Point 9 – Nicolaus Copernicus Polar Station *78° 40' 33" N 11° 49' 36" E*

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The first glaciological expedition to Oscar II Land was organised in 1938 on the initiative of Professor Antoni Bolesław Dobrowolski, the chairman of the Polar Club of the Exploration Expeditions Association. Ludwik Sawicki from the Geological Institute in Warsaw chose the area to be explored. Stefan Bernardzikiewicz, who took part in the 1934 expedition to Torell Land, became the person in charge of the whole expedition. Bronisław Halicki, DSc from the Stefan Batory University in Vilnus and Mieczysław Klimaszewski, DSc from the Jagiellonian University were among other participant of that expedition. They had a big motor boat sailed by a Norwegian trapper Sverre Hansen. The investigations were carried out on the glaciers and their forefields between Eidem Bay and Engels Bay (English Bay), yet predominantly in the Kaffiøyra region (the Coffee Plain). Unfortunately quite a substantial amount of the investigation results vanished during the war. The expedition to Oscar II Land remained forgotten for many years. The first investigation results, Geomorphologic Studies in the West Part of Spitsbergen between Kongs-Fijord and Eidem-Bukta, were published by Professor Mieczysław Klimaszewski only in 1960. Detailed description of glacial phenomena, post-glacial forms and deposits provided an excellent material for conducting comparative studies. In 1975 the Geography Institutes of both Nicolas Copernicus University and the Polish Academy of Sciences together with Geography Students' Scientific Society attempted to perform these investigations. Under the supervision of Professor Jan Szupryczyński a group of 12 people set off to Spitsbergen. It consisted of two groups: geomorphological and hydrological. The hydrological group of five persons brought a wooden house in separate elements. Professor Czesław Pietrucień was responsible for its design and constructions. The house was set up at the the foot of the end moraines of the Aavatsmark Glacier, in the north part of the Kaffiøyra, at latitude 78° 40'33''N and longitude 11° 49'36''E.

The Nicolas Copernicus University Polar Station is situated beyond the borders of the protected areas (parks). It allows a greater freedom for the exploration of the neigh bourning regions. During the summer there is not any blockade phenomenon of the Forland Strait due to ice pack. The straits is not covered with ice as early as at the end of June. It is very important while planning a journey. The neighbourning Ny Alesund with an internaltional exploration centre and the airfield (two flight a week) put the polar station in a favourable light. It takes 2–3 hours to cover the distance from Ny Alesund to the station by boat. In winter it takes almost the same time by scooters.

In July and August there is regular navigation traffic though the Forland Strait from Longyearbyen to Ny Alesund (once a week). Ship unloading is easy due to the sand shores near the polar station. Deep Hornbaek Bay allows even those bigger sailing units to take shelter against heavy storms.

Nicolaus Copernicus University started to take part in polar research in 1975 using its own polar station located on north-western Spitsbergen. The position of this station was chosen because of its big scientific value. People often ask us why do we do a research on polar territories, Spitsbergen in particular. The answer is that glaciers are almost ideal "climate thermometers". It refers especially to their range changes. They became matter of research being conducted by our Institute of Geography – just because they cover almost 60% of Spitsbergen. To understand post-glacial reliet of the earth's surface

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in Poland it is very useful to observe contemporary sediments and glacier forms. In such way Spitsbergen became a natural laboratory for geographers of various specialities.

Nicolaus Copernicus University Polar Station is northenmost polish scientific institution. It is situated on northern part of the Kaffiyora, close to the Aavatsmarkbreen. This station was used by 30 expeditions and 100 people so far. Effects of these expeditions are shown in 350 publications and on topographic and thematic maps.

In 1995 we started to do a sistematic study of mass balance of Waldemarbreen, and next in 2001 Irenebreen and in 2005 Elisebreen. These studies are part of the international programms and projects (WGMS, CALM).

NCU Polar Station is suitable to whole year work. It has three independent sources of energy (fuel engine, wind power station and sun battery). Means of transport are: fibre glass, rubber motor boats and snow scooters. Radio communication is ensured by FM radiostation with its call signal LH3MB.

In 30 year existence the station was visited by about 400 people: 150 Poles, 120 Norwegians and Germans, Dutch, Russians, Americans and even Australians. All other information about our station you can find on the internet: www.stacja.arktyka.com.

Fig. 1. Nicolaus Copernicus Polar Station (photo I. Sobota)

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