doses of ^3H -thymidine in excess of those required by the agreed protocols in the treatment of cancer patients; failure to obtain the informed consent of 112 patients to an experimental treatment; the treatment of 27 patients with ^3H -thymidine for breast cancer which was not one of the conditions specified in the protocol; and failure to keep complete X-ray records. Dr DeVita agreed that "all the allegations are curious and, if true, reprehensible".

The committee asked three broad questions. Why had the NIH investigation taken three years to bring nearly to completion? Why had Dr Strauss not been denied a further grant simply on the grounds that serious allegations had been made against him? And what would happen if the allegations were substantiated?

Dr DeVita admitted that "we were too slow off the mark" and also that "with the benefit of hindsight" it would have been wise to have told the advisory committee (a few weeks after becoming director of NCI) that Dr Strauss's Boston record was being investigated, even though that would probably have meant that the \$910,000 grant would not have been made. But he insisted that his discomfort before the committee was matched by his discomfort at "the idea of judging someone guilty until the investigation is complete".

Meanwhile, Dr DeVita said, procedures at NCI have been tightened up, with contracts reviewed by a central financially oriented staff. All contracts will in future be subject to peer review and he personally will take responsibility for seeing that funds are properly spent. If the allegations against Dr Strauss are proved, it seems there will still be time to recover \$600,000 of the 1980 grant.

US astronomy

Prospects for people

Washington

Anxiety about the future of astronomy in the United States is one of the recurrent themes in the final draft of the National Research Council report of the Astronomy Survey Committee. The committee, whose chairman is Dr George B. Field from the Harvard-Smithsonian Center for Astrophysics, has now submitted its fifth draft to the review procedures of the National Academy of Sciences.

The final draft is especially concerned about the plight of those astronomers who have been employed on fellowships or whose salaries have been charged to project grants for periods as long as six or eight years, and whose careers are now threatened by declining budgets. Astronomy differs from other fields of science in that there are no natural industrial outlets for academic astronomers, while universities are often unwilling as well as unable to employ such relatively senior people.

The draft report recommends a system of assistant professorships financed jointly by universities and the federal government. The acceptability of this proposal, for which there is no precedent in the United States, has yet to be determined.

The Field Committee also plans a series of recommendations of priorities for the future development of astronomy. Predictably it puts its weight behind the space telescope, but urges that support should also be given to second-generation instruments for the device. The launching of a γ -ray observatory (by NASA) and the building of the proposed 25-metre

millimetre-wave telescope are in the list of projects to be pursued, and there is a cautious welcome for the Princeton proposal to construct a gallium detector for solar neutrinos.

Further ahead, the Field Committee apparently wishes to give priority to an X-ray observatory even more advanced than Einstein and to a "new technology" telescope for optical and infrared observations. The proposal to deploy a 10-metre dish in an orbit about the Earth is put next on the list. The draft report has much to say about the need for technical and supporting services for the development of these projects.

Publication of the report is unlikely before October.

Uranium enrichment US price hike?

Washington

The question whether the United States should charge customers for enriched uranium more than the bare cost of enrichment surfaced again last week in the House of Representatives, this time because Congress is looking for ways of raising extra revenue so as to relieve the budgetary dilemmas forced on it by the Administration. But the chances of raising extra money quickly are small. And the Administration is clearly divided within itself about the merits of the proposal.

The charge for enrichment services at government enrichment plants has been a controversial issue since 1974, when it was planned that responsibility for non-military enrichment should be transferred to the private sector, and when everybody agreed that government prices should not undercut those of private manufacturers.

Last week, Congressman Richard L. Ottinger, chairman of the House Subcommittee on Energy Conservation and Power, opened a brief and hastily arranged enquiry on the subject with the blunt confession that the House Budget Committee needed to know this week whether the price of enriched uranium should be increased. One of his difficulties was that the Department of Energy, which argued for an increase of price in 1978, has now changed its mind. Dr William R. Voigt, who put the department's case for an increase three years ago, last week argued that the rules for enrichment pricing should not be changed simply so that Congress could spend more on other energy projects.

The General Accounting Office has been more consistent. In April, the director of the Office, Dr Dexter Peach, argued for prices that would take account of what private companies would have to set aside for state and federal taxes and for making a return on capital. His April calculation, repeated last week, was that the US enrichment business, now worth \$1,300 million a year, would yield an extra \$1,300 million

Vive la différence!

M. Pascal Clément would like French scientists to speak more French, *s'il vous plait*. In his report on the state of the French language, commissioned by the then President Giscard d'Estaing and presented recently to President Mitterrand, M. Clément — a parliamentarian and member of Giscard's Union pour la Démocratie Française — devotes a whole chapter to the invasion of English into science in France. French scientists are lazy about translating English technical terms, says Clément, preferring a kind of "Franglais"; and they even write their papers in English.

Something must be done, the report demands. Clément suggests that conferences conducted in English without translation facilities should get no support from state funds. This — if it ever took effect — would worry the Centre National de la Recherche Scientifique which supports much of the basic science in France; for two-thirds of

papers read at its conferences are read in English, while only one in five conferences have translators present.

Scientists have reacted to Clément's strictures with amused smiles. He is naive, they say. Much as they would like to speak and write in their native tongue, French scientists constitute only a tiny fraction of the world's scientists (7 per cent, estimates one). And any scientist worth his or her salt in France will be collaborating with groups abroad, with half of them probably American. And how many Americans can read or speak French?

Moreover, the inflexible attitude of people like Clément towards their language probably does more to help English penetrate French than hinder it, they say. For this attitude sees mistakes of foreigners attempting to speak French as *fautes* — faults — in the speaker, thus embarrassing some who would otherwise try to get by in the language.

As for the consequences of the report on French science, the thing is *une lettre morte* already.

Robert Walgate