfounded; only one of the 17 planes crashed.

As I look back upon the 30 year history of the Rhinebeck Jamboree, I cannot help but reflect upon why this scale contest has been so successful, while the ordinary club sponsored weekend scale contests-once so common-have all but died out. I have to conclude that it is because all of today's AMA scale events (except for "Fun Scale") require a really museum piece replica of a specific full scale aircraft to be competitive.



While this has brought such extravaganzas as "Top Gun," "Scale Masters," and the "Nationals" to new heights in terms of aircraft authenticity and magazine coverage, it has left the vast majority of R/C scale flyers out in the cold with no place to turn but to the non-competitive IMAA. Most scale flyers are just not interested in spending more time on rivets, seam lines, full cockpit details, exact color schemes, and endless documentation searches than they do flying. The Rhinebeck R/C Jamboree has provided a "Big Tent" with something for every scale flyer interested in early "aeroplanes."







The Sopwith Triplane with S.T. .60 and ACL radio flew exceptionally well for Bill Underkofler. Lots of allerons!

22 January 1968

BILL COONS

THE action was at Cole Palen's W.W.I airport, where the boys from the Poughkeepsie IBM Radio Control Club on Sept. 23 staged a one-day affair destined to become an annual event. Scale ships by the carload kept pouring in from all over the northeast for the first RC scale contest devoted exclusively to W.W.I aircraft.

It was without doubt the finest collection of vintage model aircraft ever assembled at one time. The authenticity and attention to detail were truly amazing, and as each contestant flew his turn, the applause seemed to place it far above the usual stunt pattern event seen at most contests. This is real spectator sport.

The landing strip was scale to the extent of real stones, rough ground, and a rock or two. Only the large scale wire wheels made it possible to take off and land safely. Several events were offered and most contestants flew in more than one. Included were: scale, W.W.I maneuvers, team dog fights, balloon busting, bombing and landing skills. The Endicott Aeroguidance Society boys made a clean Photographs by the author

sweep in the victory column. The Poughkeepsie club was host and did not compete.

First in scale was Bob Noll, with his Nieuport 27. Bombing and landing skill prize went to Jim Hoover who also placed first in W.W.I maneuvers. The prize for the youngest entrant went to Hale Wallace.

Nick Ziroli's Morane Saulnier turned out to be a real balloon buster. He hit it twice and succeeded in carrying it off for some distance still inflated. Tom Wensel won the worst crash award. Still it wasn't beyond repair.

The real show stopper was the mock aerial dog fight between Hale Wallace's Bristol Bullet and Jim Hoover's Halberstadt. At times they seemed to abandon all thoughts of self preservation and concentrated entirely on making the kill, sometimes only a whisper apart at the breakaway. A real crowd pleaser.

Dick Allen, the contest director, Bruce Blake, and Ed Lorenz, to mention a few, can take a curtain call for this one.



Lou Perretti's Fokker caught an instant before bursting the balloon in that event. It has lots of flying surface area.



Destined soon to be a kit by V.K. Models, the Nieuport 27 by Vern Krehbiel is true masterpiece of modeling – excellent flyer.



RC Columnist Howard McEntee, left, with Cole Palen, who operates the Rhinebeck Aerodrome. He restored the many real WWI airplanes at the field, and put on a real WWI show on Sunday flying those fabulous antiques. Bob Noll, scale winner, on right.



Ralph "Von" Jackson entered a Fokker D-7 equipped with ACL gear and a .60 engine. The model appears to be true scale in its dimensions, but construction simplified.



Pilot is "done in" after Tom Wensel's D-7 won the worst crash award. Wish Snoopy "The Red Baron" was there to see it!



Left to right: Jim Hoover, flying a tough Halberstadt, won the bombing and landing skill event. Bob Noll, first in Scale with a Nieuport 27. Hale Wallace conquered Hoover with a Bristol Bullet in the Dog Fight contest. Many great WWI models were shown and flown. Germany, with most planes, would have won the game.



