

Air routes, political visions and the imagining of Northern Norway

In this article I will consider the integration of the airplane into Norwegian society in the period before World War II, and in particular how the relation between air routes and territories was interpreted and brought into play throughout this process.¹ The emergence of civil aviation in Norway was closely linked with the development of European aviation. Important elements in the growth of aviation, such as technological development and the preparation of regulations and standards, largely took place at the international level. Moreover, most air routes that were set up in Europe following World War I were international routes, and by the end of the inter-war years a global air route network was in the process of being formed.²

Most studies of the political and cultural ramifications of aviation, have focused on the great powers.³ Norway, on the other hand, was a small, neutral state at the periphery of Europe. The country has a long coastline, and its topography and climate complicated aviation in technical terms. These factors ultimately shaped the integration of the airplane and the encounter between aviation and geography ran a different course in Norway, giving rise to different visions and spatial ideas than in geographically more centrally located countries.

The integration of the airplane may be considered a process in which aviation technology was adapted to the Norwegian geography and contemporary transport infrastructure, as well as to the country's economic structures and political values. In addition, this was a process of cultural appropriation, in

¹ Military uses of the airplane and the spatial consequences of air power which manifested themselves in connection with the German invasion of 1940, will not be considered in this article.

² As early as in 1942 Lissitzyn observed that, with the establishment of "the North Atlantic" services in 1939, the last great link of the world air network was forged", and that by the time World War II broke out, "a world air transport system, in the geographical sense, was beginning to take shape". Olivier James Lissitzyn: *International Air Transport and National Policy*. Studies in American Foreign Relations No. 3. New York 1942, p 14. There continues to be a shortage of major studies that concentrate on and analyse the emergence of a global network of air routes, i.e. the actual process towards a worldwide air route system.

³ Previous work that has placed the cultural history of aviation into a larger context includes: Fritzsche, Peter (1992) *A Nation of Fliers. German Aviation and the Popular Imagination*. Cambridge: Harvard University Press; Wohl, Robert (1994). *A Passion for Wings. Aviation and the Western Imagination*. London: Yale University Press. And (2005): *The Spectacle of Flight. Aviation and the Western Imagination 1920-1950*. London: Yale University Press.

which the concept of the airplane was adapted to the existing lifeworld. In particular I will emphasise the spatial dimensions of this process.

I will first consider the emergence of visions for how aviation could help transform Norwegian society, and how aviation technology was taken into use in the 1920s. I will then proceed to the debate of whether future air routes should be based on sea or land planes, and the opening and reception of the first domestic air route in Norway: a sea plane route from Oslo in Southern Norway to Tromsø in the North. What were contemporary views on the potential spatial impact of air routes on Norway, and particularly on Northern Norway, generally considered the country's remotest and underdeveloped region? How did the overflowed territory with its existing communication systems and historical traditions affect the reception and perception of the air route?

The encounter between aviation and geography

Civilian aviation became a feature of Norwegian life in the spring of 1918. A privately-owned airline with – by the standards of the day – significant share capital of NOK 3.3 million was formed. The company – known as *Det norske luftfartrederi* (“the shipping company of the air”) – presented its plans for a trunk route from Oslo in the South to Tromsø in the North, supplemented by a route to the United Kingdom.

The airline's arguments and scheduled routes were later echoed in a government commission set up to look at the conditions and need for air services in Norway. Air services were to improve the nation's international connections and link Norway to the emerging European air service network. Domestically, the air services were to improve connections both within and among regions, especially for the remote regions of Norway that had poor transport infrastructure. The plane was to complement traditional means of transport and speed up the postal service. Air services were therefore primarily

considered necessary along the western coast and all the more so in Northern Norway, which lacked railway lines. In its conclusion the commission did not recommend the establishment of air routes where there were existing railway lines, as the gains in terms of speed and time would be limited. Instead, it proposed that air routes should span the Norwegian coast, providing an “express route” to complement the existing ship route.

