Editor's Note: Slow to rebuild to its modest prewar level, private flying in Europe has surged forward in the last two or three years. Still peanuts by U.S. standards, European general aviation was long inhibited by the multiplicity of frontiers and languages, short distances between major industrial centers, and low living standards. Now it is growing rapidly as frontiers wither, business prospers, education overcomes language difficulties and personal incomes rise. Robert R. Rodwell, a staff writer on the British weekly, Flight International, reported on British government hostility to general aviation in The AOPA PILOT five years ago. Now, he writes, the mailed fist has become a helping hand in many European countries.

n May 1939, when AOPA was formed, general aviation in Europe was under a cloud, which was to break only three months after and unleash upon the continent a six-year holocaust. Business flying barely existed and those who flew for pleasure knew that their pleasure had little time to run.

In Britain, private and club-owned aircraft had multiplied during the late 1930's. By 1939, 72 clubs and numerous private owners operated about 550 aircraft and there were over 7,000 active pilots. They practiced an essentially leisured sport. There were no complex control areas closed to them or demanding involved radio procedures; indeed, 99% of all private aircraft had no radio.

Flying was a pleasant relaxation for sunny weekends, with tea and biscuits to follow on the clubhouse lawn. The height of excitement was the "dawn patrol"—an endeavor to sneak into some other club's airfield, undetected by its patrolling defenders, and claim a free breakfast. Round-Britain, and round-Europe races, and record attempts to Australia and South Africa during the 1930's captured the public's imagination.

Light aircraft flying had been given a boost by the evolution in the 1920's of the de Havilland Moth; the enthusiastic participation of the first Director-General of Civil Aviation, Sir Sefton Branckner (the greatest friend in the British government general aviation ever had); the trail-blazing exploits of such pioneers as Cobham, Mollinson, Amy Johnson, Hinkler, Jean Batten and the rest (who opened up an empire with light aircraft costing only a few hundred pounds); reasonable subsidies, and finally the patronage of two successive youthful kings.

When war appeared inevitable in 1938, club flyers banded themselves into the heavily subsidized Civil Air Guard. The government's investment paid off in 1940 and the following years with the ready availability of a reserve of trained and semi-trained pilots. Many private flyers were among those who, if too elderly, partially disabled or of the feminine sex and therefore ruled out

## European General Aviation On Its Way UP

War stole a generation from private flying

in Europe, but most countries are now double-timing

to catch up to U.S. lightplane industry

by ROBERT R. RODWELL Staff Writer, Flight International of London, U.K.

for combat flying, ferried military aircraft from factories and repair depots to the fighting units.

In the flying communities elsewhere in Western Europe, the situation was broadly similar. There may still have been civil light aircraft flying in Germany when AOPA was founded, but the uniforms, the discipline and political indoctrination of their pilots left little doubt that "civil" flying was in fact a para-military activity—one which the Nazis had seized in the early years of their régime as a means by which they could circumvent the Treaty of Versailles and lay the foundations of the Luftwaffe.

Today, happily, the situation has greatly changed. Europe is still divided, of course, but the threat of war seems less imminent. The air is infinitely more crowded than in 1939; governments are no longer so keen to subsidize flying and therefore the expense is greater, though perhaps by no greater degree than living standards have risen, and the books of regulations have increased in weight and thickness many times. Against these factors, facilities are more numerous, flying is safer,

business aviation exists where it did not exist before and is continually expanding.

In May 1961, 40 companies in Britain which were using executive aircraft as a tool of management united, AOPA-style, and formed the Business Aircraft Users' Association (BAUA) to negotiate directly with the government. To some people's surprise, they received a sympathetic hearing. The Association's director was able to tell the writer recently: "The Ministry is now completely sympathetic. If a request can be granted, it is granted."

The Association, which now has 78 corporate members operating 89 aircraft—and numbers among its members even one of the government's own nationalized corporations—has won a number of concessions for the general good. Easier customs clearances it has brought about for the business goose result in easier customs clearances for the touring gander. Without a specific business airfield for London, the BAUA has won its members the right to use the RAF's well-situated Northolt communications airfield, while still pushing for a specialized airport.

Most important, it has pushed business flying through the Administration's thought barrier and now has the active backing of the government's Board of Trade. Board pressure on the Ministry of Aviation a few months ago resulted in a circular being sent to all municipalities in Great Britain without an airfield, telling them fairly bluntly that it was in their own interests to put down an 800-yard strip as soon as possible, and laying down minimum requirements.

