



**Moscow Space Club President's Speech
at the NSC Huntsville Luncheon
April 18, 1990¹
Marriott, Huntsville**

*This manuscript was prepared by
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and discussed at the MSC meeting on April 11, 1991.
The documents of the MSC were used.*

I very much appreciate the invitation. My sincere gratitude to George Philyaw, Dave Christensen, Karen Mack, Jill, Michele, Kim, Ann and others, who were involved in providing for my last and present trips. My appreciation to Tom Tenbrunsel, who proposed to me the idea of the Soviet Space Club. I am happy to speak at the Marriott because my 1st visit to Huntsville was to Space Camp through an invitation by Edward Buckbee and Deborah Barnhart.

I. STATUS OF MOSCOW SPACE CLUB

The Moscow Space Club was formally established on November 29, 1990 in Moscow. The major activities of the Club include meetings, publications, research, conferences and marketing.

Among its founding members are specialists from the space companies NPO Energiya, NPO Molniya, NPO Mashinostroyeniya, NPO Komposit, TsNIIMash, the Vernadsky Institute of the Academy of Science, Institute of Medico-Biological Problems, Moscow Aviation Institute, Moscow State Technical University (Baumann), Moscow State University, the All-Union Council of Young Scientists and Specialists (CYSS), journalists from Pravda, Delovoi Mir (Business World), Krasnaya Zvezda (Red Star), Literaturnaya Gazeta (Literature newspaper), Aviacia i Kosmonavtika (Aeronautics & Cosmonautics), students, teachers, poets and others. We keep our doors open.

There are approximately 40 active members, although the total membership is more than 100.

Short Historical Notes

The MSC has developed over the past few years. The idea began in 1988 when the Space Commission of CYSS was involved in the forming of new commercial engineering centers in the space industry. Members Vladimir Basanov, Olga Vinogradova, Nikolai Putilin, Nicolai Lutsenko, and Nicolai Brukhanov participated in the Soviet - American Space Workshops in Houston, Huntsville, and Washington, D.C., in December, 1989. High on the agenda was the Soviet Manned Mars Mission project reported by Brukhanov.

In the spring of 1990 during the discussions concerning which journalists must be in space first - Soviet or Japanese - the Space Commission of the Council of Soviet Journalists was formed. It was the second source of people for the MSC. Vladimir Gubarev, head of 'Journalist-in-Space' project (later called 'Space for

Children' project), and his deputy Andrei Tarasov, a space reporter, six journalists training in the Star City - Yury Krikun, Svetlana Omelchenko, Pavel Mukhortov, Valery Sharov, Alexander Andryushkov, and Valery Baberdin - all became MSC members. These members were involved in publishing the "Unknown Space Port", the 1st book of the previously mentioned project.

The conceptual method of creating the Soviet Long Term Plan was proposed in the Club by Professors Leonid Leskov, Gregory Khozin, Yury Voronkov, Dr. Yury Abramov, and the young space experts Vadim Vlasov, Sergei Golotyuk, Ivan Moiseyev. Moiseyev was selected as the Head of the 'Soviet Cosmonautics Concept' project which Club now develops in cooperation with the specialists from industry, academia, universities, and government offices.

Toward the end of 1990, Sergei Zhukov proposed the idea of the World Center of Space Philosophy on Altay Region, which is the geographic center of Eurasia continent.

The MSC also participated in the several space conferences in the USSR.

In 1990 MSC began to cooperate with the European Space Report. Sergei Golotyuk is a reporter and representative for the ESR in the USSR.

Functions and Projects

The structural scheme of the MSC is presented on the viewgraph.

The Club's meetings take place 2 times per month in the Pravda conference hall. There is not only a planned agenda, but also a free exchange of ideas between the specialists of various disciplines.

The official registration of MSC is still in the process, and so we have not yet opened a Finance department. Several other organizations provide support for the Club, but right now we are preparing own financial plan. It is the responsibility of the Vice-President Nikolai Putilin.

The main focus of our interest is an analysis of Soviet space policy. The Research department is working on the materials for the Concept of Cosmonautics. Hopefully, the next steps will be concrete recommendations and proposals to Soviet LTP, which may led to Cosmonautics structural reformation.

