

BOYS' FLYING ADVENTURES

JULY 1929

# MODEL AIRPLANE NEWS



## 90 Years of Model Airplane News

Celebrating nine decades  
of model airplane expertise

**OUR FASCINATION WITH FLIGHT** began with the Wright Brothers' first short hop across the dunes of Kitty Hawk, North Carolina, and by the time Charles Lindbergh flew nonstop across the Atlantic Ocean in 1927, our love of airplanes had reached a fever pitch. It's no surprise that *Model Airplane News* published its first issue in 1929. Through the golden years of air racing, on into World War II, and progressing to the Jet Age, *Model Airplane News* has been there, applauding the technological innovations in the modeling world and helping readers achieve their dreams of flight.

# Leading the Way

**OF MAJOR IMPORTANCE** to the development and growth of *Model Airplane News* over the years have been the various people who have served as its editor. Many famous modelers and model aviation insiders have held this position at one time or another, and their tremendous skills molded *Model Airplane News* into the fine publication that it is today. On this, our 90th anniversary, we'd like to pay tribute to a few of these important and talented individuals.



## George Campbell Johnson

As owner, publisher, and founding editor of *Model Airplane News*, George Johnson (grandfather of present-day publisher, Louis V. DeFrancesco Jr.) is arguably the most important figure in its illustrious 90-year history. Keep in mind that in 1929 the entire world of full-scale aviation had been in existence for less than 30 years. In the beginning, model aircraft consisted primarily of gliders and rubber-band-powered (twisting strands of strip rubber!) models. Model designs were generally scale or at least influenced by full-scale aircraft. This was a humble beginning for the model-aircraft hobby but still an important start. As long as full-scale aviation continued to grow, so did the desire to build and fly model airplanes. That was the dream Johnson pursued.

## Charles Hampson Grant

In 1932, Johnson hired Charles Hampson Grant to direct the editorial content and policies of *Model Airplane News*, and he remained in that position until 1943. Charles Grant manned the helm through some very important growth years for the magazine. During that period, modelers were introduced to their first gasoline-fueled miniature aircraft engine (the Brown Jr.). As a result of this new power source, new types of model aircraft were developed, including free-flight models and U-control (also known as control line). Later in that same decade, we saw the beginning of modern-day, radio-control models. At this point, the broadcast radio industry was only in its infancy!

Mr. Grant has been referred to publicly on numerous occasions as "the father of model aeronautics in America."



## Howard McEntee

From 1945 through 1950, Howard McEntee, a popular modeler from New Jersey, held the reins at *Model Airplane News*. In this postwar period, Howard helped influence the rapid growth of practical radio-control aircraft for the average modeler. He set the stage by publishing a variety of radio-equipment construction articles and how-tos that detailed general radio techniques.

In addition to the major advances in radio control, this same period brought us Ray Arden's wonderful invention: the glow plug. This tiny component essentially replaced gasoline-ignition engines with a simple, easy, and lightweight form of model-aircraft power. Tiny engines such as the K&B Infant .020 soon followed, and just as quickly, the pages of *Model Airplane News* became flooded with design and construction articles for models using 1/2A power. Howard McEntee made a name for himself in this new class of power with several designs for micro-size RC models.





## Bill Winter

From 1951 until 1960, another famous modeler took on the role of editor of *Model Airplane News*: Bill Winter. Bill was a true model designer, builder, and flier. He created the monthly editorial column known as M.A.N. At Work, which became a staple of the magazine for many years. During Bill's tenure, the FCC authorized the use of 27.255MHz as a radio-control channel on the then-new citizens band. That's when we saw RC really take off. This was the first time a modeler could build and fly RC with only a permit, instead of a ham-radio license. *Model Airplane News* quickly took the lead in this area by publishing articles on how to construct much of the initial 27.255MHz RC equipment. The famous Lorenz Two-Tube receiver appeared in the February 1953 issue. This was a landmark RC accomplishment that took the average RC pilot of that time out of the dark ages and into the world of simple and reliable radio control.



## Walt Schroder

A vocal, influential, and hardworking model-aircraft enthusiast, Walt Schroder succeeded Bill Winter as editor. He held that position from 1960 until 1970, when he moved up to become the president and publisher of Air Age (its parent company). While Walt was editor, the radio-control facet of the hobby took a quantum leap forward with the advent of modern digital proportional control as pioneered by such companies as Kraft Systems, Orbit, Heathkit, Micro-Avionics, EK-Logictrol, Cannon, World Engines, and others. These modern radio-control systems allowed simultaneous and proportional control of the ailerons, elevator, rudder, and throttle functions. Along with these advances came the rise in popularity of the new nickel-cadmium (Ni-Cd) batteries that permitted us to operate radio systems for long periods of time. We could then quickly recharge them, and they did not have to be discarded for many years.



## Art Schroeder

When Walt Schroder was promoted to president and publisher in 1970, he hired Art Schroeder to take on the role of editor. A recently retired school superintendent and an experienced model-aircraft designer, builder, and flier, Art went on to serve three stints as editor, ending in 1984. During the '70s, Art encouraged the building and flying of larger models (1/4 scale and up) powered by converted chain-saw gasoline engines and the large-scale engines that were designed specifically for hobby use that soon followed. Flying 20- to 50-pound RC models is commonplace today.

In the mid-'70s, Art and Walt joined forces with Bill Bennett, a dedicated hobby enthusiast and owner of the Circus Circus Hotel in Las Vegas, Nevada, to establish the now-famous annual Tournament of Champions (TOC). The large-scale models that competed in TOC every year brought much publicity to the hobby and sport of model aviation.

In 1979, Art and Walt collaborated on a series of articles that instructed modelers on how to build their own digital proportional RC system (the Blue Max). It was a tremendous effort and one that introduced many people to the inner workings of the RC hobby.