In the view of the commission, a further advantage was that such an air route could be serviced by seaplanes, obviating the need for expensive land-based airports. There was a consensus that seaplanes were optimally suited to Norwegian topography with its long coastline, dotted with protective skerries and harbours, and lacking flat plains.

Despite the challenges of the Northern-Norwegian winter (which was considered too difficult to permit flying), the plane was regarded as the ideal means of transport for a country as large and thinly-populated as Norway. Being positioned at the periphery of Europe and having few significant international connections, Norway also had great need of international routes. The commission went as far as claiming that “*Norway is the country in Europe with the greatest need for air services, domestically as well as internationally. Starting up air traffic is therefore a national task of prime importance.*”⁴ The Norwegian visions for air routes, both domestic and international, were shaped by the air plane’s potential to change the relationship between the centre and the periphery. Inevitably, a combined postal and passenger route would depend on large governmental subsidies, particularly in Northern Norway, where distances were large and population density low. The commission proposed that the subsidies could be classed as a “special allocation” in order to “level out differences” between regions in regard to postal services⁵. The commission’s vision for aviation was in other words motivated by the desire to compensate

⁴ Indstilling fra Lufttrafikkomisjonen 1919, 21 October 1921, p 19. The National Archives of Norway, RAFA 1215, 5. kontor, sakpakker, 4540.

⁵ Ibid, p 72.

and reduce, even smooth away, regional differences, and the airplane was to act as a nation-building agent of integration. Realities proved to be more complex, however.

After a lull of several years, air service is discussed

When the commission presented its report towards the end of the year 1920, the optimism that had been felt on behalf of civil aviation was about to give way to pessimism. The country had been hit by an economic downturn and *Det norske luftfartrederi* had just decided to close down after a brief period of operating a short test route between Bergen and Stavanger with disastrous financial results. The visions of the airplane as a means of transport in other words failed to win the day – for the time being. To the contrary, in the Norwegian Storting – the Parliament – civil aviation became a byword for wasteful state administration in a time of financial straits. In addition, many politicians doubted that contemporary aviation technology was appropriate for Norway, given its topography and difficult climate. In comparison with other European countries, integration of civil aviation in Norway proved slow in the 1920s.

The small Norwegian airlines were hampered by the lack of capital and civilian airports, and none succeeded in setting up regular air services. The first state grant for construction of a civilian seaplane port for the nation's capital did not come until 1926. The following year, Lufthansa started a seaplane service connecting Oslo, Gothenburg, Copenhagen and Stettin with an onward connection on to Berlin. This route linked the Norwegian capital to the emerging European air route network in the summer months.

However, some progress was made in Norwegian aviation in the 1920s. Civil and military airmen carried out first flights and attempted new distances, thus “opening up” new parts of Norwegian air space. Gradually, the airplane became a feature in the northern-most regions as well. In addition, Norwegian

pilots gained renown in the field of polar aviation. Ever since the failure of the Swede Salomon August Andrée to fly from Spitsbergen to the North Pole by air balloon in 1897, there had been schemes to and even several attempts at using aviation technology in order to map out the Polar areas. By the 1920s the technological development had progressed sufficiently to make these attempts practically feasible.

The most prominent of the Norwegian polar aviators was naval officer Hjalmar Riiser-Larsen, who played a key role in Roald Amundsen's two highly publicised attempts to reach the North Pole by airplane (Dornier Wal) and airship ("Norge"; constructed by Umberto Nobile) respectively. Aviation technology was used in the exploration and mapping of land in the polar regions, and became a tool in what has been labeled Norwegian polar sea imperialism. This was characterised by the nationalist desire to acquire new land for the newly independent state.⁶ Norway made huge territorial claims in Antarctica on the basis of Riiser-Larsen's flights.

