



PRODUCT REVIEW



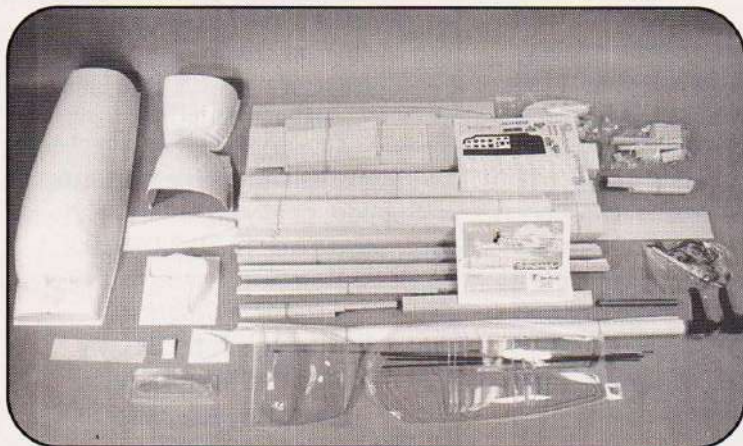
BEECHCRAFT BONANZA

Top Flite/Great Planes

By Jim Sandquist



General aviation has watched as, over the years, various designs of aircraft has become available to the general aviation community. Perhaps none as notable or easily distinguishable as the Beechcraft Bonanza. Though it was available as both a standard tail and the V-Tail configuration, the V-Tail was what made this aircraft distinct. Even people who do not know much about aircraft seem to know the Bonanza when they see the unique V-Tail. No longer in production, the V-Tail Bonanza lives on in a very nice kit from Top Flite. The kit comes packaged in one box with all parts neatly bagged



SPECIFICATIONS

Name BEECHCRAFT BONANZA
 Aircraft Type Sport Scale
 Mfg. By Top Flite/Great Planes Model Dist.
 P.O. Box 9021
 Champaign, IL 61826-9021, (800) 682-8948
 Mfg. Sug. Retail Price \$319.99
 Available From Retail Outlets
 Wingspan 81 Inches
 Wing Chord 12-3/4 Inches (Avg.)
 Total Wing Area 1040 Sq. In.
 Fuselage Length 63-1/2 Inches (Approx.)
 Stabilizer Span 25 Inches
 Total Stab Area 280 Sq. In.
 Mfg. Rec. Engine Range61-.91 2-Stroke
 .91-1.20 4-Stroke
 Rec. Fuel Tank Size 14 Oz.
 Rec. No. of Channels 4-6
 Rec. Control Functions Throt., Ail., Flaps,
 Ret. Gear, Ruddervators

Basic Materials Used In Construction

Fuselage Balsa, & Ply
 Wing Balsa & Ply
 Tail Surfaces Balsa
 Building Instructions on Plan Sheets No
 Instruction Manual Yes (71 pages)
 Construction Photos Yes

RCM PROTOTYPE

Radio Used Futaba 8UAP (w/9 servos)
 Engine Make & Disp. SuperTigre .75
 Tank Size Used 14 Oz.
 Weight, Ready to Fly224 Oz. (14 Lbs.)
 Wing Loading 31 Oz./Sq. Ft.

SUMMARY

WE LIKED THE:

Detailed plans, clear concise instruction manual, construction techniques, built-in tabs for wing construction, number of options available.

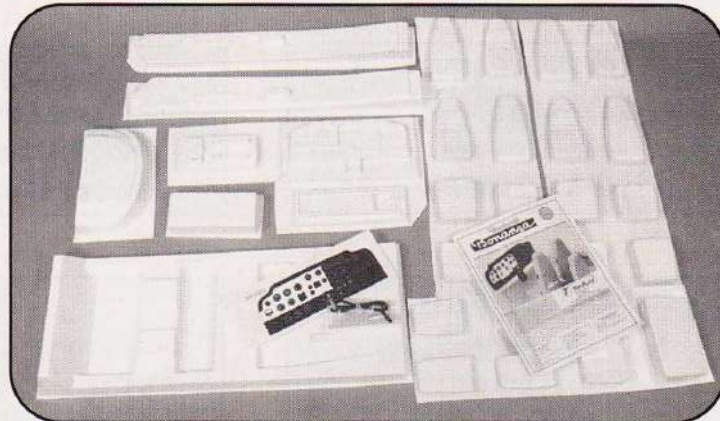
WE DIDN'T LIKE THE:

Nothing noted.

