



The AMA History Program Presents: Autobiography of JACK R. ALBRECHT Modeler, Competitor, Hobby Industry



Modeler for: 68 years Age: 75 (1996) AMA Number: L2063

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Edited by SS (2002), Updated by JS (09/08)

Career:

- 26 years in the Military Service
- 20 years worked in Hobby Industry, for Kraft & Airtronics
- Member of the AMA Frequency Committee

Honors:

- 1975: Hall of Fame - D.C.R.C Club Award
 - 1992: AMA Distinguished Service Award
 - 1997: Vintage Radio Controlled Society Hall of Fame
 - 1997: Howard McEntee Award
 - 1998: Model Aviation Hall of Fame
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The chairman of the AMA Frequency Committee charged Jack with the responsibility of writing and staffing a plan for the orderly phase-in of the 50 new Radio Controlled (RC) frequencies for aircraft use and 30 for surface use that were being considered by the FCC.

Jack's modeling activities started when he was about nine-years-old in San Francisco, Calif., with the construction of the usual solid and rubber band powered models. He was an avid reader of the old Flying Aces model magazine, as well as of the World War I pulp fiction magazines such as G-8 and his Battle Aces, etc. The White House and the Emporium department stores had model departments at that time and Jack spent a lot of time looking at the model airplane products and wishing he could afford to build some of them. It was the Great Depression; time and money were in short supply for everybody, especially a little kid. Jack had a magazine route therefore he was able to save a little money toward the purchase of an unassembled Bunch Mighty Midget engine kit that was offered for sale by the Emporium. He put the engine together and managed, after many tries, to get it running even though he had no help on its assembly or in starting the engine. It came down to when all else fails, follow directions!

Later on he saved enough money to purchase a Comet Clipper MK I airplane kit and constructed it on the kitchen table of his family's apartment located on Franklin Street. The manager of the apartment building where Jack lived with his mother and sister volunteered to take Jack over to the Oakland Mud Flats where all of the local modelers flew their Free Flight models, so that Jack could fly his first gas model.

In those days, the Oakland Mud Flats was a very large open area near the San Francisco Bay. It was an ideal area since it was relatively close to home. Photo number one, taken in early 1940, is of poor quality; however, it shows Jack and Nick Skucé, a local experienced modeler, getting ready to fly Jack's Comet Clipper. Note that the photo shows Don Foote in the background with one of his Westerners, sporting an experimental wing. Jack did get in a short successful flight that day.

A little later on Jack succumbed to the Control Line craze that was sweeping Northern California. Since Jack was still too young to drive he depended on friend and mentor, Ted Kroll to take him out to the San Francisco Golden Gate Park Polo field where they flew their Control Line models on 70 foot fishing line. Ted actually pre-dated the late and great Jim Walker in the development of the Control Line concept. Ted had rented a large building near his house, which was located a block from the Presidio of San Francisco. He set up a shop in the rented building and purchased a South Bend Lathe plus other building equipment to use in construction of his own model airplane engines for use on his models. One of his engines was a size .78 cubic inch engine that he used to power his Comet Clipper Control Line model.

Ted was employed in a municipal agency in San Francisco; therefore, his machining skills were self-taught. Jack, with Ted's help, even managed to design and build his first Control Line speed model (see photo number two) powered by a borrowed Little Dynamite .37 cubic inch engine. This model won first place at a 1942 control line contest held at the Polo Field in Golden Gate Park.

Jack met Bob McCord through his friendship with Ted. Bob helped Jack in learning correct Free Flight building techniques. In post World War II years, Bob purchased the Anderson Spitfire engine project and produced those great engines in Redwood City, Calif., which is a story all in itself.

Jack was still interested in Control Line speed flying and progressed to building and flying a Hornet .60 cubic inch powered model that was designed by Wes Little, another San Franciscan, in 1943.

Jack and Wes traveled to King City, Calif. to compete in one of the very early speed events. Jack's Hornet powered model placed third with a blistering speed of 94.6 mph, while Wes' Super Cyke-powered Sting Ray won with a speed of 98 mph. Photo number three shows the first commercially kited Control Line speed job as offered by Offenbach Hobby Supply in San Francisco. It was designed by Bob McMullen who was from King City, California.

The original shown in photos four and five was powered by a Bunch Tiger engine, and used a special hand-carved 12-inch prop, set speed records in the 100 mph range, which was fast in 1943.

