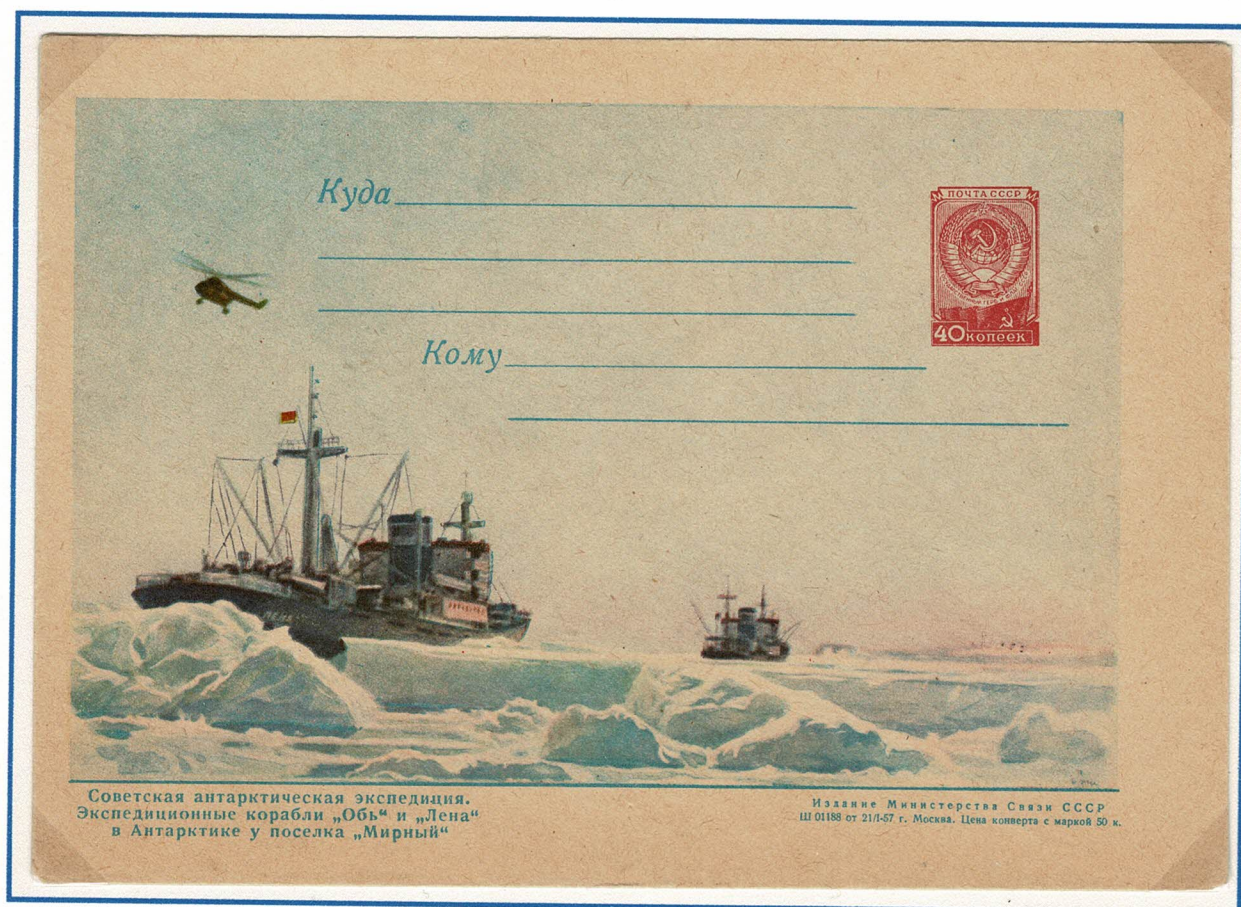


Soviet Antarctic Expeditions in International Geophysical Year

Incidents and Accidents 1956-1958

This One-Frame exhibit documents a number of incidents and accidents that have occurred during the first three Soviet Antarctic Expeditions of the IGY. Most items are unique and irreplaceable.



"Ob" and "Lena" in Antarctica at Mirnyy. 40 kop stamped envelope issued 21/1/1957



MIKHAIL M. SOMOV
Chief of the Soviet Antarctic
Complex Expedition

34, Fontanka,
Leningrad

Mikhail M Somov
Chief of Soviet Antarctic Expedition SAE-1

References:
Soviet Antarctic Expeditions 1955-1959
A V Nudelman - Moscow 1959
[Translation A R Marshall]
Aerological and Meteorological Studies
Research Ship Ob' 1955-1956 –
Leningrad 1958
Российские Исследования В Антарктике –
Volume 1 SAE 1-20 St Petersburg 1999

The Antarctic Continent is the most hostile environment on Earth. The surrounding oceans are often subject to severe storms. The icebergs present a constant danger to shipping. Transporting men and equipment to establish the Antarctic Stations according to agreements under the International Geophysical Year committee was considered hazardous duty. The continent is constantly battered by severe hurricane strength winds and snowstorms making exploration of the interior a real challenge. The glaciers have many crevasses covered by snow bridges and tractor trains and exploration vehicles are at constant risk of accidents. Maintenance of equipment, vehicles and aircraft was difficult. Flight operations were often affected by the severe weather conditions but were a critical component in the expeditions.

