
Autobiography of HORACE G. HAGEN

Modeler, Helicopter Advocate

Modeler since 1948 Age: 57 (1996) AMA Number: 231

Written & Submitted by HGH (6/96)

Transcribed by NR (9/96)

Edited by SS (2002)

Career:

- 1974 to 1977: Member-AMA Radio Controlled (RC) Helicopter Advisory Committee
- 1977 to 1982: Chairman AMA RC Helicopter Advisory Committee
- 1979 to 1990: Member of FAI/CIAM F3C RC Helicopter Subcommittee
- 1982 to present Chairman of AMA RC Helicopter Contest Board
- 1985 to present: Chairman of F3C Team Selection Committee
- 1990 to present: Chairman of FAI/CIAM F3C RC Helicopter Subcommittee

Honors:

- 2002 – AMA Fellow
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I started building model aircraft at age nine while still living in post-World War II Germany. Model airplane engines were banned in Germany after the war, so my first model was a rocket powered semi-scale replica of the Heinkel HE-162 Volksdaeger (Salamander) constructed of overlapping cardboard (Ammadillo fashion). After the first semi-successful flight, I was captivated by flying models. My father decided to emigrate to the USA in 1952. A year later my mother, two sisters and I followed him to the States. During the four years of high school, I went on a model building rampage culminating with several scale Free Flight models built from scratch including a semi-scale ducted-fan model of the Grumman F6F Panther Jet. I also built several commercially produced competitive 1/2A Free Flight models. After losing one of the latter, I switched to Control Line and later was convinced by a friend that 1/2A powered CL models are not for beginners. I received an old FOX 35 engine from this friend, built an airplane for it and found that he was right.

As a senior in high school I became fascinated with Radio Controlled (RC) flight and worked a whole summer in a hobby shop to earn enough money to buy my first RC (vacuum tube/single channel/escapement) system. This equipment was unsatisfactory, as I was never able to complete a flight without a battery or equipment failure. This era was known as the “escapement” era when we were really flying Free Flight models that were disturbed by RC. After building several airplanes with this control system I constructed my own single channel proportional RC system (MAC-II) transmitter, mechanical pulser, 2-tube Lorenz receiver and Mighty Midget motor actuator) and finally achieved controlled flights.

After entering college in 1957, my modeling activities came to a standstill. I initially studied aircraft structural design but later switched to aircraft electrical systems design. After graduating from college with a degree in electrical engineering, I joined AT&T Bell Laboratories in 1960 and have been working in the Data Communications Research Department ever since. Instead of building models, I spent an entire year scratch building a multi-channel RC system in 1961. The system was modeled after the Orbit 8-channel reed equipment and resulted in getting me hooked on RC. When it was installed in Ed Kazmirski's Orion competition aerobatic airplane.

This combination provided the first fully controlled aerobatic flights. I bought my first proportional (analog) multi channel equipment in 1964 and this was flown successfully in a Midwest Hustler, delta wing design after some modifications were made to speed up the servo response time.

These airplanes were flown until I experienced my next major interruption in modeling. I was married in 1966 and did not fly any models until late 1969 when my spouse made the mistake of threatening to throw the models out of the house. She claimed I was not using them anymore. By this time we had two daughters and I had spent all of my time with them. That year I attended the RC symposium sponsored by the Washington, D.C. based DCRC club. At this symposium three attempts were made to set the first RC helicopter world record for duration. I recorded the 5.6 second record set by John Burkam on 8 mm film. It was not a controlled flight but it was a start. Later that year I joined the Monmouth Model Airplane Club and started flying in club sponsored and open AMA sanctioned RC aerobatic competitions, winning a few trophies and prizes.

In 1970 my spouse and I traveled to Europe for a one month vacation. During this trip I had the pleasure of meeting Dieter Schlueter right after he set the first meaningful world record for RC helicopters. The record was for the closed course distance and duration categories and the flight lasted 27 minutes and 51 seconds. One evening Dieter showed me the 8 mm movies of all his earlier RC model helicopter experiments. These films were fascinating and showed that he could have claimed a world record in 1968 of duration greater than 10 seconds but he felt that such a short time cannot demonstrate controlled flight. Before we said good-bye I requested that he add my name to a waiting list for one of the first 50 handmade Bell Huey Cobra kits that he was planning to produce in his basement. At the beginning of February 1971 I received the first semi-kit in the USA and in April was the first to hover a shaft driven RC helicopter, in the USA. I hovered it tethered until June and in July flew the machine in Free Flight at our Bell Labs flying field. Later that month I flew the cobra at the 1971 USA AMA NATS in Glenview, Ill. In September, I flew the helicopter alongside Dieter Schlueter at the Doylestown, Penn. F3A World Championships. I built a second Cobra at the end of 1971.