In the early 1930s, Norwegian interest in aviation resurged. The lack of Norwegian airlines and services came increasingly to be viewed as a problem, and a manifestation of Norwegian backwardness and lack of development. Newspapers frequently commented on this. In addition, it was evident that international aviation was progressing by leaps and bounds, in part due to the appearance of more economical and dependable planes. The possibility that a cross-Atlantic service might include a stop in Norway in particular awakened interest, and airport development plans were discussed in the cities of Oslo, Kristiansand, Stavanger and Bergen.

Several companies worked to set up air services. Among these, the shipping company *Fred. Olsen* stood out by virtue of possessing investment capital. In the summer of 1933 *Fred. Olsen* appointed Riiser-Larsen director of a

⁶ Drivenes, E. A. and Jølle H. D. (ed) (2006): *Into the ice: the history of Norway and the polar regions*. Oslo: Gyldendal.

new airline, *Det Norske Luftfartsselskap*, known as DNL. The following year five other shipping companies joined the company. DNL applied for a license and financial subsidies for the Oslo-Kristiansand-Amsterdam service, which was to be flown in collaboration with KLM, and Kristiansand-Stavanger-Bergen-Ålesund to start with. Business considerations underlay the company's schedules, which were based on land planes. However, DNL's plans ran counter to the understanding that seaplanes were most appropriate for Norway, and the idea that air routes should improve communications with Northern Norway. Great importance had been attached to this idea as late as in December 1931, when a new government aviation Commission submitted its recommendations⁷.

Riiser-Larsen travelled across the country campaigning for air routes and the need for airports. He asserted that the air route would bring the country closer to the centre of Europe, resulting in huge gains for the business sector, and emphasised what he described as Norway's increasingly peripheral position. His rhetorical approach was to ask what would happen to Norway's position in the continued absence of air routes. In his talks, Riiser-Larsen exhibited a manipulated sketch of the map of Europe, positioning cities according to their travelling distance from the centre of Europe.⁸ Based on this he claimed that "*Norway has become the largest country in the world*" and "*All countries have air routes – not just civilised countries, but semi-civilised ones too. Compared to our neighbouring countries, Norway has been pushed into the Arctic sea.*"⁹ Riiser-Larsen's rhetoric reflected Norway's position as a small state on the outskirts of Europe, and he appealed to and fomented the fear of Norway ending up behind its European counterparts in terms of civil aviation.

⁷ Innstilling fra *Lufttrafikkommisjonen 1930*, 22 Décembre 1931, RAFA 1215, 5. kontor, sakpakker, 4541.

⁸ It should be noted that in his calculations Riiser-Larsen elegantly disregarded the summer months, in which Lufthansa operated a service to Oslo.

⁹ *Dagbladet*, Oslo, 12 January 1934, "Norge er blit det største land i verden!"

Seaplane versus land planes

DNL's plans were more popular in the cities in question than with the liberal minority government in power at the time. The government rejected the plans on the grounds of costs. However, when the Storting in the spring of 1934 considered extraordinary measures to counteract the impact of the depression, the Norwegian Labour Party proposed construction of the airports as an employment measure. This proved popular with the majority, which passed a resolution that the matter should be looked into. This saw the beginning of a political polemic as to whether to build a string of airports along the southern Norwegian coast (to Trondheim), or whether all domestic air services should be based on seaplanes.

The two alternatives' supporters differed in their understanding of how aviation technology should be transferred and adapted. In particular, they disagreed on to which extent the Norwegian geography with its particular topography should play a role in the choice of technology and design of air routes. DNL and adherents of the land-based airplane observed that the technology was more forward-looking, more economical once operational and a prerequisite for the international routes. They pointed out that the rest of Europe had already chosen the land-based plane, and that Norway needed to follow suit in order to avoid being left behind. DNL wished to transfer technology and knowledge to Norway without making any major changes. The company gave priority to study tours and talks with foreign players rather than practical trials¹⁰.

