The model is 1/12th actual size. It has a 96-inch wing span and approximately 978 square inches of wing area. Fuselage length is 72 inches and stands approximately 31 inches to the top of the vertical fin. The horizontal stab spans 36 inches.

A SCRATCHBUILT "CARIBOU"

Having worked on the Army's DeHavilland DHC-4 CARIBOUs (CV-2) while in Vietnam, the author was inspired to try his hand at scratchbuilding a model of it in 1/12th scale after he retired from the USAF . . .

By Frank J. Smith

The de Havilland DHC-4 was manufactured by DeHavilland of Canada, Ltd. The prototype's first test flight was on 30 July 1958. This aircraft was designed to have the load carrying capacity of the DC-3 "Gooney Bird" with short take-off and landing (STOL) capabilities. Approximately 159 of the Caribous was provided for the U.S. Army Air Mobile Divisions and was designated CV-2. In the late sixties, six companies of the Caribous were operational in Vietnam. On 1 January 1967 operational control of the Caribous was transferred to the USAF where they were redesignated C-7 A/B.

Although the Caribou is not as well known as the C-130, C-123, or the C-5's, she played a vital role in supply missions and troop transporting in Vietnam. The STOL capabilities allowed her to take-off and land where the "heavies" couldn't. True, the Caribou could not haul as much cargo as the "biggies," but when the job called for getting troops or supplies to the battlefield, the Caribou could do it.

It was in 1970-71, while stationed in Cam Rahn Bay, RVN, that I became acquainted with the C7-B. I was assigned to the 483 Field Maintenance Squadron as an aircraft structural repair technician and worked the "Boo's" for that tour of duty.

I had seen Caribous come home with half an aileron missing, repaired major fuselage damage caused by landing gear failure, and patched bullet holes which surprisingly missed the "buns" of some troops.

I would always look in amazement at the ease of her landings (stall speed approximately 68 mph) and short field capabilities. You could almost swear that the pilots reversed propeller pitch just before touch-down.

I retired from the Air Force in 1979 and was considering building a scale model. By chance I picked up a copy of *Warbird's Illustrated*—Air War over Vietnam, Vol. II, by Dana Bell. While looking at the book, I came across a photo of the Caribou and thought of the tour in Vietnam. I realized that I should do the C-7. After all, models of the C-130 and C-141 were being done as well as a control-line C-123. So I decided to construct the Caribou in 1983.

Since this was my first attempt at a twin engined scale model I am sure that my construction techniques can be improved upon. Just remember to build as light as possible while maintaining structural integrity of the airframe.

I will not attempt to give a blow by blow account of the construction steps, but will highlight the major steps which I used.

The CARIBOU starts its taxi tests two years after the author began cutting wood. It landed "heavy" on its first flight and slightly damaged the nose wheel.

Specifications

Mike Beaulieu of M. C. Beaulieu's Plan Service, 84 University St., Presque Isle, Maine 04769, deserves a special thank you for his interest in this project and the constant prodding he gave me when things didn't go just right. He has transformed my pencilled drawings into an excellent set of blueprints. Three sheets of blueprints were needed to detail the Caribou. A set of drawings are

available from Mike for $27.95. He puts a lot of work in his blueprints and produces an excellent product for the price.

The plans show a break in the fuselage at the point where it starts to rise. This break can be held together with eight 4-40 screws and blind nuts around the circumference of the bulkheads for additional strength or to break the fuselage in half. I felt that this method would make a stronger joint at the break (rise) plus allow for easier building of the fuselage.

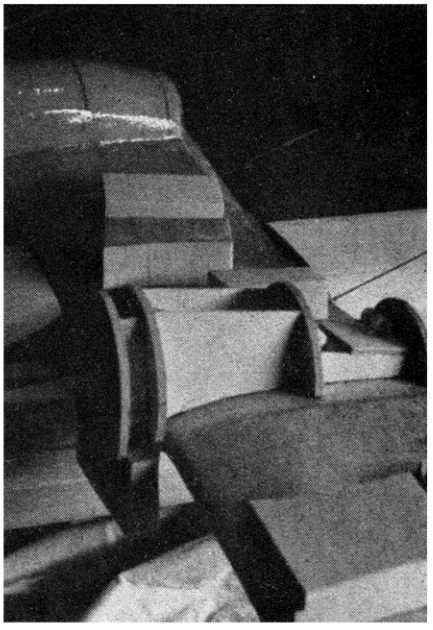
Power is provided by two Lee Custom K&B 61s (with pumps). Since I wanted to put the fuel tanks in the fuselage, Clarence Lee recommended the K&Bs with the old style pumps. Wing tanks could be installed inboard of each nacelle but would have to be custom made.