During this time I was actively competing with RC acrobatic, single design (Top Dawg) club pylon racing airplanes and the RC helicopter was my third interest. At the end of 1971 I realized that this diversification was overwhelming and I decided to concentrate on RC helicopters. I demonstrated the flying characteristics of the Cobra at many club fields and several other modelers were able to construct machines by copying the main rotor system. I wrote an article describing the process of learning to fly a remote controlled helicopter and the article "Straight Up" was published in the July 1972 issue of Model Airplane News magazine.

The first official sanctioned competition for helicopters was organized by the Long Island Drone Society (LIDS)* in September 1972. I was fortunate enough to win that contest. Although there were only three contestants, it was the beginning of RC helicopter competition in the USA. I built two Kavan Bell Jet Rangers in 1973 & 1974 and a Graupner Bell 212 in 1974.

In 1974 the AMA requested that an RC Helicopter Advisory Committee board be formed and I was asked to join that group. This group of six helicopter enthusiasts (three fixed pitch and three collective pitch supporters) put together the first set of RC Helicopter competition rules. Since I was flying a Kavan Bell Jet Ranger I was one of the proponents of collective pitch machines. These rules were used at the 1974 and 1975 and AMA Nationals (Nats) on a provisional basis. I flew the Jet Ranger at the 1974 AMA Nats in Lake Charles, La. and paced first in the Novice class and third in the Scale class. In 1975 I flew at the AMA Nats again and placed second in the Intermediate class.

I stopped flying in formal competition in 1976 when I realized that my hobby was turning into a second job and I spent every weekend away from home. Instead I decided to spend more time with the family and decided to contribute to the sport by organizing an annual competition. After winning a number of trophies at the AMA Nats and local contests, I decided that the time had come for our (Monmouth Model Airplane) club to sponsor a helicopter contest. In 1976 I organized and directed the first East Coast RC Helicopter Championships (ECRCHC) that attracted 17 contestants from many neighboring states. I built two low-cost (fixed pitch) Kavan Alouette II helicopters in 1976. In 1977 Dieter Schlueter came over for a visit and demonstrated his acrobatic Heliboy helicopter. I received samples and built and flew two Schlueter Heliboy's in 1977 and 1978.

In 1979 I was asked by our National Aeromodeling organization (the Academy of Model Aeronautics section of the National Aeronautics Association) to become a member of the FAI/CIAM F3C RC helicopter subcommittee that meets in Paris, France each year. I organized and directed the 4th, 5th and 6th ECRCHC in 1979, 1980 and 1981 respectively. In 1982 I was appointed chairman of the newly formed AMA RC Helicopter Contest Board. I flew in a contest sponsored by the Washington, D.C. based NCRCHA helicopter club and won 1st place in Scale. I also organized and directed the 7th ECRCHC. In 1983 I directed the RC helicopter event at the AMA Nationals held at Westover AFB in Pittsfield, Ma. I also organized and directed the 8th ECRCHC in Lincroft, N.J.

In 1984 I built my first 30-size helicopter, a Kalt Baron 28. I organized and directed the first USA F3C Team Selection contest and the 9th ECRCHC in Lincroft, N.J. In 1985 I was appointed to serve as a member of the FAI Jury at the first F3C World Championships held in London, Ontario - Canada. I was also appointed Chairman of the newly formed USA FAI/F3C Team Selection Committee. I directed the RC helicopter event at the AMA Nationals held at Westover AFB in Pittsfield, Ma. I also organized and directed the 10th and last East Coast RC Helicopter Championships in Lincroft, N.J. In 1986 I served as a member of the FAI Jury at the 2nd F3C European Championships held in Toulouse, France. In 1987 I served as a member of the FAI Jury at the 2nd F3C World Championships held in Bem, Switzerland. I built a Kalt Cyclone, a low-cost 60 size RC helicopter. I was also asked to serve as a member of the FAI jury at an open international F3C contest in Levens, France by the president of the Heli Cote D'Azur model club.

