

every sort of private and executive aircraft you can think of and you have some idea of what this spotters' paradise is like. I lost count of the numbers of aircraft after the 200 mark! Flying started at first light and went on throughout the day. Both Cessnas and Pipers have agencies there and there are three flying schools as far as I could tell. The hangars were full of such delights as Gulfstreams, Friendships, DH 125s and Fan-jet Falcons. On one side there was the Civil Air Patrol headquarters, an organisation that does a lot of good in helping in disaster areas, searching for missing aircraft and flying urgently needed spares and medical supplies in cases of emergency. CAP is a national organisation on which a complete story could be based. Unfortunately I had only a very short while with them and saw some of the flying training that was going on in a T-34 Mentor and other light aircraft.

Mixed up with all this was the ANG's C-97s! One wonders at the air traffic problems that must beset controllers in this region. I was told that air-miss occurrences were commonplace and that nobody really bothered to file them in the way we do in the UK. To have to wait in the *light aircraft* stack for 30 minutes to get into some airports was nothing unusual. Believe me, the Americans take aviation in a very practical way—those that can fly do—the rest don't bother.

The following day was spent with another Transport Group, this time the 106th at Floyd Bennet Field, the original New York airport of the 'thirties and now a reserve centre for both the US Navy and ANG. Elsewhere on the field there was a unit of the Coastguards and the New York City Police helicopter unit.

The 106th was a very similar unit to their counterparts at Westchester. They also flew C-97s and again had a similar record of long hours in the air and an impressive list of operational jobs undertaken for MAC in Vietnam. The headquarters was in the old terminal buildings of Floyd Bennet which gave one the impression of what Croydon's terminal area looked like until that airport was closed.

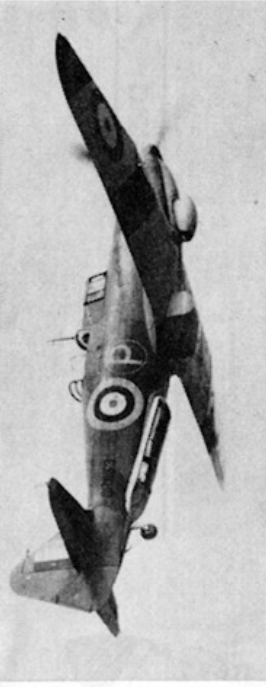
My main interest in visiting the field was, however, to see some of the aircraft operated by the Navy. They had a miscellaneous bunch ranging from Seastars to Neptunes, Trackers, Beech C-45, Sea King helicopters and a lone C-54 transport. Flying activity was pretty limited as the station had just suffered a visit from the Admiral and were recovering from a rather hectic two days.

The Coastguards kept their hangar not far from the Navy base and operated HU-16 Albatross amphibians and Sea King helicopters. Their aircraft were spotlessly clean like the maintenance area and although I only had time to stop and photograph their mounts, the area was obviously worth a return visit if ever I have another chance.

One lasting impression I got from my visit to just a small part of the United States reserve forces was the fact that they were not only fully up to strength but had a waiting list which in most cases was closed as so many people wanted to join. This fact amazed me for a while as having some experience of recruiting for part-time organisations of a semi-military nature in this country, I marvelled at the patriotic attitude of the American people in coming forward as volunteers in this way.

It was not long before I discovered that there was a snag. I'm not saying that the Americans are unpatriotic—far from it, but one of the reasons why all units are so completely up to strength is that by joining the reserve men of military age can miss getting called up for full-time service and the great possibility of being posted to Vietnam. No wonder there were a great many young business men and others with good careers at stake in Air Force blue!

January, 1968



DR883, the Defiant TT3 prototype (Imperial War Museum).

# Defiant TT3

CONVERTED BY ALAN W. HALL

**T**HERE are few conversion possibilities with the Defiant in contrast to those other two Battle of Britain fighters, the Hurricane and Spitfire, but the one that is possible can provide both an interesting and worthwhile addition to a World War 2 model collection. This is the target tug development of the Defiant which did valiant but unsung service during the war both with the RAF and Fleet Air Arm until the introduction of such specialist types as the Martinet.

There's quite a lot to do—the experienced modeller should be able to manage it in about ten evenings. Almost all of the basic tasks such as filling holes, cutting new ones, simple canopy moulding and the use of plastic card and filler are involved. In fact, the Defiant TT III makes an ideal subject for a beginner to conversion work.

