

FURTHER ON JOINT SOVIET-VIETNAMESE SPACEFLIGHT

Brezhnev Congratulations to Le Duan

LD251524 Moscow Domestic Service in Russian 1500 GMT 25 Jul 80

[Text] Today Comrade Brezhnev had a telephone conversation from the Crimea with Comrade Le Duan, general secretary of the Central Committee of the Vietnamese Communist Party, who is in Moscow. Leonid Ilich cordially congratulated Le Duan on the start of the Soviet-Vietnamese spaceflight. He stressed that the joint work in earth orbit of Soviet cosmonauts and a son of the heroic people of Vietnam is a truly historic event. Leonid Ilich Brezhnev noted the great significance of the friendly Soviet-Vietnamese meeting in Moscow on 3 July and conveyed to Comrade Le Duan and all the Vietnamese friends wishes for success in socialist construction. On his part Comrade Le Duan warmly thanked Leonid Ilich Brezhnev for his congratulations and wishes. He said that he fully shares the high assessment of the recent Soviet-Vietnamese meeting and considers that the flight of the Soviet-Vietnamese crew in space is further vivid evidence of the fraternal friendship and cooperation of the Soviet and Vietnamese peoples.

Praise From Vietnamese Official

LD261450 Moscow TASS in English 1430 GMT 26 Jul 80

[Text] Moscow, 26 July, TASS--"The possibility of getting day-to-day information from space on the progress of regeneration of lands and forest seems to me a very important aspect of strengthening Vietnam's economy", Tran Dai Ngia, chairman of the National Research Centre of the SRV, told a TASS correspondent. Speaking of the SRV's participation in the Inter-cosmos programme, Tran Dai Ngia pointed out that some branches of space science have long been developing at various scientific institutions of the SRV. One of the areas, the study of the ionosphere, originated about twenty years ago.

"But space sciences began developing on a large-scale only after the liberation of South Vietnam and the peaceful reunification of the country. A national committee for the exploration and use of outer space, laboratories of space physics, space meteorology and communications have been set up". "We attach special importance to the study of the country's natural resources", Tran Dai Ngia stressed. "Two years ago the participants in the Soviet-Vietnamese biological expedition established that vast areas of land and forest estates that had been hit by fire and chemical weapons of the aggressors have not yet been regenerated. Dead jungle where nothing grows still remains in various areas."

"The present space flight", the scientist emphasized, "is for us an opportunity to state in full voice how truly gratuitous is to us the assistance by Soviet scientists in the development of modern branches of knowledge. Soviet scientists readily met our wishes and agreed to make exactly this part of the space flight programme most intensive. We hope that even during the short flight we shall manage to lay the foundations for the commencement of work on the first space atlas of Vietnam and to start working on geological, geomorphological and hydrological maps of the country".

"The scientists of Socialist Vietnam", Tran Dai Ngia said, "see special meaning in the fact that apart from the Soviet-Vietnamese experiments, research on the apparatus left on board the 'Salyut-6' by the previous international crews will be carried out during the expedition. This relay of research and constant mutual enrichment of one another with new ideas and technologies is an earnest that the scientists and engineers of the socialist countries will continue to show an example of unselfish comradesly cooperation in the name of progress and peace."

Medical Examination Program

LD271458 Moscow TASS in English 1316 GMT 27 Jul 80

["Work in Orbit Is Being Implemented Successfully"--TASS headline]

[Text] Mission Control Centre, July 27, TASS--The working day on board the Salyut-6--Soyuz-36--Soyuz-37 orbital complex is full of scientific research today.

Immediately after getting up the cosmonauts carried out a number of experiments on the medical examination programme. By means of the instrument Pneumotest designed by specialists of the GDR, Viktor Gorbatko's and Pham Tuan conducted the "polarization", "terminator" and "atmosphere" experiments, using polarization light filters spectrometric and photographic apparatus.

In accordance with the programme for the study of the earth's natural resources and the environment the cosmonauts continued the observation and photography of the earth's surface and the world ocean area, dust and smoke pollutions of the atmosphere as well as various meteorological phenomena. During the photography Leonid Popov and Valeriy Ryumin provided the necessary orientation and stabilization of the orbital complex.

A joint Soviet-Vietnamese technological experiment Halong is to begin on the Crystal installation in the evening. The aim of the experiment is to grow monocrystals of a semi-conductive material out of the solid solution of a bismuth-antimony-tellurium compound.

According to the results of radio talks and medical control data, the state of the cosmonauts' health is good. The international crew is working concertedly and efficiently. The onboard systems of the Salyut-6--Soyuz-36--Soyuz-37 research complex are functioning normally.

First Experiment

LD261500 Moscow Domestic Service in Russian 0905 GMT 26 Jul 80

[Text] Our special correspondent, Livon Agayan, reports from the Flight Control Center: [begin recording]

[Agayan] Viktor Gorbatko and Pham Tuan have now been on board the orbital complex for about 36 hours. Early yesterday morning the cosmonauts started their first experiment. It is called Azolla after the fern which is abundant in Vietnam. Azolla reproduces rapidly and features intensive nitrogen fixation. It has other properties, too, which makes it promising for use in the cosmonauts' life-support systems. Yesterday the Tereks and Dneprs [call signs of the Gorbatko-Tuan and Popov-Ryumin crews respectively] carried out medico-biological research, including the experiment Pnevmatika. I shall ask Professor Anatoliy Dmitriyevich Yegorov, deputy flight leader on the medical side, to describe what this experiment comprises.