It was a pioneer experience for the participants who had to endure and overcome many obstacles in the search for knowledge. That they have succeeded in the various scientific research projects reflects admirably on the expedition members and their logistical support services. Many accidents and deaths have occurred, cooperative search and rescue operations performed and will continue as the exploration of Antarctica continues.

УТВЕРЖДАЮ :

.....

Директор ИГ АН СССР / И.П. Герасимов /

..... 1957 года.

АКТ.

ПОДТВЕРЖДАЮ:

М.М. Сомов
.....

Начальник КАЭ АН СССР

/Сомов М.М./

.....25 марта 1957 года.

МИРНЫЙ 6 января 1957 года.

Мы, нижеподписавшиеся, начальник геолого - географического отряда Короткевич Евгений Сергеевич, научные сотрудники Втюрин Борис Иванович, Капица Андрей Петрович и Долгушин Леонид Дмитриевич, - составили настоящий акт в том, что 17 апреля 1956 года во время похода санно-тракторного поезда вглубь Антарктиды, при движении в штормовую погоду зацепился за застрugi и был сорван с саней при поисках не обнаружен ящик с гляциологическим снаряжением. В результате были утрачены следующие приборы, принадлежащие Институту Географии Академии Наук СССР, числящиеся на подотчете за Авсюком Григорием Александровичем :

твердомеры индикаторные.....2 / два/ ,

твердомер зондовый1 / один/ ,

твердомер копровый1 / один/ .

На основании данного акта перечисленные выше приборы подлежат списанию, как утраченные в результате стихийной причины.

ПОДПИСИ:

Е.С. Короткевич / Короткевич Е.С./

В.И. Втюрин / Втюрин Б.И./

А.П. Капица / Капица А.П./

Л.Д. Долгушин / Долгушин Л.Д./

Soviet Antarctic Expeditions 1955-1959 records under "First Expedition Traverse:"

"On 2 April 1956, the first tractor-sled train, which consisted of two caterpillar S-80 tractors and six trailer-sleds, left Mirnyy. 11 people participated in the Traverse: Doctor of physics and mathematician science A M Gusev, geophysicist P K Sen'ko, glaciologists L D Dolgushin and B I Vtyurin, mechanic M S Komarov, geo-morphologist A P Kapitsa, aereologists V K Babarykin and A E Shchekin, radio operator G A Malikov, driver N N Kudryahov. The train was headed by the chief of Complex Antarctic Expedition, Hero of the Soviet Union, Doctor of geographic sciences, M M Somov."

"On 11 April. The AN-2 aircraft arrived at the train. The next day the train stopped at the 152-km point because of the severe snowstorm, which buried the train with a 2m dense layer of snow. Only on the 17th of April, after a slight improvement in the weather, the personnel began the excavation of the sleds. However, efforts proved to be in vain, because a new snowstorm started which lasted two more days. Finally on 19 April the weather improved. Participants in the Traverse dug up the tractors and sleds and began to advance. After passing 375km, on 4 May 1956, members of the tractor-sled train began the construction of Pionerskaya Station."

1957 Original letter **Report of Loss of Equipment 17 April 1956** signed by 3 of the participants in the Traverse and confirmation from Chief of SAE-1, **M M Somov**, to **I P Gerasimov**, Director IGY dated 6 January 1957. This is shown on the previous sheet. Translation is below.

I assert

Director I.P. Gerasimov
1957

I confirm

[M Somov signature]
Chief of USSR SAE M.M. Somov
25 March 1957

Mirnyy 6 January 1957.

We, the undersigned, Chief of Glaciological-Geographical detachment Korotevitch Yevgeny Sergeyeovich, the scientific colleagues Vtyurin Boris Ivanovich, Kapitsa Andrey Petrovich and Dolgushin Leonitz Dmitriyevich - composed the present report that on 17 April 1956 during heavy weather in an area of sastrugi, a box containing glaciological equipment was lost from the Sled and not found in searches. In fact this was lost from the sledge belonging to the Geographical Institute of the Academy of Science of the USSR, settlement will be by Avsyukopm Grigoriy Alexandrvichem:

Hardness gauge indicators	2/two
Hardness gauge	1/one
Gauge pile drive	1/one

On the basis of this report the instruments listed above are subject to writing off, as lost in natural circumstances.

