ARS AD ASTRA
THE 1st ART EXHIBITION IN EARTH ORBIT

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Abstract

As the next millennium approaches, humanity is being confronted by the environmental and social consequences of its overwhelming presence on Earth. *"The Space Option"* offers an optimistic plan to meet humanity's future needs and hopes for prosperity if it can be implemented in time. Recognizing the importance of space activities to the future of humanity as well as the role of art as a traditional and powerful means of communication, the OURS Foundation has initiated a project called: *Ars ad Astra: The 1st Art Exhibition in Earth Orbit* which calls up on artists to develop the theme "Space and Humanity" in an artwork which may be then sent into space. Up to 100 artworks will be selected and then sent to the Russian Mir space station in Earth orbit as a cultural experiment on EuroMir'95. As the novelty of this idea guarantees interest by the international media, and, as each artist will become a center of local media attention, this project has the potential to reach a large international public before, during and after its realization in space and therefore may become a new and effective vehicle for communicating to the public about space. *Ars ad Astra: The 1st Art Exhibition in Earth Orbit* is both an in situ cultural experiment in space and a communications project on Earth. This paper details the implementation process and reports on its progress.

1. A SPACE AGE OR A STONE AGE?

As the next millennium rapidly approaches, humanity is being confronted by the consequences of its overwhelming success as the dominant species on planet Earth. Its numbers are increasing as never before and its home planet has begun to experience the effects of its overwhelming occupation: environmental degradation, resource depletion, loss of bio-diversity and uncontrolled climatic experimentation. Many scientists and environmentalists have sounded the alarm and are propagating a variety of “Down to Earth" prescriptions to restrain humanity's careless ways such as: learning to live within its means, curbing its insatiable appetite for consuming resources, regulating its economic progress before this leads to more environmental problems, controlling its birthrate and suggesting that the rich countries, who are the biggest users of Earth’s resources and the worst polluters, reduce their demands and share their wealth with the less affluent nations.

However, as sensible and practical as these prescriptions may sound, and as necessary as some of them are in any case, taken to their conclusion many of these prescriptions go against human nature by requiring people to lower their expectations of what they may expect to achieve with their life by denying them of any hope for a better future. Now that democracy and a market economy appear to have become the political standard for joining the global economy, the accompanying standard of living as a reward for doing so is expected to go with it. Taking away the possibility for a better life just as masses of people have glimpsed that they may be on the threshold of prosperity is an invitation for further catastrophe. Thus, these prescriptions have little chance of being successful.

Unfortunately, planet Earth, once assumed to be the entire Universe (and still is by many), is indeed finite. It has become obvious that its livable area as well as its available resources cannot perpetually sustain the current lifestyle of the present 5.5 billion people, let alone the needs of twice this number of people which is expected in the next 50 years. Thus, the only real “Down to Earth" solutions which may have the desired effect are: actually lowering humanity's expectations and is very optimistic.

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However, there is another possibility. Several of the most perceptive early space pioneers, most notably Krafft Ehricke, pointed out:

"While civilization is more than a high material living standard, it is nevertheless based on material abundance. It does not thrive on abject poverty or in an atmosphere of resignation and hopelessness. It needs vigor as well as vision […..]Therefore the end objectives of solar system exploration are [….] social objectives in the sense that they relate to, or are dictated by present and future human needs." (Ehricke. 1970).

"The Space Option" (Bernasconi and Woods. 1993) is an elaboration of this argument that leads to the formulation of an optimistic plan to meet the basic and anticipated needs of humanity through the utilization of near Earth resources. Not only would this approach contribute to the survival of the human species but it also offers some near term hope for the less fortunate societies on the planet to aspire to reaching a living standard substantially beyond their present situation - an approach that none of the current scenarios for "sustainable development" realistically provide for.

As such, the *Space Option* could and should become the primary motivation for continued space exploration and development - perhaps even becoming a more powerful driver for space development than national prestige and scientific exploration has been. If implemented in time and with sufficient commitment, the ultimate reward would be a prosperous and dynamic planetary civilization and the creation of an infrastructure in space upon which the expansion of the human species throughout the solar system and beyond could be realistically anticipated.