A careful observer will also note that electric flight began to emerge during Art's reign. Modern electric motors and constantly improving battery technology have made this into a hobby all its own. Today's electric planes range in size from 1/4 scale down to 1-ounce indoor RC models.



## Cleveland Model Supply Co.

Founded in 1926, the Cleveland Model Supply Co. has been with *Model Airplane News* longer than any other company. An ad for Cleveland Model Supply first appeared in the December 1929 issue of *Model Airplane News*, and one can still be found within these pages today.

**the CLEVELAND**

**313 TRACTOR**

**BOY!** Could you wish to own a better flying model than this neat 3 foot tractor? It climbs to 150 feet and flies from 60 to 240 seconds. Just think what Christmas morning will be like with a kit to build this big model, in your possession!

Tell the folks you'd like to own one. Let them surprise you for the small cost of one dollar fifty cents. We'll ship it immediately via express, charges "collect."

Perhaps you will prefer the attractive little 14 inch "Cleveland Wasp" kit. This indoor model has 120 seconds duration to its credit and it is capable of doing better.

After you've built it you'll get a thrill to see how well it flies every time you release the propeller and let it hop-off. And then, those 3-point landings—well—wait till you build your Cleveland Wasp, then you can tell us how it performs. The complete kit will be mailed postpaid anywhere in the U. S. or Canada for 80 cents.

*We do not accept stamps or C.O.D. orders.*

**the CLEVELAND WASP**

We have other models and supplies too! If you wish to be placed on the mailing list for our new 16 page catalog and additions later, send a dime with your name and address plainly written.

Dealer list \$1c, returnable in your first \$2.00 order—write us on your business letterhead. "Cleveland Blue Diamond" models and supplies are in demand.

**Cleveland Model & Supply Co.**  
MODEL ENGINEERS  
1866N West 57th Street,  
Cleveland, Ohio  
High Quality—Prompt Service





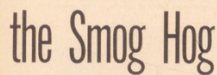








The February 1957 issue of *Model Airplane News* featured the R. E. Bowen-designed Smog Hog. The 3-channel, high-wing RC pattern plane was highly aerobatic and took home top honors at the '56 Nationals. The 74.5-inch-wingspan plane required a .19 to .35 engine for power and was among the most popular models of its day.



Howard Bonner putting the Smog Hog through it's paces. Note that smile of satisfaction. Light wine landing eyes about museum.

Light weight and simple lines distinguish most really good multi lobes. For aerodynamicists, the wing uses a 2415 airfoil section.



breath-taking performer

be submitted to continue such a claim on their competition and open an

with a surprisingly fast VFO and also was considerably from March 1966 to January of '67.

## IR-FILM

and the Kwik-

February 1968

degrees DC

al design and

work mainly

mains a por

often-copie

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MODEL  
PRINT

NEWS



100

In January 1959, Robert Hunter let us in on the design intricacies of his Satellite 600—a free-flight gas model that took many trophies from the '58 Nationals. Over the years, the Satellite 600 has been built in many sizes, covering just about every free-flight class, and it remains a popular design today.



Arguably one of the most popular pattern models ever published, the Kwik-Fli Mk. III first appeared in the February 1968 issue of *Model Airplane News*. Originally designed by Phil Kraft, the 60-inch-wingspan RC pattern plane featured a functional design and simple construction, which won many contests around the world. Later kitted by Top Flite, the Kwik-Fli Mk. III remains a popular and often-copied model.



"Guillows" is a name that needs no introduction. It's one many modelers have come to know and trust as the source of some of the most popular kits produced over the last 75 years. Well-known for their classic designs, the folks at Guillows are still hard at work today laser cutting some of their most famous WW I kits. This is the first Guillows ad ever to grace the pages of *Model Airplane News*. It appeared in the February 1933 issue.

If, over the past 50 years or so, you've ordered from a modeling catalog, chances are that you're familiar with American Hobby Center—it remains one of the most well-known names in the industry today. This is its first ad, which appeared in the November 1945 issue of *Model Airplane News*.

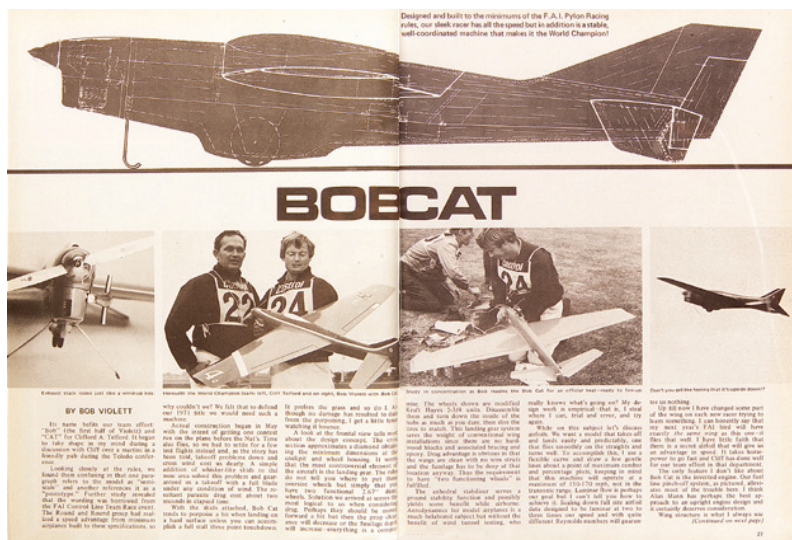




## Construction Classics

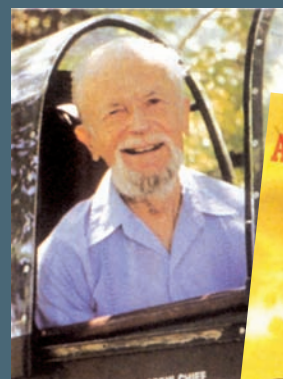
### Taurus

Considered the model to beat in the early '60s, Ed Kazmirski's Taurus was the featured construction article in the January 1963 issue of *Model Airplane News*. The Taurus featured an extremely thick, 19 per-cent wing that helped it maintain a constant speed, and its extra-long fuselage smoothed the beeped reed-control inputs. Powered by a .45 engine, the 70-inch-wingspan model was one of the first to incorporate strip ailerons, and it later became a Top Flite kit.