**STAGE 1** After cementing the two fuselage halves together and fitting the pilot's seat, cut out the lower part of the gun turret mounting and remove the spine to the rear of the turret for a length of 7/8 inch.



**STAGE 2** Cut two balsa plugs, one to fit the semi-circular gap left by the turret and the second a wedge shape to form the basis of the new dorsal spine. Glue both in position using polystyrene cement and allow to dry.

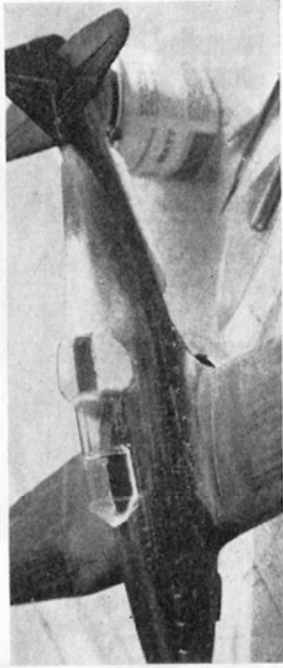
**STAGE 3** Shape both plugs into the rough dimensions shown on the plan. Then fill in the gap that exists between the fuselage side and the base line of the wedge-shaped plug with body filler. Rub down to complete the top rear fuselage shape when this has dried.

**STAGE 4** While the previous work is drying out, a start can be made on the drogue housing under the rear fuselage. Remove by file and knife a section 1 7/16 inch long from this area and glue in a piece of 1/4 inch balsa roughly shaped to the oblong of the drogue unit. Remember that this has to project below the fuselage and is wider than the width of the fuselage at this point. Study the photographs to see how to complete it.

**STAGE 5** The canopy is now moulded. This is made in one piece including the rear part which in reality is solid. The new fuselage can be hollowed out at this stage to allow for the winch operator. Remember that this crew member faces rearward if a figure is to be included in the model.