To quote another space visionary Arthur C. Clarke:

"The challenge of the great spaces between the worlds is a stupendous one. But if we fail to meet it, the story of our race will be drawing to a close. Humanity will have turned its back up on the still untrodden heights and will be descending again the long slope that stretches, across a thousand million years of time, down to the shores of the primeval sea." (Clarke. 1968)

Or more concisely stated by Mark Hempsell:

"We face the choice of the type of future that we leave to posterity: a stone age or a space age." (Hempsell. 1989)

Thus, as understanding the ultimate relationship between space and humanity is so vast, so important and so urgent in its implications to the future of human civilization, not to mention Astronautics, the OURS Foundation introduces *Ars ad Astra: The 1st Art Exhibition in Earth Orbit* as a means to utilize the unique sensitivity of the artist to visualize this theme for a new and broad public.

2. THE OURS FOUNDATION

The OURS Foundation is a non-profit international cultural and astronautical organization chartered since 1990 in Switzerland. Its primary purpose is to introduce, nurture and expand a cultural dimension to humankind's astronautical endeavors. This task is being manifested through the identification, investigation, support and realization of related cultural, astronautical, humanitarian, environmental and educational activities which make take place both on and off planet Earth, and which are deemed as beneficial to the development and advancement of human civilization in the space environment.

In the past five years the OURS Foundation organized the 1st European Space Art Workshop and Symposium as well as several international space art exhibitions at major space and art events, The OURS Foundation is most noted for developing a series of art-in-space projects: *The Orbiting Unification Ring Satellite* for the year 2000, the *OUR-Space Peace Sculpture* and the *Cosmic Dancer Sculpture*, the latter of which was launched to the Mir

space station on May 22, 1993. Most recently, the foundation has been engaged in studies called *"The Space Option"* which relates the role of Astronautics to meeting the needs of society (Woods and Bernasconi. 1993; Bernasconi. 1994a; Beransconi. 1994b; Woods. 1994).

3. SPACE ART

Space exploration is the greatest voyage of discovery ever undertaken. The results of this exploration and the accompanying technological development are already contributing to a new awareness of humankind s place and purpose in the cosmos as well as creating new opportunities planetary environmental responsibility. Space technology is playing an ever increasing role in the understanding of climatic change. Satellite communication systems have become integral to the emergence of a global economy, a global politic and a global culture. The anticipated extension of human civilization beyond its home planet Earth will have deep and profound effects on human culture - its philosophies, its religions, its arts and its societies - both on Earth and away.

Artists have traditionally accompanied explorers on many of the great voyages of scientific and geographic discovery. In the case of space, art has played an essential role since the first use of the telescope. Before the invention of the camera astronomers recorded what they observed in drawings (Hardy. 1989). As the observation of space led to space exploration, artists anticipated the developments in outer space and created fictional images and scenarios about its development. These visions were the primary way that the general public was introduced to ideas about space exploration. Artists and writers, in fact, lay the foundation which makes future space activities understandable by the general public and thus secures the necessary political support. (anon., 1992)

Today, many artists serve the space community by helping to visualize the future developments and give form to developing technologies. Others, inspired by the beauty and wonder of the cosmos and by the implications of humankind leaving its ancestral home planet, are creating new art forms and techniques appropriate to human expansion in this new environment. Therefore, having art included in humankind's activities in space is a logical and timely development.

The term "Space Art" has many connotations and definitions even among the practitioners of this genre in the space community. Roger F. Malina, as editor of *Leonardo: The Journal of the Society for Art, Science and Technology* has tracked its development over years. He lists seven categories of space art:

1. Fine art which exploits sensory experiences generated through space exploration. New landscapes become accessible through space photography and film. Space illustrators anticipated some of these, and make use of the photographic record from space exploration.

2. Art which expresses the new psychological and philosophical conceptions developed through the exploration of space. The primary example of this is the concept of the Earth as a whole system, a concept made concrete by the first views of the whole Earth from space.

3. Art in space, viewed from Earth.

4. Art on Earth, viewed from space.

5. Art in space, viewed in space.

6. The applied arts, such as space architecture, interior design and furniture design.

7. Fine art which takes advantage of new technologies and materials created through space activities. The most important of these make use of satellite systems to create simultaneous global artworks.

Malina goes on to point out that the work of some of the most important illustrators, i.e. Chesley Bonestell, David Hardy, and Ludek Pesek, not only anticipated some of the results of space exploration, but in some senses

made space exploration possible by generating public interest and support and by helping scientists to plan their and illustrate their experiments (Malina. 1990).

Today, there are probably less than 1000 artists in the world that are dedicating their talents to some form of space art. Furthermore, the appreciation of this genre of art in all of its manifestations by the mainstream art community has been and is very low. Like much of science fiction literature, space art is rarely considered to be "serious" art, but rather anecdotal to main stream art. This situation has not been helped by the cinema, which, though immensely popular, has in most cases portrayed space as an arena for adventure fantasies with a blatant disregard for the fundamental physical laws of nature, most notably that of distance and gravity.

