They'll thrash through the sky

DUDLEY DOUST looks at the wooden-plane builders

THE NIGHT air was full of stars and the fruity smell of a local jam factory as Roy Wilks led the way out through the back door of his bungalow. We passed a motor-cycle shed, a greenhouse and some withered tomato plants before reaching another long shed, at the bottom af the garden. "I get out here directly I have my tea," said Wilks, fumbling with the padlock, "and the next thing I know the wife's tapping on the window at 3 o'clock in the morning."

In the dim shed stood the silvery shape of a half-built aeroplane fuselage. The bare ribs, made of spruce, looked frail. Foam rubber rimmed the tiny single cockpit. The tyres were the size of soccer balls and a 1500 cc Volkswagen auto engine, with the red, printed legend Fill to 8 Galls, was bolted to the nose. "When the weather gets good I'll take her outside and try on the wings," said Wilks, "and she'll be flying by the end of the year. I hope."

Wilks, 48, is a plumber from Tiptree, Essex. He is one of a growing number of aero-fanatics who are building their own aero-planes at the bottoms of gardens, in warehouses, garages, spare bedrooms and even the sacred sitting rooms of Britain. The Popular Flying Association, of which he is a committee member, estimates that there are currently about 1,000 light wooden aircraft being built in Britain. "A realistic figure is more like 500," said Wilks, "I don't believe you're building an aeroplane until you're half done. Anybody can buy a set of plans and a few bits of wood, build the rudder and then give up."

Those who finish the job spend a minimum of £500—Wilks's bill will be nearer to £700—and about 3,000 working hours in as many as four or five years on their planes. There are no such things as complete aeroplane kits, as there are with boats, and even the dedicated amateur plane builder suffers waves of despair. "You can't go to a chandler for your bits and pieces," said Wilks, fingering a tail fitting, "so you spend three hours making each little rudder hinge."

Still, there are about 200 homebuilt wooden aircraft already thrashing round in the skies over Britain. They're almost all open cockpit, single-seaters, powered by a single converted Volkswagen car engine. "Their average weight is no more than 750lb," Wilks explained, "and you can't expect a Volks engine to pull along more than that. After that you need a proper aeroplane engine. They're expensive."

So these, for example, are three of Britain's most popular home-built wooden planes; none spans more than 25ft, nor is more than 18ft long; each can range over 200 miles:

- The Evans VP 1. Safe, boxy, cheap, easy to build of spruce strips, and plywood, this is the one to cut your teeth on. Of American design, there are about 50 being built here, though only two are completed. John Penny, a company managing director, from near Chesterfield, built the first. "Nobody's ever seen anything quite like it," he says. "I've got it painted up like an old German Fokker fighter, with Iron Crosses and a replica Spandau machine gun. Last week I flew through the snow without gloves."
- The Taylor Monoplane. A nippy little plane, capable of 95 m.p.h. Designed by John Taylor, an East Anglian who erred in the air, crashed and died in another plane of his design. This one has a safe record and its low wing offers wide visibility. P. C. Dan Barker of Shoreham-by-Sea, is building one. He's proud of a converted Volkswagen 1600 cc engine. "I bought it as scrap, £35," he says, "now with all the bits and pieces it's worth £250."
- The Luton Minor. A very slow plane, achieving 70 m.p.h., it nonetheless demands only about 100 yards for landing and taking off. It's a fiddly plane to build, though, and requires a skilled craftsman. This is Wilks the plumber's plane. "I think I chose the Luton," says Wilks, "so that I could land in a farm field."

The cost of operating these planes, provided the owner can avoid high hangarage costs, is astonishingly low. While the average cost of renting a club aeroplane is about £9 an hour, these plane-builders joyride for as little as £1.50 an hour. It's pure sport, partly by choice, partly through the fact that airfields on this small island are not all that convenient to business centres. Wilks chuckled. "These home-builts have absolutely no practical use. It's a truism to say, 'If you want to go anywhere, leave the aeroplane at home'."