### Bob Cat

One of the most notoriously popular models ever to appear in the pages of *Model Airplane News*, the Bob Cat was a world-class pylon racer designed by Bob Violett. The Fédération Aéronautique Internationale record holder first appeared in the February 1973 issue of *Model Airplane News*.



### Jo Kotula

A talented artist and aviation enthusiast, Jo Kotula created some of the most memorable covers ever to grace the pages of *Model Airplane News*. Jo's dramatic imagery brought aviation to colorful life for millions of readers for decades, starting in the 1940s. Jo's extraordinary talent played a preeminent role in the history of *Model Airplane News* and in the hearts of all its readers.



## AD CLASSICS

### Midwest Model Aircraft Co.

The very first ad for Midwest Model Aircraft Co. appeared in the May 1950 issue. It featured two control-line models and represented the start of a long-standing relationship between the company and our magazine. Today, Midwest not only is one of our longest running advertisers but also stands as a leader in the model-manufacturing field.









Introducing

*CitizenShip*

FIRST  
FCC APPROVED  
RADIO CONTROL

On The Citizen's Band  
NO EXAMINATION  
NO OPERATOR'S LICENSE

For control of  
Free Flight Planes and Model Boats  
Operates on 465 megacycles.  
Effective range in air up to 1/2 mile.

FIRST PLACE WINNER  
AT 1950 NATIONALS

in radio control competition at Dallas.  
We do not claim that the radio alone was first place . . . it required brilliant  
plane design, masterful performance by  
the contestant, Glenn Forrester of Indi-  
anapolis. However it could not have been  
achieved without a radio system that was  
100% dependable and trouble free.

You get this performance with  
CITIZENSHIP RADIO CONTROL

TRANSMITTER  
MODEL CC

A completely self contained unit  
weighing only 4 lbs.,  
with batteries.  
Overall dimensions less than 13" x  
14" . . . Price, less  
batteries—

**\$39.75**



Contains factory tuned precision unit  
with built-in antenna. Photo about 1/2  
actual size. Weighs just 5 1/2 lbs. Recommen-  
dation battery weight 8 . . . Price less  
batteries—

**\$39.75**

See your dealer first . . . or

TEAR OUT NOW

Please send \_\_\_\_\_ CitizenShip transmitters  
@ \$39.75 \_\_\_\_\_ Resellers @ \$39.75. Check  
or money order enclosed.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ AN \_\_\_\_\_  
VERNON C. MacNABB CO.  
915 Westfield Blvd., Indianapolis 20, Ind.

## FCC-Approved Citizen-Ship Radio

Vernon C. McNabb's ad for its one-of-a-kind Citizen-Ship radio first appeared in the pages of *Model Airplane News* in November 1950. The first FCC-approved radio system, the Citizen-Ship operated on 465 megacycles—no operator's license required. This marked the beginning of the race to RC.

# radio

New sealed nickel-cadmium batteries by Duracell. Various capacitors, etc., in 8, 24 volts.

# control

More Burgess stands. At press time, unknown if silver plate type allowing heavier drains.

# news

by EDWARD J. LORENZ

Very nice, battery frame, multichannel ship by Kite, Tuffin, Evans, U.S. Navy.

ing picture from behind "Iron Cannon," even from China, indicate progress of categories.

► George Bush, Philadelphia, N.Y., can attest to the high capacity of silver-plate nickel-cadmium cells. One of the screws in his Smeig Hargling and the entire capacity of the two cells was drained into the servo motor. The motor got so hot the plastic housing melted. Heat traveled through the amplifier winding to the shaft to the bearings and there he was. You have a high power capacity with these or similar cells, so make sure everything functions properly.

John Matzall of the Control Jersey

BC Club has applied a phenomena discussed in the early days of crystal controlled transmitters. If a 12 or 24 inch length of wire is connected to one prong of a crystal socket and a crystal inserted the combination can serve as a means of tuning super regenerative receivers. Bring the crystal antenna to within about six inches of the receiver antenna and then tune the receiver. A super regenerative or generate a wide range of RF signals, one of which is the receiver antenna. This signal is then reflected through the crystal antenna and the

## DETAILS by F. J. JELLY

CONTROL LEADERS ON HOWARD BONNER'S "RC FLYER" (with latest modifications)

## Introducing...Ni-Cd Batteries

This installment of Ed Lorenz's long-running and popular column, Radio Control News, appeared in the December 1959 issue of *Model Airplane News*. In it, Ed introduced us to a brand-new battery technology from Burgess: Ni-Cd. And of course, for the next four decades, these cells would remain integral to our hobby.

**SPACE CONTROL PROPORTIONAL R/C**

NOW THERE ARE SIX VARIATIONS OF THE REMARKABLE **WHEEL BRAKE** SEMI-PNEUMATIC and SPONGE RUBBER TIRES

**\$495 each**

Write For Catalog "B"



AT LAST YOU CAN EXPERIENCE THE THRILL OF TRUE PROTOTYPE PERFORMANCE!!!

SERVO, ELEVATOR, AILERONS, THROTTLE, & 2 TRIM CONTROLS. ALL PROPORTIONAL!