The relevance of space to the future of humanity has yet to be realistically portrayed in the arts. Furthermore, the real potential of space art to reach a global audience, has yet to be tapped. This concerns space art in Malina's third category: Art in space, viewed from Earth. Though often proposed, only a handful of art-in- space projects have ever been realized in space and nothing that was visible to viewers on Earth.

While artists have indeed made significant contributions to development of Astronautics, it is incredible that after thirty-five years of space activities, no such art-in-space projects have been concluded. The main reasons for this can be found in the space community itself, especially among the astronomers, who have loudly protested such projects as interference in their (more important) work and from some space scientists who too quickly accused such artworks to be nothing more than space debris.

Other limiting factors have been the high cost of realizing such art projects and the almost religious priority given to the "scientific" investigation of space by the space agencies.

Due to the importance of space to the future of humanity and because of the decline in both the public's interest and support for space experienced worldwide, perhaps it is now time to actively involve artists in the world's space programs once again.

4. ARS AD ASTRA

Art in and about space has the potential to expand the general comprehension of this new human experience, transforming it from a technical and scientific activity into other, broader forms of understanding. Art is also a traditional and powerful means of communication. Integrating space technology into art and using the space environment for the realization of artworks which can be experienced around the world speaks of enormous potential for global communication.

4.1 The Purpose

The purposes of *Ars ad Astra* are: 1.) to stimulate an area of society - the artistic community - to consider the relevance of space exploration and development to the future of society, 2.) to provide the general public - including the space community - with a fresh vision of this importance through the unique sensitivity of the artist and 3) to use the novelty of the event as a powerful communications tool in order to reach a large audience.

4.2 The Concept

The first step is to issue an international “Call for Art” that will be distributed and publicized through press conferences, press releases and through selected advertisements. Artists will be called upon to create and submit an artwork measuring 21 x 29.7 cm on the theme “Space and Humanity”. 30 - 100 of the artworks received would be selected by a jury of space and art experts to be sent to the Mir space station. The artworks would also be digitally recorded on a Photo-CD. The actual artworks, the Photo-CD and a portable Kodak Photo-CD player will be sent to the Mir station for the examination by the cosmonaut crew. The cosmonauts onboard would select the artwork which, in their opinion best expresses the theme of *Ars ad Astra* for permanent placement inside the Mir station. If possible, the selected artwork will be announced during a live television transmission from the Mir. This artwork would be installed permanently on the Mir station. The Photo-CD and the portable

Photo-CD player would also remain in the station for the enjoyment of future cosmonaut crews. The remaining artworks would be returned to Earth at the earliest convenience and will be sent on an international exhibition tour to museums, planetariums and congresses.

4.3 The Exhibition Package

Both the dimensions of the artworks and the size of the total exhibition package to be sent to the Mir station are determined by weight considerations. As the price and difficulty of sending anything into space is function of its size and weight, one of the challenges of the *Ars ad Astra* concept was to develop it within prevailing parameters and requirements for spaceflight.

Three kilograms was set as a realistic upper limit for the exhibition payload. The exhibition payload consists of: 1. the portfolio of artwork, 2. the Photo-CD, 3. the Kodak Photo- CD player including the remote controller and interface cable and, 4. a transport case.

A commercially available cellulose case measuring 285 x 390 x 55 mm was selected for its strength and low weight: 216 g.

The Kodak Photo-CD Player (Model PCD-960) measures 134 x 40 x 199 mm and the weights are:

PCD 960Player: 530 g
Remote Control Unit: 101 g
Video Cable: 60 g
CD: 46 g

Total Payload: 737 g

Together with the transport case this left a margin of approximately 2 kg for the art exhibition package. For reasons of uniformity and to conform to the specifications it was decided that participating artists will be supplied with an official *Ars ad Astra* paper for the creation of their artworks., 170 g per m2 white Bristol paper measuring 21 x 29.7 cm was then selected as the ideal choice as it offered a good surface and suitable stiffness conducive for a variety of artistic techniques. The size is that of a standard sheet of A4 office paper which makes handling comfortable and later reproduction of the artworks for publication in various media relatively easy. A single sheet of this paper weighs 10 g and allowing for an additional weight of 10 g for artistic media used, we arrived at the maximum number of 100 artworks weighing an average of 20 g each.

