JAMISON SPECIAL

Building Guide

WING

- Mark then drill holes for wing jig rods.
- Slide Ribs onto jig rods
- Mark the rib positions on 1/16 x 1 trailing edge, 1/4 x 1/4 leading edge & 1/4 x 1/4 spars
- Pin ribs to trailing & leading edge.
- Make sure all ribs are squared up & true.
- Slip spars into the ribs and pin in place
- Sand ribs using a “T” bar sander
- Pin or tack glue 1/16 trailing edge in place top & bottom
- Check for warps & squareness
- Glue trailing edge sheeting in place
- Locate the Bellcrank mount, Bellcrank, lead out wires and 3/32" x 7*1/2" wire. If you wish to use a plate-style Bellcrank mount drill a 3/16" hole in the 1/8 plywood Bellcrank mount where indicated on the plans. Mount the Bellcrank to the plywood plate using the 6-32 bolt by inserting the bolt through the plywood and Bellcrank You can use an extra nut or washers between the plywood and the Bellcrank to raise the Bellcrank high enough above the mounting plate to insure free movement of the wire pushrod. It’s a good idea to install the lead out wires onto the Bellcrank now. Also drill out one of the Bellcrank holes to accept the 3/32" pushrod wire.
- Bend the 3/32" wire at 90 degrees, clean the wire and solder a #2 flat washer to the wire at the bend. Clean off the wire and insert through the Bellcrank. Now solder a second flat washer to the wire on the other side of the Bellcrank. Your wire pushrod should move freely with no binding. Place the Bellcrank onto the 6-32 bolt and lock in place with the nut. A little glue or threadlock on the bolt will insure that your Bellcrank will stay in place.
- Mount the Bellcrank so that the 6-32 bolt is 2" from the back of the leading edge
- Make sure everything moves freely with no binding and epoxy in place
- Use a # 11 blade to cut out the inboard ribs to allow the control cables to pass through each rib
- Run control cables through each inboard rib from Bellcrank to wing tip location
- Cut the 1/16 x 3 balsa center section sheeting to cover the center 4 ribs
- Cut a hole for the pushrod wire then glue in place
- Glue 1/16 sheet leading planking in place, extend planking beyond wing tips
- Glue two 1/4 x 1/4 braces to the bottom of the Bellcrank mount where it meets the rib sides
- Glue 1/16 center bottom section in place
- Cut and glue 1/16 x 1/4 cap strips in place
- Glue 1/8 x 3/8 trailing edge cap in place
- Remove wing from jig
- Glue wing tips in place
- Glue the adjustable lead out guide to the inside of the wing tip where shown on the plan. Cut a 1/8" slot in the 1/4" wing tip to match up with the slot in the lead out guide. Pass lead out cables through the adjustable lead out guide and the slot in the wing tip.

- Add 1/16 tip gussets and sand to shape
- Locate the adjustable weight box and assemble it. This box is designed to accept the Sig brand of 1/4 oz flat weights. Glue the two 3/4 x 3/4 sides to the 3/4 x 3/4 bottom. Glue the two 3/4 x 1 sides. Place the 1/16 top plate in place and drill a 1/8" hole in the center of the top piece and the box bottom. Install a 4-40 blind nut in the box bottom and glue it in place. Epoxy the weight box to the last rib and spar on the bottom of the outboard wing

FUSELAGE

- Measure the engine you are going to use and cut 2 pieces of 3/8 x ½ maple to size
- Mark location of F1 & F2 on 3/8 x ½ maple motor mount
- Epoxy the 2 maple pieces to the motor mounts where marked
- When dry drill 1/8" hole through motor mount & cross pieces the epoxy dowel in hole.
- Epoxy 1/32 plywood pieces to top & bottom of motor mount crutch
- Mark location of fuselage formers on 1/8 sheet fuselage sides
- Epoxy 1/16 plywood Doubler to insides of sheet sides
- Epoxy F1 & F2 along with motor mount crutch to plywood doublers
- Lay Fuselage sides upside down on a flat surface and glue all fuselage formers to the fuselage sides making sure that everything is square
- Cut hole in F4, F5 & F6 to allow pushrod to pass through freely
- Drill engine mounting holes and install blind nuts
- Glue 1" x 3 x 12 turtle deck piece to the 1/2" top block where indicated on plans. Tack glue top block to fuselage and carve to shape. Remove and hollow then glue in place permanently
- Assemble tailwheel mount and epoxy in place where shown on plan
- Put fuselage aside until final assembly

