

	na działce CLARION (Pacyfik)		
4	Badania pod przyszłą eksploatację złóż siarczków polimetalicznych (miedź, srebro, metale szlachetne i pierwiastki ziem rzadkich) na obszarze ryftu śródatlantyckiego.	Koszty pokrywa Program Rozpoznania Geologicznego Oceanów PProGeo	w latach 2017-2033 na poszukiwania geologiczne na dnie oceanów przeznaczy ponad 530 mln zł. (głównie na zapewnienie badań na morzu i rozwój technologii wydobywania). Zgodnie z projektem budżetu na 2020 rok, na zadania związane z realizacją programu PProGeo, wydanych miało zostać ponad 33 mln zł. W tym jedna wyprawa badawcza (60 dni) to koszt ok. 600 tys Euro (lub więcej) = 2,3 mln zł

Z analizy przedstawionych informacji opartych na wiedzy autorów i doniesieniach prasowych wynika, że nie brakuje środków na utrzymanie własnego statku badawczego. Problemem jest rozproszenie kwot przeznaczonych na realizację działań statutowych tych programów i brak spójnego działania w zakresie eksploatacji jednego, nowoczesnego, wielozadaniowego statku badawczo-transportowego zdolnego do wykonania wszystkich przytoczonych zadań.

Szacowane roczne nakłady na „wynajem” statków we wszystkich projektach łącznie to suma **między 3,4 a 4 mln \$.**

Szacowane środki na roczną eksploatację statku to suma **około ok. 4 mln \$ (około 3,5 mln Euro)**

Zatem są to już istniejące środki zagospodarowane w indywidualny dość swobodny sposób.

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THE FOUNDATION OF THE H.ARCTOWSKI STATION OF THE POLISH ACADEMY OF SCIENCES

On the basis of Resolution of the Ministry Council of December 7, 1976, the Antarctic expedition of 1976/1977 was organized by the Institute of Ecology of the Polish Academy of Sciences, the Department of Biological Sciences and

the Central Authorities of the Polish Academy of Sciences, as well as with the many -sided help in people and equipment from the Ministry of National Defence.

The purpose of the expedition was the setting up of a permanent research station of the Polish Academy of Sciences (PAN) on South Shetland Islands. The station will enable multidirectional basic research, and particularly biological research in the Antarctic region, whose resources are already being exploited by our fisheries.

By the decision of December 21, 1976, taken by prof. dr. J.Kaczmarek, the Scientific Secretary of PAN, the leadership of the expedition was assumed by the following persons:

doc. dr. hab. S. Rakusa-Suszczewski – head of the expedition, Commodore F. Wróbel – vice manager for marine affairs, doc. dr. hab. J. Jersak – vice manager for scientific affairs and mgr. W. Wiórkiewicz – vice manager for general affairs. Altogether 73 people participated in the expedition; 53 of them were highly qualified military specialists employed by the Polish Academy of Sciences.

Chartered ships of the expedition m/s Zabrze in command of captain M. Lis and m/t Dalmor in command of captain M. Krzemiński transported 2735.5 tons of load to the area of destination. The station has been built on King George Island in Admiralty Bay; south from Point Thomas, at 62°09'8 S and 58°28'3 W.

The setting up of the H. Arctowski station by joint efforts of the scientific team of PAN and the crews of both ships lasted 57 days from the moment of landing south from Point Thomas.

The station consists of the following building structure: living quarters with 20 single rooms, dining room, kitchen, bathroom and food warehouse with the total area of 340 m² hydrobiology laboratory and aquarium laboratory of, respectively 60m² and 15m²; meteorology and radio center with an area of 60m²; 378m² steel hall containing a power plant and workshop; wooden hall used as a garage with an area of 432m². Besides this a container – refrigerator and a water supply system are installed. Altogether, there are 1300m² under roof with a cubage of 5000m³. There is energetics, light and radio-telephon line more than 500m long, and a radio station of 5 KW power.

At the moment the station has at its disposal the following equipment of surface transport: passenger cars UAZ (2), truck Star 266 (1) caterpillar ATS (1), amphibian transporters (3), lift Star 660 (1), lift Poland (1), truck workshop Star 660 (2), bulldozer SM (1), truck ZiŁ (1).