Signed

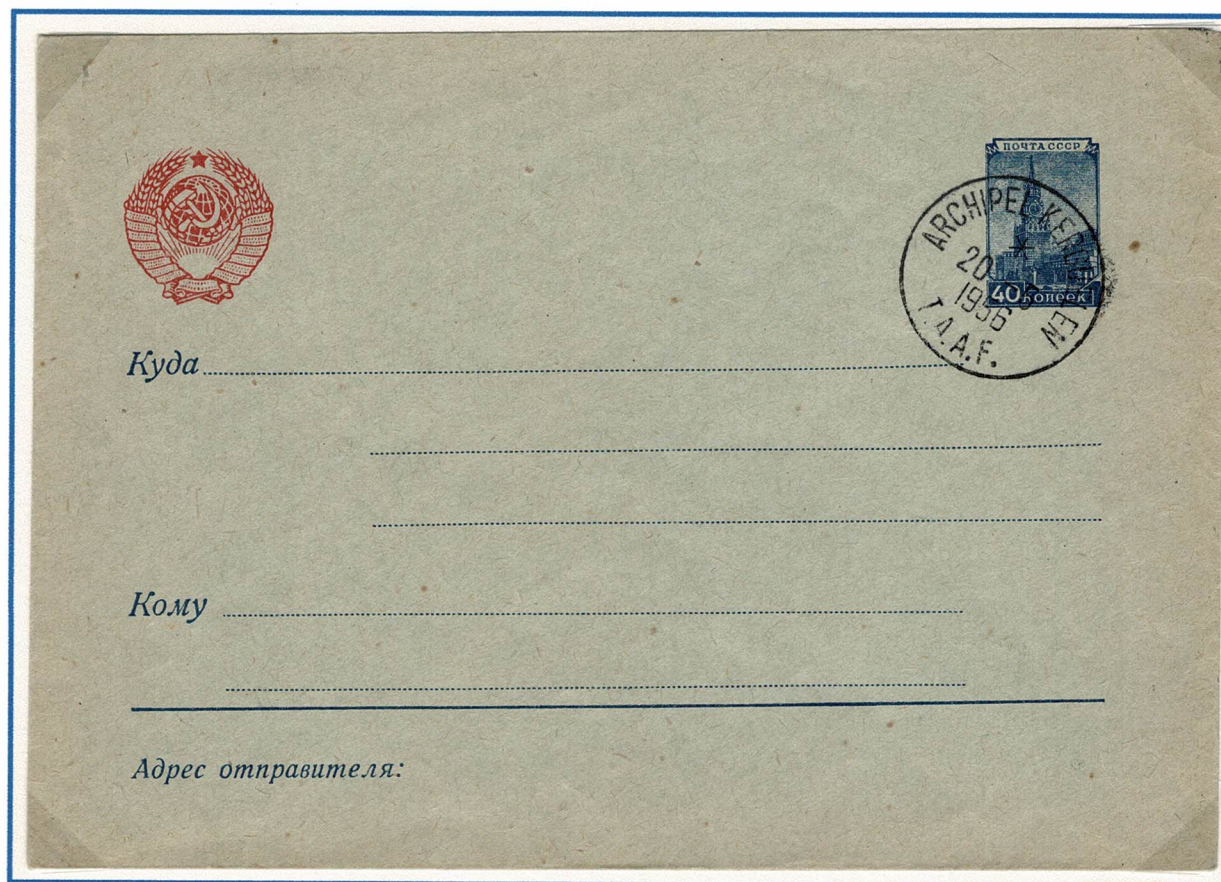
Korotevich E.S.
Vtyurin B.I.
Kapitsa A.P.
Dolgushin L.D.

The other signatory to this document, **E S Korotevich**, was the head of the geological and geographical division of SAE-1. **A G Avsyuk** was a glaciologist, senior scientific associate and Doctor of geographical sciences and part of the seasonal personnel for SAE-1. He departed on "Refrigerator Ship No. 7", logistic ship support for SAE-1.

During **SAE-1**, the support ship *D/E Ob'* which had left Kaliningrad on 30 November 1955 arrived [via Capetown] at Depot Bay, Davis Sea Antarctica on 15 January 1956. She remained there unloading equipment for the construction of Mirnyy Station until 14 February 1956 departing for Sea-work on 29 February. As part of this research voyage she visited the Balleny Islands [26 March]; McQuarrie Island [3 April]; Wellington, New Zealand [9-12 April] and Adelaide, Australia 21-30 April where grain was loaded [it was unloaded at Hamburg June-July] before returning to Antarctic waters.

Return of D/E Ob' The Ob' departed from the Mirnyy area on the return journey 13 May 1956. The *Soviet Antarctic Expeditions 1955-1959* has the following [in translation]: "On **20 May**, seeking a shelter from a severe storm, the Ob' was invited by Pascal, head of the French Station on **Kerguelen Island**, to enter Port-aux-Francais; 58 expedition members went ashore. They toured the scientific pavilions, auxiliary buildings, living quarters, the hospital, radio station, electric generator and the agricultural section. They collected numerous geological and biological specimens. The head of the station gave a dinner in honour of the members of the Soviet expedition. The French wintering personnel made a return visit to the Ob' where a dinner was held in their honour. The Soviet explorers entertained their French colleagues with a movie."

