Tail

1	T1 ¼ Balsa
1	T2 ¼ Balsa
2	T3 ¼ Balsa
1	T4 ¼ Balsa
1	T5 ¼ Balsa
1	T6 ¼ Balsa
2	J1 ¼ Balsa
2	J2 Lite ply

Other Parts

2	Aluminum Gear
1	3/32" Music wire tail skid
2	Elevator and J-plane joiner wire

5. Check all hardware to be sure it is secure. Use loctite or CA on any bolts that don't have nylon inserts. Put small pieces of fuel tubing around the kwik links. There is nothing worse than losing an airplane on the first flight because of a lose nut or clevis.
6. Hopefully by now you are ready. We know you will be thrilled with your first flight and that it was most successful. Enjoy your Double Trouble to its fullest potential.

ADDITIONAL EQUIPMENT NEEDED TO COMPLETE YOUR Double Trouble

General

.32 - .46 Size two stroke R/C engine and muffler (.40 - .56 four stroke)
Minimum of 4 channel radio set required, *a 5 channel computer radio is recommended.*
(5) Standard servos - *70 oz servos recommended for high horsepower engines*.
2 Rolls of Top Flight Monokote covering
Sullivan SS-6 oz tank
8" Nylon zip ties (4)
30 minute Z-poxy
Thin Zap CA (pink)
Medium Zap CA (green)
Slow Zap CA (yellow)
Zip Kicker
Dubro #537 Kwik hinges
Dubro #173 30" 2-56 control rods (2)
Dubro #172 12" 2-56 control rods (2)
Dubro #144 12" 4-40 control rods (2)
Dubro #122 Nylon Kwik-Links 2-56 (3)
Dubro #304 Spring steel Kwik-Links 4-40
Dubro #222 Medium fuel tubing
Dubro #514 ½ Foam rubber
Dubro #121 EZ connector (1)

Fuselage

Goldberg #546 1"x 2-56 screws and nuts
Goldberg #451 2-1/2" Nylon Tape
Goldberg #304 Axle
Dubro #140 5/32" Wheel collars
Dubro #238 Nylon Landing gear straps
Dubro #319 8-32 x 1-1/4 Socket cap screws
Dubro #329 8-32 Nylon insert lock nuts
Dubro #129 4-40 1" Engine mount bolt set (2)
Dubro #323 #4 flat washers
Dubro #124 Nylon Bearing
Dubro #107 1/2A Nylon control horn

Wing

Dubro #237 Nylon control horn (2)
Dubro #114 Servo Mounting Hardware

Double Trouble PARTS LIST

Total parts	Hardwood
2	3/4" x ½ x 8" Ply Engine Mount
4	1/4 sqr. x 36", spars, servo rail, hatch blocks
	1/4 stick
19	1/4 sqr. x 36 tail, ailerons, J-plane
5	1/4 x 1/2 x 36 tail, ailerons
	Sheet stock
4	1/16 x 3 x 36 LE sheet
2	3/32 x 3 x 36 TE sheet
2	3/32 x 4 x 36 center sheet
4	3/32 x 3/8 x 36 cap strips
	Fuse Parts
1	Router cut fuse
2	Liteply doublers
	Wing Parts
4	R1 3/32 Balsa
8	R2 3/32 Balsa
4	R3 3/32 Balsa
2	Birch ply dihedral brace

facing the side. The vent should point toward the right side of the tank, and the klunk should point toward the left side.

22. The tank is held on the side of the fuse, opposite the engine with nylon tie wraps. Hold the tank in the proper location and mark two point under the tank on the fuse to drill 3/16" holes to pass the nylon ties through. Drill the holes, then cut a piece of foam rubber (Dubro #514) the size of the side of the tank that rests against the fuse.
23. Feed the nylon ties through the holes and around the engine. Do not interfere with the throttle linkage! Thread another nylon tie on the end of the first tie to make a longer tie. Place the foam and the tank on the side of the fuse, then fasten it in place with the nylon ties. Pull them tight enough hold the tank in place, but not fully compress the foam.
24. Run the fuel lines (Dubro #222) from the tank to the carburetor and muffler, making sure the lines don't come in contact with a rotating propeller. Try to keep the lines as short as possible, and use small nylon ties to hold the lines in place if needed.

This completes the construction of your Double Trouble. Please recheck everything on the plane, a double check it against the plans. Plug your Double Trouble into your battery charger and give it a full charge before your first flight.