**IT'S THE MOST ADVANCED MODELERS R/C EVER DEVELOPED.**

**\$495.00**



DETAILS IN OUR FREE CATALOG "B". WRITE FOR IT TODAY

**Ask your Hobby Dealer to show you**

**POWER PACKS; CONVERTERS; SERVO'S; CONNECTORS;**

**WHEELS; BRAKES- DESIGNED especially for R/C!**

GARDENA  
CALIFORNIA

## Space Control Proportional RC

This ad, which appeared in the December 1961 issue, marked one of the most important breakthroughs in the history of radio control. The Space Control was the first commercially available, fully proportional RC system. Many fliers cut their RC teeth on the Space Control radio system. It opened the proverbial floodgates, and many manufacturers soon followed.

# MODEL AIRPLANE NEWS FIRSTS

## First Slick Paper and Color Page

Having an entirely new and more professional look and feel, the July 1970 issue was the first issue to feature "slick" glossy paper. And with this change came the introduction to the first full-color feature page of print.

Although several major advertisers had full-color ads on the inside and back inside cover pages and some two-color ads were previously featured, the Radio Control table of contents page was the first feature portion of the magazine to be elevated to four-color status. On that page was a photo of Ed Sweeney's VooDoo RC combat ship powered by a Veco .19. Originally a U-control model, Ed's VooDoo was converted to RC and equipped with Orbit 6-12 equipment.



## AD CLASSICS

## SIG Manufacturing Co.

The first ad for SIG Manufacturing to appear in *Model Airplane News* hit the newsstands in the March 1952 issue. In it, SIG offered balsa wood; today, SIG produces some of the highest-quality ARF planes and kits on the market of every make, model, and style imaginable.

**BALSA  
WOOD**

Top Grade Precision Cut Model  
Aircraft Stock. Eighty stock sizes.  
Discount to dealers and kit  
manufacturers.  
Write for free Price List

**SIG MANUFACTURING CO.**  
Montezuma, Iowa





# Groundbreakers

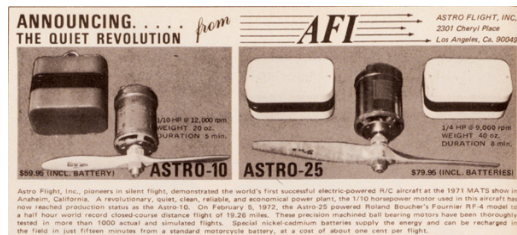
## Retractable Gears Have Arrived

Recognize this one? When this article first appeared in the November 1962 issue, the concept of retractable landing gear was certainly not new. But Hal deBolt's idea to adapt it for use on an RC aircraft by incorporating a servo certainly was. In fact, the gear introduced here was the first of its kind!



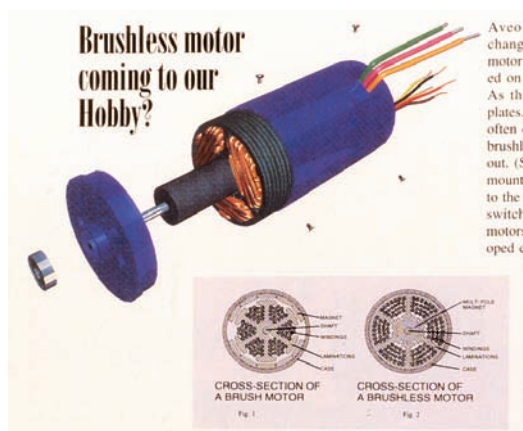
## CA Glue Intro

The introduction of cyanoacrylate adhesive, in this New Items column from the September 1973 issue, marked a revolution in the modeling industry. Lockite's SuperBonder quickly became the preferred method for joining airplane parts and allowed pilots to make quick field repairs.



## E-Power Motors

Ushering in the age of electric-powered flight, this ad from AstroFlight appeared in the November 1972 issue of Model Airplane News. The concept was fittingly dubbed "the quiet revolution," and 30 years later, the revolution continues.



## Brushless Revolution

It's hard to believe, but it has been 10 years since brushless motor technology was first brought to our attention. This March 1993 installment of Air Scoop introduced us to the Aveox brushless motor, which promised to provide both improved efficiency and performance. Combined with modern lithium-polymer (LiPo) batteries, the performance capability of brushless technology is rapidly approaching that of many internal-combustion engines.



## MonoKote

This ad, which first appeared in our April 1966 issue, marked a watershed of sorts in the modeling community. The introduction of MonoKote meant that paint was no longer a modeler's sole finishing option. Originally available in six colors, this heat-shrinkable Mylar plastic quickly exploded in popularity. Today, one would be hard-pressed to find a modeler who hasn't used MonoKote.

## AD CLASSICS

### Du-Bro Products

In this August 1973 ad, Du-Bro Products introduced its new Hughes 300 semiscale RC helicopter—undoubtedly one of the first of its kind to hit the market. Although you probably won't find Du-Bro listed as a good source of helis today, it is the first place you should turn if you find yourself in need of keepers or clevises.





## MODEL AIRPLANE NEWS FIRSTS

### First Tournament of Champions

In its 45th year of publication, *Model Airplane News*, along with the Circus Circus casino, cosponsored and reported on the first international Tournament of Champions (TOC) aerobatic competition. In his March 1975 RC News column, Art Schroeder introduced the now-famous Las Vegas-based event. Walt Schroeder (then *Model Airplane News* publisher) and Circus Circus president Bill Bennett formulated the basic format in the fall of 1974. In its initial incarnation, the TOC was an FAI Class D pattern event that drew 32 international contestants (21 from the USA) for a shot at the \$11,000 prize purse. Together with the contest director Jerry Nelson, chief judge Jim "Doc" Edwards, and the host organization, the Las Vegas RC Club, Walt and Bill set the standard for aerobatic excellence that lasted until 2002, for a total of 18 championships. Who was the winner? Hanno Prettnner from Austria with his Super Sicroly (featured on the cover).

