

ON THE FORMATION OF A GLOBAL SPACE AGENCY

By Ian Crawford

The achievements in the exploration of space which we have seen over the past two decades have been mainly along national lines. What could we achieve if the entire world worked with common goals? The author considers the possibility of establishing an international space programme.

Introduction

There is, today, a pleasing amount of international co-operation in space research. Perhaps the European Space Agency is the best example of such co-operation because, although it consists of a relatively small number of member states, they co-operate, or are prepared to co-operate, in a wide range of projects. Other organisations, such as Intelsat (the International Telecommunications Satellite Consortium), operate in a limited area of space technology but draw together many more nations; Intelsat has over 100 member states. The purpose of this article, however, is to look at the far more ambitious possibilities regarding the formation of a global space agency which would have responsibility for all aspects of space research.

Global Co-operation

Much as we might like to pretend otherwise, it is a fact that many of the World's great space projects are undertaken for political purposes and many of the lesser ones for military ones. For these reasons it is perhaps naïve to expect total international co-operation in space research; indeed, it might be argued that, by removing the element of political competition, such a system would severely reduce the pace of astronautical developments. I shall argue, however, that this need not be so; that there is no difficulty, in principle, in establishing a global space agency and that, when the full advantages are realised, there should be few political reasons why it should not be established in reality.

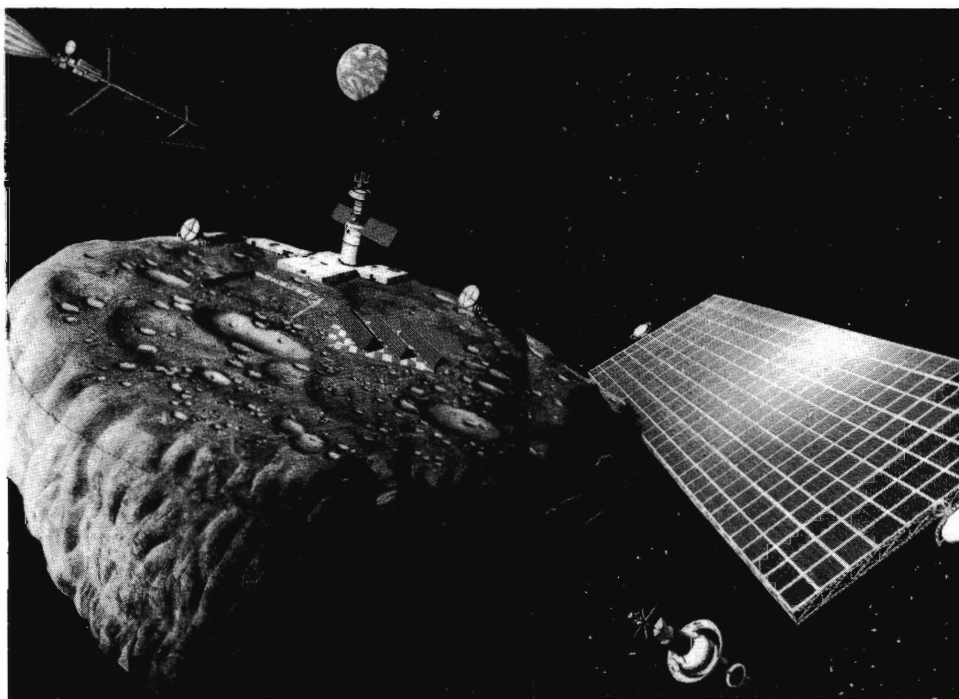
The organisation of today's World is increasingly dependent on space technology, particularly in the field of telecommunications where the existence of Intelsat clearly shows that many nations regard co-operation here as highly

important. As time goes on, more and more space-related developments will become important to the World's economy and the placing of these under international control would be beneficial to all. It is important to realise that this will not apply only to unmanned Earth satellites but, in the not-too-distant future, to manned activities as well. The maintenance of many separate international bodies, each to take care of a separate field of study, makes little economic sense and both the finance and organisation would, in my view, be better placed in the hands of one agency. I can see few reasons why most countries would not agree to some form of international control over all civilian and scientific space projects; military questions, as always, are more delicate.