The water transport for the station has been secured by fishing motor boats KM-200 (2), a row-boat (1), landing boats (3), steel pontoons and rubber pontoons (18). The station has been secured with more than 500 tons of fuel. Enough food for 400 days was left for the group of people staying for the winter-

over period. We tried to create comfortable conditions for living and work. The people are provided with clothing and recreation- educational equipment. The station has modern meteorological and hydrology equipment and equipment essential for biological research. A group of 19 people has been left at the H. Arctowski for the winter season of 1977/78. The scientific team consists of seven people: two geographers, one hydrologist, one medical doctor, one meteorologist and two biologists. The leaders of the group are: dr. hab. J. Jersak and an engineer A. Szmajda.

The station commenced its activities on February 26, 1977 after radio – broadcasting and establishing a permanent communication with Poland. On March 26, 1977 H. Arctowski was handed over under the supervision of doc. dr. hab. S. Rakusa-Suszczewski. On March 27-th m/t Dalmor left King George.

A detailed calendar of the expedition is an historical document of the actions which open a new era for the Polish research in the Antarctic. It does not contain words about the efforts, dedication and work of very many people, without the help of whom the expedition would not have been successful.

29.12.1976. End of loading of luggage on m/t Dalmor in the amount of 172.5 tons. Embarkation of 58 members of the expedition. 1.28 p.m. the ship left Gdynia port.

31.12.1976. At 8.0 a.m. m/t Dalmor entered Kiel Canal, where one of ship crew suffering from an eye injury visited an ophthalmologist. 4 p.m. m/t Dalmor left for the North Sea. The same day at 8.10 p.m. m/t Zabrze left Gdynia with a load of 2563 tons, and also with 15 members of the expedition and two employees of the Polish TV in Gdańsk.

1.01.1977. m/s Zabrze anchored at the roadstead of Copenhagen for an additional supply of food, maps and pilot of the Antarctic.

3.01 1977 m/s Zabrze left Copenhagen and took a course for the Danish Strait. The route was chosen because of the dangerous load carried on board the ship (fuel).

6.01.1977 1.0 a.m. m/t Dalmor anchored at Lisbon for a disembarkation of the crew member suffering from an injured eyes.

10.01.1977 2.43 p.m., crew meeting of m/t Dalmor and m/s Zabrze for a mutual supplement of equipment and a conference of the leaders of expedition.

14.01.1977 10 a.m., m/s Zabrze crossed the Equator

16.01.1977 2.40 p.m., m/t Dalmor crossed the Equator

18.01.1977 11.0 a.m., m/s Zabrze enters port in Rio de Janeiro. S. Kownacki, Consul General of Poland and a representative of the Polish Ocean Line was

entertained on the shipboard. A group of scientists and military men from the Instituto do Pesavisso da Marinha visited the ship.

19.01.1977 Loading of food bought in Rio for the wintering group at the Antarctic. In the afternoon the ship left Rio de Janeiro.

22.01.1977 6.35 p.m., m/t Dalmor enter the avant-port of Rio de Janeiro, four members of the PAN team received dental help.

23.01.1977 6.0 p.m., m/t Dalmor left Rio de Janeiro

24.01.1977 m/s Zabrze traverses Port Stanley

26.01.1977 10.13 a.m., m/s Zabrze crosses 60°S entering the territory included in international negotiation about the Antarctic region

27.01.1977 7.15 a.m. m/s Zabrze takes a course to Admiralty Bay at King George Island. The ship dropped an anchore in fiord Ezcurra. A group of people disembarked for the local vision of Point Thomas. On the very tip of the cape they found a small wooden hut built by Americans in November 1976. About 0.5 km SE from the cape they found fresh water in a place which appeared to be convenient for building a station. At 9.40 a.m. m/s Zabrze pulled up the anchor. I directed the ship SW towards the Livingston Island. At 4.15 p.m. we made a reconnaissance from the ship board of the South and False Bays at Livingston Island. In both I senbays no large enough place was found which would appear suitable for the building and future development of the station. Open bays are dangerous for the anchorage of ships at common in this region winds blowing from NW and SW. I sent the ship next to the Strait of Mc Farlene between the island of Livingston and Greenwich. At 7.05 p.m. we dropped an anchore vis a vis Yankee Bay at Greenwich Island. A reconnaissance of group disembarked. On the shore of the bay, in a place suitable topographically for the building of station they discovered a rookery penguins several dozen of thousand in number. This naturally excluded any building actions in this region. On a nearby rock, in the neighborhood of abundant Chilian hut we placed a plate with a Polish badge bearing an inscription in Polish which said: „To commemorate the landing of Antarctic expedition 1976/1977 of the Polish Academy of Sciences on the ships m/s Zabrze and m/t Dalmor January 1977”. At 10.0 p.m. we pulled up the anchore and came close to Half Moon Island where we saw four houses and six aerial masts of the Argentinian Station, Teniente Camara. In this situation I decided that we return to King George Island in fiord Ezcurra and build our station south-east from Point Thomas.

