# **AIRWAYS: THE YOUNGEST TRAFFIC LANES**

"And then, suddenly, we're in the midst of radiant sunshine above the fog. And everything calms in the mind: the immense blue of the sky, the blaze of the sun, the endless landscape of clouds underneath make a boundless peace seep into the mind."

Mika Waltari, 1937

Aviation is the youngest of all forms of traffic. Only a hundred years have passed since heavierthan-air flying machines made their first short hops off the ground. The whole arc of development of the airplane from the wood-and-canvas contraptions of the pioneers to the giant airliners of today has taken place in the 20th century. Ports and railway stations founded hundreds of years ago in the age of sails and steam are still widely in use, but the first airports especially designed for passenger traffic originate from the 1920's.

The proliferation of air traffic caused an unparalleled upheaval of the proportions of the world. Before the age of the airplane, traveling from one country to another could take days or even weeks. By the end of the 1930's it was already possible to fly from one continent to another in one day without intermediate landings.

The fast changing of the world has brought peril to our heritage of aviation buildings and milieus. The increasing size of aircraft and the growing number of air passengers have often led to the extension of airports without interest in sparing the old buildings and runways. In the course of building newer and larger airports, numerous old aerodromes have been closed down altogether and their lands assigned to other purposes. As only one lifetime has passed since the building of the first specifically designed passenger airports, their cultural-historical value to future generations has not often been understood.

## THE EARLY YEARS OF PASSENGER AIR TRAFFIC

In the 1920's, air travel was still in its infancy and passenger air traffic was scarce. The modest route network consisted of both land airports and air harbors. The Nordic countries with their coastlines and lakes were especially suited for seaplane traffic. As a consequence, a perfunctory attitude towards building expensive land airports prevailed in Finland – the land of a thousand lakes with its long coastline was perfect for seaplane traffic, flown already in 1924 by the domestic airline Aero Ltd. By the early 1930's, however, land airports for passenger traffic had already established themselves in continental Europe to a degree that was making air harbors obsolete as elements of the expanding route network.

From the point of view of the rest of Europe, Finland resembled an island. Thus it was imperative to keep up with development, and in the early 1930's the planning of land airports commenced in the major cities of Finland. By the end of the decade, regular traffic was already served by several airports such as Artukainen Field in Turku, Malmi Airport in Helsinki, Oritkari Field in Oulu and the airfields of Vyborg, Imatra, Vaasa and Kemi.



The opening ceremony of Artukainen Field in Turku on 8 September 1935. Photo: G. Ståhle collection

The first-generation passenger airports in Finland were mostly austere and simple, and their modest wooden terminals and hangars did not aim for architectural merit. The international airports, Artukainen in Turku and Malmi in Helsinki, were an exception.

Artukainen Field was the first land airport for passenger traffic in Finland. It was ceremoniously inaugurated by president P.E. Svinhufvud in September

1935. The steward's residence of old Artukainen Manor had been modernized in the functionalist style to serve as the terminal. Artukainen Field was an important gateway for international traffic and an intermediate point on the route from Helsinki to the brand new Bromma Airport in Stockholm, Sweden. The route was opened in late 1936 when the runways of Helsinki-Malmi Airport had been completed. Artukainen Field also served regular domestic traffic to the new land airports in Helsinki and Vaasa.

The massive buildings of Malmi Airport were erected not only to serve their purpose but also as monuments of sleek 1930's functionalist architecture. The airport as a whole was an impressive avant-garde achievement that won international recognition.

Malmi Airport was the first airfield in Finland to be designed from scratch, buildings and all, as an international passenger Its 2.400-ft concrete-paved runairport. ways, built on difficult ground, as well as the instrument approach systems and other equipment represented the most modern way of airport-building in those days. Traffic began in December 1936, when only the runways had been completed, to save the capital from being left out of the route network as all passenger aircraft were quickly converted from floats to wheels for operation from the land airports in Turku and Stockholm. At that time the terminal and the hangar were still under construction.