Such a step by the Ministry would have been inconceivable five years ago. The climate has changed so much that the BAUA, whose growth was temporarily halted by a minor business recession a year or so ago, is now receiving from two to three inquiries a day from companies about the economics and advantages of flying.

The breakthrough in the resurgence of British general aviation came in June 1959, when the economic situation permitted the lifting of dollar-goods important restrictions (thank goodness; Americans like Scotch and Jaguars!). Almost immediately a flood of modern U. S. aircraft came onto the British market, sending to overdue retirement many prewar light aircraft or war-surplus trainers. Over 400 aircraft since have been imported into Britain. As an indication of the scale of business, one can cite CSE Aviation, British main distributors for Piper, Lycoming and King (also distributing in Belgium, Holland, Luxembourg and Ireland), whose turnover last year in U.S.-made aircraft, spares, avionics and ancillaries, was worth more than \$2,800,000. CSE has sold about 270 Pipers in Britain alone.

The current general aviation fleet comprises about 400 club-owned aircraft and some 620 business and private machines. There are about 7,750 nonprofessional licensed pilots, and 200 clubs and co-ownership groups.

Neglect of the light aircraft market, a major source of business before the war, by the British aircraft industry was understandable in the postwar conditions of austerity, governmental unhelpfulness and the glut of surplus military aircraft, but it is now seen to have been a mistake. Though Beagle Aircraft Ltd., a company formed in 1960 with the financial backing of the giant Pressed Steel Company, has yet to fulfill the hopes held for it, those hopes are still alive. Beagle's 206 sixseat executive aircraft is in full production and, on the completion of a comprehensive overseas distributor and service network, it will, Britons hope, give the U.S. twins a tougher fight in the world market. Following behind is a full hand of other Beagle projects. One already flying is the 218, a pretty four-seat twin.

The more sophisticated company transport market commands the attention of the de Havilland division of Hawker Siddeley, with its Model 125 eight-passenger 500 m.p.h.-plus twinjet. Deliveries will begin to the United States in July. This aircraft follows its



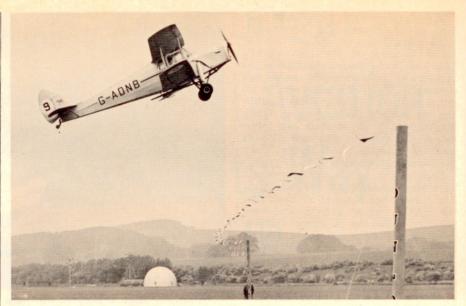
Italian lightplane designers, among the most recent to contribute to the European private flying market, have produced several attractive, highly rated aircraft. One is the Aviamilano P 19. In the background are military and civil versions of Piaggio P 166 Portofino



A new four-place plane recently placed in production by Sud-Aviation of France is the Gardan Horizon, designed and developed by famed test pilot Yves Gardan

Popular low-cost sport plane is the craft above, manufactured in both Germany (Bolkow Junior) and Sweden (Malmo Junior). It cruises at more than 115 m.p.h., has a 65 h.p. engine





Cabin comfort came to European aircraft in the 1930's through more advanced de Havilland designs. This Hornet Moth, a favorite of the day, still competes favorably with more up-to-date aircraft (Copyright, Flight Magazine, London, U.K.)

successful predecessor, the *Dove*, the one British postwar success in the business transport market which has been in continuous production since 1945

For the American private or business aviator who may climb into his own or company aircraft to fly 1,500 miles for a business conference or a few days' fishing, it may be difficult to appreciate that in the same distance in Europe he may cross five or six countries speaking even more languages. This profusion of frontiers has inhibited the development of general aviation. It has been much easier to pay one's fare and let the airline do the paperwork. Other inhibiting factors are the intensive rail and road network of Western Europe, particularly Britain, and the generally short distances between major centers. But as the motoring explosion seizes the roads in ever-increasing traffic paralysis, and as more rail lines are closed as uneconomic, the advantages of flying over both become obvious.

Evolution in the past five years of six-nation European Economic Community (the Common Market) and the surrounding seven-nation European Free Trade Area are tending to remove the inhibitions posed by frontiers. Commercial barriers are falling fast and business organizations are, effect, finding themselves with their "home" markets increased five or tenfold, but are subjected to much more competition from foreign rivals. Crossinvestment is increasing. Anglo-French, French-Italian, Dutch-German joint companies are now the rule. These developments are demanding a more vital management outlook, greater mobility among executives, increased emphasis on prestige and the corporate image. In fact, American conditions are being duplicated and

these conditions favor business flying.

