Carter's science team

Yesterday's men

Washington

As the Reagan Administration continues to have difficulty in filling many of its top jobs — posts which remain vacant include the directorship of the Office of Science and Technology Policy (OSTP), the chairmanship of the Nuclear Regulatory Commission, and the directorship of the Office of Energy Research — science policy officials from the Carter Administration are having mixed success in finding new positions. Most have slipped back into academic posts — the traditional fall-back for Democrats, in contrast with Republicans, who usually return to the private sector after leaving office. But for some, the prospects are still uncertain.

Most successful in finding a new job has been Dr Frank Press, Mr Carter's science adviser and director of OSTP, who was recently elected to succeed Dr Philip Handler as president of the National Academy of Sciences. Dr Press takes up his new position in Washington at the beginning of July, and has meanwhile returned temporarily to his old post as professor of geology at the Massachusetts Institute of Technology.

Of Dr Press's three original associate directors at OSTP, Dr Gilbert Omenn, responsible for health sciences, has returned to the University of Washington in Seattle, where he is professor of medical genetics, having spent the last year of the Carter Administration as associate director of the Office of Management and Budget. Dr Philip Smith, associate director for natural resources, has temporarily joined the staff of the National Science Board, the overseeing body of the National Science Foundation. The third, Dr Benjamin Hubermann, remains at OSTP keeping the director's seat warm until a successor to Dr Press is appointed.

Dr Robert Frosch, administrator of the National Aeronautics and Space Administration (NASA) under Mr Carter, is already established as president of the newly formed American Association of Engineering Societies. Dr Hans Mark, previously secretary of the Air Force and before that director of NASA's Ames Research Laboratory, was at one point tipped to succeed Dr Frosch, but has now been nominated as deputy to NASA's new administrator, Dr James Beggs.

Another academic who has returned to her former base is Dr Eula Bingham, previously Assistant Secretary of Labor responsible for the Occupational Safety and Health Administration (OSHA). Dr Bingham has rejoined the University of Cincinnati, from which she had been on leave as professor of environmental health.

In contrast, Dr Bingham's counterpart at the Environmental Protection Agency, ex-administrator Mr Doug Costle, is entering the academic world for the first time. Before his appointment under Mr Carter, Mr Costle had been an assistant director of the Congressional Budget Office, and commissioner of environmental protection in the state of Connecticut. A lawyer by profession, he was recently named as a visiting scholar at Harvard University's School of Public Health, and a lecturer at the John F. Kennedy School of Government.

Moving in a different direction is Dr Edward Frieman, brought in to succeed Dr John Deutch as head of the Office of Energy Research. Before coming to Washington, Dr Frieman was deputy director of the Plasma Physics Laboratory at Princeton. He has now joined a Washington-based consulting firm, Science Applications Incorporated, which deals in a range of energy issues.

Two appointments have remained unchanged. Dr Donald Fredrickson, orginally appointed by President Ford as director of the National Institutes of Health for a six-year term, has stayed in that position. Also staying put is Dr John Slaughter, brought in during the last months of the Carter Administration as director of the National Science Foundation partly on the understanding that Mr Reagan would not send him straight back to Washington State University, where he had only recently been appointed provost.

Less fortunate has been Dr Anthony Robbins, previously director of the National Institute for Occupational Safety and Health (NIOSH). Dr Robbins became the target of a bitter attack by conservative groups for his support of labour union positions on some occupational health issues, and was summarily removed from his post by the new Health Secretary Mr Richard Schweiker, as well as being stripped of a commission in the US Health Corps.

At the State Department, Thomas Pickering, previously head of the Bureau of Oceans and International Environmental and Scientific Affairs, has returned to his position as a career foreign service official. And William J. Perry, previously Under-Secretary for Defense for Research and Engineering, has joined a San Francisco investment banking firm.

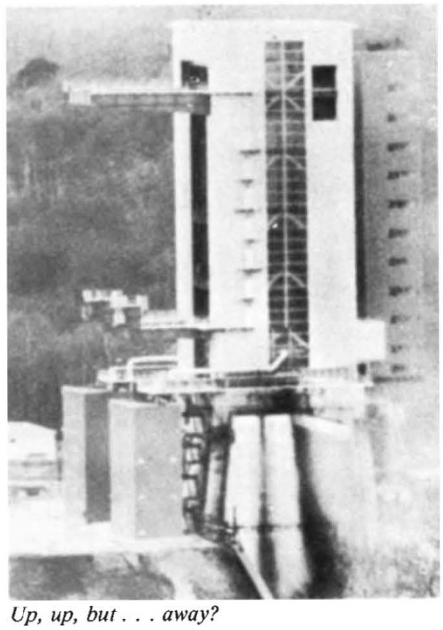
David Dickson

Ariane development

Launch at last?

The European Space Agency (ESA) has announced that the third test launch of the Ariane launcher, with two satellites on board, is to take place on 19 June. After extensive testing and some modifications, the problems associated with the first-stage engines have apparently been solved.

Europe's three-stage launcher programme encountered a major setback during the second Ariane test launch on 23 May 1980. Subsequent analysis revealed that instabilities in the injection system caused pressure oscillations at 2,300 Hz to develop inside the combustion chamber of one of the four first-stage Viking engines. The oscillations caused structural damage which in turn hindered cooling and resulted in rupture of the engine. Subsequent ground tests also revealed oscillations at 2,700 Hz.



Up, up, but . . . away?

Liquid-fuelled rocket motors are notorious for such instabilities, which still confound theorists. ESA's trial and error approach to the problem has involved months of testing of alternative modifications to the injector system. One design, in which the injection nozzle diameters have been slightly widened, resulted in a complete absence of pressure oscillations during ground tests, and has now been adopted. As a further safety measure, manufacturing tolerances have been tightened.

Like its predecessors, the third Ariane is to be launched from Kourou in French Guyana. It will carry Meteosat 2, a European meteorological satellite, and APPLE, an Indian telecommunications satellite. If all goes well, the fourth and final test launch will take place in October.

Ariane's problems have hindered its progress as competitor to the United States shuttle. However, contractors such as Intelsat — the international telecommunications satellite organization — have not cancelled their options on Ariane as a result of the delays.

Philip Campbell

British aerospace

Limbering up

Further evidence of the UK government's sudden eagerness to enter the space race came last week in the form of a new committee set up as a forum for the views of the space industry, users and government. This Space Consultative Committee has held its first meeting to try to determine its role.

The diverse membership of the committee, which includes representatives of government departments, the Science

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