ARCHIPEL KERGUELEN T.A.A.F. 20 5 1956 on 40 kop blue stationery envelope [issued 1952]
One of two items known



As part of the 2017 postage stamp series France issued a €1.24 value for French Antarctic Territories commemorating the visit of the Soviet Antarctic supply ship Ob' to Kerguelen in 1956

M M Somov, Station Leader at Mirnyy and Director of the SAE-1 writes this letter. It is dated 5 November 1956. It was sent to Pionerskaya Station attention A M Gusev. It was probably delivered by the AN-2 aircraft, which arrived 17 November 1956 with the relief crew. This represents the earliest recorded Soviet Antarctic Airmail letter. The first page of the original letter is on the adjacent sheet with a copy of the second page behind. It translates as:

Mirnyy 5 November 1956

“Dear friends, I am sending greetings for the anniversary of the Great October Revolution and wish you all the best.”

“We wanted to change staff before the holiday and celebrate it at Mirnyy together with you. However it is not possible because we have to make some general prospecting of the Noks Bank area, it is free of ice and looks like an oasis. The pilot Kash is there, sometimes he is able to make flights. He is unable to leave this point until another plane comes. He is not able to take on board all the polar explorers and cannot leave them without a plane or the radio especially as the weather in this area is much worse than at Mirnyy. The pilot Sorokin [with Li-2 airplane on skis] must change with Kash but he cannot fly up as he is waiting for good weather. A hurricane raged there for two days. I was greatly worried about this because the airstrip and the camp were situated on fast shore ice and behind that there was open water. The wind blows from the shore and the hurricane was the same.”

“The tent was damaged and several fissures appeared in the ice. So you can understand how dangerous it has been. Kash received an order to get back to Mirnyy as soon as Sorokin comes. Here he will have to make some repairs to his plane. That will take about a day. The rest depends on the weather.”

“We are all delighted with your courage and your excellent work on the tractor repairs. We can understand how it has been. We look forward to seeing you soon at Mirnyy. However, to close, I would like to tell you our news. Perhaps you already know about it from the radio operators.”

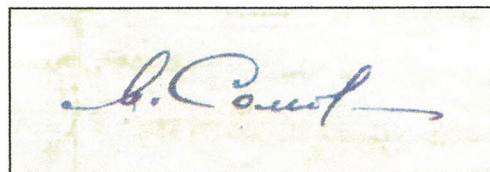
“On November 1st a tractor fell into a crevasse. The boys had lost their way during a snowstorm. The tractor is stuck in a crevasse at about 5.5 meter depth. Both the polar explorers were travelling in this overland vehicle and they escaped without any injuries. It is a wonder!”

“However, it is not the end of our troubles. We still do not know how we can drag the tractor, there are still many fissures in the ice and we cannot even approach it. It seems that there is considerable ice movement happening in this area.”

“Best regards

Sincerely yours”

“M Somov” [signed in blue ink]



A A Kash and G V Sorokin were aircraft pilots and part of the SAE-1 winter-over party at Mirnyy.

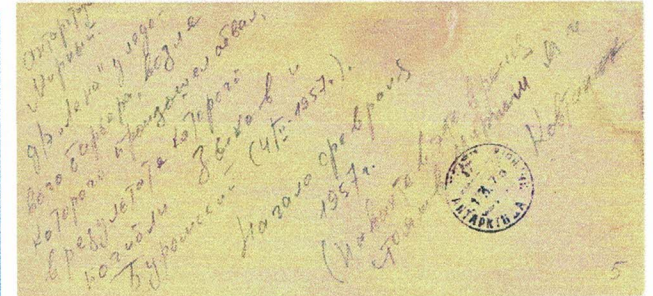
Мирный 5 ноября 1956 г.

Дорогие мои, Александр Михайлович, Леонид Дмитриевич, Евгений Трофимович и Николай Николаевич, от всей души поздравляю вас с праздником Великого Октября и желаю вам здоровья, всего самого лучшего.

Нам всем очень хотелось провести смену до праздников, чтобы встречать его в Мирном вместе с вами. К сожалению сейчас не остается почти никакой надежды на то, что это сбудется. Положение со сменой сильно усложнилось в связи с тем, что мы начали общее обследование участка суши на берегу Нокса, лишенного оледенения, несколько напоминающий оазис и внешним видом и своими размерами. С самого начала работ там сидит и временами летает Каш. Уйти оттуда он не может до прихода на смену другого самолета так как вывезти всех людей он не в состоянии, а оставлять их без самолета и без радиостанции рискованно. Тем более, что этот район в отношении погоды оказался значительно хуже и Мирного и оазиса. Идущий на смену Кашу Сорокин/ЛИ-2 на лыжах/ уже который день сидит в оазисе ожидая погоды у Каша, а тот его не может принять. Два дня там бушевал ураган Заставивший меня много пережить. Самое страшное заключается в том, что аэродром и лагерь созданы на припае, за кромкой которого до горизонта простирается чистая вода. Ветер всегда дует только с берега. Ураган был конечно того же направления. Поэтому когда Каш ^{что} сообщил, самолет висит на тросах, палатку поламало, а в припае образовались трещины, вы без объяснений поймете, какую тревогу за людей пришлось пережить.

