Flying in Europe Last of a two-part Denmark, Norway,

by ALAN BRAMSON

Part one of this article (March Pilot) told of light aviation in Britain, France, Belgium and Holland. On departing the Dutch border, a flight of some 150 miles along the northern coast of Germany, skirting the Heligoland Bight, takes you from the flat landscape of Holland to the almost equally flat Denmark peninsula.

DENMARK

Denmark is a cheerful country, within the Scandinavian orbit, with an area of only 16,580 square miles. Apart from the mainland there are a number of islands and on Zealand, the largest of them, is Copenhagen, capital of Denmark and a city often described as the "Paris of Scandinavia." It is a gay city and a great place for a city holiday if

you enjoy that type of vacation.

Like most small nations (the population is less than five million) the Danes enjoy a strong team spirit. Of all the countries to suffer occupation during WW-II none put up a more united front than Denmark. From the royal family down, the population took care of its persecuted minorities and the Danish underground movement was persistent and effective to the end.

Although some years ago this country built a steel-and-fabric, high-wing monoplane known as the KZL Lark, there is today no lightplane of Danish design in production. However, after a somewhat stagnant 1974-75, there are signs of renewed growth in light aviation. There are no fewer than 33 flying schools in this compact country where, on an average, the Danes must part with about \$1,650 to obtain a private pilot license (PPL). No doubt this is one reason why only 350 or so people

take up flying each year. And flying instructors suffer a flight test every six months, surely the most stringent requirement of its kind in the world.

Visiting pilots from ICAO member states may hire Danish aircraft and fly within the country, but special permission is required to cross any borders. This, by the way, is the pattern in most European countries. Landing fees in Denmark cost around \$4.10.

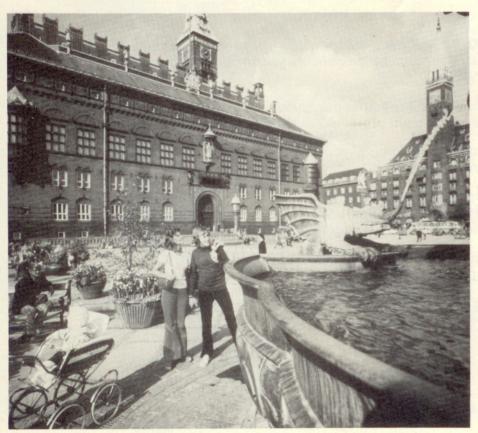
The guiding light for sporting events is the Royal Danish Aero Club. You can use the lower levels of the airways system even if your license does not include an instrument rating and single-engine aircraft may fly at night. One drawback they do have is a flat-rate system of navigation charges which discourages the private pilot from obtaining an instrument rating. Although the Danes have their counter-productive officials too, this should not put you off visiting this delightful country.

Scandinavia is a prosperous part of Europe, varied in countryside and national temperament although, for many years, Denmark, Norway and Sweden have worked closely together. From Copenhagen there is a narrow water crossing to the west coast of Sweden and another 150 miles in a northerly direction will bring you into Norway, even smaller in population than Denmark, but a country of more than seven times the area with mountains going up beyond 8,000 feet.



Since parts of Norway are within the Arctic Circle, there are times of the year when people living in that area must endure 24 hours of darkness every day. Norway is a rugged country in the true meaning of the word—a tough winter climate, one of the most spectacular coastlines in the world and plenty of mountain scenery. It also offers some of the finest skiing available.

As in Denmark, flying is not cheap in Norway and it costs around \$1,500 to gain a PPL. With some 45 flying clubs—a lot, considering the very small population—the aspiring pilot has plenty of choice. The Norwegian Aero Club organizes such events as the Nordic Championship, Norwegian Championship and the SCAN-AOPA Fly-In, a gettogether that is held by rotation in the



Copenhagen, capital city of Denmark, is often called the "Paris of Scandinavia."

series briefs the visiting general aviation pilot on Sweden, West Germany and Switzerland

other Scandinavian countries.

Landing fees average \$3.50 but one can buy an airfield carnet for \$90 and this lasts for a year; so, after 25 landings, you have broken even. Since last autumn non-I/R pilots are allowed to use the lower levels of the airways, provided a flight plan is filed, and light singles are permitted to fly at night.

One of the charms of Norway is the unspoiled nature of the countryside. It

is considerably larger in area than the U.K. yet, other than the two biggest cities, Oslo the capital (480,000 population) and Bergen (120,000), no other towns exceed 100,000 people.

The Norwegians are a hospitable, courteous and attractive people. If you enjoy breathtaking scenery don't miss Norway. Your license will give you the same privileges as in Denmark provided your country is a member of ICAO.



Set in the mountains of Norway is the unspoiled natural beauty of Lake Olden.