The opening of Helsinki Airport at Malmi, 15 May 1938. Photo: Aarne Pietinen / by permission of the copyright holder

By the end of the 1930's, the new element and way of travel was finally within the reach of the everyman, although not priced as everyday fun. The well-known travel writer Ernst Iso-Keisari (*né* Lampén) described in the weekly Suomen Kuvalehti in May 1937 a journey on the new domestic route from Helsinki to Vyborg aboard Aero's De Havilland Dragon Rapide "Salama" ("Lightning"):

"First we'd trudge around the length and breadth of the airfield until the aircraft by and by got off the ground - a lot more softly than a seaplane rises from the surface of water. The weather was fine and the sun was shining full blast. Visibility: absolutely great. The Meteorological Institute had forecast fog and rain, but luckily the prognosis was wrong. The bearded fox-terrieress was licking her moustache out of sheer joy. So we turned towards the east. No more than eighteen minutes later we saw the Cathedral of Porvoo. Seven minutes later, the tiny town of Loviisa came into view. These towns seemed quite small and insignificant from the altitude of 900 meters. Kotka was somewhat more impressive. We flew straight over the town. (...) We saw the parish village of Säkkijärvi and soon after that the outskirts of Vyborg came to view. The buzz of the engines began to fade to a somewhat less deafening tone. Soon the aircraft began a slow glide downwards, and after no time the airfield of Vyborg was swaying us on its soft sands. The journey had taken exactly 1 hour. What a wonderful journey. The only drawback was that one couldn't chat at all during that hour because the noise of the aircraft made all conversation impossible. For one whole hour one had to shut up, which was quite an ordeal but nevertheless passed painlessly as there was so much beautiful scenery to look at through the windows."

#### (...)

"The prices are not at all exorbitant. A round trip to Vyborg costs less than 500 Finnish marks<sup>\*</sup> - only moderately more expensive than a first-class railway ticket. A businessman's wallet can take it easily if there are important and urgent matters to take care of. An ordinary tourist, on the other hand, gets to see so much beauty that for once in his life it is well worth sacrificing a bit of money to see what our Land of a Thousand Lakes really looks like. I'll say it again: Finnish landscape is best seen from the edge of the clouds."

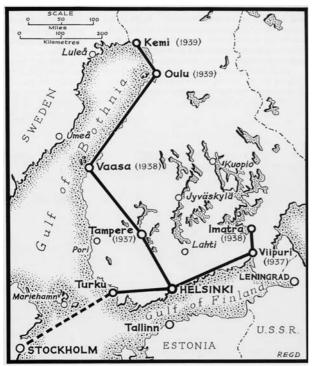
<sup>\*</sup>The purchasing power of 500 Finnish marks in 1937 was equal to about 178 U.S. dollars today. In 1937 the monthly salary of a workman was less than 2000 marks.

The functionalist buildings of Malmi Airport were designed by Dag Englund, Onni Ermala and Vera Rosendahl of the office architect group of the Board of Public Buildings. The shining white, round terminal building with its wings and continuous view balcony was sited in the optimal location towards the runways. The semicircular restaurant offered an excellent view of both the air traffic and the bustle of the departures and arrivals lounge. The stylish 300-ft hangar was, upon its completion in 1937, the second largest in Europe and could accommodate six large Junkers Ju-52 airliners. The hangar was also fully equipped for the maintenance and repairs of aircraft, engines and propellers.

The festive opening ceremony of Helsinki Airport in May 1938 was attended by 2.000 invited guests including Prime Minister Cajander, Speaker of Parliament Hakkila, Secretary of State Holsti and other members of the cabinet, Marshal Mannerheim and other representatives of the military high command, almost all of the diplomatic corps, a large group of Members of Parliament, representatives of the City and 25.000 enthusiastic viewers. The opening ceremony culminated in the biggest air show Finland had ever seen.

The prospects of passenger air traffic were promising. Several foreign airlines, with AB Aerotransport, LOT and Lufthansa at the head, opened regular routes to Helsinki. In May 1937 Malmi Airport already had 14 regular take-offs and landings per day, of which four were domestic flights to Vyborg and Tampere.

The world had shrunk remarkably: one could get from Helsinki to Stockholm in two hours, and by summer 1938 the international routes of Aero Ltd had been extended to Berlin – a six-and-a-half hour journey – via Tallinn, Riga, Kaunas and Königsberg. London and Paris were only 11 hours away. The longest air route in Europe, flown by LOT, reached from Helsinki to Jerusalem. The 2.800-mile journey took a day and a half.



*The expansion of Aero's domestic routes in 1937-1939. Photo: Finnair* 

With the 1940 Helsinki Olympic Games approaching, the exceptionally stylish and modern airport was completed just in time. It was a handsome showcase of a young, sovereign nation opening its doors to the outside world. In autumn 1939 the north-south runway was already being extended to 4.200 ft with the new large airliners and the lively Olympic traffic in mind.

#### THE WAR YEARS

History took a turn in another direction in September 1939. After the Second World War broke out, the 1940 Olympic Games were canceled and the two four-engined Focke-Wulf Condor airliners already ordered by Aero never got delivered. The regular flights by KLM and British Airways, which had commenced in late 1939, ended soon, as did the traffic of all other airlines to Helsinki Airport.