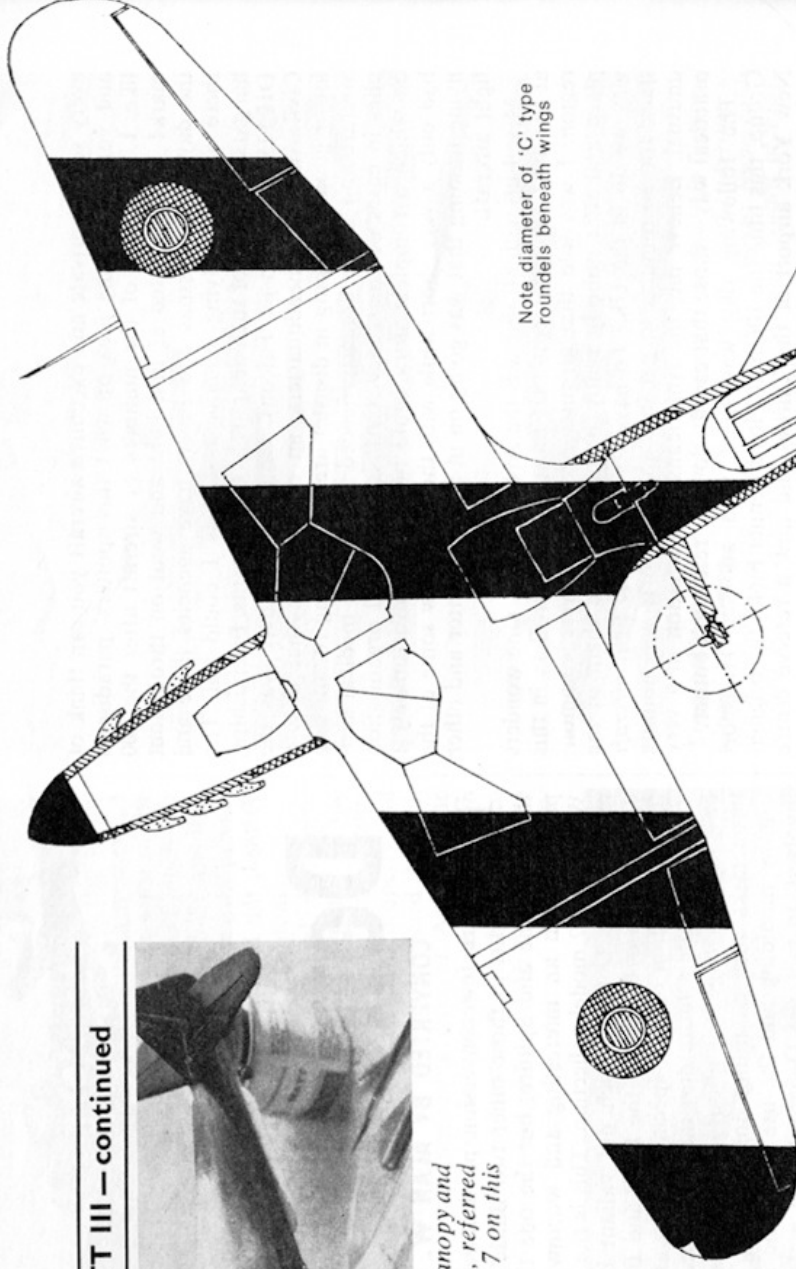
*Continued on next page*

## Defiant TT III — continued



**Above:** The new canopy and cockpit in position, referred to in Stages 6 and 7 on this page.

Full details for moulding canopies from acetate appeared in our August, 1967, issue, pages 459-460.



Note diameter of 'C' type roundels beneath wings

**STAGE 6** Stick in place the kit canopy after adding any extra cockpit detail required. A small gap will be found between the kit canopy and the home-made one and this should be filled with a tiny sliver of balsa wedged in place and trimmed with a very sharp knife. The circular section of balsa plug will also have to be rounded on its forward extremity to match up with the curve on the rear of the home-made canopy.

**STAGE 7** The final addition to the top side of the fuselage is to add the  $\frac{3}{8}$  inch long spine that runs aft from the new canopy. A small piece of balsa can be used for this but it must be completely shaped before placing in position as it butts against the rear side of the canopy and damage will result to this if sanding is attempted after it has been stuck down. A radio mast, made from plastic card, can be added now, or later, as desired.



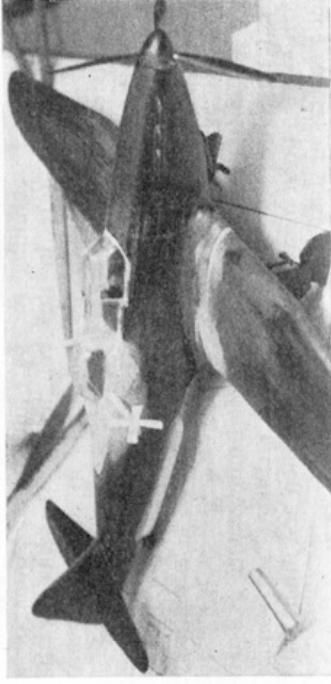
**STAGE 8** You can now tackle the drogue pack and the under-fuselage hook. The former is sanded into shape and the latter is cut out of thick plastic card or a suitable small piece of sprue. It is filed to shape according to the plan. I used the slot of the stand in which to fix the hook — it is very conveniently situated.

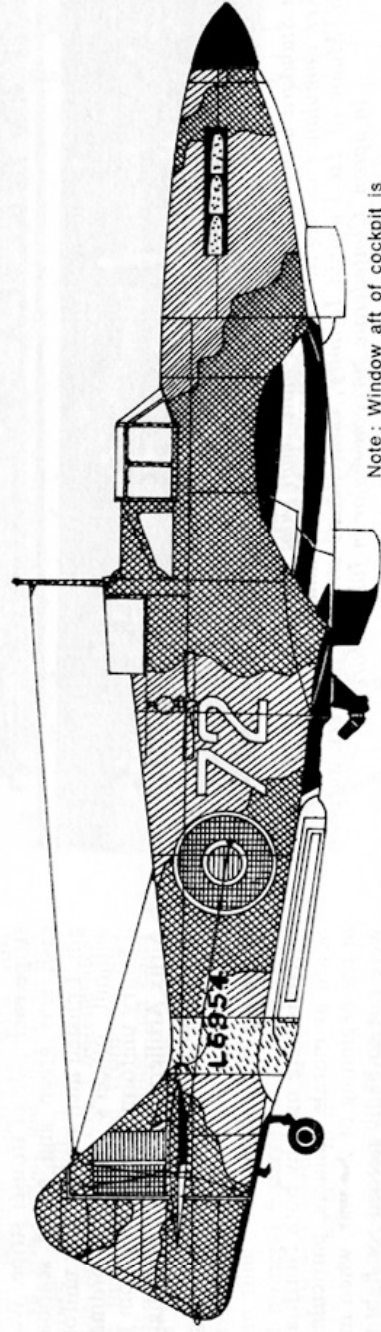
**STAGE 9** The wind-driven winch was made from plastic card for the blades with  $\frac{1}{8}$  inch dowel rod for the support. The right angled gears at the joint between blades and support was again made from the dowel rod but shaped according to the plan and stuck on. It is an almost impossible task to make these tiny blades revolve.