Country	Population (millions)	Number of PPLs	Number of Light Aircraft			Can Singles
			Singles	Twins	Foreign PPLs valid	fly at night?
Denmark	4.5	2,500	645	90	yes if ICAO	yes
Norway	3.5	1,500	450	50	yes if ICAO	yes
Sweden West	7.8	5,800	800	200	yes if ICAO	yes
Germany	52	23,000	5,000	480	yes if ICAO	yes
Switzerland	4.9	4,750	838 sin	gles d twins	yes if ICAO	yes

SWEDEN

Almost as long as its craggy frontier with the sea is Norway's border with neighboring Sweden. The direct flight from Oslo to Stockholm (800,000 population), capital of Sweden, crosses 260 or so miles of flat country. A slight southerly detour would bring you to the edge of Lake Vaner, a landlocked mass of water some 90 miles in length, while Stockholm itself is sandwiched between the Baltic Sea and Lake Malar.

In fact the country abounds in lakes. so it is understandable that the Swedes have maintained an active interest in seaplane flying, a branch of the art that has all but disappeared from the European scene. Much of Sweden stands at 1,000 to 1,500 feet above sea level and it is only in the northern areas, located within the Arctic Circle, that a few mountains ascend to around 7,000 feet.

Sweden is the largest of the Scandinavian countries both in area and population. Its rather serious people enjoy one of the highest standards of living in the world. This is hardly surprising because this nation of less than the population of London builds its own jet fighters, exports some very successful automobiles and is renowned for its precision engineering.

However, for such a wealthy country it is surprising that light aviation is not on a grander scale. For example Norway, Denmark and France all have more light aircraft per capita, so it seems that financial considerations are not the only factors influencing a nation's flying activity. Geography, alternative means of transport and air-mindedness must play an important part.

The Swedish student pilot has to pay about \$1,600 to gain a PPL; consequently, only 300 or so people learn to fly each year. Nevertheless, there are over 70 clubs and schools in the country although not all of these train pilots. The Royal Swedish Aero Club runs a West Coast Rally and every third year it hosts the SCAN-AOPA Fly-In already mentioned. Other events are organized on a local basis.

Often you will find there are no landing fees, but charges at non-state airfields run at a maximum of \$4.35 while the major airports will set you back \$5.70. There are no special restrictions if foreign pilots wish to fly Swedish reg-



It may look like a Christmas card print but this picture is real—snow, mountains, river and trees of Klosters, Switzerland. All photos in this series courtesy British Airways.

FLYING IN EUROPE continued

istered aircraft and, although non-instrument-rated pilots are at present unable to use the lower levels of the airways, tests are being conducted on a "controlled VFR" basis up to FL100. Night flying in single-engine lightplanes is permitted provided the pilot has a night rating.

In common with most other activities, the Swedes take their flying seriously. Private flying is growing slowly with business aviation showing more signs of expansion.

WEST GERMANY

The southern tip of Sweden is only 45 miles from East Germany. However, this article is confined to western Europe, so to reach the other Germany one must fly southwest, island-hopping across Denmark without ever losing sight of land.

The devastation of Germany during the later stages of World War II and its subsequent partition into two states dictated that first priorities had to be the rebuilding of its cities and the reestablishment of essential industries. Effected over a relatively short period. the German recovery can only be described as remarkable and now that country is among the wealthiest in Europe.

However, early attempts at reviving the light aircraft industry were not particularly successful. There was the Bölkow 107, a wooden taildragger of a somewhat old-fashioned concept, followed by the Bölkow Junior, a diminutive, two-seat, semi-aerobatic aircraft that seems to have had few attractions.

Today there are some interesting lightplane developments in Germany, some of them based on fiberglass airframes and Wankel engines driving ducted fans. In collaboration with Fournier in France, the German Sportavia Putzer company is marketing the RF6 in 100-hp and 180-hp versions. On a larger scale is the Dornier Skyservant medium twin and the Hansa Jet which competes in the Sabre 75A, HS125 and Lear 36A market.

Learning to fly is not cheap in Germany and one must wave good-bye to some \$2,000 in the course of gaining a PPL. Nevertheless 2,000 or so would-be pilots are prepared to part with that kind of money each year and there are about 150 flying training establishments in the country. Unusual for Europe is the decentralization of aviation control that exists in Germany, each county

being responsible for general administration and, for example, the testing of flying instructors who must, by the way, pass a radiotelephone test in English.

However, general aviation in West Germany is on the "up" although the state charges between \$8.30 and \$11.30 for navigation fees according to aircraft weight and whether or not you are crossing into another country. Landing fees start at \$3.75 and increase with aircraft weight. The Deutscher Aero Club organizes such sporting events as the Rally Baden-Baden and the Deutschlandflug. Singles may fly at night and while VFR flights are prohibited above FL 100, up to that level non-instrument-rated pilots may fly VFR on the airways.

The German aviation authorities will grant PPL privileges for a period of up to six months to pilots from ICAO member countries.

West Germany has an area roughly equal to that of Britain. The country-side varies between the flat farming areas of the north to the higher central and southern regions where the ground rises to between 1,000-2,000 feet msl. Other than a 4,900-foot mountain south of Freiburg near the Swiss border there are few high-ground hazards in the true sense.