Therefore, one of the requirements for participation in *Ars ad Astra* is for the artists to consider the demands of spaceflight in the creation and in the execution of their artworks by making them as light as possible. A total of 50 g per artwork set as the upper limit. This results in an exhibition package consisting of 40 to 100 artworks which can be sent to the Mir space station. Including the transport case and the Kodak Photo-CD player the entire package should weigh less than 3 kg. As the Photo-CD and player would remain on board the Mir for future use, the return package would weigh approximately 2 kg.

In the interest of safety, the artists will be required to use non-toxic materials in the production of their art. Pencil, crayon, ink, water color and/or acrylic mediums will be permitted. The space qualification of the acrylic paint mediums was carried out by NPO Energia in the development of the *Cosmic Dancer* project (Woods and Bernasconi, 1993).

5. IMPLEMENTATION

Once the launch opportunity is secured and a launch date set, the implementation of *Ars ad Astra* will proceed in four distinct phases. Each phase creates unique local and global media opportunities which could keep *Ars ad Astra* in the press, and likewise, in the public s consciousness for several years.

Phase 1: The Call for Art

It is anticipated that media attention will be such that through a series of press conferences the first Call for Art will be disseminated through the international press media. In addition, press releases will be made with similar expectations. Space enthusiast organizations and art associations will be contacted directly. Finally, advertisements with the official Call for Art will be placed in selected space and art periodicals.

While acknowledging the dedication of the artists already working with the theme of space in their art, it is also one of the aims of this project to reach out to the mainstream artistic community in order to stimulate new artistic insight and expression and to bring "space" into the realm of traditional culture. It is felt that with the initial press attention and advertisements in space and art journals the theme of the project "Space and Humanity" will already enter the public's consciousness and discussion.

Participating artists will be required to adhere to the size and weight limitations, the deadline for submission and to sign a Copyright Release form covering the publication of their art by the OURS Foundation and its sponsors The artists may be charged a small registration fee to cover the costs of materials and correspondence.

Phase 2: The Selection Process

A deadline will be set for the submission of the artworks that is at least four months prior to the launch date. The submitted artworks will first be judged for their conformity to the size and weight regulations contained in the Call For Art. They will then be submitted to a jury consisting of two professional artists, an editor of an art periodical, a representative from the launching agency, a space professional and a member of the OURS Foundation.

The artworks will then be judged after aesthetic criteria and for their expression of the project's theme "Space and Humanity". Finally, an exhibition package not exceeding a weight limitation of 2 kg will be assembled.

The artists of the selected artworks will be notified of their selection and the artworks not selected will be returned to their owners. A press conference will be held with the selected artworks on display. Official press releases announcing the selection will be prepared and distributed to the media and to the artists of the selected artworks The artists will be encouraged to make their selection known to their local communities and press Based on our past experience, it is felt that local press interest will be very high which in turn will stimulate discussion about the artist, his work and the theme of the project.

Phase 3: The Spaceflight

The *Ars ad Astra* payload will be assembled as described above and delivered to the launching agency at the proscribed time. Representatives from the OURS Foundation and the press may attend the launch. After arrival on the Mir space station the payload will be unpacked and prepared for viewing by the cosmonaut crew. The original artworks can be examined individually and by using the Photo-CD player. After a consensus has been reached by the cosmonaut crew as to which artwork in their opinion best fulfills the theme of the project an announcement will be made from the Mir station. With the cooperation of the launching agency this announcement could be made via a live television transmission from space which would stimulate press coverage. The selected artwork will be installed in some manner (TBD) in the Mir station and the remaining artworks will be certified with a stamp on their reverse side. These will be returned to Earth at the earliest convenience.

Phase 4: The Exhibition Tour

The returned artworks will be matted and framed. Throughout the development of the project possible exhibition opportunities will be sought out and an exhibition tour will be booked. This tour may be coordinated with the launching agency or sponsor. It is foreseen that a book about the Ars ad Astra: The 1st Art Exhibition in Earth Orbit will be published as well as made available on Photo-CD which will further enhance its

communication potential. The exhibition tour is expected to last up to four years after which time the artworks will be returned to their owners.

6. FINANCING

As the Russian Mir space station is the only permanently crewed facility presently in Earth orbit, it is the only location for the realization of *Ars ad Astra* as it has been described. Access to the Mir station is available either privately through direct negotiation or through the auspices of an official program that has booked time on the station.