When Finland was attacked by the Soviet Union on 30 November 1939, Malmi Airport was taken over by the Air Force and passenger traffic had to move to other airfields. International connections were flown from Turku and Vaasa. During the Winter War (1939-1940) and the Continuation War (1941-1944) air traffic was scarce, and the ambience of travel wasn't as it used to be. Thousands of

children were flown from Finnish airports to safety in Sweden.

During the Interim Peace (from March 1940 to June 1941), however, the passenger aircraft returned to the capital. The state of peace was charged and tense. In June 1940 the Soviet Union occupied Estonia, Latvia and Lithuania. and Aero's Junkers Ju-52 "Kaleva" was shot down on a regular flight from Tallinn to Helsinki. Nevertheless, the route network kept on ex-



Children at Malmi Airport on their way to safety in Sweden in May 1942. Photo: Finnair

panding. Aero's extended thrice-weekly "Lapland Express" route Helsinki – Tampere – Vaasa – Kokkola – Oulu – Kemi – Rovaniemi – Sodankylä – Petsamo made it possible to travel from Southern Finland to the Arctic Ocean in just eight and a half hours.

In the Continuation War, Malmi Airport served not only units of the Finnish Air Force and the cobelligerent Germany's Luftwaffe, but also passenger traffic. Unlike numerous pre-war airports elsewhere in Europe, Malmi was spared from destruction by aerial bombings. After the negotiated cease-fire between Finland and the Soviet Union in autumn 1944, the German troops left Malmi without causing any damage. Later in the Lapland War (the expulsion of German forces from Finland to Norway by the Finns, as required by the terms of the Finnish-Soviet cease-fire) many airfields of the North were not as lucky. After surviving the war, Malmi Airport was taken over the Allied Control Commission. A flight ban was in effect in all of Finland until July 1945 with the exception of January and February. After the ban was lifted, the air traffic of the capital was taken care of via the small airfield of Hyvinkää until January 1947, when Malmi Airport was returned to Finnish control.

### THE RE-BIRTH OF PASSENGER AIR TRAFFIC

After the war, passenger air traffic quickly recovered. The new Nordic alliance SAS commenced flights to Helsinki with a connection to New York from Stockholm. In 1946 a regular route to Britain was opened, flown by British European Airways. Aero's fleet grew in January 1947 by no less than eight Douglas DC-3 airliners. The company was now also known as Finnish Air Lines, soon abbreviated to Finnair, and its first stewardesses entered.

American Overseas Airlines and Pan American Airways extended their routes to Malmi. Aeroflot opened the route Moscow – Leningrad – Helsinki in 1948, and a year later Czechoslovak Airlines began flights from Helsinki to Prague and Copenhagen. In 1947 Aero had transported 38.811 passengers, but four years later the number was already up to 91.387. Aero's own regular routes extended to Denmark, West Germany and the Netherlands.

In addition to Aero, regular international traffic was flown in the early 1950's also by the private

company Karhumäki Airways, founded by the Karhumäki brothers renowned for their aerial photography and versatile aviation activities since the late 1920's. The company had a route Helsinki – Joensuu – Jyväskylä – Vaasa – Sundsvall and later a connection from Helsinki via Tampere to Stockholm.

By the late 1940's it had become obvious that the soft clay soil of Malmi Airport could not



Passengers at Malmi. Photo: Finnair

support the weight of the new big airliners. Extending and reinforcing the runways proved to be too expensive, and the decision was made to build a new airport for the capital along the road to Seutula.

When the Helsinki Olympic Games were finally held in 1952, Malmi Airport got to serve Olympic traffic alongside the incomplete, temporarily opened Seutula Airport. At that time, in addition to Aero, regular traffic was still flown by Karhumäki Airways and Savon Lentolinjat Ltd of Mikkeli.

At the end of the same year, regular traffic moved from Malmi to Seutula, today known as Helsinki-Vantaa International Airport. The new airport consisted originally of an air navigation services building, a 6000-ft runway, an apron and a barracks-style passenger terminal.

Malmi Airport served passenger traffic a long time afterwards in the service of a new field of commercial aviation: charter flights. Aero flew its first charter flight in 1949 to Nice, commissioned by the Viri travel agency. Karhumäki Airways began international charter flights in 1951 in service of the Olympia-Auto travel agency. The flights soon reached from Malmi to Stockholm, London, Rome, Madrid, Algiers and in the following years all the way to Syria, Israel and Egypt. At the end of the decade the charter flights also moved to Seutula as bigger aircraft were adopted.

