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#### SPACE EXPLORATION AND WORLD PEACE

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Until this century there was always some place on earth to explore and know fully. Men have climbed earth's highest mountain, walked upon the North and South Poles, and plunged the depths of the ocean. Man's determination to fully explore his native planet has finally turned him toward outer space, from which he can learn more about the earth and its surroundings, the sun and its radiations, the possibility of life on other planets, and the distant galaxies that lie beyond the Milky Way.

## The Meaning of Space

Space begins at the point where the atmosphere is so thin that it has no effect on anything in it; where meteors start to glow from friction against the air; and where the ionosphere ends, let us say, somewhere about 250 miles above the earth. This is our frontier. Beyond this frontier there is practically nothing. Space is a near-vacuum without air or sound.

Around the sun are nine major planets including earth; many thousands of minor planets which we call asteroids, a big family of comets; clouds or cosmic dust; and swarms of meteors. Between the various parts of our solar system is the void, which is another way of saying space. Gravity is the cosmic glue which holds the system together.

In spite of the fact that there are military and political reasons for the present urgency of the space programs by both the U.S. and the Soviet Union, a rich future can grow out of the very discoveries that people dread most — nuclear energy, automation, and biological advances, which are the most powerful social forces in this century. But these powerful social forces can be as great in peace, as in war; we can use them to create the future and not to destroy it. In space exploration, science promises a future in which men can lead intelligent and healthy lives — a future that is worth living for.

## Present Technical Knowledge

From a purely technical standpoint, we already now know enough to do each of the following:

- 1. Produce enough food to feed every hungry mouth on earth, even though the world's population should double or treble
- 2. Rid our cities' air of all forms of manmade pollution
- 3. Make fresh water out of sea water and thus irrigate all the world's arid regions
- 4. Transport large numbers of people or large quantities of material from any place on earth to any other, in a few hours
- 5. Produce enough energy from uranium to light and heat our homes and offices, electrify our railroads, and run all our factories
- 6. Establish instantaneous communication by telegraph, telephone, teletype, or television between any two points on the surface of the earth — and when the occasion arises, between any two points of the solar system.

## Scientific Space Development

Since the inception of the space program, it has been a policy, especially carried on by the U.S., to extend the benefits of space research "to all mankind," as required by the 1958 act. The American space effort has been conducted openly, and its results have been shared with many nations.

The global communications satellite network is a prime example of tremendous space benefits. Over 70 countries joined the U.S. in the International Telecommunications Satellite Consortium (INTELSAT), all of which are enjoying the benefits of this satellite.

We are all members of the same species called the human race. Like the various members of the body we have various kinds of people in the human society. Some people have unique roles to play distinct from others. Yet all roles are important each person in his own unique way. The eyes are certainly the most important member of the body in relation to the recognition of colors, and the ears are undoubtedly the most important member of the body in relation to the appreciation of music. However, certain parts of the body, such as the heart and the brains, are of vital importance. Although a human being could live without an arm or a leg. he is not expected to live without heart or brains. This means that in the history of human society there are certain members that are of vital importance. These members of society consist of those persons who are dedicating themselves thoroughly for the welfare of mankind. They consist of persons who developed, since early childhood, outstanding virtues that later enabled them to develop a sense of equilibrium, balance, and judgment, which is so badly needed in the solution of certain delicate problems at both national and international levels.

#### Priorities in Education

Because of surmounting problems, we seem to have, in the world today, a race between education and catastrophe. If we all yearn to see education as the hopeful winner, then the time has arrived to reevaluate our educational needs and project a kind of education that transcends national, political, and ethnic boundaries.

Our view of man, in terms of priorities, has to be reevaluated. A human being is first a sacred person with a unique identity of his own. Second, he is what he habitually presents himself to be through his actions and purposes — a good, honest, reliable person, or a bad, dishonest, unreliable individual. In the third place, a human being is a man or a woman, with all his specific characteristics and needs that his sexual role develops in a rational and sensible society.

It was obviously in terms of such priorities and the kind of educational approach that urged President Kennedy to plead with the American people: "Ask not what your country can do for you, but what you can do for your country." In other words, let us ask how beneficial we can render ourselves to the human race, beginning with ourselves here at home. Or, to put it in the words of Senator Robert Kennedy: "Let

us begin by healing the wounds from within." This remark, of course, could be simultaneously applied to every single country without exception.

### Reevaluation of Human Relations

Why does the source of educational chaos, revealed in tensions existent in national and international relationships, consist in the not-yet-solved problem of priorities? We simply have formed the habit of concentrating primarily on the unessential, with little regard to the actually essential.

A human being could be nicknamed American, French, Russian, or Chinese because of the fact that he was accidentally born in a global area that was in turn nicknamed America, France, Russia, or China. Hence, in our reevaluation of educational priorities, especially in terms of human relations, the nationality we carry, the political party to which we claim we belong, as well as the ethnic creed we embrace in our private and perhaps public life, should, for all practical purposes, be considered of secondary and not of primary importance.

In this way, the problem of communication in the realm of human understanding will diminish considerably. The conflicts that may remain among humans will then take the shape of those existent in the ordinary family. No matter how much brothers and sisters quarrel, litigate, and fight each other, they all end up eating at the same table and sleeping under the roof of the same house in protection and security.

Bringing people together to live in a brotherly way is an educational task of a large order. So far, education has not accomplished this desired perennial goal. People are brought together only after we learn how to break through national and international barriers. In this regard, President Nixon took a great step forward in the establishment of world peace when he lifted the ban from American people to travel to the mainland of China.

# Space as an Instrument of Peace

With a clear knowledge of space benefits on one hand and of educational needs on the other, we can now begin to realize that space exploration may perhaps prove itself to be the most effective instrument in procuring international understanding through improved facilities in worldwide communications, and through the building of an emotionally and socially stable society in the growth of a peaceful world.

When people of every nation learn how to correlate their problems to those of others, when humans in every country learn how to break the barriers that hinder communications, when all the people across every continent learn to view their earthly blue planet as a unit and a whole, then the time would have arrived when man's long quest for peace would bear the desired results.

We will certainly not be written down in history as members of the generation of peace, because of the short span of our lifetime. But we will go down

in history as the generation that initiated the generation of peace. This will eventually be revealed in our wholehearted efforts in space exploration that slowly, but surely, will break the barriers of communications that exist through national, political, and ethnic boundaries. Through space exploration we will, as a matter of fact, look at our planet as a unit void of artificial boundaries set by man since ancient times; through space exploration we will eventually look at all people as humans who share the same needs regardless of their background culture; through space exploration we will finally look at ourselves as lucky members of an intelligent species with unique contributions to make for the welfare of mankind in this planet and hopefully elsewhere as well.