The primary and most determined supporter of the seaplane was Prime Minister Mowinckel (the Liberal Party). He argued that Norway had to opt for the seaplane for domestic routes. The reason was the country's long coastline. A strong argument in favour of the seaplane were the lower investment costs regarding airports. Seaplanes were a more flexible alternative, allowing change

¹⁰ See e. g. DNLs first annual report; "Beretning om selskapets drift pr. 31.12.1935". SAS Museet Gardermoen, DNL-arkiv, Styre-, representantskaps- og generalforsamlingsprotokoller 1933-1946.

of air routes as required, permitting landing on sea in the event of engine failure or poor weather, while land-based air routes would – for safety reasons – have to be operated by multi-engine planes. The supporters of the seaplane plan believed that the Norwegian air route system needed to be developed gradually on the basis of experience gathered through trial routes. This would facilitate optimal adaptation to the country's geography and transport requirements. The seaplane alternative in other words entailed that air routes and aviation infrastructure would be shaped by the underlying landscape to a greater degree, indicating a more specifically Norwegian domestication of the plane¹¹.

Viggo Widerøe, who had established a small airline, the *Widerøe Flyveselskap*, at the beginning of 1934, became an important partner for Prime Minister Mowinckel in his campaign to develop a seaplane-based alternative. In the spring of 1934 the company was given a license to set up a three and a half-month trial route between Oslo and Haugesund. The combined postal and passenger route was trafficked by small seaplanes (Waco Cabin), with the barest minimum of safety services and good results, as well as considerable publicity. Based on the experiences from the summer's trial route, in October the liberal government proposed setting up a seaplane route along the coast from Oslo in the South to Tromsø in the North.

The dispute regarding the structure of the future aviation system was resolved in the spring of 1935, when the Storting adopted a national plan for the construction of seven airports in Southern Norway and granted funds for a seaplane route that was to carry both mail and passengers between Oslo and Tromsø. Simultaneously, the new Labour government gave DNL a ten-year license for the coastal route to Tromsø as well as the Amsterdam route,. The planned airports proved significantly more expensive than originally estimated, and only three airports were taken into use before the war: Stavanger/Sola

¹¹ See the governments bill before the Storting and the parliamentary debate: St. prp. nr. 1 1935: "Om en landsplan for flyvplasser og flyvehavner og forslag om 1ste utbygging av plasser i tilknytning til de ruter som først bør igangsettes" and St. forh. 1935, 8-11 April, p. 631-718.

(1937), Oslo/Fornebu (1939) and Kristiansand/Kjevik (1939). The planned route to Amsterdam was not opened until 1939. In contrast with the company's initial plans, DNL's activities in the first years were dominated by domestic seaplane flights.

Albeit it proved of limited duration, DNL set up its first air services as early as the summer of 1935. The Oslo to Bergen service, which also serviced a number of coastal towns, was operated with a Junkers Ju 52 from June to September.¹² The company also operated a Bergen-Tromsø service - a distance of approximately 1300 km, including no less than seven stopovers - with a Junkers W 34 in July.¹³ However, the plane proved too small for demand. The following year a Ju 52 replaced the Junkers W 34. In addition, two additional postal routes were established: one in the North, linking Tromsø and Kirkenes (near the Russian border) and one between Oslo and Gothenburg, connecting Norway to the Northern-European system of nightly postal routes.

The services were operated by DNL in collaboration with Widerøe airline.¹⁴ Towards World War II, the services were extended by several months of the year. However, DNL and Bernt Balchen, who played a key role in the route's operation, experienced some setbacks. In 1936 one of the company's planes crashed. All seven aboard died. Flights in the North were cut down the following year while air navigation services were improved through the construction of radio stations.

Imagining the route's impact on the national territory

I will now look more closely at the presentation and reception of this coastal service, emphasising the connection between the service itself and the

¹² In the first year a Ju 52 including crew was hired from Lufthansa in order to service the Oslo-Bergen-Oslo route six days per week. DNL later purchased and operated three machines of this type.

¹³ The Bergen-Tromsø route was only serviced in one direction per day. From the 1938 season this route was supplemented by the postal route Trondheim-Tromsø, which flew in the opposite direction, so that post could be delivered by air to Northern Norway six days per week.