Кашу давно дана команда с прибытием к нему Сорокина немедленно возвращаться в Мирный. Сейчас после многих не летных дней там кажется налаживается погода. Каш прилетит сюда. Здесь ему нужно будет исправить неработающие нижние закрылки. На это потребуется один день. Значит, как только АН-2 у нас появится, я дам вам команду готовить ВПП. Остальное будет зависеть от успешности подготовки и от погоды у вас и у нас. Главное конечно у вас.

On 4 February 1957, two expedition members were killed by ice falling from the ice shelf while unloading the D/E *Lena*.



**"Lena near the ice barrier where 4/2/57
2 polar expedition members were killed"**

Mirnyy datestamp 1 3 57



The *D/E Lena* was a support ship for the Second Antarctic Expedition SAE-2 arriving off Mirnyy 22 January 1957 and was unloading onto the ice shelf until 14 February 1957.

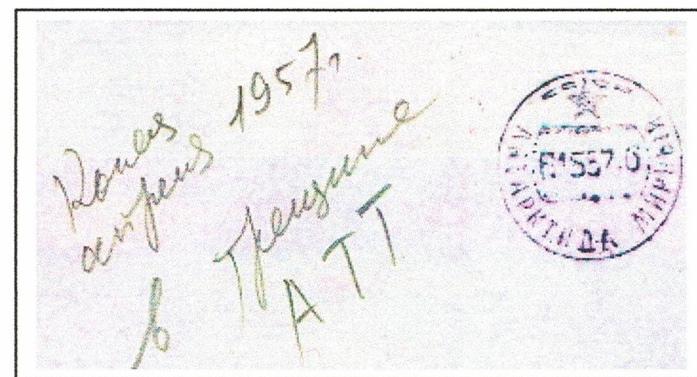
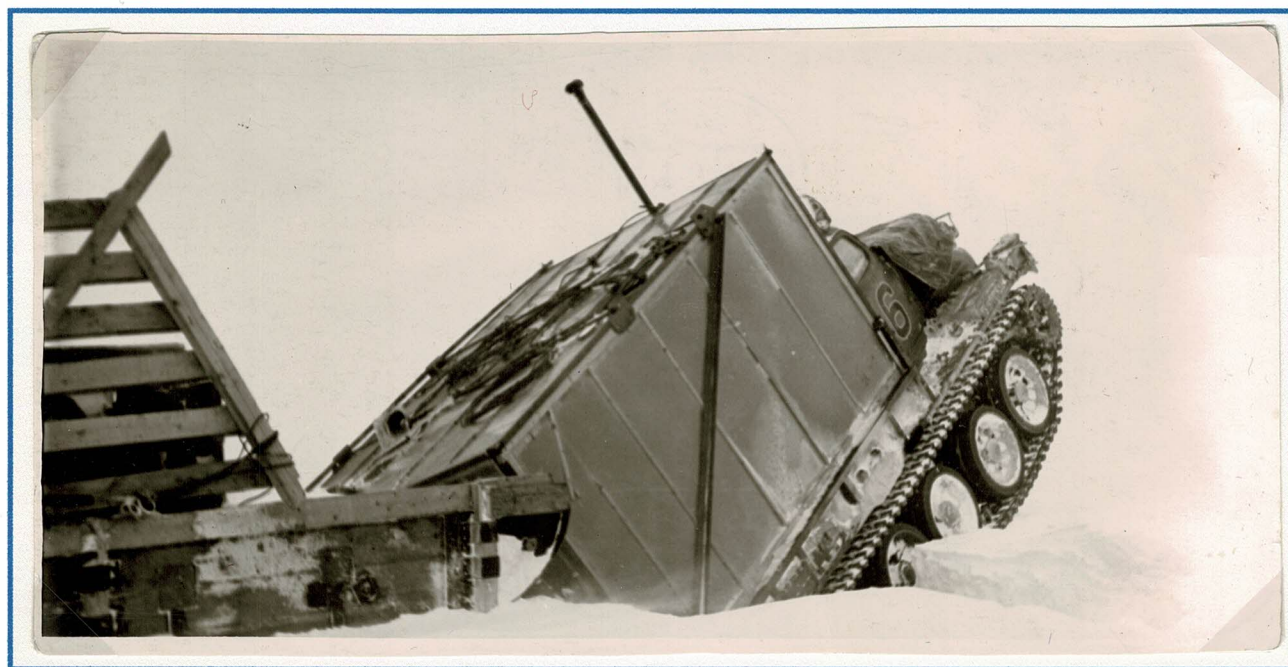
The Photo of D/E *Lena* is stamped as Printed in USSR and is dated **March 1957 Moscow.**