FINAL ASSEMBLY

- Locate Arrow shaft pushrod, dowel & 3/32 wire
- Groove dowel to accept pusdrod wire. Clean the Bellcrank pushrod wire and epoxy it to a dowel then glue front wire/dowel assembly inside the pushrod
- When dry test your joint by attempting to pull apart
- If your model is to fly properly you must insure that the engine thrust line is parallel to the wing and stabilizer thrust lines. An easy way to insure this is to draw lines on the fuselage representing the motor mount top(engine thrust line), wing and stabilizer leading and trailing edges centers (thrust lines)
- Mount the wing into the fuselage, center it and tack the leading and trailing edge centers to the fuselage at the marked lines. If you cut the bottom of the fuselage at the wing trailing edge location it is much easier to mount the wing onto the fuselage.
- Measure from the trailing edge of the last rib to the center of the fuselage front to insure that the wing is positioned properly. Measure everything again and if satisfied that the wing is centered and lined up on the thrust line epoxy it to the fuselage. If you use slow set epoxy you will have time to correct any misalignments. Glue the fuselage piece you cut off in place at this time
- Mount the stabilizer into the fuselage and center like you did the wing
- When you are satisfied that everything is level, centered and on the same centerline glue in place.

- If you are using standard hinges install them at this time and glue in place. If you prefer to use iron-on full span hinges you may install them now or wait until the model is covered
- Bend end of 3/32 elevator wire at 90 degrees
- Solder #2 washer to wire at the bend (To keep the washer straight drill a 3/32" hole in a piece of scrap and insert wire with washer into the hole then solder washer to wire).
- Clean the straight end of the wire first so that you will get a good glue joint and insert wire & dowel into arrow shaft (do not epoxy)
- Mount the nylon horn temporarily to the elevator and pass the 3/32" wire through the hole
- Cut a notch in the fuselage to allow the 3/32" wire to exit the side of the fuselage.
- Make a “jog” bend in the elevator wire so that it mates up with both the nylon horn and the Arrow shaft pushrod.
- An easy way to insure that you have the elevator centered is to lock the elevator in neutral before you epoxy the rear dowel. Place two pieces of hardwood over and under the stabilizer and elevators and rubber band them in place. This will insure that the elevator is neutral. Use 30 minute or 3 hour epoxy on the rear dowel and center the Bellcrank. This will make the pushrod slide along the wire until it is located in the correct position. When you are satisfied that both the Bellcrank and elevator are centered set everything aside until the epoxy sets.
- Remove the nylon control horn
- Epoxy the 1/8" plywood landing gear plate in place. Drill and mount 4-40 blind nuts
- Glue the bottom planking in place

FIN & RUDDER

- Assemble 3/16 fin and rudder
- Glue in place as shown on plan

FINAL ASSEMBLY

- Sand entire model & fill any low spots
- Add a coat of clear dope to bring up the “fuzz” on the balsa
- Sand entire model
- Cover model
- Paint model in your normal manner
- Finish the lead out cable ends by installing the eyelets using the crimp sleeves supplied. Remember to crimp only in the very center of the sleeve so that you do not create a sharp “cutting” edge
- Mount the dual landing gear
- Install the tank and engine

PARTS LIST

The following parts should be present in your “Jamison Special” If anything is missing or damaged contact RSM Distribution and we will send the missing/damaged part immediately.

RSM Distribution would like to thank Mr. Dennis Choate for graciously allowing us to use a picture of his “Jamison” on the box label.

1	Full Sized Plan	1	Building Guide	2	Medium Silkspan
1	3/8 x 3/8 x 36 Balsa	1	3/8 x 3/8 x 12 Balsa	5	1/4 x 1/4 x 36 Balsa
8	1/16 x 1/4 x 36 Balsa	1	Aluminum Gear	5	1/16 x 3 x 36 Balsa
3	1/16 x 1 x 36 Balsa	1	1/ 8 x 3 x 36 Balsa	2	1/8 Fuselage Sides
2	Ply Fuselage Dblrs	1	½ x 3 x 27 Balsa	1	3/16 Stabilizer
1	3/16 Elevator	1	1 x 3 x 12 Balsa	2	1/4 Wing Tips Balsa
2	3/8 x ½ x 7 Maple	1	3/8 x ½ x 4 Maple	1	4" Dowel
2	1/32 Plywood	1	Rib Package	1	Fuselage Former Pkg
1	11" Arrow shaft	1	Fin/Rudder Package	1	Tailwheel Mount Pkg
2	1/8 x 1-1/2 x 2-3/4 Ply	1	1/8 Ply Gear Mount	1	½ x ½ x 1-1/4 Balsa
1	Hardware Package				

SPECIAL OFFER

The Bellcrank supplied in this kit is sufficient for most flying activities; however, the contest or expert flyer may wish to install a larger bellcrank. RSM Distribution has available a 4" carbon fibre shaft mounted bellcrank. Regular price is $ 16.99. You may purchase it for $ 12.99/ Please mention part # HF1004 (straight style) or HF1005(self-centering style) when ordering.

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