Jack continued to design, build, and fly Control Line models throughout high school. He now owned an Indian 45 motorcycle, therefore he could get around without depending on streetcars and friends to get to and fly at the Polo Field.

Since these were the war years, no Free Flight activity was permitted, especially on the West Coast where we expected an immanent invasion by the Japanese. Blackouts were a common occurrence in San Francisco. Jack wanted to do his part in the war effort, so he enlisted in the Army in January 1944 and was inducted following graduation from Lick Wilmerding High School. He served with the 11th Airborne Division in the South Pacific area of operations and was discharged in 1946 as a buck sergeant (see photo number six).

He again took up Control Line speed contest flying with another flying buddy, Ray (Mickey) Alexander. As a team they were quite successful in winning contests in the northern California area. Jack then went to college in Tulsa, Okla., studying radio engineering. During this period



**Jack with A, B, C
1947-50 McCoy
power speed
models.**

Jack and Jim Paysen, an aeronautical engineering student, formed the very successful A&P speed team (see 1949 contest results), which went to all of the weekend Midwest Control Line contests. Photo number seven shows the Albrecht and Paysen speed team – Jack is on the right, with their stable of class A, B, C and D speed models. The A, B, and C models were powered by McCoy engines and the D was a Dooling 61.

The A and P team did very well in 1948, winning two firsts at the Carthage, Missouri Skylarks annual, and two third places at the Enid, Oklahoma Exchange club meet. Both of the McCoy 49 and 49 versions of the same model flew over 130 mph in 1948. Photo number eight shows Jack with the A, B and C models.

Following graduation in 1950, Jack returned to San Francisco and was employed by the F.W. Lynch Company, which produced carrier current telephone type equipment. Since Jack was a recent radio-engineering graduate, he became interested in Radio Controlled (RC) models; therefore, he joined the San Francisco Mustangs. They were formerly a Control Line club that converted entirely over to RC using Edward L. Rockwood's (AMA Hall of Fame) tuned resonant reed control systems.

Jack's first RC model was a Scientific Mercury Free Flight kit converted to three channel RC. This system provided right and left rudder control by two motor driven servos. It also switched high and low two speed points on an Atwood Triumph .49 cubic inch engine by sequential escapement. Needless to say, it wasn't very successful since it didn't want to get off the ground very well – it did a lot of running around before it finally got in the air.

One of the problems with the early Rockwood RC systems was the drifting in frequency of the transmitter's audio tones. Large capacity batteries for the B+ plate supply helped somewhat but didn't cure the problem since Rockwood used a blocking oscillator for the audio tone generator. The transmitter batteries were in a box on the ground, and the 6-meter transmitter with its antenna and ground plane were up on a wooden pole about six feet in height. The RC pilot held the control box, which was on a 6 to 8 foot multi pair cable connected to the transmitter. Needless to say, the pilot couldn't move very far from the transmitter and still retain control of his RC model.

Most of the Mustang members built the five-channel Rockwood set which provided selectable right and left rudder, up and down elevator and high, low and off engine via an escapement driven switch. All servos, etc. were all hand built by the modeler using gear trains from toy cars and small DC motors. The receivers used a tube complement of a 3S4 super-regen detector, an 1S5 audio amplifier, and a 3S4 for the resonant tuned reed driver. Five Kurman or Sigma 4F relays were used to activate the servos and engine control escapement.

Most of the Mustang Club's models were powered by the Anderson Spitfire .65 engine with a lapped piston. The lapped piston provided a better idle with the two speed ignition points than did the ringed version of the engine. Alex Schneider who was another member of the San Francisco Mustang Club made numerous modifications to the old Capital Piper Cub kit to improve its RC performance. It became known as the Schneider Cub! This design flew so well, it was adopted by most of the members of the San Francisco Mustangs as the club design. Alex Schneider went on to win the RC pattern event at the AMA Nationals three times in four years (one year he didn't go) flying his Schneider Cub. Jack also built a Schneider Cub powered by an Anderson Spitfire engine. See photos nine, 10, 11, 12, and 13.