In 1988 I attended the AMA Nats in Virginia to assure that the flying site was adequate for a

future World Championships. In 1991 built a Miniature Aircraft Excel 60 RC helicopter. I was appointed event director at the 3rd F3C World Championships held at Fentress Naval Air Station in Virginia. I was asked to serve as a member of the FAI jury at an open international contest held by the HELI COTE D'AZUR club in Levens, France. In 1990 I built a Kalt Whisper electric helicopter. In 1990 I also became Chairman of the FAI/CIAM F3C Subcommittee. I also attended the USA Nationals, the Boar Mountain contest in New York State, the Coppa de Bresso in Milano Italy, the Schlueter Cup in New Jersey and the Coppa Ticino in Locamo, Switzerland, where I served as a scale judge. In 1991 I directed the USA F3C Team Trials in Mat. Attended the Hudson Valley Airscrews contest in August, the F3C World Championships in Wangaratta, Australia in October.

In 1992 I was an F3C Judge at the Lehigh Valley, Penn. competition and the Kyosho Challenge in Champaign, Ill. I was also one of the judges at the Gauntlet, a new type of multi-task helicopter competition where the FAI F3C, NEW COMPULSORY and 3-D FREESTYLE classes of competition were flown. I served as president of the FAI Jury at the 4th European Championships held in Kraiwiesen, Austria in August and September and attended the traditional Schlueter Cup in Grebenhain, Germany. In October I directed the first Hirobo Cup contest held in Colts Neck, N.J. In November I served as Chief F3C judge at the International Air Meet in Ohta, Japan by invitation of the Japanese Aeronautic Association. In 1993 I was a Judge at the Lehigh Valley competition at the beginning of May and the Michigan Whirlybirds contest on May 15,16. I served as a member of the FAI Jury at the USA F3C Team Selection Finals held in Pensacola, Fla. at the end of May. I was appointed president of the FAI Jury at the 1~3 World Championships held in Veiden, Austria at the end of September. In 1991 I attended a contest in Filsicov, Denmark in May and served as one of the five F3C judges. In August I served as a judge at the 2nd Gauntlet competition held in Allentown, Penn. At the end of August I served as president of the FAI F3C Jury at the 1994 International Air Meet in Kasaoka City, Japan. In September I served as president of the FAI Jury at the 5th F3C European Championships held in Leszno, Poland. In August 1995 I served as president of the FAI Jury at the 5th F3C World Championships in Kasaoka, Japan.

At the 1996 FAI/CIAM plenary meeting I was appointed to serve as the president of the FAI Jury at the 6th F3C European Championships to be held in Nurmess, Finland.

Aeromodeling Achievements

1948-1954: Constructed and flew 1/2A Free Flight and Control Line models.

1955-1960: Constructed own single channel RC system and with escapements and pulse proportional.

1961-1964: Constructed and flew scratch-built 8-channel reed RC system for "Orion" acrobatic model.

1965-1968: Flew with analog proportional RC system in Hustler delta wing.

1969-1973: Joined Monmouth Model Airplane Club. Built 5-channel Heathkit GD-19 digital proportional RC system. Flew in fixed wing acrobatic competition and won 1st through 5th places in AMA Novice class. Competed in single design club pylon racing and won first place.

1971: First US Modeler to fly a shaft-driven RC Helicopter (Schlueter Huey Cobra) in April. Demonstrated Controlled flight at AMA Nationals Glenview, Ill. in July.

1972: Won the first US RC Helicopter contest (LIDS-NY). Wrote "Straight Up" article on learning to fly a shaft driven RC Helicopter for July issue of Model Airplane News magazine. Also flew RC Heli in largest (250,000 spectators) full-size US Air Show at Washington's Dulles Airport (TRANSPO 72).

1974: Constructed two Kavan Jet Rangers and one Graupner Bell 212 Twin Jet collective pitch helicopters. Won 1st place in Novice and 3rd in scale helicopters at AMA Nationals in Lake Charles, La. Appointed to AMA R/C Helicopter Advisory Committee.

1975: Won 2nd place in Intermediate class at AMA Nationals in Lake Charles, La.

1976: Organized and directed the first East Coast RC Helicopter Championships (ECRCHC). Constructed two Kavan Alouette II fixed-pitch, low-cost helicopters.

1977: Appointed Chairman of the AMA RC Helicopter Advisory Committee. Contest director of 2nd ECRCHC. Constructed Schlueter Heliboy acrobatic RC Helicopter.

1978: Contest director of 3rd ECRCHC. Constructed second Heliboy helicopter.

