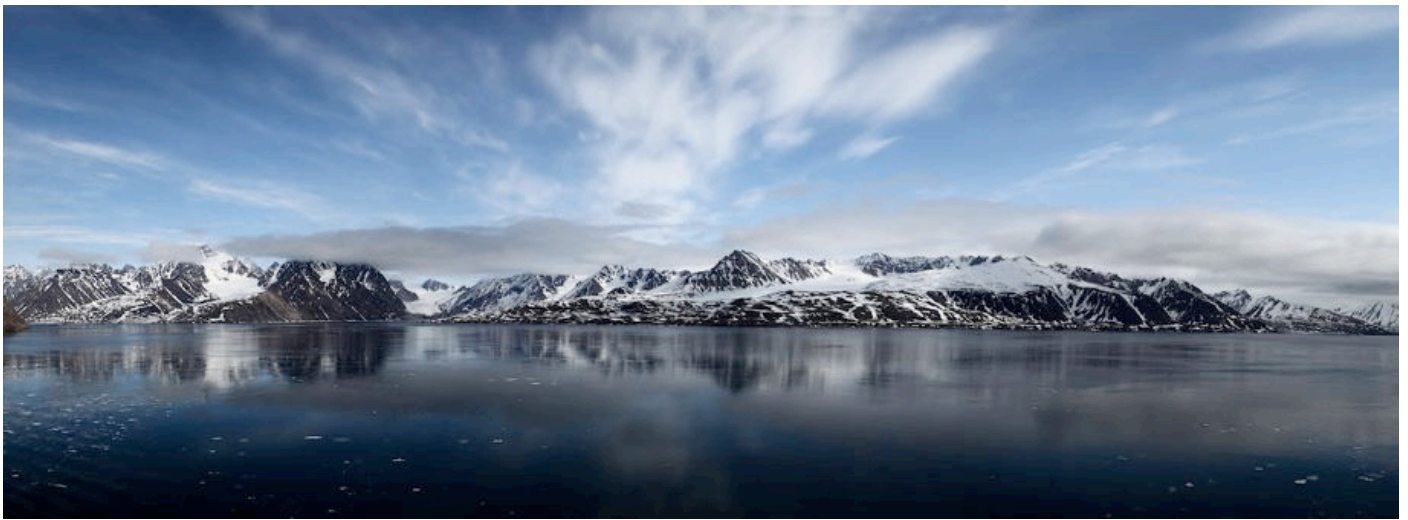




# Svalbard and Pyramiden

- the story of an Arctic archipelago



Half-way between mainland Norway and the North Pole, in the freezing waters of the Arctic, lies the archipelago of Svalbard. A collection of islands of immeasurable beauty, the mountain ranges of Svalbard rise up from the sea to reveal a spectacular arctic landscape, virtually unchanged since the last Ice Age of thousands of years ago. In summers, polar bears wander its shores under the midnight sun, whilst in the endless frozen winter nights northern lights perform on a boundless starry sky. Home to vast expanses of tundra and ice, amidst mighty glaciers and magnificent fjords, the islands of Svalbard are an awe-inspiring sight to all visitors.

## THE HISTORY OF SVALBARD

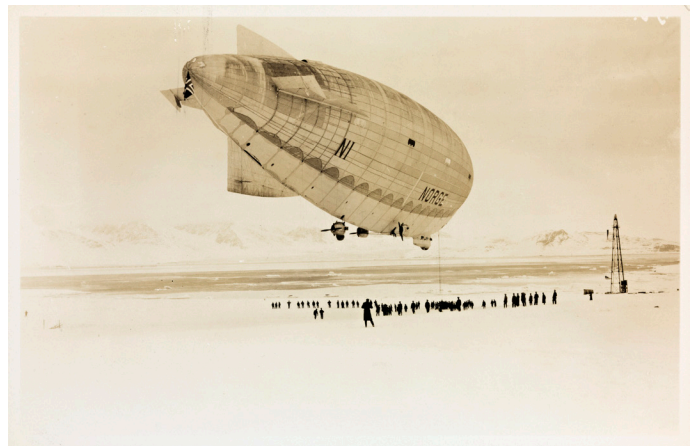
Svalbard was discovered by the Dutch explorer Willem Barents in 1596 and has ever since been a fountainhead of lore about hunters, trappers, mining communities and amazing expeditions. The islands have never been a place where people settle down for life, where family traditions are passed down from one generation to the next. In fact, to this date, no-one has spent their entire lifetime