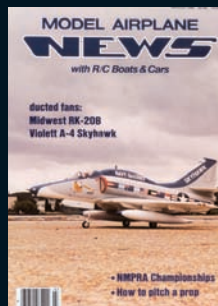


## The First 2.4GHz Aircraft Radio

It's hard to believe, but all the RC aircraft radios we now use and love got their start only 12 years ago. First reviewed in our March 2006 issue, the first airplane radio operating with a 2.4GHz modulation was the DX6 from Spektrum. In development for several years, Spektrum's optimized DSM system used direct sequence spread spectrum (DSSS) technology, which had been well proven with competitive RC car racing. Unlike the then-current 27MHz and 75MHz narrowband systems, DSSS generated a wideband signal on a single frequency, and the signal information was encoded with a globally unique identification (GUID) number so that the receiver could recognize only the information sent from its specific transmitter. With more than 4.2 billion GUID codes available, it was—and still is—virtually impossible for the receiver to be affected by anything other than its specifically mated transmitter.

We were amazed by the Spektrum DSM system as it operated in the ultra-high 2.4GHz band and offered several advantages over previous systems. Typical radio interference that is generated by electric motors, speed controls, and metal-to-metal noise is below the 300MHz range, and with the new Spektrum radio transmitting 2.4GHz (2,400MHz), its frequency range was—and still is—eight times higher than any model-generated radio-frequency noise. The radio couldn't "see" the noise, so it was immune to that interference. The DSM system also isolated the receiver from other outside high-frequency interference sources, such as cell phones, pagers, and wireless computer systems.

The many features included with the Spektrum DX6 were also cutting edge for the time, and it led the way for many of the now-well-known and popular radio systems that carry the Spektrum brand name today.





## MODEL AIRPLANE NEWS FIRSTS

### First All-RC Issue

Devoting itself to the continuing development of radio-control modeling, the September 1984 issue of *Model Airplane News* sports a subtle but significant change on its cover. The famous *Model Airplane News* subtitle, "The World's Premier Model Magazine," becomes—for the first time—"The World's Premier R/C Modeling Magazine." Although the last free-flight VTO column by Dave Linstrum is featured in the issue, the die was cast, and all future issues were dedicated exclusively to RC modeling.



## AD CLASSICS

### JR

The RC world was first introduced to JR radios in this February 1991 ad, and let's face it, we've been hooked ever since!



## LiPo Battery Packs

Cells of lithium polymer, more commonly referred to as "LiPo," are one of the hobby developments that drastically changed how we flew electric-powered RC airplanes. Even though there were a lot of concerns in the beginning regarding cell life and safety, LiPos eventually replaced the standard rechargeable nickel-cadmium (Ni-Cd) and nickel metal hydride (NiMH) batteries. Extensive research in the 1980s led to lithium-based cells, which were first used in the personal electronics industry. In 1991, Sony was the first company to introduce commercial cylindrical lithium-ion (Li-Ion) cells. LiPos quickly followed the development of Li-Ion and other lithium-metal-based battery cells.

As these new batteries came onto the consumer market, powering laptop PCs, cell phones, and other personal electronics, modelers quickly started salvaging the new batteries for use in micro and lightweight indoor RC models. Being much lighter than rechargeable Ni-Cds and having much better power-to-weight figures, it wasn't long before hobby companies noticed the advantages LiPo batteries had to offer.

Of course, having LiPo batteries also meant that modelers were in need of newer, specialized chargers to take care of the new types of batteries. In the late 1990s, Magellan Technologies was one of the first companies to offer an easy-to-use charger. Today, there is an endless supply of LiPo brands offering packs in all capacities, voltage levels, and cell counts.





# Written History



The Clark GA-43. One of the latest low passenger planes. It cruises at 170 m.p.h.

## On the Frontiers of Aviation

NINETEEN hundred and thirty-three has undoubtedly been one of the greatest years in the history of aviation as far as the development of high performance aircraft is concerned. Many new planes have been designed during the year that have shown astounding performance never before heard of in the annals of aviation.

Among the first of these super-planes of 1933 was Frank Henry's Northrop "Gamma," which was closely followed by the introduction of the Curtiss "Swift," Curtiss "Condor," Pittman cabin transport and the General Aviation's Clark GA-43, similar to the one described in this article. Next came Gerard Vultee's (former designer of famous Lockheed ship) excellent low-wing transport, the latest version of the Martin bomber, the Boeing low-wing transport, the Stinson "Reliant," the numerous Waco models, the Stinson 80 and a host of other new popular planes.

With this great number of new planes it seems incredible that any more designs could be produced, but this is not so. The newly formed Lockheed Aircraft Corp. has announced the production of a new low-wing transport known as the "Electra."

Douglas has recently produced a new large transport as has its closely related company, The Northrop Corporation. This new plane, built by the Northrop concern and known as the "Delta," designed by the famous Jack Northrop and is a direct descendant of the Northrop "Gamma."

Mr. Granville, designer of the Gee Bee series, has announced that he will soon have a new eight passenger transport on the market that will be very similar to the

The First Article of a Series Giving Intimate Details of Airplanes That Are Leading the World in Aviation

By ROBERT C. MORRISON

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The Vought Corsair V-43-C. A high speed two-seater fighter. The ship is in great demand by foreign countries.



The Vought Corsair V-43P. A single-seater fighter with a speed of 170 m.p.h. with full military load.

Gee Bee that Jimmie Doolittle used in establishing the former world's land plane speed record of 293 m.p.h.

Cypress-Burnell is busy designing a plane for Clyde Pangborn for a non-stop refueling flight around the world. The plane will have an 8,000 mile cruising range, a greater range than any plane built heretofore.