The original aircraft had two piece, full span, double slotted flaps. The outer portions acted as flaperons. Hinging of the flaps/flaperons would have been a nightmare, so I elected to go with one piece flaps and use a 1/64-inch plywood gap sealer at the forward flap location. Flaperons couldn't be hooked mechanically with the inboard flaps and are operated separately. An Airtronics seven channel Championship Series radio with a flaperon mixer was used for control.

Carbon fiber tape could be used under the sheeting for additional strength. I elected this type of construction to ease servo installation, linkage hookup, and to be able to add the "beef" needed to support the two K&Bs. The built up center section also allowed for easier routing of the Ace Ni-lite on board ignition system and fuel lines.

I wanted the engines to be as reliable as possible so I elected to mount them in an upright positon.

The finished model weighed 22 pounds! This included almost 3 lbs. of ballast. MORAL No. 1: BUILD AFT SECTION AS LIGHT AS POSSIBLE!!!



The wing center section is of built-up type of construction and the outer portions are foam with 1/16-inch balsa sheeting applied with epoxy.

Construction

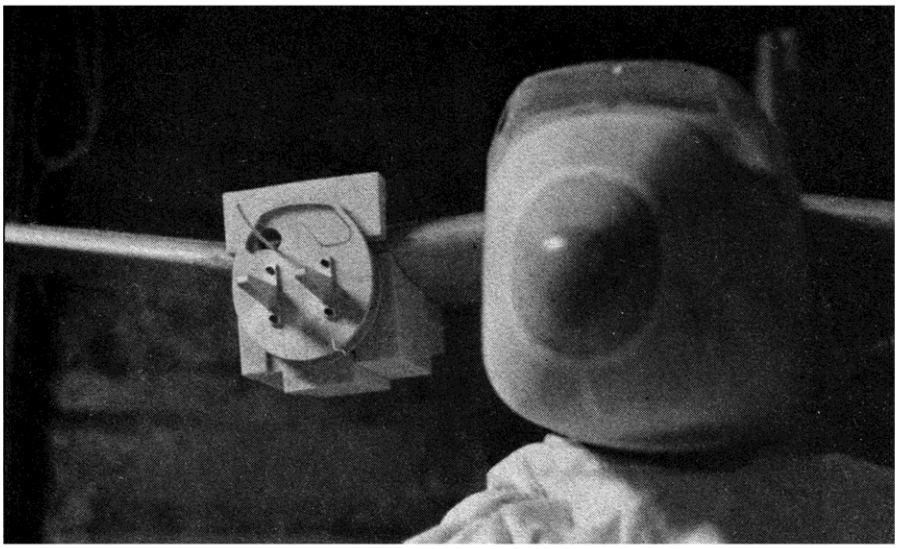
Mark center lines and reference lines on all parts prior to assembly.

FUSELAGE: Begin construction by cutting all bulkheads, formers, and the ¼-inch ply keel pieces. Lightening holes should be put in all bulkhead and formers "J through P." If desired, drill and mount eight 4-40 screws and blind nuts to formers "J" and "K," for added strength. The ¼-inch ply keel was laid on a centerline and ¾-inch triangular stock was glued to the keel and then pinned to the building board. Bulkheads and formers were then placed in their appropriate positions, squared and glued into place. (Note: The keel, bulkheads, and formers are slotted "egg crated" for a more rugged joint). Add the ¼ x ½-inch balsa stringers on the sides and top of the fuselage. Install the 1/8-inch ply wing saddle doublers.

The wing cut out is not done until the fuselage is completely planked.

Install the 3/8-inch balsa stringers at the corners of the bulkheads and formers. These pieces will need to be soaked or "kerfed" with a razor

The author's unfinished Caribou while on display at an April model meet in Maine. The CARIBOU was designated CV-2 by the U.S. Army and after being transferred to the USAF it became the C-7 A/B. The 1/12th size model has a wingspan of 96 inches and is powered by twin customized K&B 61s.