Ralph and his daughter came to the event dressed in the clothing of WWI vintage — goggles, boots, and all. It takes plenty of time to rig these planes, as this picture suggests.



Joe Tschirgi entered this outstanding Fokker D-8. The camouflage pattern is correct in shape and location of each patch. Hectagons of individually dyed Silkspan! Digimite 4RS on 72 Mhz.

American Modeler

23

AGS History 45

COMMUNITY ACTIVITIES

By: Terry Terrenoire

In the beginning, there was no AGS, and that was not good. So a group of guys got together in Endicott, NY and formed a club based on the rapidly advancing hobby of radio controlled flight of model airplanes.

The need for public exposure and support was recognized by these early pioneers, right from the start in 1954, so they involved the public by inviting them to the Tri-Cities Airport to watch the early competitions.



The spectators were exposed to the sophistication viability of the fledging hobby of radio-controlled flight. In addition to the viewing of planes in competition, another way this was done was to set up an information area where a few club members could talk to the spectators, answer their questions, and show them close up the inner workings of the planes. On Sunday afternoon, after the competition flying was complete, many of the club members would put on an "air show" for the gathered crowd. During this show and announcer would talk about the particulars of the plane being demonstrated, and the maneuvers being flown." During the first 23 years of this activity at the airport, PR activity provided a means of educating the general public on the merits and scope of the hobby. Keep in mind that in 1954 most families did not have a television set, and no one had a color television. The first regularly scheduled radio broadcast, from KDKA in Pittsburgh, PA had been established less than thirty years earlier. Radio broadcasting was in its infancy, let alone the flight of a model airplane with no visible means of control.



This early public exposure generated a lot of interest, and many adults, outside the hobby, still remember going to the airport with their parents in the 60's and 70's, to watch the models fly.

The controlled access to the airport provided a side benefit to the club that resulted in the ability to purchase both the field we now enjoy, and the original 16 acre site in Maine, NY that preceded our current facility. The club was able to ask the incoming public for a small "parking donation". At just \$2 per car, the entire family was entertained for several hours, a good deal, even at 1960's dollar value. With the purchase of the field in Maine, more PR was undertaken, although not as much as would be required later. This was a remote location, but there was some new home building activity surrounding the field. During the 50's and 60's most engines were being run without any attempt to quiet them.



Terry "Mr. Public Relations" Terrenoire building a model at the 2004 Mall Show.

A concerted effort was made to quiet the planes.

In 1982 a new venue for informing and educating the public became available, the Oakdale Mall. In 1982 The AGS was invited to put on a display in the Mall in concert with the local Plastic model building club.

In the first year just these two organizations participated. In the second year the other RC clubs in the area were invited. Some attended. By the 3rd year, all the area clubs were involved. A boating club even joined in the fun for a while. The plastic club dropped out after a few years, but the four main RC airplane clubs in the Triple Cities area have maintained the two-day event ever since. The 2007 show will mark the 25th anniversary.

During the two days of the show the public is invited to view our projects, talk to some of the builders and fliers, and get information on our activities. This resulted in some BAD PR with our immediate neighbors, resulting in the Maine Village Board adopting a resolution banning any further Model Field development within the village. In 1969 the first muffler requirement was implemented. It was too little, too late. The damage had already been done, and in truth, the original "mufflers" did very little to quiet the engines. But we learned some lessons.

When the field on Day Hollow Road was purchased in 1975, a lot of effort was put into contacting the surrounding neighbors. They were invited to the field to see what we were doing. They were invited to picnics, and they were given contact names and numbers so they could register concerns and complaints, and noise limits were instituted.



A TV set up with RC movies playing attracts modelers of all ages.

It is not unusual for us to pick up a new club member, or two, from this event each year. But the real goal is to keep the hobby in the public view, let them know the benefits of our activities, and how they can become involved.

In order to capture the attention of the passers by, there is a TV set up with RC movies playing, throughout the two days. Near by the TV there is a club member building a new project. The combination of the TV and seeing someone actually working on an airframe catches a lot of people's attention. This gives an opportunity for one of the club members to start up a conversation.