B/J and Great Lakes have been building some excellent ships for the Navy as has Consolidated Aircraft Corp., its latest being the P-2-V2, a twin-engine flying boat.

Fairchild has announced a new ship for the sport plane field. It will be similar in design to the F-22 but much faster.

Other designs are now on the boards of the leading aircraft manufacturers and we may see still greater developments in the year 1934.

All of these airplanes possess very fascinating lines and should be of very much interest to the model builder. It is, therefore, the purpose of this article and those to follow to acquaint model builders with the latest developments of the aeronautical industry in order that they may be able to build the most up-to-date models.

These articles will contain three-views, photos and descriptive matter of the aircraft planes and many others in the near future.

The Latest Vought Corsairs (V-43A, V-43B)

THE is one of the new craft that was produced towards the end of the war by the Germans. It was powered with an eleven-cylinder, two-cylinder, inline, air-cooled motor. To obtain greater efficiency the motor turned over only about 900 r.p.m., a low speed for a motor of this type.

The tail surfaces were full cantilever and the wings were of fabric with plywood ribs spaced at six inch intervals.

Two fuselages, each with a single engine, were built in one piece and joined with diagonal cables. A single cable completed the fuselage. The wings were built in one piece and joined with diagonal cables. The fuselage was of fabric with plywood ribs spaced at six inch intervals.

To effect proper turning the fuselage had an asymmetrical airfoil to render the ship steady for general use. Steel tubes completed the fuselage and the fuselage was built up of plywood bulkheads and spars.

The plane had a maximum top speed of one hundred

and thirty-five miles per hour. It employed a dorsal fin over the main engine and a prop engine. It was fitted in thick and silver.

A non-folding, full-size model can be made from these plans. The body should be built up from strips of thin, strong, lightweight material to withstand the tail surfaces should be covered with the wings covered with fabric or silk.

The framework of the wings should be built up, the fuselage in two parts. This may be covered with fabric in the plane. The fuselage should be covered with a thin layer of fabric.

Here is your chance to develop your ingenuity.

Build your own model.

Build your own model.

Build your own model.

Build your own model.

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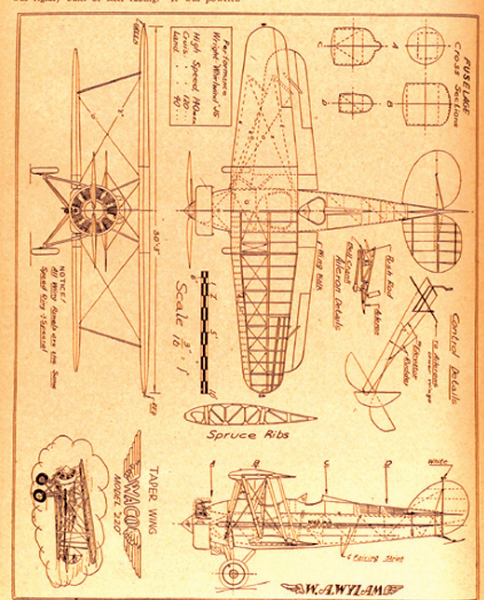
## On the Frontiers of Aviation

Written by Robert C. Morrison, On the Frontiers of Aviation appeared within the pages of Model Airplane News from January 1934 to November 1941. The long-running series presented new developments in every facet of flight.

## The Waco Taper Wing Model 220

THIS ship was one of the most popular three seat commercial planes of 1930. The wings were of wood and metal construction, covered with fabric. The fuselage was of welded steel tubing. The tail unit was rigidly built of steel tubing. It was powered

with a Warner Scarab 100 H.P. or a Kinner 125 H.P. It had a high speed of 138 m.p.h. and a landing speed of 48 m.p.h. The initial rate of climb was 1500 feet per min.



## William Wylam Drawings

First published in 1933, William Wylam's many outstanding scale drawings were a popular feature of Model Airplane News for many years and were even rerun in the 1960s. Among his most noteworthy drawings were multi-issue features of such popular aircraft as the Stinsons, the Beechcraft D-17 Stagger-wing, and Lockheed Vega series.

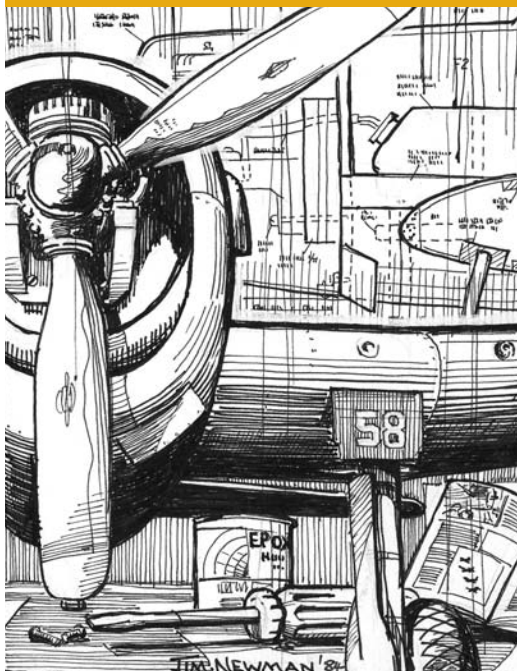
## Gas Lines

One of the earliest specialty columns, Gas Lines first appeared in the February 1936 issue of Model Airplane News. Because gas-engine technology was still in its infancy, modelers eagerly soaked up every ounce of information that this column provided. Gas Lines was a trusted source for gas-engine-operation information until it was discontinued in 1942.