The Germans, no time wasters in commerce at any time, are leading Europe in adopting it. Civil flying and aircraft design and manufacture in Germany began again only in 1955. Although there have been a number of German light aircraft marketed since then, they have not yet made much impact on foreign markets. They sell well at home, however, where about 8,000 pilots fly 1,250 aeroplanes. For business flying, as opposed to sport and touring, U.S. aircraft are usually favored, though the likelihood of the Germans making a determined assault on the executive market remains a real one. Their first executive twin-jet, the Hamburger Hansa, with swept forward wings, made its maiden flight April 21.

In France the emphasis is differently placed. This country is the finest home in Europe, and probably in the world, for the man who flies for fun. In the 1930's French sporting flyers ranged over much of the world. Now an enlightened government policy and generous subsidies make flying accessible to a large portion of the younger population and the choice of aircraft available is wide.

There are no less than 450 clubs in France, and many government-assisted schools for advanced flying, aerobatics, gliding and parachuting. With about 4,000 club and private aircraft (excluding business-owned machines) and about 13,000 pilots, general aviation in France dwarfs that of any other Eu-

The de Havilland Moth of the mid-1920's signaled the start of private aviation in Europe and was the first of a long line of British light aircraft (Copyright, Flight Magazine, London, U.K.)



Mainstay of British flying clubs before the war and for 15 years afterwards was this de Havilland Tiger Moth. Many still are airworthy. Refurbished versions can be bought in Britain for about \$700 (Copyright, Planet News, Ltd., London, U.K.)

ropean country. Many French light aircraft are stamped with typically eccentric Gallic genius. Among its large number of amateur aircraft builders, unusual but frequently commercially valuable ideas thrive. There is hardly such a thing as a conventional French lightplane. Compared with their French counterparts the small number of British "home builders" are an unadventurous lot—and the majority of the aircraft they build are of French design!

The advantage to France of this enlightened attitude has been great in recent years. An air-minded and technically adept younger public has led to the creation of a very healthy aircraft industry. From producing large numbers of one-off prototypes 10 years ago,

it has graduated to the quantity production of a number of world sellers; so much so that with only about one-third the labor force, French manufacturers are now on a par with the British in the value of aeronautical exports.

Paradoxically, business flying in France has not prospered to the same extent. Until only two or three years ago even the development of domestic air routes was restricted, in a short-sighted attempt to protect the state railways. This policy has now been reversed but it tended to keep business flying to a minimum. Now the business flying stops are out. France is marketing several fine executive transports. The Potez 840 four-jet-prop, the SFERMA Marquis jet-prop adaptation of the Beechcraft Baron and the 10-



ST PF NI AI

Be Be

Be Be Be

Ce Ce

Ce Ce De

Do

Loc Na

Na

Pip Pip

We per

> Che TOP

G

Phon



France leads the European market for home-built sportscraft. The Druine Turbulent, above, has a 40 h.p. adapted Volkswagen power plant. Also built commercially in France, Britain, Germany and Spain, it sells for about \$3,000

passenger twin-jet Dassault Mystère 20 are all being received with favor. Pan American Airways has ordered 140 of the latter and will market it in the United States. For the family pilot, the single-engine four-seat Morane-Saulnier Rallye is being built on a scale the nearest Europe has yet achieved to the mass production techniques practiced at Wichita or Lock Haven.

In Italy, inflation and a top-heavy bureaucracy have inhibited general aviation of every kind but in recent months the country's more than 7,000 private and business flyers have formed their own AOPA and have begun to wring concessions from a slowly grinding civil service mill. Despite an unfavorable environment, Italian light aircraft designers are irrepressible and superb. Signor Nardi, to name but one, has turned out numerous designs in recent years. The Italians have, without question, the most handsome and elegant of the world's light airplanes, wringing the last half-knot from every ounce of thrust.

Other aircraft, notably in the Piaggio range, have sold well in the European executive market and have been exported to the United States as bare hulls for engines, instruments and electronics to be fitted there. An extension of this idea is seen in the PD-808 Vespajet soon to fly. Developed and built by Piaggio from a Douglas design, this joint project marries U.S. design skills and knowledge of the market with Italy's acknowledged workmanship and lower labor costs.