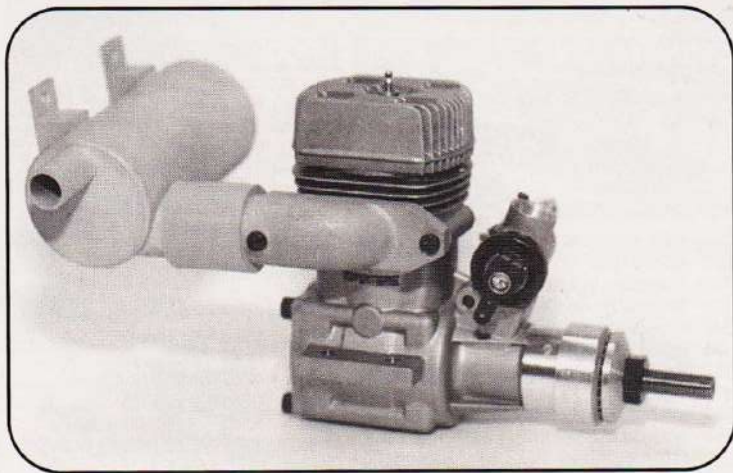
and identified. The balsa and lite ply was arranged to allow all of the materials to lie flat in shipping. Upon taking inventory, I found that all parts were intact and nothing was missing.

Construction:

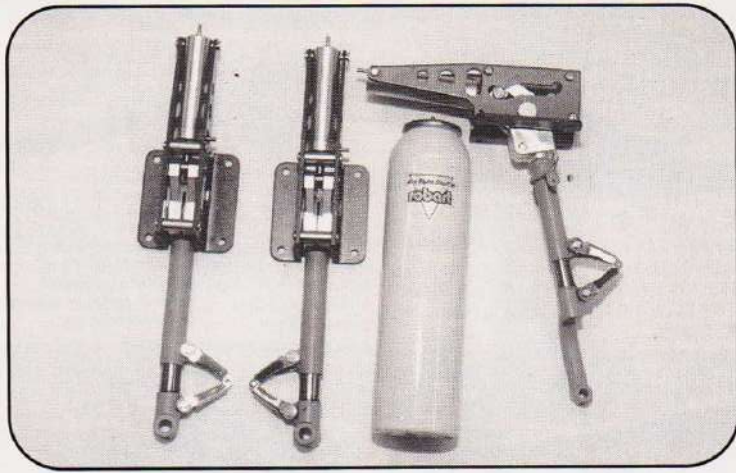
The model has a large 81" wingspan, making it IMAA



Cockpit kit from Top Flite.



SuperTigre .75 with special in-cowl muffler for Bonanza.



Robert Deluxe retracts with oleo struts.

legal. The plans sheets are also accordingly large, too large, in fact, to lay out conveniently on the average model bench. To solve this problem, Top Flite has made sure that the drawings are laid out such that you can easily cut the plans sheets up to fit on the bench. They even have predetermined cut lines on the plans to make sure you won't cut something off of importance!

The 71-page instruction manual is about as complete a guide as I have built from and is loaded with pictures of the entire building process. The manual, as well as the plans, give you the instructions to build this with either a straight tail or V-Tail configuration. I chose the V-Tail because, "It Isn't A Bonanza Without A V-Tail!"

The parts used in construction are a variety of lite ply and balsa wood. Many of the smaller parts were precut and bagged. The lite ply parts were die-cut with part number punched into each part, making them easily identifiable. The balsa was some of the highest quality balsa I have found in a kit in some time. I did not have to replace any of the wood included with the kit, and this quality was found throughout the whole model. When beginning the construction phase, the first thing you need to do is decide on the rudder configuration. In my case, this was to construct the two ruddervators. Construction of the ruddervator was typical built-up ribs and sheeting. After these were constructed, your next step is to cut the control surface away from the stab. Upon completion of the ruddervators, you move onto the wing.



The wing is a fairly complex airfoil and would be difficult to build if it were not for the unique, built-in, wing jig tabs. On a number of the ribs, a tab was added so that you can build the wing without the use of a wing jig and do it right on your bench, in much the same way that you would construct a standard flat bottom wing. The instruction manual makes good use of photographs to show you each step of the wing construction. The wing may be built with or without the flaps. I chose to utilize flaps for my model. They were a bit more work but I felt that they were worth the time invested.

The wing is sheeted top and bottom and, when you build the wing, you are also constructing the flaps and ailerons. These control surfaces are cut from the wing itself when you have the wing completely built. The control surfaces become a bit more tedious to build, but they do end up perfectly matching the airfoil and are lighter than typical solid balsa control surfaces. Before sheeting the wing, you also have to determine what type of landing gear you want to utilize.

