Panel thinks it proper to recommend from time to time.

NASA may also fear that dismemberment into more manageable pieces may complicate its matching of the demand for launching facilities with the supply it has created. That, too, is misplaced. While the vast majority of the projects on which researchers have set their sights could be handled as well by inanimate rockets as by the shuttle, that is not the case for the most valuable of all the projects, the Hubble Space Telescope (which must now languish on the ground for an extra year), while there would be no case against a craft such as the shuttle if it were dependable and cheap. In any case, especially after the latest failure of Ariane two weeks ago, launcher operators are unlikely to have spare capacity for a long time to come.

This is why the best framework in which to solve NASA's problems is quick clean surgery, which will in any case be necessary at some stage in the future, when spacecraft with or without people have ceased to be seven-day wonders. □

Observers in arms

The fate of Britain's oldest observatory will be decided next week. Or will it?

How strong are the nerves of the Science and Engineering Research Council (SERC), the chief sponsor and even manager of Britain's academic research? This is what British astronomers will be asking in the time between now and 18 June, the date fixed for the next meeting of the council and, at SERC's own choice, for a final decision on the future of the Royal Greenwich Observatory (RGO). In the three months since the decision was announced (see *Nature* **320**, 239; 1986) that the observatory would have to move again — forty years have gone since it said goodbye to Greenwich — there has been a fierce rumbling of protest from many of those affected that the decision is mistaken, which message has been blunted and confused by the siren-sounds from those other astronomers with an interest in tempting RGO to some particular place or other. A meeting of astronomers of all kinds in London last Friday seemed to be united in feeling that SERC has somehow mismanaged the whole business. So next week's council meeting becomes a test of SERC's credibility as well as of its good sense.

The reasons why some kind of decision is needed are by now well-known. Because of decisions taken by SERC (then merely SRC) in the 1970s, British astronomers are about to be blessed with a range of what may reasonably be called modern telescopes, and which will also give academic astronomers allocations of telescope time about which they cannot seriously complain. The snag is that the new equipment is a long way from Britain, in the middle either of the Atlantic or of the Pacific. As observers elsewhere know as individuals, geography may be a nuisance but is not an insuperable obstacle to good work. SERC's difficulty is that, having built the new telescopes as part of its terms of reference to foster research at British universities and polytechnics, it discovers on its payroll some 250 people at the two British observatories, RGO and the Royal Observatory Edinburgh. The problem might have been anticipated a decade ago, but was not. Since then, by common consent, the two observatories have done valuable work in supporting the development of instruments for the facilities being built elsewhere and, more recently, have been providing academic users of the new facilities with advice and assistance based on their own experience, frequently much greater. That there will be a continuing need for services of this kind is generally accepted. SERC's problem is three-fold. First, as a consequence of past decisions, it is spending more on astronomy relative to other things than it would if it were starting from scratch (but nothing said about the decision to move RGO suggests immediate savings). Second, without the issue ever having been declared, SERC is seeking (rightly) to effect a shift of responsibility (or opportunity) for observational astronomy from the in-house observatories to the universities, which is why the decision that Greenwich rather than Edinburgh should move was based on SERC's opinion (which RGO disputes) that Greenwich has been the less successful at forming links with universities. Third, at no point during the five years in which the need for reorganization has been apparent, during which time there have been two formal attempts to find an acceptable solution, has there been a serious effort to decide how the now-expanded British effort in astronomy should be managed. There is a sense in which the present council is the victim of its predecessors' neglect which, given collective responsibility, is an explanation but not an excuse. The anger and bitterness that have preceded next week's council meeting have arisen because too little has been said to those whose careers are affected.

What, then, should be done to manage the transition without further exacerbating relations between SERC and important sections of the astronomy community? The first need is for a convincing statement of SERC's strategy for astronomy. To what extent is the long-term aim, that most observers should be academics, desirable, for example? Having made a good if belated beginning on the provision of modern facilities, does SERC intend to follow through when the demands come (as they surely will) for even better equipment? And may it then not act alone, picking up assistance from others as an afterthought (Dutch as well as Spanish astronomers are partners in the La Palma observatory), but by seeking partners from the outset? All three questions should of course be answered yes. But only if they are answered clearly and sympathetically will those at the observatories whose careers will be affected have the stomach to soldier on.

What would such a strategy imply for the immediate future? If the best way of building on past investments in astronomy without jeopardizing science as a whole is to build the next generation of telescopes in collaboration with partners overseas, SERC would recognize more clearly that national support centres are inappropriate. Planning that observers should be distributed among universities, it would conclude that technical support should be similarly spread out. In the long run, neither Edinburgh nor RGO would be needed. The objection to SERC's planned course, amalgamation on the Edinburgh site, is that it would permanently institutionalize the complex. If it were now to say that Edinburgh will in due course follow RGO in being made part of a university, RGO's bitter pill would be easier to swallow. If SERC is not ready to say that, the case for moving RGO diminishes.

SERC should also be more open about its financial plans. It says that present recurrent spending will not increase, but no allowance has yet been made for future capital expenditure. Why not say flatly that SERC needs to save money now on running costs against capital spending in the future? RGO itself will have shrunk to 150 people (of whom 40 will be based in mid-Atlantic) when the present contraction is complete by 1990, but there is a case for going faster and further. The millstone that SERC has made to hang around its successors' necks is the promise that RGO will retain its independence, which will be taken as a promise of constant budgets a decade hence.

There remains the question of how British astronomy should acquire a sense of being led in a recognizable direction. SERC is a benign and well-intentioned organization that has done good works from time to time. Unfortunately, it cannot help but seem part of the civil service: why else have the directors of the two observatories been compelled to say nothing in the past three months about the aspect of their institutions that matters most, their future? Like NASA, which has the more serious problem of the shuttle to accommodate (see previous page), SERC needs a mechanism for helping the community it tries to serve to believe that its true wishes, not some others wished upon it, will be met. If SERC could arrange for that, its difficulties with those at RGO would melt away. If it cannot, its credibility will indeed decline. □