The radome was constructed using foam and fiberglass, cabin windows were cut out and the fuselage was sanded and shaped to contours.

saw to allow bending to bulkhead B. Balsa blocks were shaped and installed between bulkheads A and B. A styrofoam block was placed in the cockpit area. This was sanded to shape using top and side views of the plans. (Cockpit will be available from: AVCO Model Supplies, 1885 Dyson St., Muskegon, MI 49442.)

Sheet the forward fuselage with 3/32-inch balsa. I used a 3-inch sheet running mid-way between the ¼ x ½-inch stringers on each side. This basically completes roughing in the forward fuselage.

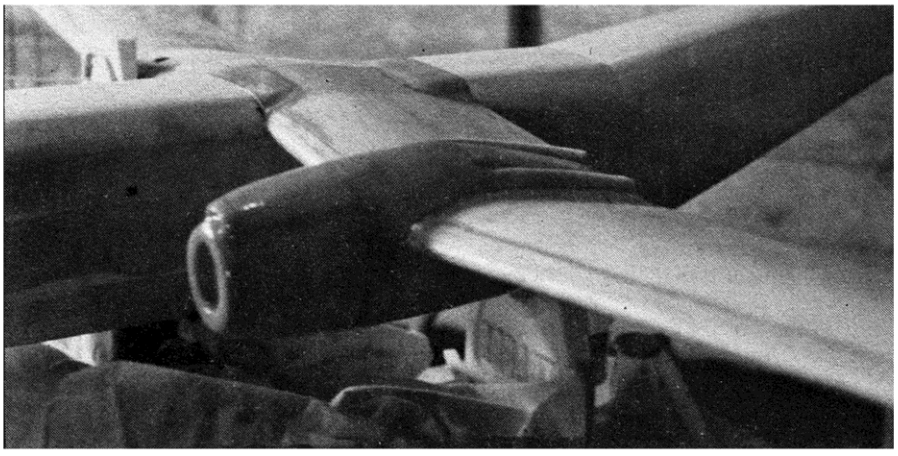
The aft portion of the fuselage was a lot harder to construct. I used the side view of the plans and spliced the ¼ x ½-inch balsa stringers together. When the glue dried I marked the former locations and slid them into place. Bulkhead "K" was screwed to bulkhead "J." With an extra pair of hands, the aft section was lined up and glued. This sounds easier than it actually was.

After the aft section framing was completed I thought of an easier way which would allow the wife to stay upstairs. Use the side view of the plans to mark a piece of plywood to use as a template/jig for holding and aligning the bulkheads/formers. Set the plywood on the center line, square the plywood, set formers into place, then glue the ¼ x ½-inch stringers into place. Partially sheet the aft section allowing room to install the pushrods and the vertical fin/stab assembly. When sheeting, be sure to check alignment of the fuselage occasionally to prevent twisting. Allow the aft section to dry and construct the fin, rudder, and stabilizer assemblies.

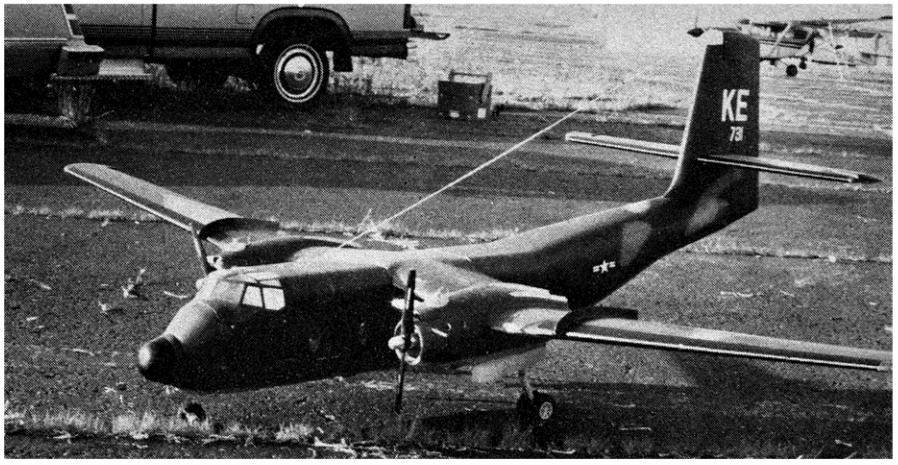
VERTICAL FIN AND RUDDER: Ribs on the plan are shown one-half of top view. Cut out all ribs leaving fin and rudder portions together. Mark center lines and spar cutouts on the ribs. Use a wing jig and drill holes for the jig to fit. I used a Great Planes Wing Jig for this procedure. Cut the 1/8 x 1/4-inch spruce stringer slots and then place each rib on the jig. Align the ribs and glue on the leading edge. Shape a balsa block to fill in between ribs "F-3 and F-4." This block will be used to support the horizontal stab. I also put 1/8x1/4-inch spruce under the rib, running spanwise, below the stab cutout.