Landing Gear:

The kit gives you the materials to construct a fixed-landing gear, but to take full advantage of the kit, I

installed the optional Robert Landing Gear. Robert sells two different retracts for the kit. The standard set is a typical wire landing gear and basic retract unit. These can be dressed up with their plastic landing gear struts. The Deluxe Landing Gear I installed is really fabulous! They are very rigid and keep the plane on a straight track for take-off and landing, but

the functional oleo struts absorb all of the stress of the take-off and landing. Robert has done a great job of creating a scale-type appearance with these Deluxe Gear. It will add a bit to the overall cost, but I would highly recommend the Deluxe Gear be on your list of accessories you must get!

Fuselage:

The fuselage is completely built up and sheeted. To look at the Bonanza, you would expect to have a very difficult fuselage to build because of the round cabin area. Top Flite has turned a difficult task into a simple one by creating an all ABS plastic cabin area. With that out of the way, the rest of the fuselage is very box-like in its shape and construction. The fuselage built up very quickly. The only difficult part of the fuselage is the sheeting. The flat sides were no problem, but the turtledeck area required a bit of time and patience. It pays big dividends to make sure that your sheeting fits to the turtledeck real well before gluing it in place. In an effort to keep the tail light, the turtledeck sheeting is only 1/16" and does not give you a lot of margin for sanding. The kit contains a simple V-shaped spar that mounts aft of the turtledeck and runs back to the tail of the fuselage to receive the

RCM TRAPLET ORDER FORM

Traplet Books

Basic Aeronautics	
For Modelers @ \$15.50	\$
Designing Model	
Aircraft @ \$13.00	\$
Fast Electric Powerboats @ \$15.50 ..	\$
Fast Powerboats I/C @ \$15.50	\$
Gas Turbine Engines	
for Model Aircraft @ \$24.00	\$
Gearboxes for Electric Powered	
Model Air @ \$22.00	\$
High Flying On A Low	
Budget @ \$15.50	\$
Introduction to Marine	
Modelling @ \$15.50	\$
Model Jet Engines @ \$24.00	\$
Model Rocketry — Space	
Modelling @ \$22.00	\$
Model Submarine	
Technology @ \$24.00	\$
Radio Controlled	
Model Aircraft @ \$15.50	\$
Scale Construction @ \$15.50	\$
Scale Electric Flight @ \$24.00	\$
Scale Model Boats @ \$15.50	\$
Scale Model Gliders @ \$24.00	\$
Scale Model Helicopters @ \$22.00 ..	\$
Static Marine Modelling @ \$22.00 ..	\$
Radio Controlled	
Racing Yachts @ \$15.50	\$

POSTAGE FOR BOOK ORDERS

U.S.A. Postage & Handling. All orders must include postage. Allow 2-3 weeks delivery.
United Parcel — U.S.A. — \$4.00 for 1st book;
\$2.00 for each additional book

Foreign Postage & Handling. Orders MUST include either Surface or Airmail postage.

Surface Rate — 25% of Order	\$
Airmail — Canada & Mexico add 30% ...	\$
Airmail — Europe & S. America add 75% ...	\$
All Others add 100%	\$

TOTAL PAYMENT ENCLOSED (U.S. Funds ONLY)

CA residents add appropriate sales tax ... \$
Only U.S. Funds Accepted. (Foreign orders will not be processed until Money Order is received in our office.)
We do not bill or send C.O.D. for any of the above.
Prices subject to change without notice.

Payment Options

- ☐ Check Enclosed (Payable to RCM)
☐ Master Card ☐ Visa ☐ American Express
☐ Discover

Card # _____

Expiration Date _____

Name on Card (please print) _____

Signature _____

Name _____

Address _____

City _____

State _____ Zip _____

Mail To: RCM, P.O. Box 487, Sierra Madre, CA 91025

Fax: (626) 355-6415 • Office: (626) 355-1476

Orders Only: (800) 523-1736

Introducing the NEW fast cat

CHEETAH 42DX
3.0HP/57 Oz.



\$399.95



Incredible power-to-weight performance in a two stroke gasoline engine. Get the brute power without the weight. DX series engines come complete with CH Electronics ignition systems allowing use of a much lighter flywheel.

CHEETAH 25DX
\$329.95



CHEETAH 25
\$249.95

CHEETAH 42
\$279.95

Reid's Quality Model Products

30 Clifton Street
Phelps, NY 14532,



www.reidsmodels.com

Tel 315-548-3779
Fax 315-548-4099

stabilizer and two ruddervators.

The entire model lends itself to very standard building techniques and does not require any special glues or modeling tools to complete. If you have a couple of planes under your belt, you should have no trouble constructing this model.