With the *Cosmic Dancer* project as an example, payloads to the Mir station via the private method currently will cost approximately U.S. $100,000 per kg and approximately the same amount to have them returned. The price may include quite a few services such as training, testing and cosmoanut time and varies according to the amount these aspects involved as well as successful negotiations. Our interface to NPO Energia for the *Cosmic Dancer* project was Kayser-Threde GmbH.

As a private endeavor, one approach to finance the *Ars ad Astra* project would be to require the participating artists to share the costs. Hypothetically this could be achieved through the sales of reproductions of the artworks, and through the sales of the original artworks. Cost per artist would be approximately $4,000. The *Cosmic Dancer* project was initiated on this basis and due to the high costs of marketing and the general disinterest in space, the OURS Foundation experienced much difficulty with this approach.

The most logical approach was to locate a corporate sponsor willing to underwrite the total costs of the project in exchange for corporate visibility and and product exposure in connection with the realization of the project. Noting the above launch costs and adding the publicity costs, the public relations and the administration costs *Ars ad Astra* would cost the potential sponsor at least $400,000. This sum, while modest for a space project exceeds the budget of many potential sponsors for an untried public relations activity. It should also be pointed out that the sponsoring approach also brings with it problems that could be incompatible with an art project. When companies are spending substantial funds to promote themselves, compromises to the project and even to the art may be expected.

An attractive approach for realizing *Ars ad Astra* would be to have it officially integrated into the payload component and flight plan of a scheduled space agency mission to the Mir station. This approach would not only avoid the problems and uncertainties of the above two methods, but would also add the prestige of having the project sanctioned by an official organ of the space establishment.

Beyond the cost of the spaceflight it should be pointed out that *Ars ad Astra* is a communication project and its success as such will depend on effective and professional public outreach program in order to take advantage of the many media opportunities that it creates. Therefore, based on our experience with the communication of the *Cosmic Dancer* project, whereas this aspect was not adequately funded, it is realistic to estimate that at least one-half of the project's overall budget should be dedicated to the communications aspect.

7. SPACEFLIGHT OPPORTUNITIES

Ars ad Astra was first introduced to the space community by the OURS Foundation at Space Commerce'90 in Montreux. Switzerland as a proposed International Space Year (ISY) project. Preliminary discussions concerning its implementation were conducted with space officials of the former Soviet Union in Moscow in 1990. As the OURS Foundation was already occupied with the development of the substantially more expensive OUR-Space Pace Sculpture project (Woods and Bernasconi, 1989) it proposed the implementation of *Ars ad Astra* as a mutual partnership with NPO Energia. Though an initial agreement was reached, subsequent negotiations concerning the terms and responsibilities as well as the definition of the partnership continued through much of 1991 to a point where no satisfactory arrangement could be reached in time for a realization during the ISY. The project was then postponed.

After having successfully flown the *Cosmic Dancer* sculpture in 1993 aboard the Mir station, the *Ars ad Astra* project was reviewed and considered to be a way for artists to celebrate the 25th anniversary of the Apollo 11 Moon landing. Yet. based on the difficult experience of financing the *Cosmic Dancer* project, a privately financed approach was disregarded in favor of trying to locate a sponsor. The project was discussed with Energia Deutschland in 1993 and a “Letter of Intent" was signed and negotiations with an interested corporate sponsor ensued for a period of five months after which the sponsor decided not to undertake the project as it would conflict with its own “in house" developed communication efforts. And. *Ars ad Astra* was again postponed until another opportunity and/ or an interested sponsor could be located.

After much reflection and evaluation of our attempts to realize such cultured projects as commercially viable or corporate sponsored activities, it was decided by the foundation to try to realize the project within the auspices of a national space program. It was known that two European manned missions were under development by the European Space Agency (ESA): EuroMir’94 & EuroMir'95. Austrian artist Richard Kreische had his cultural experiement *ARTSAT* included as a part of AustroMir in 1992 (Kriesche, 1993) and this project as well as the *Cosmic Dancer* project were precedents for art- in-space activities within the European space community.

As the OURS Foundation is a legal organization chartered and registered in Switzerland and as Switzerland is a member country of ESA. A proposal was submitted to ESA to fly *Ars ad Astra* as a cultural experiment as a part of the EuroMir’95 mission. Fortunately, ESA responded positively to this proposal and a letter was issued in September 1994 approving our proposal. Plans are currently underway to implement the project in the latter part of 1995 as an official part of EuroMir’95. The excact details of how this will be done are currently under discussion. It appears that Europe may be taking the lead in the cultural investigation of the space environment.

