

AUSTRALIA

Filling the information breach

From Sydney, Peter Pockley looks at Australia's science policy in light of the Science Department's recent Annual Report

SOMEWHAT dated and dented by more recent political and bureaucratic changes, the Annual Report of the Australian Department of Science and Consumer Affairs for the year July 1974 to June 1975 has now surfaced. The most visible dent on the Department is the recent removal of consumer affairs from its title and duties.

Nonetheless, this retrospective report is useful, if only for combining in one list the various activities which, under the now deposed Labor administration, had been brought under the one department. It is, however, as informative to note the omissions from this list as the inclusions, for Labor's Department of Science and Consumer Affairs exercised only partial coverage of the national science scene, a situation unchanged under the new regime. By international comparison, Australia spends in the government sector one of the highest proportions of total research funds (of the order of three-quarters). National figures are not yet available for the year in question, but a conservatively generous estimate puts the Department of Science's proportion of this expenditure (that is, funds directly controlled by the Department) at no higher than a quarter, probably less. At least three-quarters of "in-house" government-financed research was done outside the Department's control.

The most obvious organisation standing beyond the influence of the Department is Australia's colossus of research, CSIRO, with expenditure of \$143 million in 1974-75. In company with the newer and smaller statutory bodies, the Anglo-Australian Telescope and the Australian Institute of Marine Science, CSIRO remained responsible directly to the Minister for Science and Consumer Affairs, and not through his Department. (Again, this arrangement did not change with the change in government in December 1975.)

While a lack of mention of CSIRO in the Department's report is strictly correct in legislative terms (indeed, if the proudly independent CSIRO had been mentioned by the Department from which they keep a cool distance, there could have been a row of epic proportions), it means, unfortunately, that the report cannot be treated by local or international readers as representative of the national science scene. It should also be added that sub-

stantial government-financed research and development efforts are also carried on outside the responsibility of the Science Minister. Notable among these are the Australian Atomic Energy Commission, the Bureau of Mineral Resources, and the Weapons and Aeronautical Research Laboratories, who all report to separate Ministers.

What the Science Department report does show, though, is the dominance within the Department, measured in terms of staff and expenditure, of five operational research and service units, each of which had been long established under other Departments before Labor placed them under the Department of Science from December 1972 onwards.

Out of a total of 3,368 established positions, these operational units had 3,097 and the central office 271. The Bureau of Meteorology (\$31.2 million), the Patent, Trade Marks and Design Office (\$5.7 million), the Antarctic Division (\$4.5 million), the Analytical Laboratories (\$2.7 million) and the small Ionospheric Prediction Service (\$600,000) accounted for 78% of the Department's overall expenditure of \$57.2 million. If \$8 million of payments to university researchers by the Australian Research Grants Committee are included, the proportion of these six activities rises to 92%. Through revenue earned, the Patent office was almost entirely self-supporting, and the Bureau of Meteorology earned over a third of its keep, the total revenue of the Department being \$17.5 million.

The Department also administers civilian space projects conducted through the operations of three tracking stations for the American NASA. Of the 400 employees in this work, only 40 are Australian public servants; the \$11 million cost in 1974-75 was met by NASA.

The Department can point to an apparently modest sum of \$2.6 million being spent on general administration. However, the operational units had largely self-contained administrations before their transfer to the Department, and the geographical separation from Canberra of most of them had probably not allowed much in the way of reduced administrative expenses. The Department talks of developing "staff resources without any significant increase in numbers", and of units becoming "more effective as a result of reorganisation". Personalities aside, it is not surprising that friction did develop between the central administration and some of its operational outposts; naturally none of this emerges in the report.

Policy influence

The constraints on an Australian Department Head in writing a report to his Minister are such that only the blandest information on matters of policy and planning is presented. For instance, Sir Hugh Ennor's report does note the formation of the Interim Australian Science and Technology Council (ASTEC) as "an important, but not exclusive, source of advice to the Government". The report adds that "the Department's work will both supplement and complement ASTEC;

AAT change

THE 3.9-metre Anglo-Australian Telescope (AAT) on Siding Spring Mountain, New South Wales, is to have a new Director in September. He is Professor Donald Morton, of Princeton University, and he succeeds Professor E. J. Wampler who left at the end of last month to return to the Lick Observatory in California. Wampler's appointment was for a period of two years ending in October, but by "mutual agreement" he has withdrawn early—mainly because he considered complete his task of seeing the AAT commissioned, but also, it is believed, because he was not completely happy about future prospects for the telescope at a time of economic stringency.

Not that the telescope is lacking funds, according to Professor Vincent Reddish, of the Royal Observatory Edinburgh, who sits on the AAT

Board. Its present annual budget is about £1 million, equally financed by the UK and Australia, and, says Reddish, all the indications are that it will continue to be well looked after by the two governments as an important ongoing project.

One of the most interesting aspects of the AAT is the way in which it has been operated hand-in-glove with the UK 48-inch Schmidt Telescope, located a few yards away on the same mountain. The Schmidt is essentially a survey instrument, and on most days AAT astronomers are to be seen in the Schmidt building poring over the most recent plates to find astronomical objects worthy of more detailed examination by the AAT. Much useful work on the spectroscopy of faint galaxies, and the dynamics of groups of them, for example, has been done by the AAT in tandem with the Schmidt.