on Svalbard. People have come and gone, and Svalbard's history is thus starkly set apart from that of other places.

Soon after its discovery, and throughout the seventeenth and eighteenth centuries, Svalbard became a main site for international whaling. At its peak, over 300 ships of predominantly Dutch, British and German origin were operating in its waters, hunting the abundant whales for its precious blubber and baleen. Even to this day, tales of their exploits can be traced in what's left of their many whaling stations that dot the shores, with their remains of houses, boiling stations and bones of both whale and walrus, not to mention the graves of the many who were never to make it back.

As whaling started to decline, hunting gradually took over. The first wave of hunters were Russian Pomors from the White Sea Area. Between 1700 - 1850 they would defy the islands' long harsh winters for the promise they held as hunting grounds. Primarily targeting the walrus for its tusks, blubber and hide, they would sustain themselves on the local populations of reindeer, seal and fowl. The thick and attractive fur of the polar bear and that of the

fox were similarly attractive incentives to survive the dark, freezing winters. By the time the Russian hunters were gradually replaced by Norwegians, the islands were home to more than 70 hunting stations, several of them operating all year round. By the turn of the century a few years later, the hunters covered large areas and used a whole network of sheds and cabins. The notorious hunter Henry Rudi is recorded to have killed as many as 759 bears over the course of his many years there, with a highest annual record of 115 kills. After 100 years of intensive exploitation, polar bear hunting was finally banned on Svalbard in 1973, and its population has recovered significantly over the recent decades.



The aims of the expeditions were often complex. Though the nominal goal tended to be scientific, expedition leaders, participants and sponsors were often motivated by considerations such as national or personal prestige. The Arctic seemed to beckon to people of heroic mettle, goading them into feats of remarkable stamina, actions that became, as such, national symbols and that brought personal glory to the performer when he returned, be he dead or alive. For many tourists visiting Svalbard today, the sense of discovery in their pursuit of adventure is still a large part of the islands' attraction.



Meanwhile, from 1859 and onwards, research and expeditions were to become increasingly important. Ever since the discovery of Svalbard in 1596, visitors had informally been charting landscape, waters, sailing routes and resources. As of 1850, a series of organised expeditions systematically collected scientific data from this outer edge of the known world. Highly valued by academic circles in Europe, the results would shed new light on global issues such as ocean currents, geologic history, the exact shape of our planet, arctic flora and fauna, northern lights, climate, glaciers and moulding of the terrain. During the first international polar year 1882-83, Swedish researchers spent the winter at Kapp Thorsden in Isfjord, and in 1899 -1901, the earth's exact shape was determined on the basis of the data they collected. To this day, Svalbard remains an important centre for international research and environmental monitoring.

Similarly, the archipelago has long been a favourite point of departure for expeditions aiming to reach the North Pole. During 1896-1928, no fewer than nine expeditions set off from Svalbard in the race to the polar set point. Several pioneers, among them Salomon Andrée, Roald Amundsen, and the Italian Umberto Nobile would try but ultimately fail to reach it by air balloon.