## MODEL AIRPLANE NEWS FIRSTS

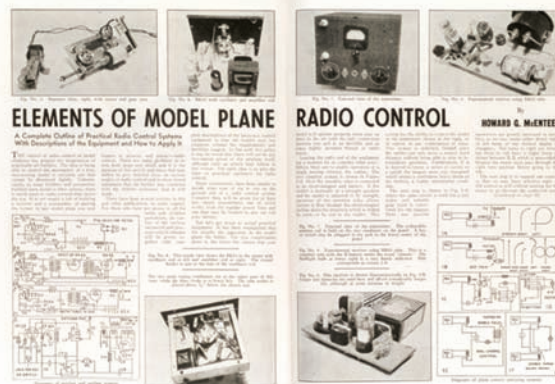


### Hints & Kinks by Jim Newman

From my files, it appears that my first Hints & Kinks column appeared in the June 1975 issue. The column grew from a visit Walt Schroder paid to Carl Goldberg Models in early 1971, while I was working there. Walt asked if I would be going to the '71 Nats at Glenview, and I replied that I would be competing in FAI Free Flight. (Now that's a story in itself.) Walt then asked me if I would be prepared to cover the event with a sort of "roving sketchbook." I agreed, and after the Nats, a few pages of my sketches—complete with fake spring binding down the gutter—appeared in the magazine. I really loved his presentation. I'm sure that I have every page from that day on. From that Sketch Book sprang Hints & Kinks. Throughout the early '70s, I illustrated numerous articles for *Model Airplane News*, *American Aircraft Modeler*, and *RC Modeler* before Walt finally brought me aboard *Model Airplane News*. My last column was published in the May 2001 issue. That's 26 years. Wow!—*Jim Newman*

## Elements of Model Plane Radio Control

Information on the budding technology of radio control first appeared in the May 1939 issue of *Model Airplane News*. Authored by Howard McEntee, the Elements of Model Plane Radio Control column was the first to begin to depict a revolution of sorts in the modeling world. It was succeeded in September 1953 by Radio Control News, when Ed Lorenz took on the task of reporting on the many breakthroughs in this new and fascinating facet of the hobby. In January 1965, Radio Control News took on a life all its own and was transformed into an entirely separate section of *Model Airplane News* that featured articles on everything from plans and new products to breakthrough technologies.

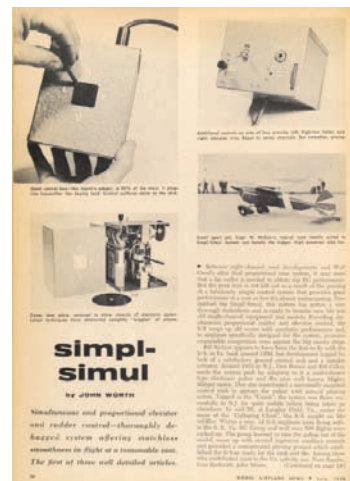


## Scrap Box and M.A.N. At Work

Over the years, the *Model Airplane News* editorial column has appeared under several different titles, the most memorable of which were Scrap Box and M.A.N. At Work. Written by Bill Winter, the editorial column ran under the title Scrap Box from April 1949 through January 1951, but it became the now-legendary M.A.N. At Work upon Bill's promotion to editor. The column remained under this heading through the reigns of Walt Schroder and Art Schroeder, until it was changed once again in March 1979.

## Simpl-Simul

John Worth's three-part series, Simpl-Simul, appeared in the July, August, and September 1958 issues of *Model Airplane News*. Considered revolutionary at the time, the Simpl-Simul system allowed simultaneous and proportional elevator and rudder control.





## Written History

### VTO

Authored by Richard Miller, Dick Black, and Dave Linstrum, VTO ran from March 1962 to February 1979. A series of articles that detailed the many facets of free-flight models, the VTO column later became Free Flight News and was authored by Linstrum.



### Round and Round

Started by Bill Winter in 1962, Round and Round introduced readers to the latest news and developments in the control-line world. The column ran through June 1966 and featured a number of authors



over the years, including Peter Soule, Bill Netzeband, Jim Daves, and Phil Granderson. In March 1975, Harry Higley's name began to appear at the top, and in 1979, the title was changed to Control Line News. It ran as such until it was discontinued in April 1981.

## The Academy of Model Aeronautics

Before the Academy of Model Aeronautics (AMA), modelers had to belong to a variety of organizations, including the Junior Air League, the Junior Aviation League, and the Junior NAA (the model-airplane branch of the National Aeronautic Association). Although the Junior NAA sponsored the first National Aeromodeling Championships (referred to as the "Nats") in 1923, the idea for the AMA began in 1935. Interested in forming a self-governing body, modelers wanted a single voice to develop national rules for contests and to speak to the government.



In 1936, the AMA was located in the RCA Building, Rockefeller Center, in New York City. Later that year, the AMA headquarters moved to Washington, D.C., as part of the National Aeronautic Association. In 1940, the AMA moved its offices to the Willard Hotel in Washington, D.C., and this was the first time that the AMA had separate offices from the NAA, along with its own budget and officers. It wasn't until 1966, however, that the AMA became a fully independent organization.

In 1979, the AMA purchased property in Reston, Virginia, just outside of Washington, D.C., to build a new AMA headquarters and the National Model Aviation Museum, which officially opened on September 24, 1983. Soon after, the AMA began looking for a location for a national flying site, and in 1992, a location in Muncie, Indiana, was chosen. Two years later, after moving the AMA collection from Virginia to its new site in Indiana, the museum reopened to the public. The new Frank V. Ehling Complex not only housed the museum but also the Lee Renaud Memorial Library as well as the AMA headquarters. The AMA eventually outgrew the building, and so in 2001, a new AMA headquarters building was opened for business, housing all the administrative offices.