Photo by A Kochetkov of TASS agency taken while *Lena* was at Mirnyy unloading, is titled **"The *Lena*" Diesel-Electric Ship in the Antarctic."**

Film carried on **"Kooperatsiya"** departing Mirnyy 15 February 1957 for Cape Town arriving 3 March then by air to Moscow



The **Glaciological Traverse** of SAE-2 left Mirnyy 7 February 1957 with 2 tractors and 6 sleds and 17 men under the command of P A Shumskii. After many stops for research and observations, the tractor-train reached **Pionerskaya 375km** from Mirnyy on 21 March 1957. The train then combined with elements of the transport traverse from the interior [having established of Konsomol'skaya and Vostok I stations], making 6 tractors and sleds, departed from **Pionerskaya 18 April 1957** arriving at Mirnyy **1 May 1957**.



Photograph annotated "April 1957" with Mirnyy 1 5 57 datestamp impression

This photograph is illustrated in "Soviet Antarctic Expeditions 1955-1959" page 57

The translation of the section on the **Glaciological Traverse** from pages 56-57 of "Soviet Antarctic Expeditions 1955-1959" reads:

"On the tenth day, **28 April**, the train unexpectedly came out onto the edge of the Yelen Glacier which was crossed by large crevasses. Two tractors, travelling in front, crossed six wide crevasses but broke the snow bridges. The vehicle following them fell into a crevasse and hung over it, having caught an upper corner of its 'caboose' on an overhanging edge of the snow bridge."

"The remaining tractors were able to stop, and the drivers gave the alarm signal. The drivers of the first two vehicles saw a new open crevasse, 10m wide at a distance of 20m. The crevasses, which split the train were 6 to 8m in width and could have easily swallowed the train if the snow bridge had completely broken. The people from the fallen tractor got out through the roof of the 'caboose.'

"Subsequently, at some risk, they were able to lift the vehicle with winches. On 30 April, making use of information from an aerial reconnaissance, the train successfully emerged south of the labyrinth of glaciers, found the route and on **1 May**, following the survey marks, arrived in Mirnyy."

Crevasse

SAE-2

26 December 1957

One of the major objectives for the Soviet Antarctic Expeditions agreed with the IGY was the establishment a base at the South Geomagnetic Pole. The **South Geomagnetic Pole Traverse of SAE-2** and establishment of **Vostok Station** involved 45 men under the leadership of A F Treshnikov, Leader of the continental division of SAE-2. The Traverse took 85 days and covered **3850km**. It departed **8 October 1957** and the route was **Mirnyy – Pionerskaya – Vostok I – fuel depot – Komsomol'skaya – Vostok – Komsomol'skaya – Pionerskaya – Mirnyy** and arrived back **31 December 1957**. The Traverse established Vostok Station on **December 16, 1957**. Leaving 2 tractors and some staff behind to begin observations and establish a landing strip, 7 tractors departed on **18 December 1957**. Having taken just 13 days on the return journey of 1140km, - an average distance of over **87km daily**, it is evident that the train did not linger at the intermediate stations.

On the return leg, the third tractor fell into a crevasse on the **Yelen Glacier 26 December 1957**. It was winched free using 3 tractors and wire ropes. No one was injured and although the cabin was badly crushed the vehicle was able to continue to Mirnyy.

Mirnyy datestamp 6 1 58



Tractor-train annotated 24--XII-57 - 2 days before the accident.
At Pionerskaya Station.

Neither of the photographs are attributed but it is recorded that **A. A. Vvedenskii** a special correspondent for 'Pravda' and the movie photographer, **N. T. Shmakov** were both SAE-2 members and included on the Traverse to establish Vostok Station and return to Mirnyy.

SAE-3 Search for French Helicopter 29 January 1958

Soviet Antarctic Expeditions 1955-1959: page 34 translates:

“In **January 1958** the Ob’ received a telegram from the French base Dumont d’Urville. B Imbert, head of the expedition group, reported that a French helicopter which was caught in a snowstorm had made a forced landing. Immediately two airplanes were dispatched from the Ob’ to the site of the accident. The totally destroyed French helicopter and its pilot who remained unscathed, were discovered by members of the French expedition before the Soviet rescue groups arrived. The French embassy in its memorandum to the Ministry of Foreign Affairs of the USSR conveyed the gratitude of the French for the prompt and generous response to the request of the French expedition.”