RADIO SETUP

Suggested radio setup for the Double Trouble:

Aileron: Hot dog - All you can get

Low rate - 3/8 up, 3/8 down

Elevator: Hot dog - All you can get

Low rate - 5/8 up, 5/8 down

Rudder: Hot dog - All you can get

Low rate - ¾ left and right

J-plane: Follows the rates of the rudder. Make sure it does not bind at the maximum rudder throw.

If you have a computer radio you may want to try mixing 50% flaperons with the elevator. You may also want to try flying with 20-40% exponential on the control surfaces. This makes the controls a little softer with minor control inputs, but allows full throws with major inputs. Adjust the setting to meet your flying requirements.

GETTING READY FOR THE FIRST FLIGHT

Before the first flight, and to ensure some longevity from your Double Trouble, you will want to check out a few things before your first flights.

1. Balance the Double Trouble at the indicated CG point shown on the plans with the fuel tank empty. Depending on your type of flying, you may want to move it later.
2. Check the control surface travels. We have given you a starting point on the plans however, they need to be fine tuned to meet your equipment's and your flying needs.
3. If your engine is new, break it in as per the manufacturers instructions. Run the engine and check the idle.
4. Turn on the radio with the engine running to make sure there are no intermittent glitches. Make sure the antenna is away from the rudder and elevator control rods and make sure it passes a range check.

more precise control setup, especially if you are using high torque, BB servos, tap, thread, then solder metal links on the ends of the control rod instead of using Z bends).

10. Mount the landing gear on the plane with the 8-32 bolts (Dubro #319) and lock nuts (Dubro #329). Mount the axles (Goldberg #304) in the gear, then the wheels on the axles with the 5/32" collars (Dubro #140). Use loctite or CA on the set screws in the collars.

11. Mount your muffler on your engine, then place the engine in place on the fuse and hold it in place with a #64 rubber band. Put a Master Airscrew propeller of the appropriate size for your engine (see the instructions included with the engine) on the engine.

12. Install the receiver and the battery temporarily in the wing <u>without</u> the foam wrap.

13. Check the balance of the plane as compared to the CG indicated on the plan. Slide the engine and battery pack back and forth until you achieve the balance of the plane at the indicated CG. Also check the lateral balance of the plane by removing the glow plug from the engine and picking up the front of the plane by one prop tip, leaving the tail on the building board. Slide the battery pack left or right if the plane falls to one side sharply.

14. With a pencil or permanent marker, mark through the mounting holes of the engine onto the engine mounting rails. Remove the engine and drill 1/8" holes through the rails. *You need to remove the J-plane to give proper access to the fuse before you drill and mount the 4-40 blind nuts. Replace the J-plane when the engine has been mounted.*

15. Remount the engine on the fuse, using 4-40 bolts and blind nuts (Dubro #129). Place 1-2 #4 washers (Dubro #323) under each of the front two engine mounting bolts to add around 2° of right thrust to the engine. Use loctite or CA on the bolt to keep them from working loose.

16. Thread a nylon kwik link on the 12" 2-56 rod (Dubro #172) and fit the rod between the carburetor link and the throttle servo. Mark the length, then trim and place an EZ connector (Dubro #121) on the end of the rod. Mount the engine control rod and adjust the length if necessary at the EZ connector.

17. Pull the receiver and battery back out of the plane and wrap them in foam rubber (Dubro #514). Place them back where they balanced before and recheck the balance. Move them if necessary to keep the plane in balance.

18. Mount your switch harness in a location opposite the muffler.

19. Route your receiver antenna out of the plane, keeping it away from the metal control rods.

20. Mount the hatches on the wing using the screws provided with the landing gear straps and in the servo screw set (Dubro #114). Place the hatches on the wing and drill 1/16" pilot holes through the hatches and into the hardwood blocks in the wing. Drill one hole, then insert a screw. Do this for all ten blocks, in all four corners of each hatch.

21. Assemble your fuel tank (Sullivan SS-6) as per the instructions included with it except you will need to assemble it with the bottom

any drips of dried thin CA on the covering, you can clean them up with soft rag and some acetone.

J-PLANE INSTALLATION

1. Align the J-plane on the fuse as shown on the plans. Make sure the split halves don't rub the fuse. Use some masking tape to hold the J-plane in place.
2. Using the laser cut holes in the J-plane as a guide, mark through the holes onto the fuse. Drill 1/8" holes through the fuse, then mount the J-plane with one of the 4-40 engine mount sets. The blind nuts should be mounted on the right side of the fuse.