The stream of tourists, geological mapping and Polar expeditions at the end of the 19th century increased the awareness about Svalbard. This led to a hope of economic gain from the archipelago's mineral resources and to a Klondike-like atmosphere. At the onset of the twentieth century, Svalbard was still a no-man's-land, and the first years were chaotic. Of the first people who sought their fortune in the area, some were considered specialists, whilst others were mere adventurers, but only a very few had a little knowledge about minerals. Nevertheless, some of the claims were made in areas rich in coal deposits, especially those found on the mountainsides of the west coast. These were the operations that would survive in the long-term and established many of the more permanent settlements that we know today. At the turn of the century the Americans settled in Longyear City, the Swedes in Sveagruva and Pyramiden, the Dutch build their operations in Barentsburg and the Russians initially in Grumant. Later, the Norwegian company Store Norske Spitsbergen Kulkompani took over from the Americans and the Swedes, while Barentsburg and Pyramiden was sold to the Russians. Over the next decades, Store Norske's operation in Longyearbyen and Trust Arktikugol's operation in Barentsburg and Pyramiden became the three most stable workplaces in Svalbard, though only two of them remain in operation today.

As a consequence of the mounting activity - and conflicts of interests - that characterised the islands



in the early 20th century, The Svalbard Treaty was signed in 1920, recognizing Norwegian sovereignty over Svalbard. Since entering into effect in 1925, it grants nationals and companies from all forty signatory countries equal liberty of access and entry, and freedom to engage in lawful commercial activities without discrimination, a situation reflecting the archipelago's long history of foreign settlements and activities.

## PYRAMIDEN



Source: LPO Architects

Pyramiden («The Pyramid»), named for the pyramid-shaped mountain adjacent to the town, was founded by a Swedish state-owned company in 1910 and bought by Soviet-Russia in 1926. The Russian state-owned mining company Trust Arktikugol was founded in 1931 and in 1939 started developing Pyramiden for future coal-mining operations. However, with the outbreak of the war their efforts were interrupted and only after the war had ended did the planning and construction of Pyramiden, alongside Grumant and Barentsburg, again gain pace. After a period of intense construction in the years that followed, commercial coal production finally came online in 1956.

Lying on a flat piece of land overlooking the Billefjord, the Russian mining-town of Pyramiden was planned as a series of detached housing and administration buildings along a straight and broad main street. The wooden houses built right after the war reflect traditional Russian wooden craftsmanship, whereas the brick-clad concrete buildings from the modernisation period in the 1970s and 80s are more reminiscent of the Soviet settlements elsewhere in the Arctic region. The workers lived in apartment blocks and ate their meals in the communal mess hall. The plan and structure reflects the situation where laborers would come and stay for shorter periods of up to two-to-three years.

With time, Pyramiden came to be a self-sustained society throughout most parts of the year, with all the necessary amenities and functions provided for. At its peak, Pyramiden was home to several hundred workers and their families, altogether some 1000 inhabitants. The coal-fired power station was the beating heart of the community, providing electricity and hot water, and heating the large Olympics-seized saltwater pool as well as the animal pens on the farm. Here the large animal stock of cows, pigs and hens provided the means for a staple diet, as well as an abundant source of natural fertilizers for cultivating a whole range of vegetables and flowers grown in the nearby greenhouse. The brick-factory used the mineral ash from the power plant and several of the buildings from the latter stages of development were built using locally produced bricks. There was a great emphasis on recreational as well as cultural activities, and in the latter part of the 1980s both Barentsburg and Pyramiden were awarded their own indoor sport facilities, including the afore-mentioned heated swimming pool.

In the years that followed, however, a series of events would lead to the eventual closure of Pyramiden in 1998. In the early 1990s, coal production started to decline along with financial support from mainland Russia, following the dissolution of the Soviet Union. In 1996 a Russian aircraft accident on Svalbard claimed the lives of 141 Russian and Ukrainian passengers,



Source: LPO Architects

all belonging to the communities of Barentsburg and Pyramiden. When a mining explosion claimed the lives of an additional 23 coal mine workers in Barentsburg the following year, tensions were rising and Trust Arktikugol eventually decided to shut down its operations in Pyramiden. In the space of a few months, all its citizens were evacuated over the course of the summer. Left behind as if frozen in time was Pyramiden, a deserted town full of signs of a life, that once had been.