In recent years a flight simulator has been added, and many kids, of all ages, stop a try their hand at flying an RC plane.

A more behind the scenes approach to Public relations is the one-on-one of a club member attending the meetings of other groups, like the local Kiwanis, Lions, or Sertoma, associations. In these encounters, we try to show the variety of activities, and aircraft challenges that exist. We discuss, and show, everything from the small hand launched glider up to state of the art Pattern planes, and try to tie them together by explaining the similarities.



Expert AGS builder, Don Shugard, helping an explorer scout with wing fabrication

went back to the classrooms and helped every child in the school build a flying model that they could take home. While there is no way of knowing if any of those children eventually found RC as a lifetime hobby, it sure is gratifying to know that so many youngsters were exposed to the thrills and challenges of model construction and flight. On one such occasion, there was an elementary school principal in the group of Kiwanians. After the presentation, he approached the speaker and introduced himself. Arrangements were made to have the speaker conduct a similar talk at the school for about 300 kids from Kindergarten through 5th grade. The facilities permitted a flight demonstration behind the school after the talk, and the kids were enthralled. Over the following weeks the school PTA bought Delta dart kits for every child in the school. The presenter went back to the school and taught all the teachers how to build the planes. Then, the teachers



"Don, we need your help with this fuselage," an explorer girl asks.

Over the years, many such presentations have been made to various civic organizations, service clubs, and schools, exposing thousands to the wonderful world of model flight.

Yet another example of a similar event is the club's involvement with a local Explorer Scout program, in conjunction with the local Lockheed Martin facility.

On two occasions the club has participated in a winter-long building and flying challenge with about 20 students. In both instances the Scouts were divided into four teams, with four or five on each team. The scoutmasters concentrated on teaching teamwork, and quality control, while our club members taught them how to construct a straight, strong airframe. In both years we chose the Sig LT 40, and over the winter we built four of them for the kids to fly in the spring. With meeting just twice a month from October to March, it was a real challenge to get all of the building, covering, and equipment installation completed. In the end, all of the students did get a chance to fly the planes they had helped to build.

Steven Bard, a long time Aeroguidance Society member, has almost single-handedly administered one more project. He has consistently worked with the local High School, and a Boys and Girls Club in Endicott. Steven assisted these youngsters on a variety of aircraft construction projects. For many years he gave assistance to the High School with its development and construction of an electric car. Here again, over the years of Steven's activities many, many young minds have been introduced to the challenges, and joys of our great hobby.

It seems that the members of the AGS never stop promoting the hobby, and our club in particular. From its inception in 1954, there has been a push to educate and inform the general public. This push continues today with the annual Mall show, our two winter flys, the fall float fly, the open house at the club field, and numerous "private" presentations. This type of continuing activity can only help to ensure that the AGS will be a viable organization for yet another 50 years.

FLIGHT TRAINING PROGRAM

By: Gib Vandeling

Once upon a time is was possible, but difficult, to learn to fly a radio controlled model airplane by one's self. With a one or two channel airplane or glider you could learn by trial and error after a number of crash and repair cycles even though your first airplane was often quite stable and would pretty much fly hands-off.



A Flight School Student preparing his LT 40 for his first flight of the day using our special Safety Flight Setup Stations.

With a modern "trainer" which typically has interactive 4 channel control it is much, much more difficult to achieve solo flight. Most who try to learn by themselves either give up or seek help. Indeed most of the instruction books that come with beginner model airplanes either kits, or Almost Ready to Fly (ARF) planes requiring very little construction, clearly stress the importance of finding someone to help you learn to fly. Recognizing this, the AGS instituted a formal flight school for new and inexperienced members some years ago and to this day the AGS is the only club in the area providing this service to it's members as an organized program.

