Scientists leaked H-bomb secrets, says US

US Government experts believe that the authors of two press stories outlining the concepts behind the hydrogen bomb may have been helped by leaks from scientists at the government's own Lawrence Livermore and Argonne national laboratories.

The government had tried to stop publication of an article by Howard Morland entitled "The H-bomb Secret — How We Got It, Why We're Telling It" in the *Progressive* magazine. However, the government dropped its case after the publication last week of a lengthy letter outlining the details of the H-bomb in a Wisconsin newspaper, the *Madison Press Connection*.

The letter, written by a computer-programmer, Charles Hansen, has roused the suspicions of government nuclear experts, who claim that Hansen used leaks from the government's secret files in its case against the *Progressive* in addition to repeating the mistakes made by Morland in his article. As for the latter, the government claimed in a brief that "The evidence suggests that Morland was able to write accurately about the H-bomb secret only because he had significant guidance by a person or persons with access to classfied material".

Both authors insist that they based their articles on information available to the public in libraries, lectures, and textbooks, and that the similarities in the two articles could be explained by the fact that they used the same sources.

Despite the decision to drop the *Progressive case*, the legal battles are not over, since the government has now asked the Justice Department to determine whether there is a case for criminal prosecution under the Atomic Energy Act.

But lawyers on both sides have doubts as to whether a firm case could be made. The lawyers for the *Progressive* argue that the Act is too loosly defined for a successful prosecution; and some lawyers in the Justice Department believe the government's case would be fundamentally flawed, as the many of the "secrets" are already in the public domain.

Anne Norman

Poland seeks cooperation on nutrition

Fundamental research into human nutrition, including data gathering and the design of experiments suitable for use on human subjects, should become a major area of international cooperation, Professor Kazimierz Szebiotko of the Poznan Agricultural Academy told *Nature* last week. He was attending a UK/Polish symposium on food technology at the National College of Food Technology, Weybridge.

Poland already has a well-developed programme of food research. Protein production and its optimum use rates as a "governmental problem" in the Polish hierarchy of research and development, "commanding the highest priority. The eight-point programme ranges from plant genetics to unconventional protein production, and from the biochemistry of aminoacids to the optimum animal feeds.

So far, said Professor Szebiotko, results have been generally better than expected. A soya-bean has been developed with the shorter growing period necessary for Poland, and already some 500 ha have been grown successfully. In collaboration with a Canadian team, a strain of rape-seed has been developed with very low content of erucic acid (suspected of being a carcinogen).

There have, however, been setbacks. A project for processing inconveniently small fish and fish scraps into edible form turned out well — but ran into trouble when fish stocks declined. There are certain logistic difficulties; in his own field of single-cell protein production from agricultural wastes, Professor Szebiotko said, developing the process was fairly straight forward. What was needed now was research into the "economics of cooperation with industry".

This did not seem to have been the case, incidentally, with TVP. According to Professor Jan Zaleski of the Ministry of Food Production, who led the delegation, for some years now all Polish hamburgers, mince and many kinds of sausages have contained TVP "extender" (20% in the case of hamburgers and about 12% for sausages), the new recipe being quietly introduced and the non-extended product simultaneously phased out by agreement between the Ministries of Food Production and Health — without any indication to the public. This, incidentally, was not the best procedure in Professor Szebiotko's opinion. He would have preferred the open launching of frankly soya lines.

In the future, he hoped, genetic engineering would form a fruitful field of international cooperation. Other such "themes for the future", to be tackled at the international level, he suggested, might include the biochemistry of nitrogen fixation, the optimal use of water resources (also a major concern in Poland), and his own particular interest, optimal nutrition.

So little is known about this, he stressed, while so much work has been done on malnutrition and obesity. What is needed, he suggested, is a data-bank of nutritional experience collected over the whole world, No one country, or even group of countries, could undertake this. It is a task for the United Nations agencies, for WHO and FAO.

Vera Rich

Cubans to join the space race before 1983

Cuba's future cosmonauts have received special training and acclimatization to enable them to cope with a possible landing in the Siberian winter, the chief training officer of the Interkosmos programme, former cosmonaut V. A. Shalato, told a Moscow press-conference recently, despite the fact that Soviet space planners are usually reluctant to give any details of future plans or cosmonaut training.

The press conference was, formally, a winding up of the latest series of Salyut-6 missions. The emphasis on future Cuban participation does not necessarily indicate an imminent Cuban launch. It could simply be a response to the Havana non-aligned conference and the large Latin-american presence at the press-conference.

Shalatov would not commit himself to a date for the Cuban launch, recalling only that it was originally announced that all the Comecon allies would have had a cosmonaut in orbit by 1983, and that "we have every reason to think we will meet this date, or perhaps it will be a little earlier." He did, however, say that the Cubans had completed their general theoretical work and had now moved on to crew training.

At present, the two candidates are officially on holiday in Cuba, (where incidentally, Interkosmos maintains a cosmonauts' rest home), One of them has also been taking examinations at Havana University.

Meanwhile, according to Academician Boris Petrov, Chairman of the Interkosmos council, the programme of on-board experiments proposed by the Cuban scientists for the future cosmonauts to perform is undergoing expert scrutiny by "specialists of both countries".

Vera Rich

"If they're gonna put a Cuban in space maybe we can fix it to be Fidel Castro!"

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