## SVALBARD IN THE 21st CENTURY



A meaningful account of Svalbard and Pyramiden would not be complete without considering the broader set of circumstances that govern many of the islands' current developments. This is perhaps best illustrated from the point of view of the current effects of climate change and the ways in which they impact on the islands' future predicament.

The High North, including Svalbard, is among the areas in the world seeing the biggest impact of climate change. At the same time, the areas are generally characterised by increased activity both on land and on sea, predominantly from shipping, fishing, tourism, education and research. Overall, a number of specific, but interlinked, conditions offer up challenges as well as new opportunities, and environmental protection and monitoring must go hand-in-hand with responsible resource management, commercial development and research activities.

The Arctic has been singled out as one of the regions where it is assumed that the impacts of climate change on both species and ecosystems will be first to occur and have its greatest impact. Temperatures are expected to rise twice as fast as the global mean, and the observable changes in Svalbard are probably only the beginning of a rapid transformation towards a warmer Arctic and new

climatic conditions. Retreating sea-ice is threatening the natural habitats of many of its species, perhaps best exemplified by-, although by no means limited to the polar bear. Similarly, the melting of the permafrost and accelerated coastal erosion pose a threat to the foundations of the islands' collection of buildings and infrastructure, as well as cultural heritage sites - Pyramiden included.

The significance of climate change in the Arctic has led to the recent development of Svalbard as an international hub for climate research. In 1993, the University Centre in Svalbard (UNIS) was established in Longyearbyen as the world's northernmost institution for higher education and research. The Svalbard Global Seed Vault opened in 2008, with a capacity to store some 4.5 million seed samples. Other institutions include the Norwegian Polar Institute and the Svalbard Satellite Station, in addition to the many research institutions from more than 20 countries that are present on the island on a more or less permanent basis. It is believed that a better understanding of climate processes in the Arctic will be crucial for efforts on a global scale to adapt to the climate changes that now appear to be unavoidable. This underscores the importance of making full use of the opportunities Svalbard has to offer as a platform for future research and environmental monitoring.

A warmer climate and retreating sea-ice will make many areas more readily accessible to on- and offshore commercial activities. For Svalbard and its coastal waters this relates especially to different forms of tourism, fishing, international shipping, as well as petroleum-related activities. For Svalbard, despite government backing for its current coal mining operations, the prospects of a future sustainable livelihood will likely depend on



its ability to diversify its means of revenue. The growing potential of eco-tourism provides one such possible strategy, merging commercial interests with environmental awareness and protection. The unique landscape, biology and cultural heritage sites are vital features of the total experience of Svalbard





and are safeguard by a number of established nature reserves that cover some 65 per cent of its land area and about 86 per cent of its territorial waters. Facilitated access to these areas would benefit the tourism trade, but will inevitably depend on a careful evaluation of its possible environmental impact.

As for the offshore activities around Svalbard, these relate primarily to those of shipping-, fishing- and research vessels, along with cruise liners. Recent trends indicate that offshore traffic to Arctic areas will increase both in volume and extent. Trawling for cod, for example, is moving ever northward and now takes place as far north as the Isfjord, at the level of Longyearbyen. In the longer term, an increasingly ice-free Arctic Ocean may open completely new and shorter routes to international shipping between western Europe and Asia, and would drastically reduce their shipping costs. The shortest of these routes passes directly west of Svalbard. On the other hand, the seas north of Greenland and Svalbard are likely to be amongst the most challenging and risky for shipping operations. Add to this the prospect of increased interest in Arctic petroleum exploration and a clear case can be made for considerable future challenges, not least with regard to search-and-rescue- and pollution clean-up operations. In light of these current developments, it will have to be expected that Svalbard will become increasingly important as a base for just such operations in the future.



Source: Northern Adventures