Today most radio transmitters are provided with a connector for a "buddy cord" which allows two transmitters to be interconnected. One of the transmitters is the active transmit-

ter used by the instructor and the other is a "buddy box"—a transmitter unit with the transmitter disabled—which is used by the student. During the training the instructor will permit the student to control the airplane for longer periods of time but retake control to avoid any problems or crashes. The goal is for the student to solo and fly a complete flight without any intervention of the instructor.

It sounds pretty simple but there is more to it than this. In addition to instructors, other club members act as "helpers". First, the helpers will make certain that a student's airplane is airworthy. That means, for example, that the controls respond to the appropriate transmitter commands and deflect in the proper direction and that the center-of-gravity is correct. Even experienced pilots sometimes make such mistakes particularly when they use a transmitter with more than one airplane programmed into it. Also the helper will assist the student in starting and adjusting the engine and provide other assistance where necessary.

At the beginning of the flying season a flight school co-coordinator will organize the flight school and publish a list of instructors, students and helpers with their phone numbers. Flight school is traditionally held on Wednesday nights and Saturday mornings although other arrangements can sometimes be made to fit an individual instructor's or student's convenience. One important feature of our flight school is that the student is required to contact an instructor in advance of a flight school session to insure that the instructor and student will both be available for a specific flight school session. Our instructors volunteer their time and this simple courtesy insures that an instructor doesn't show up with no student and vice versa.



AGS Flight School's wonderful tradition when student pilots prepare a delicious dinner for their instructors and helpers as a tasty conclusion to another successful Flight School season.

A special feature of our Flight School is the Performance Log. This shows the student his/her progress from lesson to lesson. It sets goals for the student to achieve. It also is a quick reference for the instructors to know where a student's skill level is if he hasn't taught that student recently.

Dick Allen coordinated our first flight school some years ago. This was before buddy boxes became commonplace. Dick said that they originally passed the transmitter back and forth from instructor to student and that this worked pretty well except for landing. Dick also remembers that mode 1, mode 2, and single stick transmitters were quite common in the old days and that

students were often given wings when they soloed. A more recent tradition is for the students to host a picnic for the instructors and helpers on the last scheduled flight school session.

The AGS is very proud of our flight school tradition and of the dedication of our flight school instructors and helpers. It is one very important benefit of club membership.

FLIGHT CONTROL CENTER

By: Bob Noll

The Flight Control Center (FCC) was designed and built to meet the need for an improved frequency control board at our club flying field. The FCC was designed and built in 1996 and an article about the FCC was published in Radio Control Modeler magazine in 1998.

Included in this chapter are: - Letter to RCM with submission of the article - The submitted article

The sublished article

- The published article

The Flight Control Center is still in use with no modifications from the original design.

2317 Acorn Drive Vestal, NY 13850 (607) 754-5279 September 25, 1996

Mr. Don Dewey RCM Publisher 144 W. Sierra Madre Blvd. Sierra Madre, CA 91024

Dear Don,

Enclosed is the article on the Flight Control Center that we discussed at this years Toledo Show. It has taken considerable time to finish the project, pictures and plans. Also included is a diskette with the article using Microsoft Word.

During our discussion you expressed an interest in this project for publication and estimated a minimum payment of \$250.00. To repeat, this was a club project by the Aeroguidance Society Inc. and the compensation will be used to defray the costs of this rather aggressive project.

I hope you will find the enclosed materials adequate for RCM and will be looking forward to hearing from you.

Sincerely,

Bob Noll

Flight Control Center

by Bob Noll

After many years and several frequency boards, the Aeroguidance Society, Inc. decided that an improvement was needed. But, the new frequency board had to be more than just a means of controlling flights; it had to do a few other jobs. Since the club's trainer boxes were stored in a shed away from the flight line, it would be much more convenient if they, too, were at the same location as the frequency pins. And while we were at it, why not make provisions for transmitter impound, the first aid kit, and the sound meter and log book! Recently, a fire extinguisher was even added. It became clear immediately that this new construction project needed a new name and the name of 'Flight Control Center' seemed appropriate considering all the tasks that it supported. And so, this FCC was put into design, a design that had to meet all these needs and be weatherproof and lockable. And, it also had to be an ergonomic design so its use would be convenient and easy to use.