Amateur plane-builders mostly are pilots although some hastily take last-minute lessons. Wilks is an RAF veteran. An inveterate boatbuilder, he bought his set of plane plans for £12 in 1965 and fashioned his first rudder rib in 1968. "That's the best place to start," he said. "It's cheap. It's easy. And since that's the first



Roy Wilks: sitting-room plane builder: "She'll be flying by the end of the year."

place the PFA inspectors can turn down your work, that's the best place to quit."

The Civil Aviation Authority has given the job of inspecting privately-built planes to the PFA and, according to the PFA their and, according to the PFA, their safety record is superb. "We've been going to the PFA, their safety record is superb." been going since 1946," says Frank Parker, a former associa-tion chairman, "and as far man know we're know we've never had a man killed through structural failure in flight." in flight."

In the freemasonry of flying,

the builders share chores and are scavengers for parts. A joiner carved an exquisite propeller for Wilks from 75p worth of mahogany. "This altimeter I got for nothing," said Wilks, bending into the cockpit. "By coincidence, a local farmer had been on at me to fix his central heating and when a Proctor crashed near his farmhouse, I finally went round. There was this lovely plane— pure scrap. I whipped out the instrument panel."

Wilks at last put back the pad-

lock. "We get a bit anti-social, shut up in sheds," he said. We returned to the sitting room and the bare bones of an airplane wing and, there in the corner, Mrs. Wilks knitting with the patience of Penelope. Wilks soon began to tinker with a wing rib. "No aircraft industry uses these materials any more, apart from a very few small outfits," he said. "We wooden-plane builders are keeping something alive that might otherwise die."

Flying high

Shipley College of Further Education has shown considerable enterprise in mounting three exhibitions ___at Shipley, Bingley and Baildon — displaying the extraordinarily wide range of work being done by adult students.

Who would have thought, among the older generation of "night class" students, that their labours could produce a low-wing monoplane that might actually fly? This prize exhibit, on show at Bingley this Saturday, represents the revolution that has taken place in meeting

the practical and creative demands of the modern adult student.

Whether it be the problems arising from Value Added Tax, the urge to create at the potter's wheel or the desire to make running repairs to your own car, there is an adult education class to meet your needs.

A word of commendation to the adult education authorities for the work they have done in recent years is certainly not out of place. Literally thousands of students have

cause to be grateful.



His own ship

Night school aero men ready for off

The result of six years' work by a group of aviation enthusiasts will be seen in a few weeks time of the two-seater aircraft built duhing evening classes.

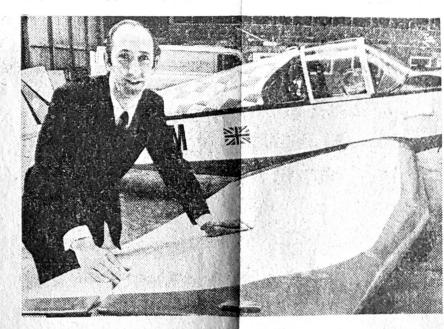
At the cost of about £2,500—
and a lot of hard work—
the group of ten members,
now calling themselves the
Bingley Flying Group, have
made a French-designed
Jodel D11, perhaps better
known as the "Robin."

The project started at a Bing-ley College of Further Education dass. For two hours every Wednesday evening the group, only one of which does not have a

pilot's licence, carried out the meticulous work.

One of the instigators was Mr.
Mike Rockcliffe, of the
Yorkshire Light Aircraft
Company, who said today:
"We hope to have our inaugural flight within a week
or two. The engine has
been installed and tested
and now all that needs to
be done is check that the
aircraft meets Government
and aviation regulations."

The aircraft has been fitted with a Rolls Royce engine, and will probably be used by the group for peasure flying. Mr. Rockcliffe said: "It is likely that a similar aircraft of this type would cost £6,000 or more bought on the market.



Mr. Mike Rockliffe and the aeroplane he and his friends have made at night school. Their only problem now is to find something else to do on Wednesday evenings.

"This has been a labour of love and our only problem now is what to do on Wednesday nights. Certainly I am glad to see the Jodel completed. So many people

get the idea of building a 'plane and then things fall by the wayside when they discover that, for one reason or another, the job is just too big."

Five years ago, a group of aviation enthusiasts formed a class at the Bingley Centre of Further Education. Their aim was to build an aeroplane.