Even more than Germany, Italy is the European economic miracle of the last 15 years. A rapidly industrialized nation, it has seized the design lead in fields as varied as high fashion and motor scooters. Having started from a much lower baseline than its more developed neighbors, Italy's living standards have not yet risen sufficiently for more than a small proportion of the population to aspire to fly, even if they wished. When they do, one can expect the Italians—with their passion for speed, noise and all things new—to show the rest of Europe their stabilizers in the race to get aloft.

A more conservative attitude prevails in the northern countries. The aircraft salesman has greater customer resistance to conquer, although with the impressive rise in living standards the money may now be there. Belgium, Holland and Denmark are countries so small, and with such good roads, that time and distance pressures to make people fly are largely lacking, although with the internationalization of Europe they will certainly increase.

In Holland the government subsidizes gliding generously but extends nothing but goodwill to the power-flying fraternity. Naturally the thrifty Dutchman, if he flies at all, glides cheaply and leaves power flying to about 500 active pilots flying about 120 club and personal machines. Similarly, if he flies to get some place, he goes by KLM, the national airline of which he is very proud. In generalizations like these, one leaves out such vast Dutch or Anglo-Dutch industrial empires as Philips Electrical, Unilever and Shell, which operate whole fleets of executive aircraft, from light twins to customfurnished airliners.

The scale of private flying in Belgium and Denmark is very much the same. Each has about 500 pilots and 110 aircraft. Until recently Belgian flyers were burdened with an entirely "anti" feeling by the government, which stifled business flying in favor of the national airline. Heavy import duties on aircraft and great difficulty for pilots in obtaining instrument ratings, unless one was an airline company employee,



A British buyer takes delivery of a Czechoslovakian Morava five-place twin. Czech planes reportedly are well designed, well built and deliver high performance. They sell for about 20% less than comparable U.S. aircraft

curbed the growth of private flying. Now the policy is being reversed under pressure of economic need. Those who should know confidently expect a number of Belgian businesses to buy their first aircraft this year.

The Scandinavian countries—Norway, Sweden and Finland—all have enthusiastic flying fraternities, relatively large when judged by the overall standards of Europe. Living standards are high (particularly in Sweden), governments are enlightened and there are large, sparsely populated areas of mountains, lakeland and forest. Roads and railways are necessarily circuitous and the advantages of flying fairly obvious.

brief survey, one cannot In this ignore the Communist countries farther east. There, flying and gliding is available to some of the younger population in organized sporting centers. Czechoslovakia, particularly, makes use of the air-taxi concept. Light twins for four, five and six can be hired easily and cheaply, and the service is much used. The Czechs, always good engineers, have had reasonable success in selling well-designed, well-built aircraft in Western Europe in recent years—14 have been imported into Britain recently-at prices about 20% below those of their U.S. counterparts. Poland has advertised aeronautical products widely too, but has met success only with agricultural aircraft and sailplanes. Russia does not, as yet, even try.

Signs are that the Iron Curtain is developing some holes for business and touring pilots to pass through. Two years ago a colleague took the first British light aircraft into Poland since 1939, for a revealing tour of that country's aviation facilities. A number of pilots have entered Czechoslovakia, and flown on into Poland, or south

through Yugoslavia. Flights through Eastern Europe skirt, rather than fly over, Eastern Germany.

It is relevant to end with a mention of my own employer, Flight International magazine. After operating for 13 years with two examples of an immediately post-war British twin, with minimum radio and a total lack of aids, we switched to a well-equipped but single-engine plane in 1962. In March of this year Flight International combined full navaids with twin-engine safety by purchasing a Beechcraft Baron. Now with airways capability and a 220-knot cruise, staff writers range far afield in speed and comfort, reporting aerospace affairs. In this respect we are typical of a growing number of European firms which have similar requirements for moving their staff around.

Wichita, Lock Haven and Bethany need lose no sleep tonight. Europe does not yet have a light aircraft Detroit to match the scale of these. But almost everywhere one goes, there is a feeling that general aviation is really making its takeoff run at last.

A full generation of general aviation development was missed in Europe. The antiquities of the 1930's remained in service far too long. One could wish that European manufacturers would now produce the kind of aircraft to establish general aviation on a continent where the entire concept must still be sold, and not be mesmerized with over-sophisticated 500 m.p.h. twinjets before a wider base is built. For this reason, Europe will remain a valuable market for the U.S. general aviation industry for many years. Wichita, Lock Haven and Bethany can rejoice with Europe's business and pleasure pilots that European general aviation has, in the last three years, left its Curtiss Jenny age.

P

PI

Ki

gı

N

SC