¹⁴ DNL held the majority of the shares in Widerøe from 1936 to 1939.

territory that was overflowed. Northern Norway was the part of the country that was the furthest removed from the capital, and the region that historically had the fewest links with the rest of the country.¹⁵ Northern Norway was regarded with some ambivalence. It was seen both as a region of opportunities and an area beset with developmental difficulties. While being viewed as pure, picturesque and exotic, and with a hospitable population and unexploited resources, Northern Norway was also seen as underdeveloped, poverty-stricken and backward. How did the region's status shape the public's response to the service? How did politicians and journalists envisage that the service would change the region and its place in the general public's perception? In Northern Norway in particular, the flights were met with a sense of expectation and enthusiasm. Numerous mayors pointed out in interviews that with the air services, postal service would become more efficient, and that the route would approximate Northern Norway to the remainder of the country. The mayor of Tromsø exemplified this by reporting that normal waiting time for the reply to a letter sent to Bergen was eight days. With the new flight route this was cut to two days.¹⁶ Business people were also expected to use and benefit from the route, and there was great faith in the route's potential to attract tourists. DNL marketed the service internationally as "the midnight sun airway" and thus drew on well-established clichés from the tourist industry.¹⁷

A number of editorials and letters to editors observed that the service heralded a new era of communications and that it represented a milestone for traffic in the region. Many newspaper articles compared the opening of the service with the start of the coastal express in 1893 – a shipping service along the Norwegian coast that ran day and night throughout the entire year, and which revolutionised transport and communication in Northern Norway. In

¹⁵ Northern Norway consisted of three counties: Nordland, Troms and Finnmark in the very north.

¹⁶ *Aftenposten*, Oslo, 19 June 1936,

¹⁷ The French-American anthropologist Paul Du Chaillu, who was an important promoter of Northern Scandinavia as an exotic travel destination, in 1881 entitled his two-volume work *The Land of the Midnight Sun*.

many ways the coastal air service was interpreted and viewed in the light of this ship route. When writing on the inauguration of the route in 1936, journalists dwelled on the fact that the air plane had caught up with and overflowed no less than four coastal express steamers heading north to Tromsø, overtaking the last one in the port of Tromsø itself. This underlined the speed and efficiency of this new means of communication. Some called the air route the “rapid coastal steamer”, and it was considered a more efficient supplement to the ship route. This was a form of cultural appropriation in which the new technology was accommodated within existing life and conceptual worlds, and thus acquired meaning.¹⁸

Underlining comparisons with the coastal steamer, in the beginning the sea planes used the shipping lanes’ facilities. The planes used existing coastal radio stations and radio beacons for communication and navigation. Prior to opening the service in 1936 the pilots had sailed with the coastal steamers for about a month in order to acquaint themselves with the route. The shipping lane therefore helped shape the airway, both conceptually and practically.

In one of the regional newspaper the opening of the service in 1936 was commented on as follows:

“On Sunday the air service for Northern Norway was opened, initiating a new era in Northern-Norwegian communication. All at once, all of Norway has been compressed into a single traffic region that can be traversed in a few hours. It might – paradoxically – be said that Norway has been united from the air. “Sea eagle” and “the Tern” [the name of the two planes used] will in time erase the dreary words “out of the way” when linked with Northern Norway from our vocabulary.” The means of communication of this new time has torn distances to shreds ... It is easy to perceive the significance of this commercially and in

¹⁸ On the concept of cultural appropriation, please see: Hård, Mikael and Jamison, Andrew (2005) *Hubris and Hybrids. A Cultural History of Technology and Science*. New York: Routledge.

terms of traffic. We also believe that this will play a large social and cultural role."¹⁹

This excerpt illustrates – in short – many of the reflections that characterised the route's reception in the newspapers. In the quote, the air route is attributed the ability to transform society and Northern Norway's position in the national community by virtue of the plane's speed, which enabled it to "shrink distances." Distance was measured in time, and there was a consensus that the air service brought Northern Norway many days closer to the capital and Southern Norway. This perception is typical of both Northern and Southern Norwegian editorials.