The enthusiasts worked meticulously on the aircraft for just two hours every Wednesday evening and now it is almost ready to take to the air.

On Saturday it will be displayed to the public at Beckfoot Grammar School, Bingley, where it has been constructed and where the centre, an annexe of Shipley College of Further Education, is staging an exhibition of students' work.

The two-seater aircraft, which has a wing-span of about 25 feet, will shortly be fitted with a Rolls Royce engine ready for its first flight—hopefully in the summer.

LEARNING

Mr. Mike Rockliffe, of Yorkshire Light Aircraft Ltd., who has been supervising the group, said about half of the 11 members could already fly and the others were either learning or were about to learn.

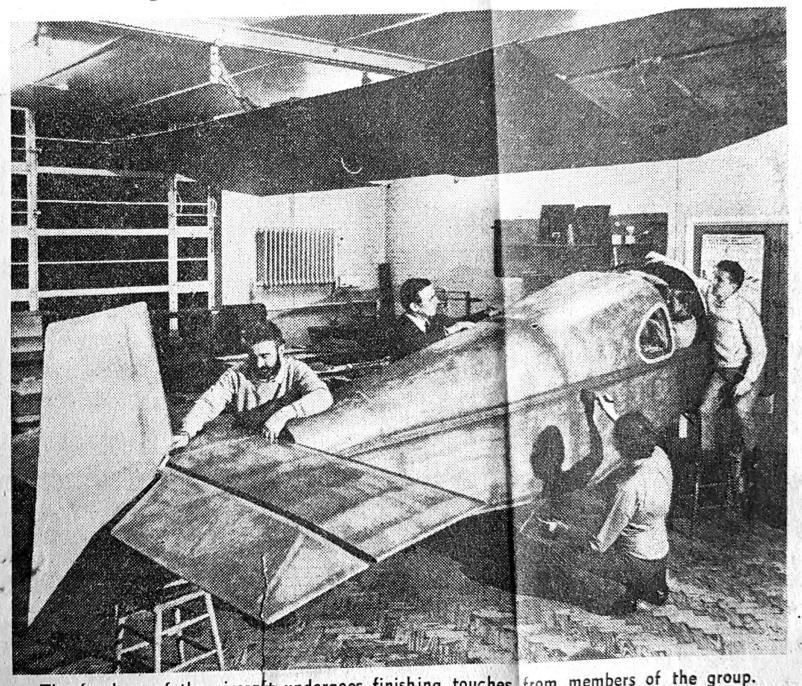
The group, which will have spent nearly £2,000 on completion of the aircraft—the only education subsidy has been the use of the school—are now considering forming a flying group.

"My main concern has been to build the aircraft and make it into a flying machine," said Mr. Rockliffe. "Just how the owners plan to fly it is still being discussed, but it will be a flying group of some form."

Other items produced by adult education classes will also be displayed on Saturday, about two-thirds of them having been made by women. Mr. C. P. Whittaker, head of adult education at the Shipley College, said there was a whole classful of women studying car maintenance.

THE PROPERTY OF THE PARTY OF TH

Nearly ready for take-off



The fuselage of the aircraft undergoes finishing touches from members of the group.

EVENING CLASS

BUILDS A PLANE An aeroplane — built by a group of adult

students over the past five years — will be on view at an exhibition in Bingley

on Saturday, March 31.

With characteristic Yorkshire caution, the head of the local education centre said "It is expected to fly this summer."

The group has been meeting every Wednesday night to build the plane from scratch.

The design chosen was a model low wing monoplane and it has been built under the instruction of Mike Rockliffe, of Yorkshire Light Aircraft Ltd.

The projet has not been without setbacks, but nevertheless wings and fuselage are now assembled and a Rolls. Royce Continental engine is shortly to be fitted.

The exhibition is one of three mounted by Shipley College of Further Education, showing many facets of adult student work. The other two will be at the Shipley Centre (March 26-28) and the Baildon Centre (April 7).

A college spokesman said today: "Most people have an idea what "night school" is about, but how many have any concept of the vast change that has overtaken this sector of education?

"Both in the City of Bradford and the surrounding area of West Yorkshire, shortly to be amalgamated as a authority, the nature of this service has improved immeasurably."