Pictures one is a photo of the FCC in its closed and locked position. The main box is attached to two treated 4x4's which are placed 48 inches into the ground. You see, we have some pretty good winters in upstate New York and our field chairman demanded that we get below the deepest possible frost line. Examination of these pictures shows that the box is covered by a roof and that a 2x4 across the bottom provided supports and stops for the doors when they are open. Removal of only four bolts allows the removal of the FCC for winter storage.

Pictures three shows the FCC in its operational configuration, with doors open and pinned in place to the 2x4, cards in place where the frequency pin is in use, and impounded transmitters in the center section. Note that the transmitters are staggered in order to maximize the space available. A nine inch stagger proved to be ideal and will accommodate all transmitter sizes. You can also see the first aid kit at the right, the box with sound meter next to it and the sound log book farther to the left. All of this at a convenient height for easy access.

Since our club decided many years ago that a subtractive system (you take away a pin if you want to use a frequency) combined with an additive system (you place your AMA card in a holder) was the best; we knew that pins and clips would be needed. The frequency pins would be made from good quality clothes pins (yes, there are some good ones available) with the frequency numbers from ACE Radio Control placed on a rectangle of 1/16 birch ply which is CA'ed to the clothes pins. The card clips are flat cable clamps which come with a good double back tape for adhesion.

Picture three is a close-up of a frequency pin. It is clipped to a 1/4-20x 2" bolt that has been screwed into a wood strip inside the door. This screw is vertical with the pin clipping on from the right which was determined to be the best for ergonomic reasons. The second frequency sticker was placed directly behind the pin and the card clip was located below the pin on the wooden strip. Location of the clip allows easy input and removal of the AMA card as it projects slightly above the strip of wood. This card location also makes it hard to return the pin without removing the card so fewer cards would be left at the field. If more than one member needs the same frequency pin, AMA cards are placed into the clip behind the active flyer and the pin is transferred only after it is returned to the FCC and the transmitter is in impound.

AMA cards are placed into a clip when the frequency pin is taken. A special sticker is attached to the right front of the AMA card. This small yellow sticker with the club logo is proof that the flyer is a paid up member. Upon receiving the member's dues, the club Treasurer attaches one of these stickers with

His dues expiration date to the card. This system assures that all flying members are licensed and paid up. A simple but effective system.

Much discussion went on during the design regarding the method for storing impounded transmitter and the club buddy boxes. The initial thought was to use shelves but in order to maximize the space available, the shelves would have to be constructed in such a way that the transmitter antennas would be able to project between two other transmitters. This idea survived for a few weeks while we tried to figure out how to make the shelves so the transmitters would not fall off but still be easily added and removed. Finally one member of the design team suggested hooks since most currently used transmitters have handles. Wala! This was a stroke of genius and solved all the shelf problems while being simpler and less costly, our kind of solution.

Picture 4 shows the transmitter hooks which are standard hardware store items. These 2" hooks are screwed into wooden strips at a slight upward angle of about 10 degrees and large fuel tubing is slid over the hooks to make a neater, cushion mount for the handles. Using a wooden strip for the hooks, insures that the hooks do not project through the back of the FCC and also keeps the transmitters at a straight and upright position as seen in picture 8. Of course the spacing of the hooks is important and we found 3 inches to be perfect.

Picture 5 shows the first aid kit and the box containing the club sound meter. Members are more able to check their planes for our 98 dBA maximum sound level since the meter is now readily accessible at all times.

Special credits for this project go to Bob Punkar for the use of his wood working shop, to Dave Lewis for the procurement of hardware and many design ideas, and to the many other club members who worked on the project as well as Dave Roberts for the pictures.

For a reprint of this article, a complete set of drawings and a bill of material send a check for \$10.00 to:

The Aeroguidance Society, Inc. P.O. Box 39 Vestal, NY 13850.