28.01.1977. At 5.30 a.m. m/s Zabrze anchored in fiord Ezcurra, at 8.15 we began unloading.

31.01.1977, 2.58 a.m. m/t Dalmor passed through Port Stanley.

1.02.1977 The leaders of the expedition sent telegrams to the Polish Government and the Polish Academy of Sciences informing about the start of construction works at H. Arctowski station.

2.02.1977, 6.0 p.m. m/t Dalmor entered Admiralty Bay and anchored in fiord Ezcurra. Before the arrival of m/t Dalmor the crew and the team of scientists from m/s Zabrze unloaded 1089 tons of cargo.

3.02.1977. The Polish r/v Profesor Siedlecki entered fiord Ezcurra asking for a medical help of dr.J.Halter from the PAN expedition.

4.02.1977. Leader of the expedition from r/v Profesor Siedlecki asked our doctor to remain with them for six days, since one of the members of their team suffered from a gastric ulcer and had to be transported to the Falkland Island.

9.02.1977. An international group of tourists of about 200 people from a Panamanian passenger ship Lindbar Explorer visited the area of Polish station.

10.02.1977. At 8.30 a.m. Polish trawler m/t Gemini arrived in fiord Ezcurra. One hour later the r/v Profesor Siedlecki entered fiord Ezcurra.

11.02.1977. In the heavy storm which began in the morning, at winds blowing from SW the m/s Zabrze broke loose from anchorage. To secure the ship, the captain instructed the crew to cut off two ferry boats, one of which was fully loaded. During the manoeuvres a fishing boat, „Robert” moored at the stern broke loose and sank. m/s Zabrze sailed out into the open waters of Admiralty Bay. The wind carried away to the sea also m/t Gemini. m/t Dalmor and r/v Profesor Siedlecki remained anchored in fiord Ezcurra.

13.02.1977. Continuous storm m/s Zabrze and m/t Gemini to leave the anchorage again.

14.02.1977. As a result of the rescue action initiated by the captain of m/t Dalmor we found back one of the ferries lost on the 11th of February. Of the cargo, however, we managed to regain only about four tons of cement. Lost were: water supply pipes, attachable engines, fire extinguishers, windows for a wooden hall and some small equipment.

15.02.1977 m/t Gemini trans-shipped 180 tons of fish onto m/s Zabrze.

16.02.1977 A Chilean war ship, Yealcho, entered fiord Ezcurra. The captain of the ship and two officers paid a visit at m/s Zabrze. A group of Chilean officers visited the construction works area of the station.

18.02.1977 Heavy SW winds forced m/s Zabrze to leave for the open sea. Zabrze came near Bellingshausen, the Soviet station and established a radio contact with the Soviets. We announced our visit there at some later date.

19.02.1977 A Polish trawler m/t Tazar entered in the evening fiord Ezcurra.

21.02.1977 m/t Tazar trans-shipped 350 tons of fish to m/s Zabrze. In the evening, Tazar left fiord Ezcurra.

22.02.1977. Two Chilean Navy helicopters visited Arctowski Station. At 3.0 p.m. we finished unloading the expedition's luggage from m/s Zabrze.

23.02.1977. Heavy wind forced m/s Zabrze to the open sea.

24.02.1977. I established a radio contact with the American Station – Palmer, and invited the Americans to visit our station. They were glad to receive the invitation.

26.02.1977. In the night the radio station built on land transmitted first radio message to Poland. The text given in five languages said: „This is the H. Arctowski Antarctic Station of the Polish Academy of Sciences located at 62°10'S and 58°28'W on King George Island, South Shetland Archipelago. The Arctowski Station commenced its activities today at 3.25 a.m. Greenwich time. Our call signal is 32LH30, 32LH34 at frequencies 7514 and 8054 Kh. The air temperature is 4.3°C, pressure 962 mb. cloudiness 0.8, wind speed 7 meters per second. This event in compliance with the instruction from the Scientific Secretary of PAN, initiated the activities of the Station.

27.02.1977. The leaders of the expedition sent telegraphic dispatches to the Party Authorities, the Government and the Regents of the Polish Academy of Sciences. Telegrams were sent also to institutions and people participating in the organizing of the expedition.