RADIO AND ENGINE INSTALLATION

Radio and engine installation is done together to aid in the balancing of the aircraft. Don't drill the holes for mounting the engine until you have gotten the plane to balance on the CG indicated on the plans.

1. Using the plans as a guide for location, cut 3 holes in the bottom sheeting of the wing for the control horn of the servo's to exit. See the plans for details.
2. Mount the rudder, elevator, and throttle servos as shown in the wing cross section over the fuselage view on the plan. The servos are upside down with the screws mounting from the bottom of the servo into the hardwood rails.
3. Cut (4) ¾"x ¼" pieces of birch ply from the scrap. Glue these with CA, over the rails that mount the aileron servos. Mount the aileron servos on the outside of the wings, after running the wires through the wings to the receiver area.
4. Mount the control horns (Dubro #237) in the locations shown on the plans. Note that the horns for the Rudder and Elevator are on the bottom side of the plane.
5. Mount the 1/2A control horn (Dubro #) on the lower half of the J-plane. The holes in the control horn go toward the front of the airplane.
6. Thread the two nylon kwik-links (Dubro #122) on the 30" control rods (Dubro #173). Cut them to the appropriate length and make a Z bend on the end to the servo. Mount the rods on the servos and horns. Place a ¼" piece of medium fuel tubing (Dubro #222) over <u>all</u> clevis'.
7. Thread a nylon kwik link (Dubro #122) on a 12" 2-56 control rod (Dubro #172) and mount the link on the J-plane. Mark the control rod where it lines up with the rudder servo wheel, opposite the rudder control rod. Make a Z bend in the J-plane control rod at this mark, then trim off the excess with a set of wire cutters.
8. Locate the 4 nylon landing gear straps (Dubro #238) and cut off one side of the strap with a pair of wire cutters. *(Keep the screws that come with the straps, you will use these later for attaching the servo hatches).* Drill a 1/16" hole through the fuse at the location shown on the plans. Using the 1"x 2-56 (Goldberg #546) screws to mount the landing gear straps on both sides of the fuse, capturing the control rods, but letting them move freely. Place a drop of CA on both of the nuts to lock them in place.
9. Thread the two steel 4-40 kwik links (Dubro #304) on the 4-40 rods (Dubro #144) and cut them to the correct length. Make a Z bend on the other end of the rod and install the rod. *(Expert tip: for a*

Also make sure the fuse is 90° to the wing. (See detail "B" on the plans).

3. When you are sure of the wing alignment, mark several places on the joint with a pencil, then slide the wing over about 2".
4. Mix a good amount of 30 minute Z-poxy and spread it on the wing where it mates with the fuse. Slide the wing back into the fuse and check the alignment of the marks you made earlier. Wipe any excess Z-poxy up with alcohol and a paper towel. Make sure the wing and fuse are 90° to each other, then leave them alone until the Z-poxy has cured.
5. Measure the width of the stabilizer to find the center, then draw with a pencil a line through the center, 90° to the TE. Now draw a line 1/4" on each side of the center line. These lines should line up with the side of the fuse when the stabilizer is placed in the fuse slot.
6. Trial fit the stabilizer in the fuse slot, lining up the center lines. Measure from the TE of the wing to the TE of the stabilizer. (See detail "B"). Adjust the stabilizer until the measurements "C" are equal. Also sight along the rear of the plane to make sure the stabilizer is 90° to the fuse, and level with the wing. Re-mark your pencil lines if needed, then pull the stabilizer out of the slot. *(If you covered your Double Trouble already, trim the covering off the stab from between the two alignment lines you drew. Be sure not to cut the wood.)*
7. Mix some Z-poxy and spread it in the fuse slot, and on both sides of the stabilizer between your alignment marks. Slide the stabilizer back into the slot, aligning your marks and the wing. When you are 100% sure of the alignment, leave the plane alone until the Z-poxy has cured.
8. Trial align the fin on the rear of the fuse. Draw a line up the center of the fuse about 4" long. Now draw a line 1/8" from the center line on each side of the center. Align the fin between these two lines. Line the rear of the fin with the rear of the fuse and make sure it is 90° to the stabilizer. *(If you covered your Double Trouble already, trim the covering off the stab from between the two alignment lines you drew. Be sure not to cut the wood.)*
9. When you are satisfied with the alignment mix some Z-poxy and glue the fin in position. Pin or block the fin in position until the glue has cured. **It is very important that you use Z-poxy and not CA on this joint. Do not CA the fin in place.**
10. Drill 1/8" holes in the elevator and J-plane split halves as shown on the plans. Dry fit the joiner wires to check the alignment of the halves. Make sure they stay flat.
11. Glue the elevator halves together as shown on the plans using epoxy and the 1/8" wire joiner. Do the same for the two J-plane halves.
12. After you cover the plane and the other components, install the hinges (Dubro #537). Install the surfaces in this order: Elevator, Rudder, then Ailerons. You can also install the hinges in the J-plane surfaces. As with most CA type hinges, all you need to do is cut the slits with an X-acto knife on the center lines of the control surfaces and the corresponding position on the plane. Insert the hinge halfway into the control surface, then slide all the hinges into the slits on the plane. Now apply about two drops of thin CA on each side of the hinge. When the glue has cured, flex the surface back and forth a few times to loosen it up and you are done. If you have