More Than Just a Transmitter Impound

fter many years and several frequency boards, the Aeroguidance Society, Inc., decided that an improvement was needed. But, the new frequency board had to be more than just a means of controlling flights, it had to do a few other jobs. Since the club's trainer boxes were stored in a shed away from the flight line, it would be much more convenient if they, too, were at the same location as the frequency pins. And, while we were at it, why not make provisions for transmitter impound, the first aid kit, and the sound meter and log book! Recently, a fire extinguisher was even added. It became clear immediately that this new construction project needed a new name and the name of "Flight Control Center" seemed appropriate, considering all the tasks that it supported. And so, this FCC was put into design, a design that had to meet all these needs, be weatherproof and lockable. It also had to be an ergonomic design so its use would be convenient and easy to use.

Photo #1 is of the FCC in its closed and locked position. The main box is attached to two treated 4x4's which are placed 48" into the ground. We



have some pretty good winters in upstate New York and our field chairman demanded that we get below the deepest possible frost line. Examination of these photos shows that the box is covered by a roof and that a 2x4 across the bottom provided supports and stops for the doors when they are open. Removal of only four bolts allows the removal of the FCC for winter storage.

Photo #2 shows the FCC in its operational configuration, with doors open and pinned in place to the 2x4, cards in place where the frequency pin is in use, and impounded transmitters in the center section. Note that the transmitters are staggered in order to maximize the space available. A 9" stagger proved to be ideal and will accommodate all transmitter sizes. You can also see the first-aid kit at the right, the box with sound meter next to it, and the sound log book farther to the left — all of this at a convenient height for easy access.

Since our club decided many years ago that a subtractive system (you take away a pin if you want to use a frequency) combined with an additive system (you place your AMA card in a holder) was the best, we knew that pins and clips would be needed. The frequency pins would be made from good quality clothespins (yes, there are some good ones available) with the frequency numbers from Ace Radio Control placed on a rectangle of 1/16" birch ply which is CA'ed to the clothespins. The card clips are flat cable clamps which come with a good double back tape for adhesion.

Photo #3 is a close-up of a frequency pin. It is clipped to a 1/4-20x2" bolt that has been screwed into a wood strip inside the door. The second frequency sticker was placed directly behind the pin and the card clip was located below the pin on the wooden strip. Location of the clip allows easy input and removal of the card as it projects slightly above the strip of wood. This card location also makes it hard to return the pin without removing the card, so fewer cards would be left at the field. If more than one member needs the same frequency pin, cards are placed into the clip behind the active flier and the pin is transferred only after it is returned to the FCC and the



Photo #1

Photo #2





Photo #3

transmitter is in impound.

Much discussion went on during the design regarding the method for storing impounded transmitters and the club buddy boxes. Finally, one member of the design team suggested hooks since most currently used transmitters have handles. Wala! This was a stroke of genius and solved all the shelf problems while being simpler and less costly than some ideas, our kind of solution.

Photo #4 shows the transmitter hooks which are standard hardware store items. These 2" hooks are screwed into wooden strips at a slight upward angle of about 10° and large fuel tubing is slid over the hooks to make a neater cushion mount for the handles. Using a wooden strip for the hooks ensures that the hooks do not project though the back of the FCC and also keeps the transmitters at a straight and upright position as seen in the photo. Of course, the spacing of the hooks is important and we found 3" to be perfect.

Photo #5 shows the first-aid kit

Photo #4



Photo #5

and the box containing the club sound meter. Members are more able to check their planes for our 98 dBA maximum sound level since the meter is now readily accessible at all times.

Special credits for this project go to Bob Punkar for the use of his wood-working shop, to Dave Lewis for the procurement of hardware and many design ideas, and to the many other club members who worked on the project, as well as Dave Roberts for the pictures.

For additional information, you can contact: The Aeroguidance Society, Inc., P.O. Box 39, Vestal, NY 13850.

+