Covering and Paint:

I chose to cover my plane with the Top Flite MonoKote. Part of this decision was to keep the plane as light as possible. Had I decided to fiberglass and paint the plane, I may have had to go up to a larger engine. I also like to try and build the plane exactly to the specifications of the manufacturer when I do a product review, and I would guess that MonoKote will be the covering of choice for most modelers building this kit. I had not used MonoKote in a while and decided to try some of the new tools that are available for applying this material. The new MonoKote "Smart Cut" Striping Tool proved quite useful for some of the trim. I also tried one of the new "Cool Hand" and "Hot Glove" products. The "Cool Hand" Glove in particular, was a real help and is a tool you may want to add to your list of covering tools.

The plastic cowl, tail cone, and cabin area were all painted with Top Flite LustreKote Paint. This was the first time I had used this product and found it to be a very good quality paint. The color match is very good and the paint "flows out" real well. Most aerosol paints I have tried, have not flowed as well as the

LustreKote and tend to orange peel. I highly recommend the use of this paint for any of your MonoKote projects.

Engine:

The plan has a wide range of engine recommendations but, again, I chose to use the recommended SuperTigre .75. This engine delivers scale-like performance and completely fits under the cowl. They also have an "in-cowl" muffler available to complete the scale engine installation. When making your engine choice, keep in mind that this is a civilian aviation airplane. The full-size was not used for aerobatics, it didn't do snap rolls or high "G" maneuvers. If you intend to fly this like a civil aviation aircraft, you probably do not need to install a high-powered engine. The SuperTigre .75 has plenty of flight time with the recommended 14 oz. fuel tank. The tank is positioned a bit different than most tank installations and is mounted sideways across the fuselage. I used the 14 oz. Great Planes fuel tank which comes with a special 90° elbow to allow for this installation.

Radio:

Obviously, if you build the straight-tail version, the installation of the radio is not unique, but if you choose the "V" Tail, there are a few things to take into consideration. First of all, according to the instruction manual, the plane will fly very well with the ruddervators being set up as elevators only (basically, a

Ohio R/C Models



These are the top of the line kits. Each features Fiberglass Parts, Hardware Pack, Color Instrument Panel, and Aluminum Gear.

Kit No.	Model	Price
127	70" Extra 300S	\$279.99
128	72" Extra 300L	\$279.99
140	70" Sukhoi SU-26mx	\$279.99
142	70" Cap 232	\$279.99
NEW 145	74" Giles 202	\$289.99
NEW 147	75" Giles 300	\$289.99
101	81" Super Chipmunk	\$289.99
102	82" DHC-1 Chipmunk	\$279.99
103	81" Pepsi Chipmunk	\$299.99
111	62" Ultimate 10-300s	\$359.99
120	84" Extra 260	\$399.99
122	84" Extra 300S	\$399.99
125	87" Extra 300	\$399.99
130	84" Sukhoi SU-26mx	\$399.99
115	75" Ultimate 10-300s	\$499.99
NEW 301	102" Extra 300L	\$499.99
NEW 302	97" Cap 232	\$499.99
400	127" Extra 300S	\$799.99
210G	101" AT-6G Texan	\$549.99
210D	101" AT-6D	\$549.99

1.20 Series

Giant Scale Series

Monster Series

* SAVE Call for Kit and Engine Combo Pricing. *



All Bar Stock CNC Turned

Tired of Giant Scale costing a Giant Amount?

Then join the revolution to have high-end products at affordable prices.

Introducing a line of all Bar Stock Spinners. Rising above the best by being lighter and much less expensive. Try one. You will see we're advancing Giant Scale to the next level.

Compare and Save

Part#	Spinner Size and Style	Sale
275F	2-3/4" Fai	28.95
300S	3" Standard	34.95
300U	3" Ultimate	42.95
300E	3" Extra	44.95
350S	3-1/2" Standard	49.95
350U	3-1/2" Ultimate	58.95
350E	3-1/2" Extra	62.95
400S	4" Standard	73.95
400U	4" Ultimate	80.95
400E	4" Extra	85.95
450U	4-1/2" Ultimate	97.95
450E	4-1/2" Extra	101.95
500U	5" Ultimate	136.95
500E	5" Extra	144.95
550P	5-1/2" P-51	198.95
600E	6" Extra	198.95
700E	7" Extra	299.99

Intro Sale

Save

an

extra

\$5.00

Off

Spinner

Prices



Extra



Standard



Ultimate

Visit our 1000 Sqft. Showroom

Send \$1 for catalog (outside USA \$2)



Brison Engines

Get the best Giant Scale Gas engines available. Combining the 'Hot' Sachs Heads with precision CNC Parts and an Electronic Ignition, and you have the best.....Brison Power.