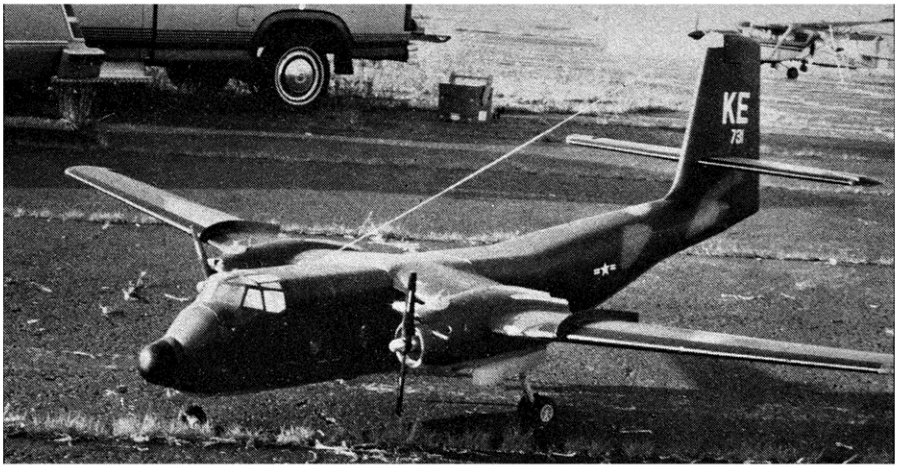
Install the 1/8 x 1/4-inch stringers. Use 1/16-inch balsa and sheet the leading edge of the fin to mid-way of the stab location. Sheet the trailing edge of the rudder up to approximately two inches from the leading edge. After the glue has dried cut

Devcon epoxy was used where the glass of the nacelles mated to the K&B finishing resin. A Sears contour gauge was used to match the nacelles and cowl contours.



Beautifully scaled, the CARIBOU is a fine, stable flyer that offers the extra benefit of being able to drop parachute loads from its large rear loading doors. Full size plans are available from Mike Beaulieu's Plan Service. See text or advertisement in this issue.





Beautifully scaled, the CARIBOU is a fine, stable flyer that offers the extra benefit of being able to drop parachute loads from its large rear loading doors. Full size plans are available from Mike Beaulieu's Plan Service. See text or advertisement in this issue.

the vertical fin and rudder apart at the spar locations.

Fabricate the spars from ¼-inch balsa stock and mark the center lines on both pieces. Glue the spars in place aligning the centerlines of the spars to the rib centerlines.

Install triangular stock to the trailing edge of the vertical fin spar to carry the sheeting past the spar and close the rudder gap.

Hinging of the rudder must now be accomplished. I used C.B. Associates butt and strap hinges. Fabricate the rudder hinge supports from 1/16-inch ply. The notch in the ply will hold the brass pivot pin in place, so make this a close fit. Use 1/16-inch ply also for the vertical fin hinge supports. Cut a slot through the 1/4-inch spar to accept the strap portion of the hinge on the vertical fin. Align the hinge on the centerline, install the 1/16-inch ply supports and install with 2-56 screw and nuts. Make sure that each portion of the strap hinge is on center and spaced properly. Use a piece of music wire through the hinges or a straight edge to insure trueness. Stiffen the upper and lower supports with ply gussets.

Install the rudder hinge supports using the butt portion of the hinge as a spacer. Put the hinges together and slide the rudder onto the hinges. Check for binding and then drill the butt hinges to accept 2-56 screws. The rudder spar is cut to allow the hinge to slide through and a slot will have to be cut on each side of the hinge to allow for left and right movement. Use two screws in each hinge. Remove and install blind nuts on the rudder hinge supports and anchor them securely.