1979: Appointed USA representative on FAI/CIAM F3C R/C Helicopter Subcommittee. Founded AMA chartered club "New Jersey RC Helicopter Society." Contest director of 4th ECRCHC.

1980, 1981: Contest director of 5th and 6th EGRCHC.

1982: Appointed as chairman of newly formed AMA RC Helicopter Contest Board. Won 1st. place in RC Heli Scale at NCRCHA contest at Goddard Space Flight Center, Md. Contest director of 7th ECRCHC.

1983: Event director for RC Helicopters at AMA Nats at Westover AFB Pittsfield, Ma. with 86 entries. Contest director of 8th ECRCHC.

1984: Built 30 size Kalt Baron 28 RC Helicopter. Appointed president of FAI Jury at 1st F3C European Championships in Eibergen, The Netherlands. Organized and directed first USA FAI/F3C Team Selection Contest. Contest director of 9th ECRCHC.

1985: Elected to serve on FAI Jury at first F3C World Championships held in London, Ontario - Canada. RC Heli Event Director at AMA Nationals and Contest director 10th Annual East Coast Championships.

1986: Served as member of the FAI Jury at 2nd European F3C Championships in Toulouse, France. Appointed chairman of newly formed USA FAI/F3C Team Selection Committee.

1987: President of the FAI Jury for 1987 USA Team Selection contest. Member of FAI Jury 2nd World Championships in Bern, Switzerland and conducted F3C judging course. Member of the FAI Jury at the 2nd F3C Europe in Levens, France. Constructed a Kalt Cyclone, a low-cost 60 size RC helicopter.

1988: President of the FAI Jury at the 3rd F3C European Championships in Eibergen, The Netherlands. Attended AMA Nats in Fentress, Va. in anticipation of upcoming F3C World Championship.

1989: President of the FAI Jury for the 1989 USA Team Selection in Dayton, Ohio. Member of the FAI Jury at the 3rd F3C Eurocup in Levens, France. Event director for F3G World Championships in Fentress, Va. Constructed Miniature Aircraft EXCELL 60 RC helicopter.

1990: Scale Judge at the Coppa Ticino competition held in Locarno, Switzerland. Appointed Chairman of FAI CIAM F3C Subcommittee. Constructed a Kalt Whisper electric RC helicopter. Attended AMA Nationals in Lawrenceville, Ill.; Hudson Valley Airscrews contest in New York; and the Coppa Ticino contest in Locarno, Switzerland, where I served as a scale judge.

1991: Contest director of USA F3C Team Selection Contest held in Germantown, Md. Served as president of the FAI Jury at the 4th F3C World Championships held in Wagaratta, Australia. I attended the Hudson Valley Airscrews contest in New York and the Schlueter Cup in New Jersey.

1992: Appointed president of the FAI Jury at the 4th F3C European Championships held in Kraiwiesen, Austria. Attended the annual Schlueter Cup in Grebenhain, Germany. Invited by the Japan Aeronautic Association to serve as an FAI F3C judge at the International Air Meet held in Ohta. Also served as FAI F3C judge at the Lehigh Valley contest in Nazareth, Pa. and Kyosho Challenge Cup in Champaign, Ill. Served as a judge at the 1992 Gauntlet, a new type of multi-task competition where the FAI F3C, new compulsory and 3-D FREESTYLE classes were flown. Directed first USA HIROBO CUP in Colts Neck, N.J.

1993: Served as a member of the FAI Jury at the USA Team Selection contest held in Pensacola, Fla. Appointed president of the FAI Jury at the F3C World Championships held in Vdden, Australia. Served as F3C judge at the Lehigh Valley, PA and Michigan Whirlybirds contests.

1994: Attended competition in Filskov, Denmark in May and served as FAI F3C Judge. Invited to serve as president of the FAI Jury at International Air Meet in Kasaoka, Japan in August. This

event is intended to be a trial run for the 1995 F3C World Championships to be held on the same site. Served as President of the FAI Jury at the 5th F3C European Championships in Leszno, Poland.

1995: Appointed president of the F3C Jury at F3C World Championships in Japan and chaired F3C S/C meeting in Kasaolca City, Japan. As Chairman of FAI/CIAM F3C Subcommittee generated and submitted new F3C competition rules for 1997 FAI Sporting Code.

1996: Appointed president of the F3C Jury at the 6th F3C European \Championships in Nurmes, Finland.

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