"Ob' looking for a suitable place to debark light airplanes to find the French helicopter 29.01.1958"

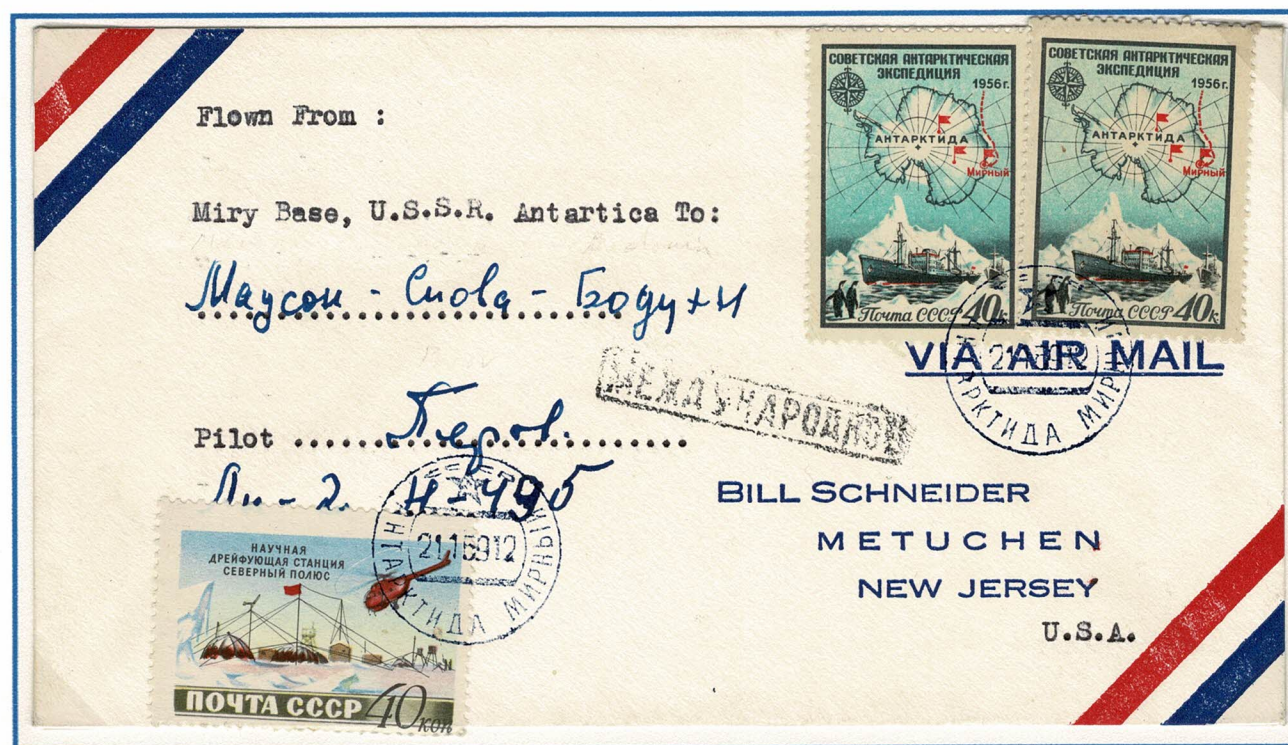
Photograph: V I Shilinkov, junior scientific associate part of the Marine Antarctic Expedition SAE-3

Perov Rescue Flight

On **5 December 1958**, a Belgian aircraft with 4 men on board disappeared. A surface search was started but it was unsuccessful and help was sought. The Russians at Mirnyy, nearly 300km to the east, offered help and on 12 December a Li-2 aircraft on skis, piloted by **Viktor Perov**, Commander of the Aviation Division of the Continental Antarctic Expedition SAE-3, set off from Mirnyy via **Mawson** to the Belgian Base.

The first rescue flight on the 13th was stopped by bad weather. A flight on the 14th with a crew of 5 Russians, an interpreter and 2 Belgians was again without result. On **16 December 1958**, 9 days after the crash, the men were located. All were in good shape and flown back to King Boudouin base. During the rescue operation, the Russian aircraft had flown over 20 hours and 11,000km, made 5 landings in the interior of the continent with the Australian base, **Mawson**, continually on the air relaying reports from the aircraft to Mirnyy.

The flight returned to Mirnyy via **Mawson** December 19, 1958. All crew members received gallantry awards from The Soviet Government with Viktor Perov receiving the Order of Lenin. The Belgian Government also bestowed Orders on the Russian Crew with Perov receiving an Order of Leopold II. A film was later made of the exploits.