**STAGE 10** The wings, undercarriage, tailplane, propeller and tail-wheel are now added. The joints between the wing and fuselage and possibly under the centre of each wing will have to be filled with body putty and sanded down as the gaps are inclined to be rather large.

**STAGE 11** A pitot head was added to the port wing made from the spare radio mast in the kit. Tail guards were made from stretching sprue in a candle flame and were stuck in place using the absolute minimum of glue applied on the tip of a pin. The model is given a final polish with extra fine flower paper before painting.

*Continued on page 179*





Sky fuselage band

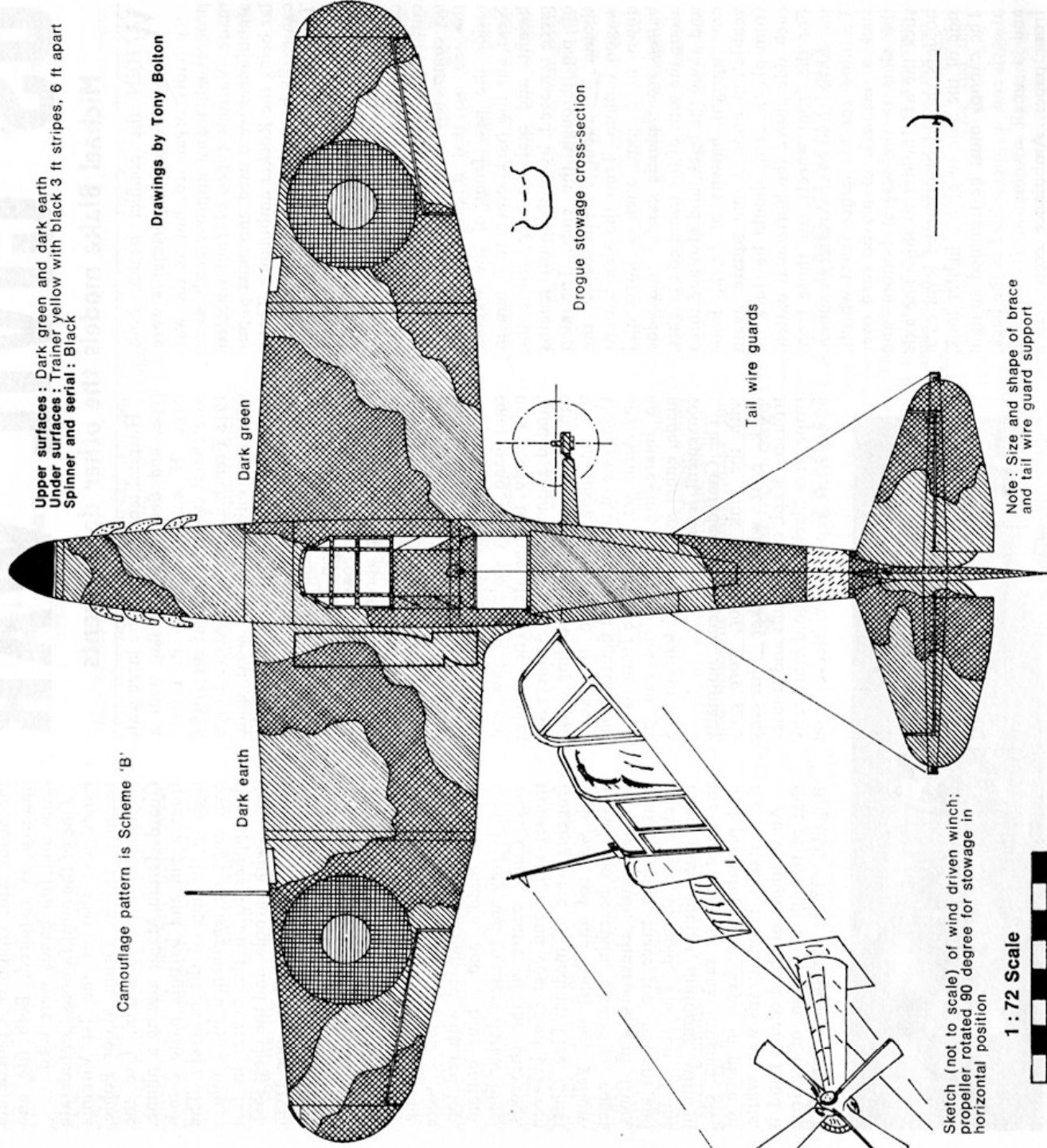
Number '72' on fuselage in white

Note: Window aft of cockpit is on starboard side only

Upper surfaces: Dark green and dark earth  
 Under surfaces: Trainer yellow with black 3 ft stripes, 6 ft apart  
 Spinner and serial: Black

Camouflage pattern is Scheme 'B'

Drawings by Tony Bolton



Dark earth

Dark green

Drogue stowage cross-section

Tail wire guards

1 : 72 Scale



0 Feet 8

