was on the procedures by which the Ministry of Defence keeps a check on research projects—the so-called Gibbs-Zuckerman procedures. Mr G. Leitch, Deputy Under-Secretary (Equipment), said that these were designed to give pauses for thought at crucial stages of any project. Less charitable observers have suggested that the procedures are laborious and time-wasting, but Mr Leitch denied this. With hindsight, he said, one could say, “Well, perhaps we did waste thousands of pounds by waiting at a certain stage—but isn’t this better than wasting millions later?”

The Ministry of Technology also submitted a memorandum, parts of which bore evidence of the minister’s personal touch. (As well as calling the Ministry of Technology “Mintech”, the memorandum goes on to call the old Ministry of Aviation by the awful title “Avmin”.) The memorandum explains that the majority of research contracts are let on the basis of “a carefully controlled development cost plan”. It might therefore have been better if the memorandum had not gone on in the next paragraph to discuss the projects in which the United States Phantom has been refitted with Rolls-Royce Spey engines. This has been a very costly project. The first thing the ministry witnesses revealed was that the long promised White Paper on research policy is not now expected until “the second half of this year”. (It should originally have been published by now.) In part the delay was because of changes in defence requirements, and in part because of the discussions the minister was having about the future of the Atomic Energy Authority.

Later, Dr G. G. Macfarlane, one of the three controllers of research in the ministry, produced an interesting argument. Defending the role of the ministry establishments, he said that in reality the balance of research work between research establishments and industry was much the same in Britain as it was in the United States. The general impression that the United States puts more research work into industry and does less in establishments was wrong, he suggested. The National Aeronautics and Space Administration had large laboratories. The Lincoln Laboratory at MIT, publicly supported, was almost a replica of the Royal Radar Establishment at Malvern. He did say that the tendency in Britain was now to put more into industry, but this did not mean that the establishments were redundant, and he denied the suggestion by Mr B. Parkyn, a member of the committee, that the establishments were needed only to test the feasibility of schemes put up by industry. There was plenty of basic research to be done, and the establishments were always useful as a fire-brigade when crises arose.

Although this first meeting was dull, the investigation as a whole will be a fascinating exercise. The committee is likely to call, among others, Professor P. M. S. Blackett, Sir Solly Zuckerman and Minister of Defence Mr Denis Healey. To help it in the investigation, the committee has signed on two advisers, Mr Christopher Harlow, who works for Political and Economic Planning, and Mr W. R. Thomas, chief scientist of Elliott Automation. This is a welcome move, although the way the committee set about finding its advisers was a trifle odd. Mr Thomas’s experience of government service at the Royal Aircraft Establishment at Farnborough may well be of particular value.

Parliament in Britain

by our Parliamentary Correspondent

Radio-telescope

MRS SHIRLEY WILLIAMS could give no information about the siting of the new radio-telescope for the Jodrell Bank Observatory. But she did agree that Oswestry was one of the sites considered for the telescope. The sites were all within 100 miles of the Jodrell Bank radio-telescope. (Written answer, March 7.)

Concorde

MR HUGH JENKINS, Labour Member of Parliament for Putney, seems to be opposed to the Concorde supersonic airliner. He asked the Minister of Technology if he would take steps to ensure that, when the Concorde started to operate, the noise limits at Heathrow Airport would be the same as they are at present. For the Ministry of Technology, Mr Gerry Fowler agreed that this was a design aim, but hedged by saying that the noise estimates were being continually revised as development proceeded. He refused to say when Concorde would make its first flight. (Oral answer, March 11.)

Phantom

MR TAM DALYELL tried to establish how much it has cost to fit the Phantom aircraft bought from the United States with British engines, the Rolls-Royce Spey. For the Ministry of Technology, Mr Gerry Fowler said that the cost so far had been about £75 million, which included the cost of developing the engine and adapting the airframe. About sixteen Phantoms out of the total order for 170 had been treated so far. Mr Fowler added that they had been aware that it might be expensive, but that it had improved the performance of the aircraft, which was necessary for naval operations. (Oral answer, March 11.)

Defence Research

MR TAM DALYELL has also been trying to establish how much civil research work is carried out at defence establishments. So far he has asked dozens of questions without receiving any very surprising answers. On March 11, for instance, he asked the Minister of Technology what general policy he had for increasing the amount of civil work in progress at the ministry’s defence establishments. Mr Gerry Fowler said that it was not the Government’s policy to build up these establishments as civil research establishments, or to seek civil work merely to keep them at their present size. He seemed quite satisfied at the arrangements that had been made for getting the results of military research over to industry. Mr Dalyell later had a go at the chemical and microbiological research establishments at Porton. First he asked what the toxicity of CS gas, ortho chloro benzyl malano nitrile, was. Mr Roy Mason, for the Ministry of Defence, said that the toxic dose for man was about 150,000 milligram minutes per cubic metre, which was 50,000 times the dose which could be tolerated by human beings, and 200,000 times the dose needed to disperse rioters. No authenticated report had been received of CS causing death or injury. Mr Mason also gave some information on the civil benefits of the work at Porton—protective clothing, and the study of air pollution. But he refused to de-classify all future work carried out at the Porton establishments. (Written answers, March 11.)