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in particular, it will act as an agent for ASTEC in obtaining and supplying data in conducting or commissioning studies and in carrying out those liaison and other tasks both within and outside Government that it is favourably placed to undertake". As far as the Department was concerned, the demarcation lines in the highly competitive business of influencing the government are kept nicely fuzzy. All this, of course, may be water under the bridge when the Liberal Government's current review of ASTEC is publicised and implemented.

In support of its own advisory role, the Department has pursued its data collecting activities. The long-running Project SCORE (Survey and Comparison of Research Expenditure) first surveyed expenditure and manpower in Australian research and development for the financial year 1968-69; the results were published in 1972 and 1973. Project SCORE is now reported to be "well underway" on "two-yearly intervals" and using OECD bases for statistics "to be sure that Australian figures may be compared with overseas figures".

The day after the report's period of survey concluded, that is, July 1, 1975, the 555-strong Patent Office was removed from the Department and transferred to the Attorney-General's Department (more recently still it has found another home in Business and Consumer Affairs).

It is easy for outside observers (and most insiders, too) to be bamboozled by the dispersed nature of Australia's scientific organisation. This is not, however, an argument for centralised control, but for at least one government sponsored effort to document in assimilable form the standing and overall progress of science on a national scale. The Science Department's report cannot claim to do this, nor to be fair does it claim to do so. Yet, not many scientists in Australia are more than dimly aware of what is going on in fields outside their own speciality. The interested public and politicians find the task equally tough, although they are helped by some very informative programmes on ABC radio.

The only organisation in Australia which has had the drive and capacity to fill this information breach is the interim ASTEC, but it is still on ice while the government reviews its aims and operations. If, however, ASTEC is allowed by Prime Minister Malcolm Fraser to survive in anything like its form under Labor which would make public reporting central to its functions, then the prospects of the scientific community and general public alike catching and keeping up with the hare of Australian research are quite bright. Or, is it a tortoise? □

USSR

Give and take

April, traditionally an auspicious month for Soviet scientists with the announcement of the Lenin Prizes, has this year brought an ominous picture for those out of favour with the establishment: two dissident scientists on trial, continuing harassment and repression of refuseniks, and Academician Andrei Sakharov briefly held with his wife in police custody. Vera Rich reports

THE recent "Omsk incident" involving Academician Sakharov marks a new development in the Soviet authorities' campaign against him—the loss of his personal immunity. It happened when Sakharov and his wife Yelena tried to attend the trial of Mustafa Dzhemilev, a young agronomist who has become the leader of the movement for the repatriation of the Crimean Tartars, deported *en masse* to Siberia in 1944.

"Political" trials in the Soviet Union are not normally open to the public, but Sakharov did sometimes manage to enter the courtroom as a friend of the accused—in the case of the mathematician, Dr R. I. Pimenov, in 1970, for example. By 1972, however, when Vladimir Bukovskii was on trial for having sent to the West detailed reports on Soviet misuse of psychiatry for political ends, Sakharov was no longer admitted, protesting instead outside the court. Now he and his wife have been prevented from doing even this.

According to Sakharov, who says two official TASS bulletins on the incident are false, plain-clothes KGB men prevented the friends and relatives of the accused from entering the courtroom, using "rude physical force", directed "in particular" at Sakharov and his wife. In an "immediate reaction" to the "mockery of the feelings of friends and relatives, the mockery of the law, the whole tragic circumstances of this case and other political cases in our country", Sakharov said he hit in the face "one or two KGB men" and a civil policeman who was acting on KGB orders. The Sakharovs were removed to police headquarters, where Sakharov made a statement claiming that the police were acting "on the side of the law-breakers". The next day, the Sakharovs tried once again to protest against the exclusion of the Dzhemilev family from the court, and again were taken to police headquarters.

Sakharov stresses that the civil police treated them "correctly", and says that earlier reports to the contrary were

due to a bad telephone connection to Omsk. He denies vehemently that he created a disturbance in the courtroom, as TASS had claimed. This was quite impossible, he says, since "three ranks of KGB men" prevented them even getting near the court. He admits that the possibility of criminal charges against himself is "not excluded".

Sakharov's attempt to focus world attention on the Dzhemilev trial in Omsk, a city closed to foreign journalists, came at the same time as his friend and close associate in the human rights movement, physicist Andrei Tverdokhlebov, faced similar charges of anti-Soviet activity in Moscow. Sakharov felt that the location of this trial in the capital, and the fact that Tverdokhlebov's membership of the illicit Moscow group of Amnesty International makes him a well-known figure, would ensure publicity abroad, whereas the Dzhemilev trial might pass unnoticed without his presence. Tverdokhlebov was sentenced to 5 years' exile; Dzhemilev received 2½ years in a strict regime labour camp.

As for the general position of dissident scientists, this shows little sign of improving. The Kiev seminar for Jewish refusenik scientists, one of the many off-shoots of the original Voronel seminar in Moscow, and led by physicist Vladimir Kislik, has been shut down. Mark Azbel, who now runs the Voronel seminar, has once again been refused a visa for Israel. And Professor Veniamin Fain, one of the very few activists and refuseniks to be allowed to continue in his academic career, has now been dismissed from his post at the Institute of Solid State Physics in Moscow.

Sakharov has meanwhile accepted an invitation to become a member of the executive committee of the Campaign Against Psychiatric Abuse (SAPA), the British section of the International Initiating Committee against Misuses of Psychiatry for Political Purposes. □



Photo: AP
Andrei Sakharov