3. Cut, pin, then glue the 1/4"x 1/2" balsa for the rudder LE.
4. Cut, pin, then glue the 1/4" square balsa as shown on the plans.
5. Remove the pins, then sand the rudder flat with the sanding tee.
6. Sand a round edge along the top edge and down the TE of the rudder. Leave the bottom of the rudder square.
7. Draw a center line down the LE of the rudder, then sand a 45° "V" along the line you made.
8. Draw a center line down the center of the rear of the fuse. Mark 1/8" from the center line on each side. Using a razor saw, cut ½ deep on both lines to make a ¼"x ½ notch for the fin post. Remove the material with a razor or x-acto, then sand to fit the fin post.

STABILIZER AND ELEVATOR

1. Place wax paper over the stabilizer and elevator portion of the plans.
2. Cut and pin the ¼"x ½ balsa stabilizer TE and Elevator LE in place.
3. Locate, then pin in place the T1,T2 and T3 ¼" balsa tail pieces. Glue the joint with CA. Be careful not to get glue in-between the two 1/4"x 1/2" balsa pieces.
4. Cut, then glue in place the 1/4" square balsa as shown on the plan.
5. Remove the pins, then sand each side of the stabilizer and elevator halves flat with the sanding tee.
6. Sand the front and side edges of the tail round.
7. Draw a center line down the LE of the elevator halves, then sand a 45° "V" along those lines.

J-PLANE CONSTRUCTION

1. Place wax paper over the J-plane portion of the plan.
2. Remove the laser cut parts J1, J2. Pin the parts J2 over the plans.
3. Laminate the parts J1 together with a piece of scrap 1/16" balsa between them. Pin the assembly in place.
4. Cut and pin the ¼" x ½ balsa J-plane TE and LE as shown on the plans.
5. Cut and pin the ¼" square balsa pieces in place as shown on the plans.
6. Remove the pins, then sand each side of the J-plane pieces flat with the sanding tee.
7. Round the LE of the front half of the J-plane, and round the TE of the rear split halves.
8. Draw a center line down the LE of the split halves, then sand a 45° "V" along those lines.

COVERING AND ASSEMBLY

1. The key to any good covering job is having a smooth finish to cover over, so sand the entire airplane with 200 grit sand paper on a 12" or 24" sanding tee. *You may wish to cover the components now, or you can wait until the plane is assembled. If you cover the plane now, be careful to trim the covering away from any of the glue joint, and only cut the covering. Cutting into the wood while trimming away the covering could lead to in flight failure of that component.*
2. Trial fit the wing in the fuse to make sure it slides all the way to the center of the wing.

18. With the bottom of the wing facing up, sheet the center section of the wing using 3"x 3/32" balsa (covering over the servo rails) as shown on the plans.
19. Turn the wing over on the building board.
20. Using the leftover 1/16" sheet from the LE, cut 10 cross grain pieces 2-1/16" long. Glue these sheer webs in place, one between each of the ribs, using CA.
21. Sheet the rear portion of the center section of the wing with 3/32" balsa sheet. Leave the forward section open for the hatches. Using scrap 3/32", cut a cross grain piece 1" wide, fit, then glue the piece in the center of the hatch area.
22. Cut 8 pieces of ¼" hardwood to lengths of 1", and glue in the corners of the hatch areas, as indicated on the plans.
23. Measure the hatch areas, then cut two hatches from 3/32"x 3" balsa sheeting. You will want to cut the hatches 1/32" to 1/16" smaller than the hatch openings to allow for covering later.
24. Remove any pins you may have holding the wing on the board. Using a 24" sanding Tee, carefully sand the sheeting and capstrips level with each other.
25. Using the 24" sanding tee, shape the LE balsa to the shape shown on the plans.
26. Sand the LE, TE, and spars flush with the outer ribs, then finish sand the entire wing.