The Liaison Flight of the Finnish Air Force operated from Malmi until 1973 when the headquarters were moved to Tikkakoski. The Border Guard still has an important base at Malmi Airport. In the service of general aviation, Malmi Airport has developed into an oasis of light air traffic in the capital region and the biggest pilot training center in Finland. Two out of three Finnish professional pilots and half of all pilots get their education there.

### THE BUILDING AND MILIEU HERITAGE OF PASSENGER AIR TRAFFIC

The extension of runways and airport buildings to meet the demands of growing commercial aviation has destroyed airport milieus from the early years of passenger air traffic everywhere in the world. Domestic examples of old airfields disappearing under newer construction are, e.g., the airports of Pori, Vaasa and Joensuu. There is also very little left of the original 1950's Seutula Airport (Helsinki-Vantaa International).

War has also taken a heavy toll on old European airports. In Finland, the retreating German forces mined and blew up, among others, the first-generation airfields of Kemi and Rovaniemi as well as Ivalo Field, which they had built themselves. Later, these airfields have been built anew. In the cessions of territory to the Soviet Union after the war, the Suur-Merijoki military airfield and Yläluostari Field in Petsamo were lost.

While building new airports, several old airfields have been completely closed down and their lands ceded to other purposes. Oritkari Field in Oulu, opened in 1936, was abandoned by regular



Terminus of "Lapland Express", Yläluostari Field in 1940. Photo: G. Ståhle collection

flights in 1953 and faded away after the new airport in Oulunsalo was completed. The old Laajalahti Field in Kokkola was closed down in the late 1950's. Regular traffic moved from Turku's Artukainen Field to the new Rusko airport in 1955 and other air traffic ceased ten years later. Härmälä Field in Tampere served passenger and military traffic until 1979 when the new airport in Pirkkala was completed.



The terminal of Artukainen Field today. The control tower is occupied by the hotel sauna. Photo: Rasmus Kordelin

The original terminals of Artukainen Field in Turku and Härmälä Field in Tampere have survived only as individual buildings torn from their purpose. The Kordelin entrepreneur family meritoriously saved the dilapidated terminal of Artukainen in the late 1990's and turned it into a hotel, but next to nothing remains of the aviation milieu. Härmälä has also lost its aviation milieu to a residential area after the bigger airport in Pirkkala was completed, although the modest wooden terminal still serves the local parachuting club.

Building heritage related to military aviation has survived better. In Härmälä, a significant

group of buildings of the Ministry of Defense, the State Aircraft Factory and the Air Depot has survived. In Kauhava, the military aviation building heritage is proudly upheld by the Air Force Academy, now known as the Training Air Wing, and in Imatra by the buildings of Immola Field.

Although much of the civilian aviation building heritage has been lost, Finns nevertheless have reason to be proud. Finland still has in active aviation use one of the best preserved early civilian airports in the world, Malmi Airport in Helsinki.

In the Helsinki region, instead of putting pressure on Malmi Airport, the growing commercial aviation has affected the newer Helsinki-Vantaa Airport whose original early 1950's structures have in effect disappeared. The moving of heavy air traffic elsewhere and the lively general aviation activity in the capital region have thus spared Malmi of the fate of most other old civilian airports.

The runways and architecturally significant buildings of Malmi Airport have survived in aviation use and in nearly original shape and size. In the present phase of its rich and versatile history, Malmi Airport is one of the most complete and authentic early airport milieus in the world. As such it helps to fill in a gap in the cultural and milieu heritage of international commercial aviation.

The future of Malmi Airport is, however, shadowed by ambitions to turn the airport into a residential area. In that event the listed buildings would survive only as fragmentary memorials torn from their purpose, like Artukainen and Härmälä.

Malmi Airport has in 1993 been listed in the catalogue of built cultural environments of national significance by the National Bureau of Antiquities and the Ministry of the Environment. It has also been included in the Finnish selection of the international DoCoMoMo organization's catalogue of significant monuments of modern architecture.



Malmi Airport on its 67th Anniversary, 15 May 2005. Photo: Seppo Sipilä

As a still active integral piece of aviation building heritage, Malmi Airport is a world-class rarity. The international esteem it enjoys is reflected in the selection of the Airport to the global List of 100 Most Endangered Sites by the World Monuments Fund in 2004-2005 and in 2006-2007.

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## Literature in English

Wegg, John: Finnair: The Art of Flying since 1923. Finnair, Helsinki (1983).