A boat trip down the Rhine with its ancient castles perched high on either side is worthwhile. German wines are excellent and so is the beer. There is a profusion of quaint, old-world towns and you will find most of the people courteous and correct. As in the Scandinavian countries English is spoken by many people.

SWITZERLAND

Fly down the Rhine with France on your starboard wing and the Black Forest to port and you will eventually reach Basle, a fine Swiss town sitting at the intersection of the French, German and Swiss borders.

It is easy to discount Switzerland as a picture postcard country, land of the cuckoo clock and chocolate bar. But this little country, with no natural resources other than the tourist attractions of beautiful scenery, has won for itself a position of great influence and some importance in the world.

In contrast to Belgium, which has suffered a succession of other people's wars fought on its homeland, Switzerland has managed over the centuries to remain neutral and, as a result, is now traditionally accepted as an island of peace within a not-so-peaceful Europe. The Swiss share with Sweden one of the highest standards of living in the world.

This is reflected in the fact that there are more pilots per million population in Switzerland than in any other European country, as well as more light aircraft, although the topography, certainly in the southern part of Switzerland, can hardly be regarded as ideal for

amateur pilot.

Fifteen-hundred feet msl is considered low-lying, 8,000-foot mountains there by the score, many go up to 11 feet, and some push the wrong side of 14,000 feet. Although the air is normally gin clear, the weather can turn nasty when so inclined. Then there is the problem of VHF reception in some mountainous parts of the country, but all this does not deter the Swiss.

They make a two-seat aerobatic trainer called the Bravo and a very suc-cessful eight-seat STOL aircraft, known as the Pilatus Porter, powered by a French Astazou turboprop engine or a Pratt & Whitney PT6. A number have been fitted with skis for operation into and out of various snow-covered, mountain strips. Pilatus also manufactures

gliders.

Switzerland must be one of the world's most expensive places to take up flying, but although it costs no less than \$3,500 to gain a PPL, around 500 people start the course each year at the 35 flying schools. In terms this may not sound a lot but there are only 4.9 million Swiss. There is, however, government assistance for those wishing to get a license. Sporting events are organized by the Aero Club der Schweiz and, being in the center of Europe, the Swiss have a number of air touring options open to them; France, Italy, Austria and West Germany are all bordering states.

On the average, landing fees for light aircraft cost \$4 and visiting pilots from ICAO member states may fly Swiss-registered aircraft within Switzerland but their licenses must be validated by the Federal Aviation Office should they wish to fly the aircraft to another country. Single-engine flying at night is permitted provided the pilot is night rated and the lower levels of the airways may be used by non-instrument-

rated pilots.

Light and business aviation is growing and the importance of this little country as an aviation center is perhaps highlighted by the number of large gen-eral aviation manufacturers that have established sales bases there. The commercial center is in Zurich (420,000 population) and Bern, the capital, is a city of 155,000 people.

Life is not cheap in Switzerland but, although the hotels and restaurants are expensive, pilots flying around Europe will not be disappointed with this little

gem of a country, the last in our pilot's

tour of Europe.

In a two-part article of this length it is impossible to offer more than brief impressions of each state and pilots contemplating flying in any of the countries mentioned would do well to contact the relevant AOPA office before planning the trip.

Light aviation is yet to take off in Europe. For example, on a pilots per million population basis the United States has around 3,300, Canada 3,200 and Australia 2,800, yet the European countries included in this article average only 510. Now that Europe is working towards closer integration, the need for mobility within the community and, even more important, the demand for communications with other continents, is awakening many firms to the potential of modern business aircraft.

Country	Average Price per U.S. Gallon in U.S. Cents.
Britain	74
France	85
Belgium	80
Holland	97
Denmark	91.5
Norway	80
Sweden	78
West Germany	89
Switzerland	90

Can you use your pilot license in Europe?

All the countries mentioned in this article will recognize the license of a foreign country, usually treating it as a PPL, provided the issuing state is a member of ICAO, the body responsible for laying down standards and requirements. In most cases you may hire an aircraft registered in the country visited and fly it on a non-commercial basis. However, should you wish to fly it out of the country of register then your license will have to be validated for the purpose.

What will it cost to fly in Europe?

Prices vary from country to country. In Britain you may hire a Cessna 172 for around \$32 an hour while a Cherokee Arrow would cost \$45. Prices are similar in Belgium. A Cessna 150 will cost you about \$33 in France while the rates are somewhat more expensive in Scandinavia, Holland, Germany and Switzerland.

Pipers and Cessnas are everywhere, but in France and Germany the Robin aircraft are very much in evidence.

Fuel costs also vary from state to state. Since most pilots using a light-plane for touring purposes will be flying from one country to another, the prices above are based upon duty and tax drawback levels assuming the pilot has filled in the relevant customs forms for re-claim. Gallons are U.S and prices are in U.S. cents.