In September 1950, Jack, who in a weak moment had joined the U.S. Army Reserve, was called to active duty to serve in the Korean War. He later was commissioned a second lieutenant (photo 14) and flew his Schneider Cub while stationed at Fort Bliss, Texas as well as in Panama from 1952 through 1956. Jack and his family returned to the West Coast in 1956 and he was stationed in the Los Angeles area where he flew RC at the Sepulveda Basin RC field. Photo number 15 shows Jack cranking the engine in his six-foot Schneider Cub. Note the hand held transmitter box in the foreground. Jack had now constructed the first hand-held reed system transmitter, which was designed by Alex Schneider with the assistance of Ed Rockwood. This unit worked very well and did not have any audio tone drift, as did the earlier Rockwood units. About this time, Jack made the acquaintance of Bob Dunham, who had a hobby shop in the Los Angeles area. Bob had just started producing the first of the ORBIT resonant reed RC systems, and Jack purchased some of Bob's components so that he could build up his own eight-channel reed system. This unit was flown in a variety of the then popular models, such as Alex's 6 foot Cub, Jerry Nelson's Qualifier and Sultan, Doug Spreng's Stormers, etc.

After returning from a tour in Korea, Jack was again assigned to Fort Bliss, Texas. It was now becoming the beginning of the age of digital proportional, so Jack purchased his first commercial RC system, a DIGICON, which was designed and manufactured by Don Mathes and Doug Spreng. Previously, all of Jack had built all of his own RC tuned reed systems. After three years at Fort Bliss, Jack's next assignment was to attend The Command and General Staff College at Fort Leavenworth, Kan. At the completion of this assignment, he was then posted to ENT Air Force Base, Colorado Springs, Colorado.

He built and flew sport, pylon, and scale RC models and competed in scale and pylon at the 1966 AMA Nationals, which was held at Los Alamitos, California. His KI-61 Kawasaki Hien, Tony, with which he competed at the Nationals, was published by Radio Control Modeler Magazine in the February 1967 issue. Jack also worked with Ed Thompson in the development of a servo, using the ORBIT servo mechanics and Ed's DIGITRO proportional RC system. Jack's design of this servo amplifier was also published in Radio Control Modeler Magazine.

Jack was later assigned to command a Nike Hercules missile battalion in Germany where, in rare off duty times, he competed in German Formula 1 RC races. A tour in Vietnam followed from 1970 to 1971 interrupted Jack's RC flying. He resumed flying sport and pylon RC models when he was assigned to a three-year tour in the Office of the Joint Chiefs of Staff in the Pentagon in

Washington, DC. Jack was a member of the prestigious DCRC Radio Controlled club at which he received the Howard McEntee award for a paper he wrote on RC electronics.

His next tour of duty was back home to San Francisco in 1975 where he was assigned as the Sixth U.S. Army Inspector General. During this time, he was selected to become a member of the AMA Frequency Committee.



Col. Jack Albrecht

Jack's 26-year Army career ended when he retired from the service as a full Colonel and went to work for Phil Kraft at Kraft Systems in Vista, California two weeks later. In 1976, the AMA only had six frequencies on the 72 MHz band and one on 75 MHz. Some of these frequencies were shared with the RC car and boat modelers, which was a potential safety problem. In addition, some cities were placing pager transmitters directly on the frequencies used for RC making them unusable. After several

meetings with FCC representatives by the AMA Frequency Committee members, which included Jack, it was concluded that we needed additional sole user frequencies to solve the major interference problems and allow the RC industry to grow. The committee then developed a proposal for new frequencies, which was submitted to the FCC. The chair of the AMA Frequency Committee charged Jack to write and staff a plan for the orderly phase-in of the 50 new RC frequencies for aircraft use and 30 for surface use that were being considered by the FCC. This was accomplished and the phase-in plan was approved by the AMA president and executive council. Jack had briefed the plan to RC industry leaders at the IMS show in January 1981 where they concurred in the plans concept. The plan's goals were as follows:

1. To protect the existing 72 MHz and 75 MHz frequencies.
2. Prevent existing RC frequencies from becoming obsolete overnight.
3. Plan for the orderly phase-in of all authorized new frequencies.
4. Separate aircraft and non-aircraft frequencies to prevent mutual interference.

The FCC granted all of the new radio control sole user channels in 1982 and history indicates that all of the plan's goals were attained. The final phase-in of all of the new channels occurred in January 1991. Later on Jack assumed the duties of Customer Relations Manager at AIRTRONICS, INC., in Irvine, Calif. Don Lowe, president of the AMA, presented Jack with the AMA Distinguished Service Award in 1992 for his invaluable contributions to the RC scene. Jack is currently competing in SAM RC assist contests and flying quarter and third scale RC models for weekend pleasure.

(signed) Jack R Albrecht
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