Until recently military satellites were employed either for early-warning and surveillance or for communications. Surveillance satellites could logically be controlled by the proposed agency, on behalf of the United Nations, to monitor compliance with international treaties. Their observations would be made available to all nations and only those intending to deliberately violate such treaties could object to this arrangement. Military communications satellites pose a more complex problem since, as long as nations wish to maintain independent military machines, they will insist on the use of these satellites and their exclusive control. In the envisaged system these would have to be launched by the international agency according to some agreement acceptable to all parties.

Recently, both super-powers have started thinking about more active military roles in space and the development of so-called killer satellites has probably already begun. This is obviously a very dangerous situation and must be brought under control in the near future. If this trend is allowed to continue much further then asking a nation to place her space interests under international control would be like asking her to do the same with her air force — not something that would appeal to the average politician. Perhaps a global space agency is necessary if further military exploitation in this field is to be prevented.

I envisage such an agency being responsible ultimately for all space projects and being answerable to the General Assembly of the United Nations. Each of the 'developed' nations would contribute a relatively small percentage of their GNP, in a manner similar to the present financing of ESA. Many poorer



A montage of possible future space projects, all of them so large that they may need cooperation on a world scale. They include asteroid mining, space colonies, solar power satellites and, not shown here, permanently manned bases on the Moon and Mars.

On the Formation of a Global Space Agency/Contd.

nations, of course, would be unable to afford to subscribe to the agency but, through the United Nations, would be guaranteed any scientific, technological and social benefits which resulted from its work. The direct economic benefits, which would result from industrial contracts, would be shared out between the contributing nations in a way linked to their subscriptions.

There would, in my view, be many advantages in the formation of such an international body, of which a demilitarisation of space would be only one. It would enable more funds to be made available for space research than is currently possible and would prevent the duplication of work carried out by different nations, thus leading to a better utilisation of resources. Perhaps the greatest benefit of all would be the reduction of international tensions that co-operation at this level would, hopefully, bring.

Many will argue that international competition is necessary if space technology is to advance at the pace to which we are accustomed. I believe that this need not be so; the member countries of ESA have agreed to pay sums of money to an organisation which manages projects of little political value and I can see no reason why most other nations should object to this. With guaranteed funds available the developments would probably proceed at a faster rate because they would be driven not by the whims of politicians but by the enthusiasm of the scientists and engineers concerned. Funds would no longer be restricted for projects which are of great scientific importance but which have little political or military usefulness.

The above should not be taken to mean that all competition would be ended. Competition will be of great importance in driving the exploration and exploitation of space; all that will be ended is *international* competition driven by political considerations. As the industrial development of the Solar System continues, companies will be formed which deal exclusively in space technology and, later, in space exploitation; mining and construction, for example. Competition between these companies will, as always, reduce prices and, hence, speed up the rate of development. What is important is that this will be competition between companies rather than between nations. By this time the central agency would be directly responsible only for the scientific missions and would act as a guard to prevent nationalism once again creeping in.



Perhaps the best example of international cooperation so far is the Apollo-Soyuz Test Project when Soviet and American crews flew a joint space mission. It showed that, if the political will is there, the technical problems are secondary. Here we see President Ford meeting the Soviet crew (*left*) and their US counterparts.

Perhaps all this is a naïve view, but I have tried to show that the concept of a global space agency should not be dismissed out of hand. Anyone who has a true picture of Earth's place in the cosmos must be struck by the futility of national differences and the absurdity of trying to break out of our 'cosmic cradle' on a national basis. The formation of one body to take responsibility for this task, on behalf of humanity as a whole, is surely the most logical way to go about it. In spite of the political and bureaucratic difficulties, is this not something for which we should strive?

The Editor would welcome readers' responses to the suggestions put forward by Mr. Crawford. Is a global space agency possible in the real World? How would we overcome the awesome political differences?

On a more general note, short items on interesting topics in the above style will always be considered for publication by the Editor.