AILERONS

1. Place wax paper over the aileron portion of the plans. **For short ¼" balsa, use the 10" pieces left over from the wing construction, for long parts, use the 36" stock.**
2. Cut and then pin in place the 1/4" square and 1/4" x 1/2" balsa as shown on each aileron. Glue each joint with CA.
3. Cut, then glue in place the 1/4"x 1/2" balsa aileron mounting strip.
4. Cut, then glue in place the 1/4" square balsa inside stringers.
5. Remove all the pins from the ailerons, then sand them flat with the 24" sanding tee.
6. Sand a round profile on the TE of the ailerons. Draw a center line down the LE of each aileron, then sand a 45° "V" on each one.

FIN

1. Place wax paper over the fin portions of the plans
2. Locate, then pin the T5 and T6 parts from the ¼" laser cut parts
3. Cut, pin, then glue the 1/4"x 1/2" balsa for the rudder LE. Cut the balsa in two pieces and sand the round edge for clearance of the elevator.
4. Cut, pin, then glue the 1/4" square balsa as shown on the plans.
5. Sand a round edge on the LE and top of the fin only.
6. Mark a center line down the middle of the TE of the fin for hinging later.

RUDDER

1. Place wax paper over the rudder portion of the plans
2. Locate, then pin in place the T4 1/4" rudder piece.

WING

1. Lay wax paper over the wing portion of the plans. **Please note that you will be building the left side wing first, then the right side. DON'T MAKE TWO LEFT WINGS.**
2. Cut (8) 36 inch balsa spars and (4) hardwood spars to a length of 27", then pin one in place over the indicated main spar, lay another over the rear spar, and place the other spars aside. Don't throw the 9" pieces out, you will need these for building the ailerons and tail surfaces.
3. Cut all ribs from sheet with razor blade. Also cut out lightening holes in all ribs.
4. Locate ribs R1, R2 and R3 on the spars and over the locations as shown on plans. **Make sure the servo rail notches face down.**
5. Glue the ribs in place, making sure they are at 90°. (You may want to use zip kicker on the ribs to tack them in place.)
6. Glue another ¼" balsa spar in place at the trailing edge of the ribs.
7. Trim a sheet of 3/32"x 3"x36" balsa sheet to a length of 27", then cut it lengthwise into two pieces 1-1/2" wide. Glue one of these pieces at the trailing edge of the wing. Save the other piece for the other side of the wing.
8. Trial fit, then glue two other pre-cut balsa spars on wing with CA. Also trial fit and glue one of the ¼" balsa spars to the leading edge of the ribs.
9. Sheet the leading edge of the wing from half of the spar forward with 3" x 36" x 1/16th balsa. Trim to a length of 26-1/4". Using masking tape, tape the rear of the sheeting to the spar, then fold the sheet back toward the trailing edge. Using slow or medium CA, run glue along the spar, all along the front half of the ribs and the LE stock. Fold the sheet back over and apply pressure to the leading edge until the glue sets. Be sure to keep the wing flat.
10. Using the 3/8"x 3/32" strip, measure, then glue with CA in place the 5 cap strips as shown on the plans.
11. You can now pull the wing off the board and turn it over on the board. Sand the trailing edge to make sure it is even with the angle of the ribs, then glue the 1-1/2" x 26" x 3/32" TE sheeting in place. Pin the TE to the board, aligning the wing to the plans, to keep the wing straight.
12. Trim the length of the next 3" x 36" x 1/16" leading edge sheet to the approximate length of the wing and glue in place, as was done in **step 9**, making sure the wing remains flat on the board.
13. Cut and glue 5 cap strips from 3/8" x 3/32" balsa for the bottom half of the wing.
14. Return to step 1 of building the wing and build a right half wing.
15. Sand the outside edges of the wing flush with the ribs, then check the alignment together over the plans. Use the plywood wing joiners to check the alignment also.
16. When you are satisfied with the alignment, glue the wing joiners and the wings together using 30 minute epoxy. Keep the wings aligned over the plans until the epoxy has cured.
17. Cut the two ¼" square hardwood pieces each to a length of **6**", then glue into the servo rail slots on the bottom of the wing. Also cut 2 pieces from the scrap 2" long, and glue in place in the holes in the R3 ribs for the aileron servo mounting rails.

