

More extraterrestrial hoopla

The grand new space policy of the United States is philosophically coherent but intellectually bankrupt, promising little of practical benefit to those left on the Earth.

THE tragic Challenger accident two years ago seems not, after all, to have imbued Washington's policy-makers with the sobriety that might have been expected. The loss of a whole shuttle crew should have been an occasion for reflection, for sober consideration of what purposes are served by the exploration of space and for a deliberate decision about the framework in which future activity will be contained. In the event, the outcome of a year's brooding is that hardware takes precedence over software. There is to be a base on the Moon and, next century, an excursion to Mars, but meanwhile new lifting equipment will be developed to service these expeditions. At the same time, the government plans to privatize the business of launching Earth satellites, using public funds to enable industrial companies to establish themselves in these capital-intensive ventures. The plan also legitimately centres around the principle that the United States will not neglect its national security in deciding what to do next, and next after that; the question inadequately answered is how national security is secured by the plan now on the table. Does it equate with "leadership" in the sense in which that is most often understood in connection with space developments, the knack of being first?

The privatization proposals nevertheless have the merit of constitutional consistency. The US government differs from most others with ambitions (however modest) in this field by the extent to which practical development and even operation of space machines is contracted out. The admirable, even enviable, consequence is that there are skilled private organizations that can be quickly regrouped to meet the needs of new customers for novel machines and services. The theory, conforming with the equally admirable doctrine that government should be as unobtrusive as possible, is that there is enough skill already in being for providers of launching services to assemble the appropriate skills and to sell them on to potential customers. That, in other fields, is usually true. But will the risk-bearing free-wheeling economy of the United States generate the market necessary to sustain privatized space launching? Not, it appears, just now, which is why the administration plans to stand proxy for customers undeclared to the tune of 70 per cent. So much is understandable. There are plenty of organizations wishing to launch communications satellites, but which are probably unwilling also to have to pay for the launching costs of a complicated private company. A decade from now, it may be different. Meanwhile, what the US administration is attempting is to hurry on the future. The price of that impatience will be to skew the pattern of a future industry, and at great cost. Patience would have won greater benefits.

Lunar adventure

The plan to go back to the Moon, and from there to Mars, is similarly a plan to force the natural pace. It is an adventure in high-technology exploration strictly comparable with the President Kennedy's Apollo programme of the 1960s and, for that matter, with the dash to the South Pole by Scott and Amundsen earlier in the century. As on those occasions, the hard work will be the preparation, but the risks of failure will be great enough to give the expedition an heroic air. And the benefits? More

than a quarter of a century will have passed between the last and the next landing by a person on the Moon, comparable with but even smaller than the interval between the two first journeys to the South Pole and the next visit. Those heroic journeys served chiefly to show that the risks of repetition were not worth the trouble, chiefly because the means of transport were too costly and insecure — and there was so little to do on arrival.

The plan to go to Mars is a plan to make a pageant for a future generation. It is partly inspired by the disappointment of Challenger and partly by the advertised interest in Mars of the Soviet Union. Nearer the time, no doubt, the community of planetary scientists will be asked for its views, and there will be hastily arranged competitions for people wishing to design programmes of observation that might be made above, below and on the surface of that inhospitable place. But neither those who put in bids nor those who pay for them (the taxpayers of that decade) should be disappointed if the programme of martian exploration is quickly put on ice after the first few successes. As at the cancellation of the Apollo programme, the word will go out that it would be more prudent to have a safer means of transport (whence, of course, the shuttle). None of this means that the journeys will not be fun, but simply that a huge investment of resources stretching over decades is justified largely by the undoubtedly absorbing interest of the long preparation, the sense of making progress that will come from that and the no doubt even more absorbing television programme it will be possible to mount from Mars. Naturally, it will be a disappointment for the United States if the Soviet Union does all this first... but there is always even less hospitable Venus.

By-products

The Apollo people were fond of saying that their project would cost a lot of money but that none of it would leave the ground. The same argument will arise on this occasion, and there is much in the claim that the tangible end-product of the mission to Mars will be the skill of the people who will have built the transport system, and which can then be turned in other directions. But as with all development projects whose chief benefits turn out to be their by-products, it would make more sense to mount projects aimed at the by-products themselves.

If, as on this occasion, it is felt necessary to bring about a substantial improvement and broadening of the capacity of the United States to send objects into space (a legitimate component of national security), that could more efficiently (and cheaply) be done by concentrating people's efforts, in the next decade or so, on the jobs that cry out for doing. The careful collection of data from the Solar System nearby, the further development of telecommunications and remote sensing satellites whose work must bring immediate benefits and the development of machines in which reliability takes precedence over spectacle. The temptation is to suppose that such dull work cannot contain the seeds of greatness, let alone leadership. But in this new and risky business, the prizes will go to those who do what they say with unsensational reliability. Columbus, after all, is remembered still not because he was a daring fellow, but because he was a splendid navigator. □