28.02.1977. At four p.m., on three masts in front of the main building of the station, we hoisted our national flag and the flags of ship owners of Dalmor and Polish Ocean Lines. We sang our national anthem. After the ceremony a banquet was given in the station's dining room in honor of the builders and the crew of the ship.

1.03.1977, At eight o'clock a.m. the r/v Profesor Siedlecki entered fiord Ezcurra. The crew of the ship and the scientific group from the Marine Institute of Fisheries in Gdynia (MIR) visited the station. They had nailed into a rock a plate with the Polish badge and the inscription „r/v Profesor Siedlecki” March 1. 1977”

2.03.1977 At 8.0 a.m. m/s Zabrze left the station taking course to Buenos Aires. At the same time an Argentinian war ship A-3 entered fiord Ezcurra. A Polish flag and an Argentinian flag were hoisted up. Two officers visited m/t Dalmor and then the Arctowski station. Mgr. Wiórkiewicz and first officer from m/t Dalmor revisited the Argentinian ship. The meeting was friendly. We received frequencies and hours of radio communication with the Argentine stations in the Antarctic

3.03. 1977. m/t Dalmor sailed off to visit the Russian Station Bellingshausen. Three people of the PAN group stayed behind at Bellingshausen so that they

could return to H. Arctowski on foot through the mountains in order to get acquainted with the land passage. At 10.0 p.m. m/t Dalmor returned to fiord Ezcurra.

4.03.1977. During the evening hours, an American research vessel r/v Hero entered fiord Ezcurra and anchored along the shi-side of m/t Dalmor.

5.03.1977 Captain of the American vessel, P. Ienie and Mr. Gerry Hoffman representative of the NSF accompanied by two women visited our station. The flag of both countries were hoisted up. In the evening the r/v Hero left Admiralty Bay.

8.03.1977. Arctowski station began broadcasting daily weather forecasts for Polish fishing boats.

11.03.1977 general San Martin, an ice breaker of the Argentinian War Navy arrived and anchored in fiord Ezcurra. Mr. J.A. Paradelo, chief of the Argentinian Service in the Antarctic, accompanied by six officers visited m/t Dalmor and Arctowski station. They paid honour to the flags of Poland and Argentina. At the invitation of the Argentinians, a Polish group of ten people revisited the ice breaker. The Argentinians declared many-side help and invited us to use their port Ushuja. We were given navigational maps, frequencies and hours of communication with the Antarctic stations.

12.03.1977. The ice breaker, General San Martin, left fiord Ezcurra.

14.03.1977. We ended unloading our baggage from m/t Dalmor

15.03.1977. Covering of the wooden hall's roof with sheet iron was finished.

20.03.1977 m/t Dalmor again entered Maxwell Bay in the neighborhood of Ballingshausen station. We were asked by the Russians to take their mail back with us. In the evening our ship returned to the fiord.

22.03.1977 We began sending meteorological data from H. Arctowski via Belingshausen to the Antarctic meteorological centre at the Molodzioznaja station.

26.03.1977 The building of the H. Arctowski station has been accomplished. The supervisors of the construction works handed over an official record of the works to the supervisors of the station.

27.03.1977 6.37 a.m. m/t Dalmor took up the anchor in fiord Ezcurra. At 7.45 the ship traversed the fiord in front of the H. Arctowski station and fired a farewell salute of 18 white-red rockets.

29.03.1977 6.37 a.m. m/t Dalmor crossed the latitude of 60°S at 49°32' W and took a course towards South Georgia.

1.04.1977 In the roadstead of Grytviken we began trans-shipment of fish from fishing boat to m/t Dalmor.

5.04.1977 After completing the trans-shipping operation m/t Dalmor sailed away taking a course towards Montevideo.

11.04.1977 m/t Dalmor entered port in Montevideo, from where S. Rakusa-Suszczewski and W. Wiórkiewicz took an airplane back to Poland.

13.04.1977 After taking from the port a supply of oil, water and vegetables, m/s Dalmor left Montevideo.

18.04.1977 Because of a severe case of periostitis of one of the members of the PAN team, the ship entered port in Rio de Janeiro to seek dental help. The ship left next day at 6.50 p.m.

5.05.1977 The ship was moored in Las Palmas at the Canary Islands for a supply of water and propulsion oil.

17.05.1977 at 11.50 a.m. m/t Dalmor anchored in the port of Gdynia at the Pomoranian wharf. The ship was turned over to the owners on the 19-th of April at 6 p.m.