	Retail	Sale
2.4ci Single w/Ignition	\$449	\$435
3.2 Single	\$549	\$535
4.2 Single	\$649	\$635
5.8 Single	\$699	\$685
4.8 Twin	\$999	\$989
6.4 Twin	\$1199	\$1179

SAVE

Bisson Custom Mufflers

	Retail	Sale
Brison 2.4 Pitts	\$98	\$89
Brison 3.2 Pitts	\$98	\$89
Brison 4.2 Pitts	\$138	\$125
Brison 4.8 Pitts	\$170	\$153
Webra 1.20 and others	\$54	\$49
Supertigre 2300	\$54	\$49
Zenoah G-23 Downdraft	\$54	\$49
Zenoah G-45 Pitts	\$98	\$89
Zenoah G-62 Pitts	\$138	\$125

SAVE 10%

MGA Pilots

100	WWI Pilot	\$27.50	\$24.95
200	WWII Pilot	\$27.50	\$24.95
300	Civilian	\$27.50	\$24.95

SAVE BIG !!

Ohio Haigh Style Tail Wheels

112	Up to 12Lb.	\$14.95	\$12.95
122	Up to 22Lb.	\$16.95	\$14.95
130	Up to 30Lb.	\$26.95	\$23.95
150	50Lb and over	\$29.95	\$25.95

Industrial C/A Glue

150% Stronger than Epoxy

SI-1500	Super C/A Thick	\$14.00	\$11.00
HP-1000	Thick w/Rubber	\$14.00	\$11.00

NEW

Ohio R/C Models

30 West Linden Ave. Miamisburg, Ohio 45342
Phone (937) 859 1660 FAX (937) 859 7202
Email: ohioircmdl@aol.com

3-channel). If you do not have a computer radio with ruddervator mixing, you can also install the Ace MixMaster servo mixer (Product #ACEM2510) to allow ruddervator mixing with a standard radio.

For my installation, I chose the new Futaba 8UAP. This radio is a completely functional computer radio that provides a lot of different mixing capabilities including ruddervators. The number of servos required will vary, depending on whether you go with the basic 4-channel or choose to go all the way with flaps and retracts. I used nine servos in my installation, one throttle, two ailerons, two

flaps, two ruddervators, one retract, and one for the nose wheel steering. Standard 3003 were servos used throughout except on the aileron where I chose to use the 9302 high torque servo. In retrospect, I probably could have used standard servos throughout the entire installation.

There is more than adequate room for the standard-size Futaba servos throughout the model, even if you put in the optional cockpit interior.

Flying:

All control surfaces were set as prescribed in the instruction manual for the first flight. The plane required a couple of ounces of lead to balance within the prescribed C.G. range. Take-off is straightforward, as is the case with most tricycle gear aircraft. The plane takes a little time to build up its ground speed. When adequate flight speed was achieved, it only took a bit of elevator input to get airborne. Retract the gear and the plane really leaps ahead. With the gear retracted, I found that I needed to throttle back to get a more scale-like speed. The plane flies very easily with no bad flight characteristics. The roll rate was good, as was the vertical performance. Again, I believe this plane should be flown as the full scale since it is not going to be put

through a lot of aerobatic maneuvers.

Landings were really fun. When I set up for landing, I popped the gear and then dropped the flaps on final. Unfortunately, the plane just kept floating and floating. I pulled the gear and flaps up to go around again. This time, I set up for a steeper approach and the plane touched down nicely for a short roll out.

Conclusion:

The Bonanza is a classic airplane that Top Flite has captured in a great kit. Options such as the cockpit interior and the lighting kit add to the realism of the airplane and are available from Top Flite. This plane can easily be used in Fun Scale competition and, if you are so inclined, you could make a few additions to the model and make it pretty competitive in Sport Scale model as well.

If you have built and flown two or three models, you should have no problem stepping up to the Bonanza. The kit and accessories available from Top Flite seem to be a good value. The complete package is not inexpensive but, having put one together, I can assure you that it is a good value for your money!



MaxCim Motors, Inc.



Our Most Popular Brushless/Digital Power System
2 Motors/Speed Controls for 7-25 cells
For .25 to .90 size glo scale/sport planes

57 Hawthorne Dr. Orchard Park, NY 14127-1958
Tel/Fax: 1-716-662-5651 for Brochure
E-Mail: maxcim_motors@localnet.com
Website: <http://www.maxcim.com>
MasterCard/VISA/Discover