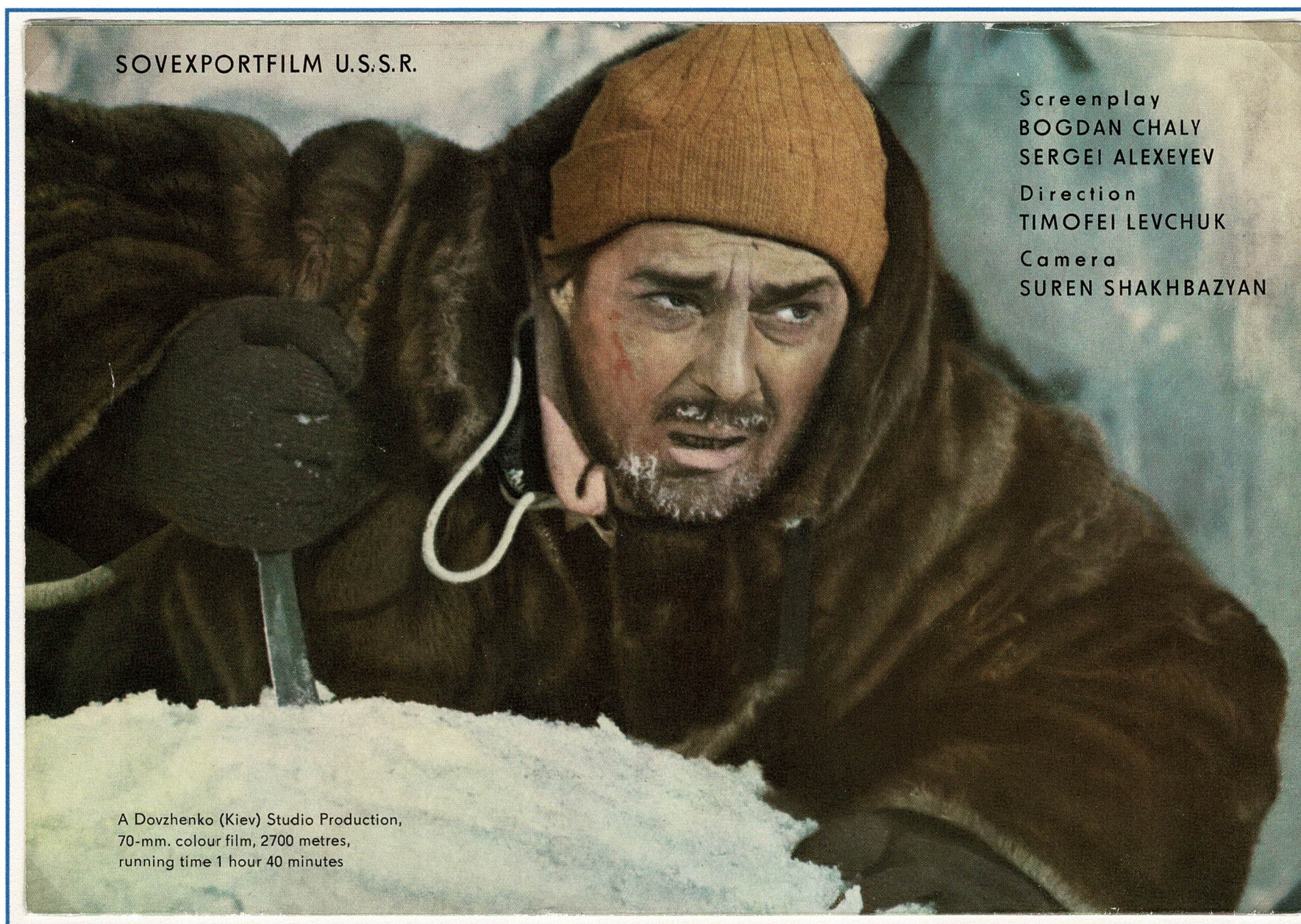


Flight Cover: Mirnyy – Mawson – Syowa [Japan] to King Baudouin
Pilot Perov in Li-2. Mirnyy 21.1.59

Boxed “**International**” indicating the cover entered the mail system in Russia having been carried on board the “*Mikhail Kalinin*” support vessel for SAE-4 which departed Mirnyy January 30, 1959 arriving Riga March 4, 1959.

Flight departed Mirnyy on **December 12, 1958** 14.50hrs arrived Mawson December 12, 1958 20.15 hrs. Remained at Mawson overnight due to poor weather. To Japanese Base Syowa then Belgian Base Baudouin at 15.09hrs. Two flights on **December 14**, locating the downed Belgian plane and abandoned equipment. Two flights on **December 16th** locating the men on the second then transporting them to a depot where the Belgian helicopter was located then escorting them back to the Belgian Base.

Perov Rescue Flight immortalised in Film



THE LAW OF THE ANTARCTIC

"A Dovzhenko [Kiev] Studio Production, 70-mm colour film, 2700 meters, running time 1 hour 40 minutes."

"A plane belonging to a Belgian scientific expedition meets with disaster in the Antarctic. An S.O.S goes out to all the stations in the Antarctic. Three thousand kilometres separate the Soviet settlement at "Mirnyy" from the Belgian "Queen Maud" station."

"The Russians are the first to answer the distress signal; the crew of a plane piloted by Victor Belov takes off in spite of the stormy weather and impenetrable darkness. The Soviet airman put up a courageous fight to rescue the Belgian scientists.

Help in need, love for one's fellow men, solidarity in the struggle against the elements - such is the law of the Antarctic."