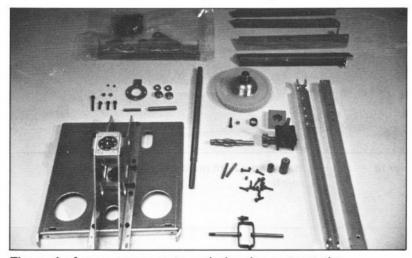
## HIROBO BELL 47G KIT REVIEW

## WHIRLY BIRDS OF THE PAST

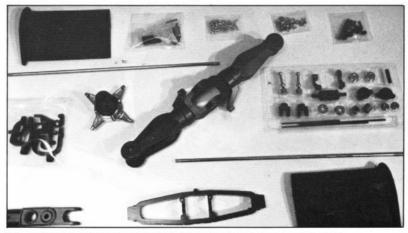
## A look at the 47G model produced by Hirobo by the Editor



The kit all laid out as it comes well packed and presented.



The main frame components and showing autorotation main gear, main shaft, and drive gear for tail shaft.



The rotor head components laid out prior to assembly, tail blade holders, swashplate and scissors link.

There are many models on the market which are scale and enjoyable to fly. None so much as this large and impressive model from Hirobo. I am not going to delve into the highly technical complexities of reviewing this kit but to point out its most favourable points for the person who has mastered basic flying skills and wishes to have a reliable and solid scale model to fly and own. After all, the cost of this model makes it somewhat out of the average person's reach.

The mechanics of the kit are the usual Bell/Hiller/Hirobo design rotor head atop a very rigid aluminium main frame. The installation of everything is designed to be easily maintained and putting the whole lot together is really quite simple although everything like anything on a helicopter, model or fullsize, needs to be perfectly

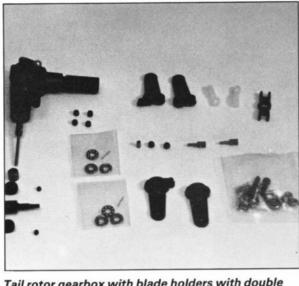
The installation of the engine requires some dexterity and at the time I picked up the kit from its distributors here in England (Dave Nieman Models), it was pointed out to me that the mounting holes for the mounting bolts that keep the whole unit in place should be slightly enlarged to allow movement when aligning engine drive shaft to main gear spindle through the double ballraced bearings.

The short exhaust manifold was removed as was the air intake, as I could not get it to fit into the frames otherwise - however - I may have just been inept at this point. Setting up the mesh gears between spindle and main gear and tail drive gear proved fiddly yet when in place and tightened up the whole unit ran very smoothly much to my pleasure. The instructions for all this were reasonable but I think they could

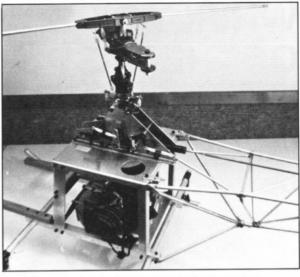
be much better.

Installation of cyclic and collective controls etc. is a pleasure to do and setting up via swashplate, scissors link to the head was an enjoyable exercise. The tail boom comes ready built up - tighten any loose nuts that have come loose and loctite. Assembly onto the main frame is via four braces which hold it securely in place. The actual angle of the boom is not quite right as it points up a little too much, however this does not harm it in any way. Everything else is the usual straightforward things to do, like installing tail drive, tail gearbox etc.

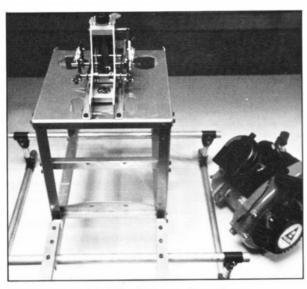
The cabin housing was rivetted to scale amongst other things and then bolted on to the mainframe on wooden bearers after painting etc. All in all, again a pleasure to do. Installing radio gear, servos



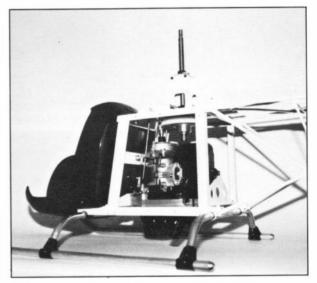
Tail rotor gearbox with blade holders with double ballraces.



Mainframe with tail boom attached, engine installed and rotor head, swashplate and collective and cyclic controls.



Main frame with 20 hp Echo engine prior to installation.

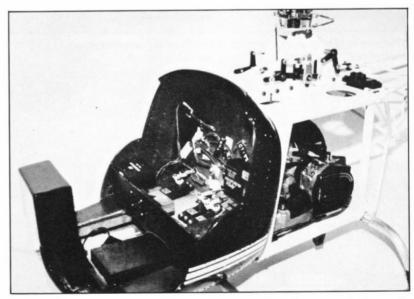


Main frame with main housing attached after painting.

etc. was fun as you knew they would all be hidden away under floorboards and seat and seat back.

With a gyro running on its own power source, there was plenty of room for five servos and receiver plus battery case for battery ignition and ignition source and battery for lighting system (strobe and navigation lights).

The model comes with hoppers for the sides of the main frame if an agricultural version gives you ideas away from the usual MASH versions that you see. When the model is complete it is still difficult to know why it should have cost so much. Although large – there is not really a great deal in it. But then, I suppose it could be said that complete with engine its price is structural to the kits that don't include the engine.



Showing radio gear and gyro installed under bench seat and electronic ignition unit under floorboards.



Everything complete except for scale LAPD decal and glass bubble made from very clear hard plastic.



The finished model ready for take-off with pilot at controls.

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**Final points** The engine started after around half a dozen pulls on the start cord which recoils quite sharply. For a new engine it idled smoothly and quite quietly. Dave Nieman's model flies very smoothly yet even he commented on how well this engine ran. It seems some run smoother than others and also have a bit more power in them. There are two others I know of that have great difficulty in flying around due to low engine power. This is not a fault due to Hirobo, maybe it just requires precise setting of the carb on the day's temperature conditions. The model is very stable in the hover and very scale like in circuit flying around. It is certainly enjoyable to fly, to maintain, to watch and to own and for a top of the line scale ship to have like the Huey Iroquois, then you cannot go wrong.

There are a couple of things that do tend to happen to it - yes, it has got faults, like any kit has. This seems to stem from a very high pitched reverberant type vibration caused by the engine which sends this unseen vibration down the tail boom. The result is the tail skid shears at the point where it meets the lower part of the tail boom. It also shears the four braces that hold the boom to the main frame. This has happened quite a lot and has resulted in modifications. In the next issue, I should have had a reply from Hirobo on their viewpoint regards this and will report on this particular fault then.

Meanwhile, don't not consider it for your next model. It is a very good model and will give many hours and years of fun flying.



Your actual pilot keeping this lovely stable model in the hover.