It is worth noting that in this view the centre – the capital – was immovable, while the periphery – Northern Norway – was shifted and moved towards the centre by the air service. In this sense the relationship between the centre and the periphery was confirmed. Furthermore, the entire region was perceived as being shifted, not merely the ports of call. A consideration closely connected with the shortening of distances, was the vision that the air services connected the nation and helped integrate its constituent parts. Several commentators observed that the air route would help Norwegians feel more as "a single people", thus re-enforcing national identity. DNL consciously evoked associations with national identity, among other things in its advertisements²⁰.

The concept of the speed of air travel "shrinking distances" was based on established modes of interpretation.²¹ The impact of transport and communication technology on the relationship between time and space has played a key role both in contemporary and current understanding of modernisation processes.²² While the plane's "shrinking of distances" was a

¹⁹ Vesterålens avis, Stokmarknes, 9 June 1936, "På stålvinger til Nord-Norge"

²⁰ See e. g. DNLs advertisement from 1938 with the slogan: "Luftveien binder landet sammen" (Air routes connect the nation). From the collection of the National Norwegian Aviation Museum.

²¹ See e.g. Schiwelbusch, Wolfgang: (1986) *The Railway Journey. The Industrialization of Time and Space in the 19th Century*. Los Angeles: University of California Press. and Kern, Stephen (2003) *The Culture of Time & Space 1880-1918*. Cambridge: Harvard University Press.

²² For a review and critique of the dominant linear narrative of speed and the modern: Simonsen, Dorthe Gert:

“general phenomenon”, the idea entered into specific, local and global contexts. In the public reception of the coastal route this shrinking was seen in the context of national integration and the axis of centre-periphery. This concept echoes the rhetorical devices used by Riiser-Larsen in his lecture series 1933-34, in which he underscored the idea of Norway’s peripheral position in relation to Europe. In both cases we see an idea of the introduction of air routes approaching the periphery to the centre, rather than leading to a balanced compression of space.

Most commentators regarded the savings in time made possible and represented by the air services as a manifestation of progress and development. Distance measured in time came to be considered an objective and a measurement of development and modernity. In this view the air service had a “modernising” and “civilising” impact on the areas it serviced. In the newspaper article cited above, we meet these ideas in the statement on flight routes putting an end to expressions such as “out of the way” being used about Northern Norway.

Similar thoughts on how the air routes would help change the region’s status are also evident in other articles, including this one from a Bergen newspaper:

*“What has arrived is more than a flight machine. It is a new unit of time. The enormous distances between Northern Norway and the remainder of the country have been shrunk to less than a day. Those who have lived north of the Arctic Circle for generations are best able comprehend the full significance of this. Until today, living north of the Arctic Circle has implied living north of civilization.”*²³

These expectations of the route’s “modernising impact” form the backdrop to the cities’, towns’ and regions’ lobbying campaigns to be included in the route. The design of the coastal route – i.e. the question of which places were to be

“Accelerating modernity. Time-space compression in the wake of the aeroplane.” in *The Journal of Transport History*, Vol 26, no. 2, 2005.

²³ Dagen, Bergen 9 June 1936, “The Midnight Sun Airway”.

serviced – made emotions run high, both in the local papers and the Storting. The route was associated with progress and modernity, and becoming one of the ports of the call carried with it prestige and status. Above all, this was the case for Northern Norway, where interest for the coastal route was the greatest.

In order to increase popular awareness of the services, the airline handed out free tickets to the journalists in the start-up phase. What were their perspectives on the air service and the overflowed territory? The articles included reflections on the accelerating speed of the new technology, and how the relationship between distance and time was changed; there were thoughts on historical development, and progress. Narrative techniques otherwise known from travelling literature were used²⁴.

