Over-optimism about projects like World Weather Watch and the Global Atmospheric Research Project that may follow it seems also often to be engendered by a conviction that the time has come when all parts of the natural environment can be brought tidily under control by the expenditure of enough money and by the conduct of enough scientific research. A part of the trouble is that massive research undertakings since the Secord World War have often been surprisingly successful, so that potential sponsors are easy to persuade. But it is also clear that the scientists who participate in these ventures are often convinced that there is something virtuous in operating on a gigantic scale. One of the points the president of the Royal Meteorological Society was making is that it is prudent to start small and to grow in the directions where opportunities offer themselves. Projects planned by committees tend artificially to work the other way.

DEATH IN THE SKY

THE sad, valiant and fruitless death of Colonel Vladimir Komarov is yet another reminder that rudimentary essays beyond the atmosphere are not simply episodes in one long Buck Rogers story. Coming so soon after the death of three pilots in the United States, this nasty happening may help to bring a better sense of proportion to what the super-powers are up to. The ideal outcome would be some understanding between the Soviet Union and the United States that in the future there will be more partnership and less rivalry between them, and a more deliberate programme of what is called space exploration, although that may be too much to hope for. What President Johnson and Mr. James Webb had to say immediately after the accident was encouraging, but if statesmen on both sides really believed what they have been saying all these years about the connexion between rocketry and the cause of understanding and of progress, they would long since have recognized that they would jointly be at least as effective in concert as in competition. It is all very well, in "Romeo and Juliet", for the Montagues and Capulets to be brought together by bloodshed. Even if the people on the launching pads were men and women like that, they are not the ones who matter.

It is therefore ironical that when Colonel Komarov was travelling in an orbit around the Earth, the latest Surveyor rocket to the Moon was quietly scratching a furrow in the surface of the Moon. It is only natural that people should be asking why great economic systems which are busy replacing men by machines on the surface of the Earth should be so anxious to substitute men for machines in space. What is all the fuss about? The best justification of the two space programmes is irrational. President Kennedy was on defensible ground when he echoed Mallory's excuse for going back to Everest "because it's there". Although President Johnson's message of sympathy about the latest tragedy was generous enough, it was

old-fashioned of him to have said that the enterprise is "in the cause of science". That doctrine was given up a long time ago, and there is very little doubt that even the exploration of the Solar System by automatic devices such as Surveyor is a more lavish allocation of resources to one narrow activity than can be sensible or even profitable if science is what matters. If it had become clear that winning the race to the Moon is not an economic investment but an economic waste, it is most probable that the planners would have allowed their sense of high adventure to be overcome by their reason. So why cannot they be made to see sense without waiting for disaster? In exploits like these, as in the testing of new aircraft, some deaths are unavoidable and the men who die are courageous fellows. The tributes which are showered on their coffins are well deserved. The most appropriate tribute of all would be unilateral declarations by the United States and the Soviet Union that they will discard their arbitrary timetables for the Moon. A sensible agreement on collaboration would be better still. Is it too much to hope for ?

REFORM BY STEALTH

Success in reforming the British Parliamentary system seems to be in inverse ratio to the amount of noise the reformers make. Mr. Richard Crossman may not be the quietest man in the House of Commons, but in introducing the Select Committees on Agriculture and on Science and Technology he made use of what almost looks like stealth. Members may well be rubbing their eyes in surprise that one of their oldest and most traditional practices should be used as a Trojan horse for reform. The Select Committee on Science and Technology has surprised many by its vigour and its determination that nobody is too important to give evidence, and it may be able to force significant changes in the ways in which great public concerns run their lives. The House of Commons should be grateful that vital decisions need no longer go by default.

A worthwhile extension to the new committee's powers is now in prospect. Mr. Crossman's new proposal, reported on page 447, is that the select committee should have the power to appoint subcommittees with the full rights and privileges of the select committee itself. The subcommittees could be smaller-they would need a quorum of only threeand more specialist. Mr. Crossman has also taken the opportunity of reminding the House that the select committee has the power "to appoint persons with technical or scientific knowledge for the purpose of particular inquiries, either to supply information which is not readily available, or to elucidate matters of complexity within the committee's order of refer-Whether this reminder presages another innovation in committee procedure—the introduction of experts from outside the House of Commonsremains to be seen.