The rudder control horn was fabricated from .040-inch aluminum and I used two Sullivan Gold-n-Rods connecting to each side of the rudder. The horn was bolted above the last rudder rib and I used 1/16inch ply doublers on each side of the rib for stiffness.

I made the leading edge of the rudder using blue styrofoam. I tack glued the foam in to place, shaped to contour and then glassed the foam. Just be sure that you have full throw of the rudder before the foam is glassed. The rudder fairing was constructed in the same manner.

HORIZONTAL STAB: Construction and hinging are accomplished basically the same way as the vertical fin and rudder. Since the stab was 36 inches long I added 1/16-inch ply directly over and below the spar. This spar has a slot cut for the elevator horn and I felt the ply trailing edge would help to strengthen this area. The control horn was constructed using 5/32-inch music wire, wheel collars, and .040-inch brass stock. Use silver solder to secure the wheel collars and brass stock to the music wire.

Install hinge supports and hinges to the stab and elevators. Mark the stab spar for the elevator horn cutout and cut this slot. Note the upper and lower skins on the stab will also have to be slotted for horn clearance and push rod connections. Install the balsa leading edges to the elevators, shape to contour, drill holes for horn, and install elevator temporarily. Check hinge alignment for freedom of movement and leading edges for clearance.

Remove the elevator and secure the control horn to only *one* side of the elevator. Sheet the stab and elevators. I used K&B 3/4 ounce cloth and resin to finish the stab and elevators.

Once the vertical fin and stab were completed to this point I installed the stab to the vertical fin. A slot was cut in the vertical fin to allow the elevator horn to slide through and allow for the hinge alignment on the elevators. Temporarily hook up the elevator and install your control system. I used a Dubro bellcrank, mounted securely to the last rib of the vertical fin, and ran a pushrod up to the elevators horn. A gold-n-rod was routed through the leading edge of the vertical fin, connected to the bellcrank, and then routed forward. The rod was then connected to an idler crank located just aft of fuselage bulkhead "J." The support for this crank was secured to the upper ¼x½-inch stringer of the fuselage.

A cable system might be a better hook-up. After deciding which control system to use and the stab is secured to the vertical fin, finish sheeting the vertical fin. Finish the rudder and elevators. Leave rudder and elevator off at this time.

Finish the aft portion of the fuselage by sliding the fin over bulkhead "P." Lower the fin to the proper height and block in position. At this point alignment of the stab and fin are critical. Just aft of bulkhead "D" and just below the top ¼ x ½-inch balsa stringer I cut a slot to allow a 3/8-inch square hardwood strip to protrude through each side of the fuselage. A Robart incidence meter was then placed on this strip and the fuselage was blocked square. I then attached a small plumb-bob to the vertical fin trailing edge and aligned the hinges and fuselage centerline marks. I checked stab alignment, blocked the assembly in position, and glued the fin in place.

I then ran my rudder and elevator pushrods, installed the rudder and finished planking the fuselage aft section.

Sand aft portion of the fuselage to contours and to reduce tail heaviness. I used ¾ ounce cloth and resin for finish. (Note: One cabin window will fall on bulkhead "H.") If you decide to install functional cargo doors, as I did, the outline is on the plans.

Note also that radomes, rudder fairings, cowlings, etc., should be available from T&D Fiberglass Specialties, 30925 Block, Garden City, MI 48135.

Wing Construction

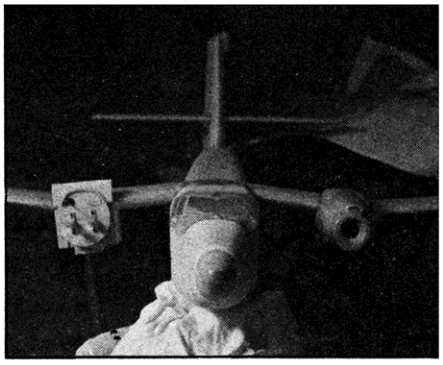
Construction of the wing started by first cutting all center section ribs and plywood anhedral braces. Mark all ribs with center lines and flap cut lines.