However, the nature of the airplane, the fact that it used air space, brought in new elements and provided new perspectives. Many writers commented on the novelty of observing familiar landscapes and places from above and contrasted the view from the airplane with the ship route. Writers admired the view afforded from the air, and one journalist described the fjord landscape below as a “marvelous plastic map”. The journalists dwelled on the aesthetic qualities of the air services, highlighting the country’s potential as a tourist destination. Descriptions of the plane trips usually included a portrayal of well-known landmarks, in particular mountain formations. The press reports can be seen as a contribution to the creation of “imagined communities,” in which the air service and its description tied cities, regions and landscapes together. Nature, and the mountains especially, were essential to the construction of both national and regional identities, and the emphasis on this in many of the articles must be viewed in this context²⁵.

The view from the plane formed the basis for thoughts on the different landscapes and regions being overflowed, and of the national community they

²⁴ See e. g.: *Arbeider-Avisen*, Oslo 13 June, “I Petter Dass kjøl-luft”.

²⁵ See e. g.: *Adresseavisen*, Trondheim 30 June, “Ei døde hefte – Med Havørns etterfølger til eventyrlandet i nord” and *Dagen*, Bergen 9 June 1936, “The Midnight Sun Airway”.

were part of. The new perspective especially provoked reflections on local living conditions, and how people were able to sustain themselves from the barren land along the narrow coastal strip. Although the articles particularly highlighted the ways in which the air service served to integrate the nation, they also located Norway in an international context. The foreign tourists travelling by air in Norway and the press's coverage of the service as an attractive tourist destination²⁶ served to remind the readers that the service was part of the emerging European air service network, as well as the tourist industry. The coastal steamer had helped create the vision of Northern Norway as an exotic travel destination since the late 19th century; naturally, the setting up of the air service encouraged this perception.

Conclusion

So far we have looked at ideas that assumed that the air services would help transform the overflowed territory, modernise it and draw the peripheries closer to the centre, thus acting as an agent of national integration. These conceptions were largely based on future expectations of development. Prior to World War II the air services did more to shape the national and popular imagination than to actually transform society through physically moving passengers and post. The services only operated for parts of the year, and passenger numbers were modest. But the very existence of the air services promoted the sense of being part of a technology-based community. The newspapers' discourse on aviation and the coastal route therefore played a key role in this phase of the integration of the airplane.

In this review of the advent of civil aviation I have tried to demonstrate that even a global technology, such as aviation, was accommodated to local conditions and must be understood contextually. What characterised Norwegian

²⁶ See e. g.: Tromsø Stiftstidende, Tromsø 13 July 1935, "Muligheter som åpnes av flyveruten" and Morgenavisen, Bergen 8 June 1936, "Den første ruteflyging Bergen-Tromsø forløp meget vellykket".

aviation in the European context was the long coastal, seaplane-based route, and the emphasis on the plane as a vehicle for national integration, which it was hoped would improve communication to the nation's peripheral regions.

Some of the visions for aviation which were initially formulated following World War I, and which shaped the coastal route, continue to determine contemporary perspectives on aviation, particularly the understanding of the role of aviation in relation to Norwegian society. In addition to ordinary airports, the Norwegian network of airports includes a comprehensive network of STOL-airports. This is the case especially in Northern Norway. Most of these routes are run by Widerøe and are subsidised with a view to promoting more remote regions of Norway.

This article has concentrated on domestic aviation. DNL also had international ambitions, and when war broke out three Scandinavian airlines – Swedish ABA, Danish DDL and Norwegian DNL were involved in negotiations to set up a joint cross-Atlantic route in collaboration with Pan Am. There was a vision to link this via air routes to the Soviet Union and Moscow, giving Scandinavia a pivotal position in the potentially important communication route between two populous states. These negotiations were subsequently continued, and resulted in the formation of SAS after the war. The Scandinavian company stood out in a period in which international aviation was dominated by national airlines that were also flag-carriers.