Zvezdoplavatyel (Star Flyer or Star Soarer), the illustrated space magazine, is the main project of the Publishing department. The editors of magazine are actually interested in a possible cooperation with American partners.

The Public Relations department is responsible for advertising our activities, conferences, and special programs.

MSC Partnerships

The Club cooperates with the All-Union Council of Young Scientists and Specialists in organizing the education of talented specialists abroad. CYSS is a participant of the "Global Training" national program and is financially supported by the government. Because I am a CYSS member, I am authorized to explore the possibilities of collaboration with the UAH as well as with the other firms and organizations in Huntsville.

We also collaborate with the Entour tourist center in organizing business trips to Soviet Union, including visits to the space facilities. Located in Kaliningrad, Moscow Region, Entour was established by NPO Energiya staff members.

II. BRIEF OVERVIEW OF SOVIET SPACE POLICY

Cosmonautics Management System

The existing managing scheme is presented on the graph. We noted only the part of the ministries which are involved in the space activities.

The staff of big NPO (Research and production association) includes more than 10, 000 of people. The total staff for the space industry includes several hundreds of thousands of people.

Specialists are leaving the companies because of decreased financing, fewer projects and lower salaries. In the future America can wait expect the emigration of Soviet space specialists, but now a vast majority of them are still at their jobs.

The economical and political crisis in the country is worse then the situation in Cosmonautics. But because of strong militarian management, the space industry is still working much better than the civilian branches of the economy.

It is difficult to predict the future of Cosmonautics.

The question is "Is the Soviet Union to be or not to be ?" or even "Is civil war to be or not to be ?" The new Space Policy Analysis Group established at the Moscow Aviation Institute under leading Vadim Vlasov, looks at 3 possible perspectives:

- * The political structure of USSR will not change
- * The USSR will not exist and a new federation from the few Republics will be formed
- * There will be a more OK structure within the existing USSR.

The mass media is deeply analysing the situation. The observers note such main weaknesses of Soviet Space system as:

- * Mixing of military and civil programs
- * Prioritising the producer (industry) before the customer (academia or commercial firms)
- * Secrecy, no information exchange, no open media contact
- * No alternative way of making decisions on the big technical projects and, so, several great mistakes are made such as cutting off the Lunar program
- * Separateness of Cosmonautics
- * Absence of the State Long Term Plan
- * Not enough involvement in international cooperation

View On Long Term Space Plan

I told you at the last Space Summit that the USSR has no single space policy. The situation has not changed.

The official Soviet Long Term Plan is the program created in TsNIIMash (Central Research Institute of Machine Building) and developed in MOM (Ministry of General Machine Building). It has not been fully published.

The main projects of this Plan are (excuse me for incomplete information):

- * Exploiting the MIR orbital complex
- * Big Orbital Station (Mir II) with 6-12 cosmonauts
- * Global Communication Systems
- * Unmanned Mars Program (Prof. Osipyan, Vice-President of the Academy of Sciences, was selected as the Head of the program last year)
- * Producing Materials in Earth Orbit
- * Fundamental Astrophysical etc. Research
- * Space Meteorology, Remote Sensing of the Earth Surface, etc.

The previously mentioned TsNIIMash - MOM program is criticized by the Soviet mass media. Observers note its limitedness, 'ministerial behavior'. For instance, the Mriya-Hotel Aerospace System project wasn't included in the document - possibly because of project NPO Molniya is managed by MAP

Last year well-known space experts Academician Vsevolod Avduyevsky and Prof. Leonid Leskov proposed to develop a complex Long Term Plan. High on the agenda of this Plan is a new Civil Space Agency like NASA or (more appropriately for the Soviet Federation) like ESA.

Financing

The national space budget was published only once in 1989 - 6.9 billion roubles; within that 3.9 billion for military, 1.7 for space research, and 1.3 for Energiya - Buran project. Observers and politicians like Academician Yury Ryizhov doubt if this data correct. Let us compare it with America's space budget - approx. 28 billion \$ in 1989. (It is difficult to compare because the economies are different).