If you elect to mount your fuel tanks in the fuselage as I did, then

be sure and drill holes in the ribs to route the fuel lines and on-board ignition system wires. These holes should be installed forward of the main spar and be at least 3/8-inch I.D. I also recommend that appliance heat shrink tubing be routed through these holes so that fuel lines can be installed after the wing is completed.

I used a wing jig to construct each panel and then joined them together. If the anhedral braces are cut accurately, the seven degree anhedral angle will be maintained.

Make a template from the front view of the wing drawing to set the root and tip ribs angles during construction. Slide the ribs onto the wing jig, mark spars, ply braces, and leading edge for rib alignment and pin in to place. Once satisfied with alignment glue ribs in place. Install ¼-inch shear webbing between the main spars, full span. Install shear webbing between the ¼-inch square



The distinctive front profile of the Caribou and its inverted "gull" wing are reminiscent of the Corsair.

trailing edge spar in the area of the hardwood wing hold downs. Install the bellcrank supports, and hardwood wing hold downs.

Determine where you want the throttle pushrods to exit and drill holes through leading edge. Mount the throttle bellcranks, route the pushrods and check for clearance and binding. (Make sure throttle bellcranks are installed properly. I had one installed backwards which would have made one engine "HOWL" and the other "IDLE." MORAL No. 2: CHECK EVERYTHING TWICE. Mark the leading edge for nacelle center line, sheet the leading edge of the wing back to center of main spar. Cut the ribs aft of the ¼ x ¼-inch rear spars and save the trailing edge pieces for flap construction. Install the ¾-inch triangular stock aft of the rear spars and sand to airfoil shape.

If not done, install the remaining anhedral braces and sheet top of wing panel. Turn wing over and sheet the bottom back to edge of ¼-inch square

A very happy Frank Smith with his "Caribou" after its first successful flight.

spars, after figuring out servo locations and control rod routing. Construct the other half in a similar manner. Sheet was accomplished on this panel after the anhedral braces were aligned and glued into place.

Construct flaps using the side view of the wing area for details. Dubro control horns and bellcranks were used throughout the wing control systems. A 1/8-inch plywood insert was used in each control surface for horn attachment.

I had a fairly large gap between the flaps and flaperons and trailing edge of the wings. The 1/64-inch plywood "fake" forward flap was an "after-thought" by Mike Beaulieu. Although not too functional in the down flap position, it does close the gap, gives a more scale appearance, and seals the flaperon on the "up" aileron side. A small spring or elastic may have to be attached to prevent flutter.

Shape the leading edge, sand the center section and temporarily install the flaps.

The outer wing panels were constructed using Sig foam block. Make a root and tip template using the cross section views on the plans. Allow for an entry and exit point, for the hot wire. Cut the foam block to length and then draw a wing chord line on the block ends. Attach the root template aligning the chord lines. The tip template should be raised at the edge tip three degrees for the washout. NOTE: The wing center section sits three degrees positive to the fuselage reference line. The tip will then end up at zero degrees. After the cores were cut, I then marked them for the ¼x1-inch spar cut. I placed the core back in the block and then band sawed the trailing edge of the wing off. The core was sanded and the spar was installed.

Next, I put in the control system platforms, bellcranks and pushrods, installed the leading edge and sheeted the wing cores. Use carbon fiber tape under the skin for additional strength. The flap and flaperons were finished and test fitted.

I attached the outer wing to the center section with Hobbypoxy Formula II. This was accomplished by placing the center section on a flat surface, aligning the chord line parallel to the board, mating the outer wing root rib to the center wing panel and blocking the tip to the proper dihedral.

A piece of medium fiberglass cloth, 6 inches wide, was centered on the joint and Devconned into place. This joint was sanded and the nacelle center line was then placed on the top and bottom of the wing center sections.

Wing tips were installed, sanded to shape, and the wing tip light lens was stretched formed over the tip. I used .040-inch plastic sheet, heated in the oven until it just started to smoke, and stretched it around the area where the lens was to be attached. The landing light lenses were done the same way.