Sketch (not to scale) of wind driven winch; propeller rotated 90 degree for stowage in horizontal position

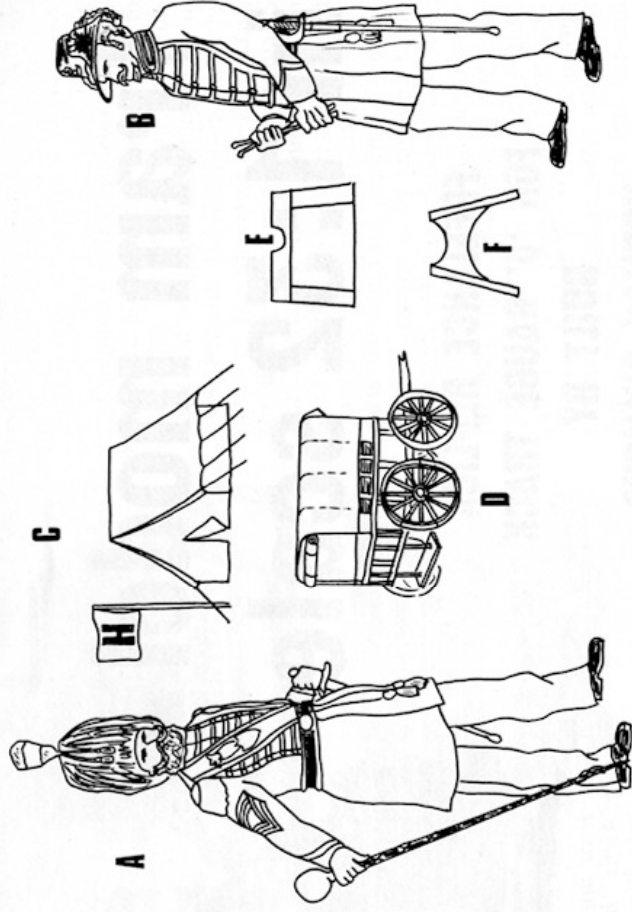
Note: Size and shape of brace and tail wire guard support

French inspired uniform with full skirted frock coat and black slouch 'Hardee' hats with a black plume. Swop heads with the Confederates, and make the plume from barbola and trousers were light blue, as was frogging on coat front, collar and cuffs. Waist sash was red. Gloves and drum slings were white. A brass bugle and numeral 6 decorated the front of the hat, and a small brass eagle held the turned up side in place.

### Quartermaster's Dept.

The usual army wagon was drawn by a six-mule team, and was essentially the same as the famous covered wagon. The Wagon Train wagon lends itself admirably, with a few modifications. First, the team. Airfix zebras can be used, but for convenience use the horses supplied plus the two extra horses not used with the ambulance conversion. The nearside pole horse should be changed for one from the Artillery set, as the driver rode this horse. Pole must be cut to length, and chain used to link the mules.