Before starting to build this kit, we urge you to read through these instruction while reviewing the plans. They contain some important building sequences as well as instructions and warnings concerning the assembly and use of the model.

We expect that you have some building experience to take on a built-up model. However, every minute detail is not covered. This is not a basic trainer. The plans and instructions together with the laser cut parts, and the simplicity of this kit will allow you to produce a first class Double Trouble.

BUILDING SUPPLIES NEEDED

Single edge razor blades
24" Sanding Tee w/ 80 grit paper
12" Sanding Tee w/200 grit paper
X-acto knife w/ #11 blade
Thin Zap CA
Medium Zap CA
Slow - Thick Zap CA
Zip Kicker
30 Minute Z-poxy
Tee pins
Wax paper
Wire cutters
Pliers
Drill with bits: 1/16", 1/8", 5/32", 3/16"
#64 Rubber bands

See the list at the end of the instruction book for a list of additional R/C equipment you will need to complete the Double Trouble.

FUSELAGE

1. Lay wax paper over the fuselage portion of the plans to keep the CA from gluing any part to the plans.
2. Lay the router cut fuselage over the plans and hold in place with t-pins.
3. Glue the 2 plywood engine mount blocks in place with thick CA or Z-poxy.
4. Remove the pins, then sand both sides of the fuselage with the 24" sanding tee to make sure they are flat.
5. Lay the fuse back over the plans with the left side facing up.
6. Glue the lite ply fuse doubler marked left, on the left side of the fuselage with green CA, aligning the outer perimeter of the doubler with the fuse perimeter. Be sure to use plenty of glue.
7. Turn the fuselage over and shim back portion with scrap 1/8th ply. Glue the right fuse doubler to the right side of the fuse, as was done in the previous step.
8. Finish sand both sides of the fuselage with the 24" sanding tee and if desired round the outer perimeter of the fuse as indicated on the plans.
9. Using a 5/32" drill bit, drill 2 holes through the fuse as indicated by the laser marks on the doubler for mounting the landing gear.
10. Bend the 9" piece of 3/32" music wire to the shape indicated on the plans for the tail skid. Cut off the excess wire with a pair of wire cutters.
11. Drill a 3/32" diameter hole on the bottom of the fuse, as indicated on the plans. Make sure you harden the balsa with CA.
12. Cut a slot for the Dubro #124 nylon bearing. Glue the tail skid on the fuse using epoxy and the nylon bearing as shown on the plan. (You can wait to do this step until after the fuse is covered, if you like.)

Lanier R/C

Double Trouble

WARNING! THIS IS NOT A TOY!

THIS IS NOT A BEGINNERS AIRPLANE

This R/C kit and the model you will build from it is not a toy! It is capable of serious bodily harm and property damage. It is your responsibility, and yours alone - to build this kit correctly, properly install all R/C components and flying gear (engine, tank, radio, pushrods, etc. and to test the model and fly it only with experienced, competent help, using commonsense and in accordance with all safety standards as set forth in the Academy of Model Aeronautics Safety Code. It is suggested that you join the AMA and become properly insured before attempting to fly this model. If you are just starting R/C modeling, consult your local hobby dealer or write to the Academy of Model Aeronautics to find an experienced instructor in your area.

Write to: Academy of Model Aeronautics, 5151 Memorial Dr. Muncie, IN 47302

LIMITED WARRANTY

Lanier R/C is proud of the care and attention that goes into the manufacture of parts for its model kits. The company warrants that for a period of 30 days, it will replace, at the buyers request, any part or material shown to the company's satisfaction to have been defective in workmanship or material at the time of purchase.

No other warranty of any kind, expressed or implied, is made with respect to the merchandise sold by the company. The buyer acknowledges and understands that he is purchasing only a component kit from which the buyer will himself construct a finished flying model airplane. The company is neither the manufacturer of such a flying model airplane, nor a seller of it. The buyer hereby assumes the risk and all liability for personal or property damage or injury arising out of the buyers use of the components or the finished flying model airplane, whenever any such damage or injury shall occur.

Any action brought forth against the company, based on the breach of the contract of sale to the buyer, or on any alleged warranty thereunder, must be brought within one year of the date of such sale, or there after be barred. This one year limitation is imposed by agreement of the parties as permitted by the laws of the state of Georgia.