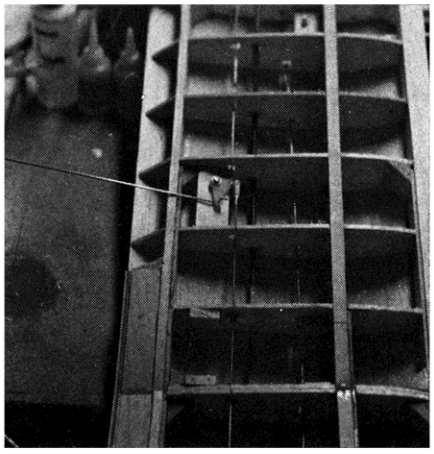
Once the wing was completed, except for fiberglassing, I made the cutout in the fuselage to accept the wing. The fuselage was aligned using the hardwood stock through the fuselage and leveled fore and aft. Wing incidence was then measured and the wing dowels holes were marked. The holes were drilled through the leading edge and the main spar shear webs. A 3/8-inch I.D. brass tube was then glued to each hole. ¼-20 bolts were used to attach the wing from inside the model.

Final sanding of the wing, fuselage, and vertical fin was completed and the sections were then glassed.

Engine Nacelles

The engine nacelles were not hard to build, once the sequence was figured out. Hopefully T. & D. Fiberglass Specialties will do the entire nacelle. Begin by cutting out the plywood components and epoxy N-3 through N-6 in the positions noted, along with the 1/8-inch side pieces. Note that the N-3 firewall has three degrees of down thrust as referenced to the fuselage reference line.

Once the ply parts are in place it's just a matter of inlaying blue styrofoam, using centerlines to align N-1 and N-2, shaping to contours and fiberglassing. I used two plies of K&B heavy cloth, sanded between each ply, from N-3 back to N-6. I used three plies of cloth on the cowling portion.



Radio installation posed no problems. Four servos were put in the wing: two for each flaperon, one for throttle control, and one to operate the inboard and center flaps.

The cowlings were cut off next to bulkhead N-3 and hardwood blocks were installed to attach the cowl, with small countersunk wood screws.

Landing gear doors were cut out after the nacelles were completed and the landing gear was installed. A special fitting was machined on a lathe to attach the dual main and nose gear wheels. This was brazed in position with the main gear having about 1-2 degrees of toe-in.

Once cured, a Dremel saw was run along the wing side of the tube and the pipe was removed. The slot was then glassed closed.

The exhaust pipe outlines were drawn on top of the nacelles and then cut out. A piece of 14 gauge electrical wire was put in a soldering iron and the pipe locations were burned through the foam, down to the wing. The pipes were installed using Devcon epoxy. The foam behind N-3 was removed to allow exhaust air to escape the engine compartment and to allow the fuel lines and ignition wires to enter the engine area.

Finishing

After the model was final sanded, I used Chevron's Perfect paint for coating system. Since I wanted to use the USAF color scheme, I called Dennis Butts and gave him the Federal Standards for the colors. He was very helpful, courteous, and willing to mix the colors for me. I am totally satisfied with his product and highly recommend them for modeling. The colors used were: Tan FS#30219; Gray FS#36622; Green FS#34079; and Green FS#34102. The model could also be done in the U.S. Army paint scheme.

I used K&S butyrate sheet plastic .030-in. thick for the cabin windows.

Radio and Fuel Tank Installation

Three servos were mounted under the cockpit for rudder, elevator and cargo door operation. The fuel tanks were placed directly under the wing and connected to Robart Super Fuelers located in the fuselage lower skin. The fuel line was then routed up to the wing cut out and Dubro fuel filters were installed for wing disconnects. This fuel system worked flawlessly.

Flying

Mike's preface basically tells the story of the DeHavilland's first official, scrutinized flight. However, little did he know that this sly and cunning modeler was out with the bird the week before he received the phone call. I seriously had my doubts about the Caribou's flight ability because of the weight. By doing high speed taxi checks, I found the model to track almost as straight as an arrow. I finally got up enough nerve to decide for a rotation of the nose gear. After several attempts without flaps, I decided to drop the inboard flaps to about 20 degrees. I taxied to the far end of the strip, applied full power, and let her roll approximately 150 feet before I held a little "up" elevator. The Caribou broke ground—to my surprise—and climbed about three feet before I settled her back to the runway. Roll and pitch stability was good at that time.