Right now it seems that the Supreme Soviet does not know the space budget for FY 1991. It is very difficult to calculate it because there are many sources of financing.

NEW: The Soviet Republics are trying capacity to influence the budget.

Commercialization Of Space

New Commercial associations for telecommunication systems:
Traditional: Ministry of Communications. V/O INTERSPUTNIK, V/O MORSVYAZSPUTNIK)

- New:
- * INFORMCOSMOS (NPO PM + 3 NPO + "Vostok" Bank)
Geostationary systems, designed by NPO PM, Krasnoyarsk, cost of the program 400 mln. rouble.
 - * State commercial corporation MARAFON (more than 100 organizations)
Global system of communications, using the big geostationary platforms, designed by NPO Energiya.
Financial supporting of the projects of participants.
Cost of the program - more than 6 billion rouble.
 - * ELCON (low-orbital system of communication)
 - * COSCON (low-orbital global system of communication)
 - * SMOLSAT (low-orbital system of communication)

Commerce Program of THE Russian Government. Russia has bought 3 Gorizont satellites from Ministry of Defense.

Commerce Conference in February, 1991.

The Public Infrastructure Of Cosmonautics

In this difficult time, the public organizations show a tendency to cooperate. The traditional Federation of Cosmonautics, Committee of Cosmonautics of DOSAAF, and new organizations such as All-Union Aerospace Youth Society "Soyuz" (President-Cosmonaut Alexander Serebrov), Federation "Earth & Cosmonautics" (President-Cosmonaut Igor Volk), Association of Cosmonautics Museums, Moscow Space Club, and Space Flights Supporting Foundation - discussed mutual plans at the Conference in Moscow last February.

III. A LOOK AT THE NSC-MSC CLUBS COOPERATION

CURRENTLY:

* Exchange of Specialists, Conferences, and Trips

Right now we are discussing with Karen Mack a September trip in the USSR which will be organized by the Entour tourist center, a partner of MSC. Entour will arrange visits to space facilities such as NPO Energiya, Star City with the Cosmonauts Training Center, and Space Mission Control Center in Kaliningrad, as well as historical and cultural places in Moscow and Leningrad. Also, if possible they will arrange visits to space ports in Baikonur, Plesetsk and Kapustin Yar.

* Journalist-in-Space program.

The head of the Program Vladimir Gubarev, editor of Pravda newspaper, asked me to propose showing American movies & videos about Space Camp (very popular among the students in the USSR), and on space research, industry and studying team. We may propose the exchange of our movies, books like "Unknown Space Port", materials about the Soviet space program, etc. Yury Krikun, Journalist-Candidate, is the Producer of documentary TV film on "J-in-S" program. He would be very pleased to make a "picture" in Huntsville.

* Exchange of specialists between the UAH, MSFC, commercial firms and appropriate Soviet organizations.

Conferences. MSC is happy to participate in the Huntsville's Space Summit in 1991. We would be glad to invite our colleagues to the Space Workshop in the Soviet Union on Manned Mars Mission team. If the situation in the country is normal we will try to organize the event in 1992.

* In future we hope to begin marketing service because of our knowledge of addresses of firms and their types of space technology. I have some technical proposals now, and among them the 100-ton orbital factory for producing of materials designed by KB Salyut

IN PERSPECTIVE:

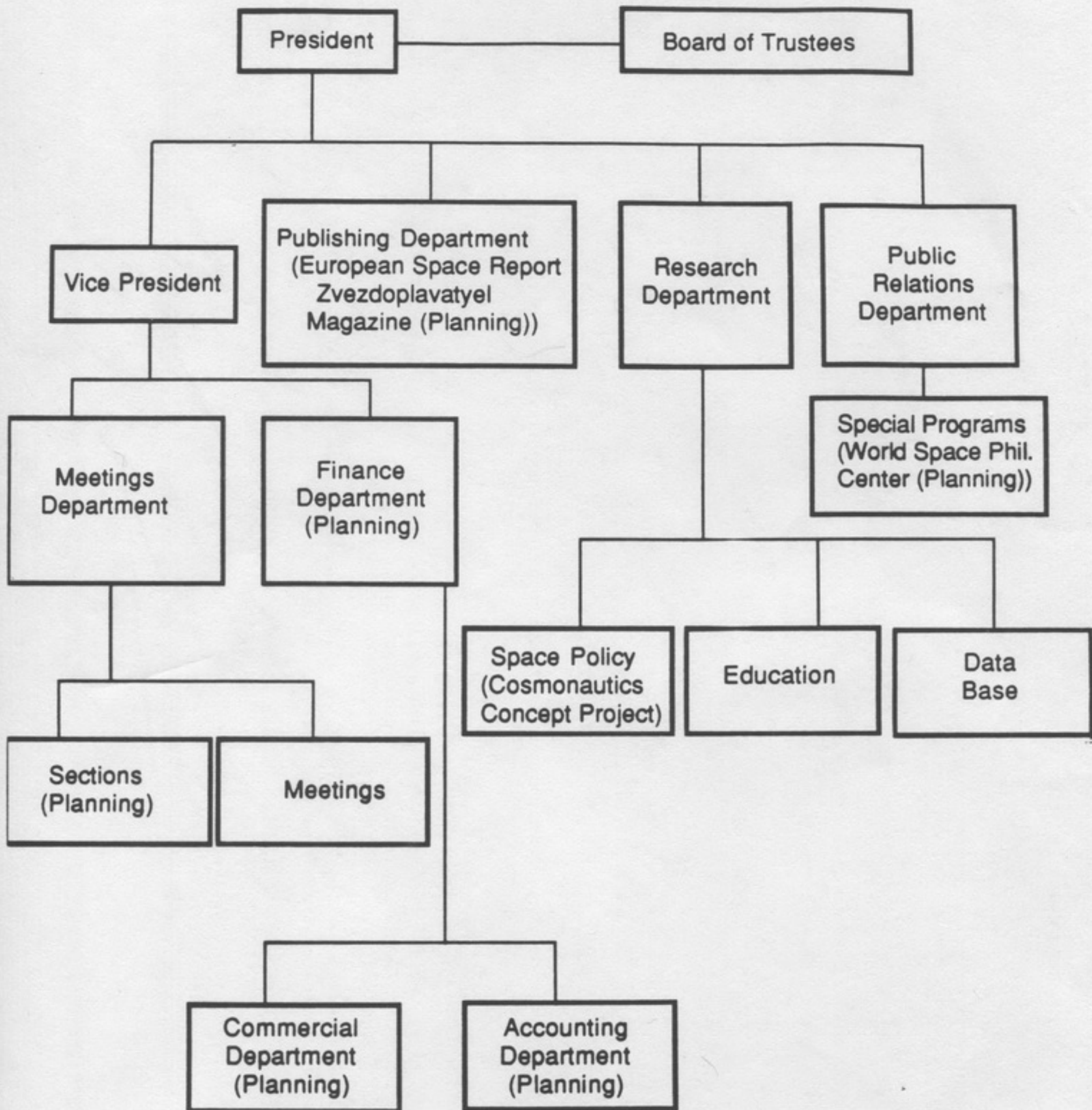
I feel there is a good opportunity to organize the Space Club of the USSR in the next 1-2 years and to establish collaborations between the National Clubs of the two great countries. However, Soviets know that our Club's history is

beginning now in Huntsville, and relationships between NSC Huntsville and MSC will be at the 1st priority.

- * NSC-MSD Constant Working Group
- * World Space Philosophic Center project (Altay Mountains)
The idea of 1992 International Expedition to Altay.
- * World Space Club - World Space Philosophic Center
World Space Agency !
- * American-Soviet and Soviet-American Humanitarian
Space Flights during 1993

My personal dream is to look at the Earth from orbit and to write the book about 'space part' of Humanity. I mean, I want to write about the people from different countries who are involved in space activities or who think about space and so, push human history into the Space Era. I dream that it will be the symphony of Homo Creativity and Space which is our Love because Space is God.

STRUCTURAL SCHEME OF MOSCOW SPACE CLUB



**THE EXISTING MANAGING SCHEME
OF THE SOVIET COSMONAUTICS**