# TOP GUN

## SCALE INVITATIONAL



In our 60th year of publication, we covered the very first Top Gun in Coral Springs, Florida. Created by Frank Tiano, the event, attracted 40 of the country's best scale contestants and was sponsored by *Model Airplane News* and Pacer Technology/Zap Glue. Since 2002, the invitational has enjoyed the unrestricted flying area and manicured runway amenities of Paradise Field at the Lakeland Linder International Airport in Florida.

Since its inception, Top Gun has been the venue for many RC scale modeling "firsts." Foremost among these is the fact that it was the first invitational scale competition ever in RC history. It was also the first scale competition to feature a turbine-powered model. And the category of Team Scale, which combines the building/finishing talents of one modeler with the flying skills of another, was also pioneered here.

A more recent addition is the Pro-Am competition classes, which allow new participants with a strong interest in scale to compete. To accommodate the ever-changing dynamic of the event, the Unlimited category was started in 2012. These "team" models push the limits in size and the wow factor. In 2016, Top Gun added the X class for almost-ready-to-fly models, which allowed them to be weathered but not repainted, and in 2018, the Young Guns class was created so that pilots under the age of 18 could be in on the action.

So as the models and pilots have continued to develop and evolve, so has the event itself. And after three decades of continued popularity, no one can argue with its success.

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## TOP GUN

### INVITATIONAL TOURNAMENT

APRIL 21-23, 1989 • "CONDOR'S" FIELD  
CORAL SPRINGS, FLORIDA

**PROMISES TO BE THE PREMIER SCALE EVENT IN THE WORLD!**  
45 of the best scale builders and pilots in North America battle it out for the gold. Meet these pilots, magazine editors, news reporters, and video magazine publishers as they cover the world's most grueling scale competition.

**FOUR DAYS OF SPECTACULAR FUN IN THE SUN**  
Early arrival begins on Thursday, April 20th. Static judging will follow on Friday, April 21st. And flying competitions will take place Saturday and Sunday, April 22nd and 23rd. Also scheduled:

- ☐ Demonstrations by Bob Voight, Bob Parkinson, Model Rocketry, U-Control Combat, Free Flight, and World Class Kites. A few surprises are planned, too! So don't forget to bring your camera!
- ☐ Top Gun Food Bazaar (Not just hot dogs!)

**RESERVE NOW FOR DISCOUNTED LUXURY HOTEL ACCOMMODATIONS AT TOP GUN HEADQUARTERS HOTEL**  
When calling for reservations, just mention "Top Gun" to receive the special discounted room rate of only \$75 per night at the luxurious new Westin Cypress Creek Hotel in Fort Lauderdale. Call toll free 1-800-228-3000. Hurry, space is limited, so call now for reservations.

**CALL FOR ADVANCE TOP GUN DINNER & DANCE TICKETS**  
Party with all of us on Saturday evening. Everyone's invited to our fabulous Top Gun Dinner & Dance Party. Register to win in our free prize drawings. Cost: \$35 per person. Call (305) 473-2211 for advance ticket information.

For more information, call the Top Gun Information Office 9 a.m. to 5 p.m. (E.S.T.) Monday through Friday at (305) 473-2211. Dinner/Dance attendance can only be guaranteed with advance ticket purchase. Tournament admission tickets will be available at the gate during the competition.

**CALL NOW FOR ADVANCE TICKETS AND ADDITIONAL INFORMATION!**







## Editors' Choice Awards

Our Editors' Choice Awards, which debuted at the 2010 RCX and Model Airplane News Expo, have always been highly prized by companies in the RC industry. Intended to recognize and highlight the best of the best, our first Editors' Choice Awards included plane, helicopter, radio, engine, and innovation categories, and they have changed with the times to also include a drone category. When a product is advertised as being a Model Airplane News Editors' Choice Award winner, you know it's something special.

# The Rise of Horizon Hobby

Founder Rick Stephens, along with a handful of his family and industry professionals, opened Horizon Hobby for business in October 1985. Enjoying positive growth, a second distribution center soon followed and was opened in Paso Robles, California, so Horizon could service retailers west of the Rockies. In the early 1990s, Horizon acquired Hobby Dynamics and started to gain exclusive distribution rights for several other premier RC brands, including JR Remote Control. By 1998, using the Internet and e-commerce, Horizon started reaching out directly to hobby consumers and acquired catalog retailer Indy RC. By 2000, Horizon debuted the HobbyZone Firebird to launch the popular teach-yourself-to-fly category. A valued industry partner, Horizon had been advertising several of its exclusive brands, such as JR, MDS, Hangar 9, Saito, and Zenoah, in *Model Airplane News* for many years, and it was in our January and February 2000 issues that the brand really kicked into high gear. These multiple-page ads proudly told the hobby industry that

Indy RC would now be known as Horizon Hobby.

In 2014, Horizon became an LLC and began a new chapter with new ownership led by CEO Joe Ambrose and a group of investors. This new ownership structure positioned Horizon for positive future growth. Early in 2018, rival company Hobbico filed for Chapter 11 bankruptcy protection, and by June, it filed for Chapter 7. In April, the bankruptcy court approved Horizon Hobby's purchase of Hobbico. Following the purchase, Horizon began to distribute several of the Hobbico brands, including Axial, Arrma, Dromida, Great Planes, Real Flight, Top Flite, and Tower Hobbies. Although merging several product lines from both companies has proven to be a challenge, the transition has gone smoothly, and today, Horizon Hobby is the largest RC hobby distribution company in the United States.



Our early issues were filled with rubber-powered, free-flight models, and over the years, they progressed to cover radio control and gas/glow power on to turbine jets and electrics that dominate the flying field today.

*Model Airplane News* is extremely proud to still be here, 90 years later, celebrating this thrilling and rewarding hobby. The editors and staff thank you, our readers, for your loyalty and enthusiastic support. Here's to another 90 years aloft! ✈