The next attempt was a little frightening. I had taxied back to the end of the field, dropped the flaps to about 30 degrees, firewalled the throttle stick and watched her roll about the same distance before getting on the elevator control. The Caribou leaped from the ground and in no time was about 15 feet in the air. Like a dummy, I chopped power and the Caribou came nosing towards terra firma. I was able to maintain roll stability but pitch control was sensitive. The nose gear contacted the runway first and bent under the weight. The right wing tip contacted the asphalt, the right main hit, and the bird wrenched side ways. Although I felt like I had a bowling ball in my stomach, I was happy with the maiden attempt. A small crack was visible on the aft fuselage just behind the cargo door, a hole was in the fuselage where the nose gear hit, and a hairline crack was visible on top of the right wing.

The minor damage assured me that the Caribou was structurally sound. After the repairs and adjusting the elevator controls the phone call to Mike Beaulieu was made.

Granted, this model is heavy, but fly she does. Of course she doesn't loop or fly upside down, but how many cargo airplanes can?

By selecting your woods, hollowing out the tip blocks, putting lightening holes in ribs, bulkheads, formers and sanding the model's structure and finish resins I know yours will fly a lot better than mine. GIVE IT A TRY, YOU'LL BE GLAD YOU DID. □

THE CARIBOU'S UNVEILING

By Mike Beaulieu

I wasn't a bit surprised when Frank Smith approached me after one of our club meetings and announced that he was going to build the De Havilland DHC-4 cargo airplane. Knowing Frank's ability to design and build, I encouraged him to start and asked if there was anything that I could help him with just to let me know. My first opportunity to see how his work was progressing came during our annual model display in April. Frank showed this huge unfinished aluminum painted twin engine airplane right smack in the center of the stage at our local community center. Frank then proceeded to describe to me the workings of the cargo doors which were servo operated and just how he intended to drop cargo parachutes out the back of the plane while in flight. I think the best part of building a project like this is when you can set around and look at the unfinished plane and visualize all the things you are going to do with this big bird.

I have to mention here that Frank worked on the real C-7 during the Vietnam War and had plenty of time to study the airplane.

During the late spring and early summer months, my wife and I would take a Sunday ride over to Frank's home to see how the DHC-4 was progressing. Finally Frank handed me the construction drawing and said start drafting. It's now time to see if we have an Eagle or a dog. With every trip to Frank's, I was getting more excited because the airplane was nearing completion and the vibes were getting to both of us. I've got to throw in this official bit of information here for other modelers' wives who are very supportive of their husband's hobby. Norma, Frank's wife did a lot of the little jobs such as peeling of the liquid masking, putting her hand into an area where Frank wasn't able to get his big claw in.

Norma kept the coffee coming and remembered different things that were forgotten as the plane progressed to its finished stage. She was also his biggest supporter when it came to flying the DHC-4. When the long awaited phone call came that it was time to take the photos and do the high speed taxi test, the adrenalin started to pump. The time and place was set for the following Wednesday at 5:30 p.m. On the appointed day of the great unveiling, a phone call was received. Everything had to be postponed until the next day because of engine installation quirks.

The following morning I called Frank on the telephone and he sounded discouraged. "Mike, I don't believe the plane will ever fly because it weighs over twenty pounds. I know if I build it again, I can get the weight way down. We talked a little more and finally decided to do the taxi test anyway. At 5:30 p.m., I arrived at the airport and met with Frank, Norma and another friend, and his wife. We finally got the plane set up, tested and some photos taken. Now as the DHC-4 taxied out, I set the 200mm lens and took a few more photos. After four high speed taxi runs and seeing how stable the plane handled on the ground, we decided to do one more run and put the DHC-4 away until the weekend. This would give me a chance to take a photo shot of the airplane on just its mains.

But Frank Smith had different ideas and he wasn't telling anyone. Frank taxied the big bird out to the end of the runway, turned the DHC-4 into the wind and ran the K & B 61s up. As the airplane gathered speed, I noticed the front nose gear starting to raise off the ground as I looked through the camera. Then all of a sudden there was daylight under the entire plane. I took shots of the airplane as it passed overhead and then put the camera down just to enjoy watching that magnificent aircraft fly around and finally land. It was sheer joy to see the expression on Frank's face when the airplane finally taxied into the pit area. By the time this article goes to press there will be a lot more flights on the DeHavilland DHC-4.

I want to thank Frank and Norma for the beautiful job they did on the DeHavilland DHC-4 Caribou. They have shown just what scale is all about. □