8. NASA?

At this point some readers may question as to why NASA - the National Air and Space Administration of the United States - was not approached. The first and obvious reason is that NASA does not have a facility in Earth orbit which would be suitable for the exhibition of *Ars ad Astra*. The Mir station is the only habitable outpost of our civilization that exists beyond Earth. Besides this aspect, on the Mir station the art could actually contribute to the living environment of the cosmonauts as a diversion to the long duration missions. Furthermore, the Mir cosmonaut crew would have the time to contemplate and enjoy the artworks as they would on Earth. Thus, the art could be appreciated in a real sense and an authentic artistic dialogue between Earth to Space could be established.

The short duration and the hectic schedule of a typical U.S. space shuttle flight would not offer a similar context for either the exhibition nor for the contemplation of the art. In light of recent developments concerning Russian and American cooperation in space with docking missions planned and American astronauts scheduled to visit the Mir beginning in 1995, the appropriate context would appear to have manifested itself. However, in recent years NASA has a demonstrated reluctance to consider artistic projects within its spaceflight program. Having flown two art projects in Get Away Special (GAS) containers before the Challenger disaster and one "non-scientific payload" since, NASA has suspended this policy until realistic flight opportunities are available. The "suspended" status of this policy is effectively invoked to discourage cultural experiments by artists in space aboard the space shuttle. Other than a few “art objects" which have made it onto U.S. manned space vehicles via an astronauts "personal effects" case, no art that involved the interaction of the astronaut crew has officially been included in a U.S. space mission. (Woods, 1994)

This reason was given to reject a proposal to fly the *Cosmic Dancer* sculpture (Woods. 1993,1994) as a part of the NASA art program aboard the shuttle in 1992 (NASA/ Schulmann, 1992), and most recently, similar reasons by the administrator were given (NASA/Cline. 1994) to reject a proposal to return the *Cosmic Dancer* sculpture to Earth from the Mir station on the upcoming docking mission even though the *Cosmic Dancer* sculpture would have gone to the Smithsonian Institution's Air & Space Museum as a gift to the country of its creator (Harwit. 1994).

Although NASA has a commendable art program which has resulted in a large collection of commissioned artworks which chronicle the U.S. space program, it does appear to have a disinterested policy toward realizing art-in- space projects within the current U.S. space program. Until the "non-scientific payload" policy is reactivated, the possibility for artists to realize their art projects in space with NASA's participation appears to be futile.

9. COMMUNICATING TO THE PUBLIC

As pointed out in section 5. Each phase of the *Ars ad Astra* implementation creates new and distinct opportunities for communicating to both new and broad audiences. One of the main goals of this project is to reach out and touch areas of society that may not be aware of the potential of space to contribute solutions to the problems that humanity must soon face. While this potential may be well understood within the space community it is neither reaching nor convincing a broad public. The danger is that inadequate and counterproductive measures may be imposed by governments which have not examined all possibilities.

Therefore the authors are convinced of the urgent need to elaborate and disseminate a new rationale for space and to implement a concept which we call the *Space Option*. Indeed, the window of opportunity for its implementation may already be disappearing as the problems associated with the unchecked proliferation of the human species threaten to overtake its ability to do so.

Due to the importance of space activities to the future of society, the lack of appreciation of the potential benefits of space development for the economic and environmental well-being of the planet, and. as a result, to the current lack of support for space by the general public, we feel that there is much important work to be done in the area of educating and communicating the public about the relevance of space to their future. We believe that the communication of scientific data alone, which has been the traditional approach, is not enough to convince and excite the public about the importance of space. Nor do we believe, that this approach has proved to be successful in stimulating and maintaining their broad interest and support. Space needs the "human touch', both in space and on Earth, to be better appreciated which, in addition to astronauts, cultural activities can provide. The authors call upon the space community to utilize to the fullest the many creative resources that are at its command and to finally embrace the cultural dimension of space.

Ars ad Astra: The 1st Art Exhibition in Earth Orbit, now scheduled for implementation on EuroMir'95 is a step in the direction of "Public Outreach" so necessary for the future of astronautics and to the future of human civilization. It is also a first modest attempt to open the door to artists who may never have considered "space" in their art before. As such, it is a challenge to both artists and to society to consider the theme "Space and Humanity" in all of its dimensions. It provides artists with the opportunity to participate in a novel, historic and highly publicized event, and society, with a body of visual images which could help catalyze the creation of an optimistic future for humanity on Earth and in space.

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