In recognition of achievements of the organizers of expedition, the leaders of the expedition and the builders of the station were received on the 22nd of June 1977 by Mr. Edward Gierek, the First Secretary of the Polish United Workers Party.

Function and Duties of the H. Arctowski Station

First of all, the station is a place of scientific research. Both the attractive location of the station and the possibility of following a great variety of research problems, guarantee the interest of many scientific centers in Poland and their possible inclusion in the Antarctic investigations. A station located at the sea given the possibility of a full-scale oceanographic research and should supplement the lack of such a centre in Poland. The main purposes of the station are, however biological studies indispensable for the recognition of the living resources of the Antarctic and their protection. Considering the intensive fisheries in this part of the world, fishing restriction and limitations will undoubtedly be set forth, and these, judging by the so far practice will be determined with the consideration of research accomplishments of the countries interested in the exploitation of natural resources. Particularly significant is the problem of environmental protection and the protection of Antarctic fauna and flora which are already being threatened by civilization. With every year, there is an increasing number of ship and people visiting these areas. The Polish H. Arctowski station has been visited in the summer of 1977 by more than six hundred tourists, fishermen and scientists from foreign countries. It might be expected that in the future years the number of visiting people will markedly increase. The visitors have shown deep interest in our activities, our style of life, its standard and our research work. In this

situation the function of the station is particularly important both as place for development of research and for political reasons.

Uwaga: dla ewentualnego wydawcy: Oryginał tego pisany na maszynie w latach 1976/77 jest w moim domu.

Ewelina Twardoch-Raś

Instytut Sztuk Audiowizualnych UJ

Wydział Zarządzania i Komunikacji Społecznej

SIOSTRZEŃSTWO W KRĘGU POLARNYM

RECENZJA FILMU „POLARNICZKI” DAGMARY (DAGI) BOŻEK I KUBY WITKA

Filmy, opowiadające o zetknięciu się człowieka z surowymi, wymagającymi warunkami środowiskowymi cieszą się wśród (nie tylko) polskiej widowni nieustającą popularnością. Czy są to filmy górskie, które od dawna wyodrębniają się jako osobny podgatunek filmowy, opowiadające m. in. o dokonaniach himalaistów i alpinistów, katastroficzne blockbustery, czy rozliczne realizacje dokumentalno-reportażowe, w tym o tematyce ekologicznej i kryzysie klimatycznym (jak produkcje Wernera Herzoga), łączy je wszystkie refleksja nad kondycją człowieka w dobie antropocenu. Proponowana przez nie krytyczna narracja nad zakresem i konsekwencjami kapitalistycznej eksploatacji zostaje też najczęściej zrównoważona problematyką ludzkiej wytrzymałości, walki z własnymi słabościami, bohaterstwa, outsiderstwa (z ostatnich lat: „Broad Peak”, Leszek Dawid, 2022 czy „Infinite Storm”, Małgorzata Szumowska, 2022). Wszystkie te tematy doskonale wpisują się we współczesne koncepcje neoliberalnego podmiotu, eksplorowanego nieustannie przez twórców filmowo-telewizyjnych, w tym platformy streamingowe takie jak Netflix. Trudno więc byłoby w tym kontekście mówić o osobnych gatunkach filmowych, są to raczej pewne konwencje, które przejawiają się w licznych nurtach kina mainstreamowego i niszowego, rozrywkowego i zaangażowanego, kształtując różne warianty narracji człowiek kontra przyroda. Tematyka polarna jest natomiast podejmowana przez tego rodzaju kino wcale niezrędko, tworząc najczęściej tajemniczą, nieodgadnioną, romantyzowaną lub wrogą scenerię dla ludzkich poczynań („Arktyka”, Joe Penna, 2018, „Przetrawianie” Joe Carnahan, 2011 i in.). W polskim kontekście szczególne miejsce zajmuje w tym zakresie kino dokumentalno-edukacyjne poświęcone terenom polarnym, począwszy od inicjatyw Włodzimierza Puchalskiego, przez filmy takie jak „Selma. Prawdziwa przygoda z końca świata” o żegludze polskiego jachtu S/Y Selma Expedition w najtrudniejszych antarktycznych warunkach na świecie z 2020 roku i wcześniejsze od „Polarniczek” realizacje Kuby Witka – jak „Ruch lodu” z 2019 roku.