[Yegorov] The essence of this experiment is that inflatable rings are fitted around the thighs, a certain pressure is put into the rings, and this creates conditions whereby, in conditions of weightlessness, blood accumulates in the lower extremities. In other words, this reproduces the blood distribution which is characteristic of normal life on earth.

At the same time we record a whole number of parameters characterizing the blood circulation system. Then, based on this information--the objective recording of various parameters--and on how the cosmonauts feel subjectively, an evaluation can be made of the effectiveness of this method which may, in the future, be of importance on one hand as a means of prophylaxis, and on the other hand as a functional test, as it were, making it possible to evaluate the reserve possibilities of the human body.

[Agayan] Today the program of the Soviet-Vietnamese crew comprises three experiments: Biosfera, Imitator and Gp:os. Tomorrow there will be seven experiments, and on subsequent days approximately the same number. Some of them will be described by Professor (?Nguyen Van Thieu), deputy chairman of the SRV National Scientific Research Center.

[[?Thieu]] The latest experiments include some very important and interesting ones to study natural resources (?of the country) from space. During the present flight we intend to solve the following kind of problems in the sphere of agriculture. For example, there will be an evaluation and registration of existing soil resources; the detection, studying and measurement of various characteristics and properties of the soil; and so forth. There are also some problems connected with hydrology. For example, we would like to study from space the maximum boundaries of heavy floods, to define the inner boundaries of penetration of tidal sea waters, to study the process of belt formation [lentoobrazovaniye] and the change in shape of sea coasts due to erosion and sedimentation. There are similar projects, too, in the sphere of geology and forestry. We hope, therefore, that the present spaceflight will make a great contribution to our national economy. In addition to remote earth sounding experiments from space, we are also ready to take part in a number of experiments in space biology and medicine. Soviet scientists, GDR scientists and scientists from other countries in the Intercosmos program have given us a very great amount of help in preparing these experiments. [end recording]

Preparation For Return

LD261302 Moscow TASS in English 1113 GMT 26 Jul 80

[Text] Moscow, July 26, TASS--Special TASS correspondent reports from the Mission Control Centre:

Visual observations of the earth's surface, preparing the equipment for geophysical research, medico-biological experiments and television reportage are planned for today onboard the orbital complex Salyut-6--Soyuz-36--Soyuz-37.

In accordance with the flight programme Gorbatko and Pham Tuan will return to the ground in the Soyuz-36 ship. For this purpose the cosmonauts today dismantled the individually shaped arm-chairs in the Soyuz-37 ship and installed them in the landing craft of the Soyuz-36 spaceship. They also carried there the flight suits and other individual equipment.

Medical checks on the members of the visiting crew were made with the use of the pressure suit Chisis. The reaction of the cardio-vascular system to the imitation of the effect of the hydrostatic pressure was determined during these checks. The clinical control was exercised with the multi-purpose registering equipment Immitator to determine the temperature profile in the electric heating chamber of the Kristall unit is planned for the evening.

According to reports of the crew and the data of telemetric information the on-board systems and scientific equipment of the orbital complex are functioning normally. The cosmonauts feel well.

Plan of Work

ID251512 Moscow TASS in English 1459 GMT 25 Jul 80

[Text] Moscow, July 25, TASS--The working day of Leonid Popov Valeriy Rhymin, Viktor Gorbatko and Pham Tuan aboard the orbital Salyut-6--Soyuz-36--Soyuz-37 scientific-research complex began at 1400 and will last till 2300 Moscow time. After checking the systems of the station and the spaceships, the international crew got down to the planned work. On the programme of the day are medical explorations and biological experiments, filming and photography, a television reportage, and physical exercises.

With the help of the Pneumatic instrument, the Soyuz-37 crew will carry out explorations of head blood circulation in the period of adaptation of the organism to weightlessness. Pham Tuan will be the first to be examined, and Victor Gorbatko will help the cosmonaut, explorer and conduct negotiations with specialists of the medical team of the flight control mission.

The joint Soviet-Vietnamese experiment Azola continues in accordance with the program of biological explorations. The experiment began immediately after the transfer of the international Soyuz-37 crew to the Salyut-6 station. The experiment is held to study the development in space flight conditions of a higher plant--the alga fern Azola, submitted by scientists of Vietnam.

Popov, Rumin, Gorbatko and Pham Tuan feel well. The program of the work of the international crew is going on successfully.

Academician on Soyuz-37 Program

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[Boris Nikolayevich Petrov, vice president of the USSR Academy of Sciences and chairman of the Intercosmos Council, interview to Sergey Zheleznyak--date and place not specified]

[Excerpts] [Petrov] First of all, I should like to say that the series of experiments prepared by the Vietnamese scientists, together with their Soviet colleagues and specialists of the other Intercosmos countries, is a development of those experiments which have been completed and includes a number of new ones.

One aspect is physics research with the aim of studying the earth's atmosphere and finding out precise details of phenomena in the atmosphere. These are connected with studying such complex processes as typhoons and hurricanes. The task is to find out how these transformations start and develop.

[Question] And this is particularly important for Vietnam?

[Answer] Yes indeed. This research is particularly important because it is there that these natural phenomena occur and sometimes cause great damage to coastal areas. To be prepared in advance for this, to know about their structure, to evaluate their significance, this is of great importance.

Study of natural resources is also of great significance, in compiling a program in the interests of the Socialist Republic of Vietnam, much attention was paid to this. The aim of the research is to develop sufficiently precise assessment methods for natural geological formations, to distinguish likely areas for prospecting for minerals, to work out methods of making assessment of the state of crops, forest planting and so on.