

Off to Join the Shuttle ?

THE European Space Conference has at last (see page 427) faced the plain truth that there is no point in spending money on the development of earth satellites without some assurance that they will eventually find their way into orbit, and that at least is something to be grateful for. The visit now planned to Washington by M. Lefevre, the science minister of Belgium and the current chairman of the space conference, may turn out to be a milestone in the chequered history of that organization. Now, at last, the European governments which have been contributing to the European Space Research Organization (ESRO) may be able to know where they stand. To be sure, the posture in which they will find themselves may be neither honourable nor even respectable, but there is a point at which it is better to know the awful truth than to pretend that truth is unimportant. In short, if M. Lefevre does not spend too much energy in beating about the bush, there is every reason why he should be able to go back to Brussels with a clear understanding of the circumstances under which the United States will be willing to launch European satellites. Better still, he should know something of what the cost will be.

The travellers to Washington would be wrong if they entirely forgot that it would have been much easier to have made a sensible (and economical) agreement for the use of American rockets to launch European satellites if they had faced up to the need for such an agreement five years ago. In the foreshock of the Moon landing, almost anything was possible. Now, by contrast, NASA is necessarily (and rightly) a penny pinching agency of the United States Administration. Dr Thomas Paine, until this week the administrator of NASA, is entirely serious when he says that space research could yet become a means of spreading international understanding among governments, but there is also no doubt that his successor will have no blank cheque for international enterprises. Indeed, there may be something if not everything in the belief that NASA's enthusiasm for international collaboration on the development of the space shuttle may be a sign that international connexions are considered to be an important safeguard of the programme.

Even if there is no point in crying over spilt milk, it would be only seemly if those who a few years ago let it be understood that the need for a formal agreement between Europe and the United States on the launching of rockets could be forgotten were not occasionally to acknowledge that their views have done much damage. The result is that a great many European nations have cherished ambitions about launching earth satellites for carrying out a variety of tasks, much in the spirit in which people at fancy dress parties

occasionally find that the wish becomes the deed. In spite of the endeavours of the government of France, the simple truth is that there is no means by which Europe as a whole can will its satellites into orbit and there are no machines which can carry them there. Nobody should be excessively cast down by this, for the fact that the United States is splendidly equipped for tasks like this is a simple logical consequence of the energy which has been spent in the past two decades on research and development on rocketry. European nations wishing to use United States rockets for launching satellites should be eager to pay for the privilege, not merely the cost of fuel but that of the research and development as well. To put a figure on this cost is evidently a matter of mumbo-jumbo, but that is no reason for not trying.

What would, however, be entirely unseemly is an agreement that the United States would supply launchers to Europe in return for undertakings of a less tangible kind—the willingness of European nations to participate in the shuttle, their acceptance of the notion that the Communications Satellite Corporation should continue as the manager of Intelsat or even their unwilling agreement to participate in some of the less expensive if equally fanciful schemes that seem to set eyes of international lawyers alight. The dangers of such arrangements are that Europe would be permanently deficient in methods of advanced technology and yet be forced into administrative straitjackets designed by other people.

There is no easy way out of the difficulty, but M. Lefevre should at least try to find one. His argument might go like this. First, Europe has nothing to gain from the space shuttle, and the United States stands to gain almost as little. Second, the cost of starting again on the development of a useful rocket launcher would probably be something like £250 million at present prices. The Bluestreak booster stage which has been the first stage of the ill-starred Europa rocket system is at once too unreliable and too small. The French rockets are so far equally unsuitable for serious commercial satellites. Yet if £250 million would meet the cost of the development of a new rocket, this does at least provide a basis for calculating the upper limit of the degree of commitment of Europe as a whole towards the shuttle. Briefly, it would probably be worth £10 million a year for five years to have the right to use American launching rockets more or less at cost. A higher price would probably mean that it would be wiser to develop European rockets. This is a point that should be put strongly in Washington. That done, there is everything to be said for paying the money with a good grace and without attaching strings.