Now for the wagon. Bend the foot-board up until it stays raised at a sharp angle, and stick a plastic card top and sides on to make the tool box, remove the top and back of the old seat, covering the hole in the floor with card. An open feed box, 20 mm x 3 mm x 3 mm, was suspended from the back. For variation, the cover can be cut, and hoops from wire inserted to simulate a rolled back top. The Corps insignia (see Infantry article) and the name or number of the outfit and its contents, eg, 'Ordnance', appeared on the side of the canvas top. A brake handle from a pin stuck into the existing brake block and connected to the driver's saddle horn by rope, can be added. Finish was much the same as for artillery pieces, though some Federal militia units had green wagons with red wheels.



**Key to drawings:** A—Drum Major of the 1st Virginia Infantry. B—Musician, 6th Wisconsin. C—Hospital tent and flag. D—Rocker Ambulance. E and F—Pack saddles for mountain artillery mules. Allow grooves for trunnions and make from balsa with barbola paste filling. Colour details in text.

### Mountain Artillery

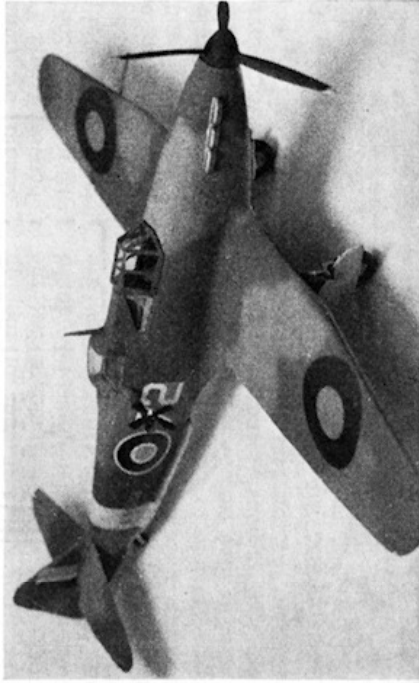
Both sides used mountain artillery, usually in the form of the 12-pounder howitzer, which could be carried in pieces on mules, or pulled when assembled. The smallest wheels I could find are the front ones from the Airfix covered wagon. These are really too big, so the whole piece is a little oversize. The rest of the gun comes from the Airfix artillery set. First, cut the barrel to 8 mm, with 4 mm each side of the trunnions, to keep them central. Re-trim the breech end to a round shape, using a pin to make a new breech-button, and 'bell' the muzzle with UHU. Next take a carriage and cut the axle to 18 mm, recut wheel grooves 2 mm from the cheeks, and trim the cheeks to 4 mm high and 12 mm long, recutting the trunnion grooves. Shorten the stock to 23 mm, and reshape the end, sticking a 6 mm length of wire across it (the ends fit into holes in the shafts). Make the

shafts themselves from tapering 20 mm lengths of cocktail sticks. Sponges and rammers were carried on the stock sides.

Now for the beasts of burden. Zebras from the Airfix Zoo set make good mules, but Airfix horses can be used, and three are needed. One carried the barrel and shafts and pulled the piece on roads. The pack saddle was standard, and is made from balsa and barbola paste (see drawing). To use the shafts, push a length of wire through the mule beneath the pack saddle, and loop the ends to fit the shafts. The second mule carried the carriage and wheels on a similar pack saddle, and the third carried the ammunition. This was in boxes about 10 mm x 5 mm x 5 mm, one on each side of the saddle. Various spare pieces of equipment, and gunners' belongings were carried on top of the saddle. Straps can be painted on, or made from barbola and stuck in place.

### Defiant III — continued from page 176

**Below:** The completed conversion finished as L6954, subject of the scale drawing on page 177.



### CAMOUFLAGE AND PAINTING

I tried out the new Humbrol camouflage colours on this model and as can be seen from the photographs, the results were very pleasing. The paint dries very rapidly without brush marks but I found that the pigment had to be mixed very thoroughly before application. Five minutes was not an unusual time to spend on this operation. For the undersurfaces the yellow was Humbrol Railway colour and the black their usual matt colour. The yellow was applied first and the black lines overpainted after masking the yellow areas with Sellotape strips. Blue and red upper wing markings came from the kit transfers and the remainder were cut from HisAirDec sheets. The serial was made from Letraset.