

authors expect will differ from those of the Condon report.

The scientists who are critical of Condon are chiefly concerned that he will recommend against further serious study of UFO's. McDonald has been campaigning to have the National Academy, or various federal agencies, or Congress sponsor a large-scale investigation, but he has not been notably successful thus far. However, there are signs that the study of UFO's is becoming more respectable. In late May, the American Institute of Aeronautics and Astronautics set up an eight-member group to examine the UFO issue. Organized as a subcommittee of the AIAA's committee on Atmospheric Environment, the group is chaired by Joachim P. Kuettner, director of Advanced Research Projects at the Environmental Science Services Administration research laboratories at Boulder. The AAAS is considering the possibility

of holding a symposium on UFO's at its next annual meeting. The House subcommittee on science and astronautics has invited several scientists, including McDonald and Hynek, to testify at a hearing on UFO's on 29 July in Washington.

It is difficult to know what to make of the Colorado fracas. Some observers believe it represents honest disagreement over the adequacy of the study. Others believe it stems from strong personality clashes. And still others believe it represents a deliberate effort to sabotage the project by persons who fear they will not like the project's conclusions and recommendations. L. J. Lorenzen, head of an organization of UFO buffs known as the Aerial Phenomena Research Organization, believes there was "a strong attempt by the NICAP group (McDonald and Saunders are both close to NICAP) to control the study. When they found they couldn't

control it, they attempted to scuttle it."

Condon's supporters note that much of the criticism against the UFO project is based on newspaper quotes, on Condon's obvious delight in recounting humorous stories about UFO's, on statements from scientists who have been fired, and on a memo that was written by a subordinate before the project began. They do not find such evidence convincing.

The controversy has saddened even some of the investigators who sparked it. Levine told *Science* he is "chagrined at the way things turned out. This is not my idea of what science is, or the way science is run." But the controversy may not have been a total surprise to the old battler Condon. "I raise a little hell when I run things," he told the *New York Times* when he took on the project. "That's why we're trying to have a little fun when we get into flying saucers."—PHILIP M. BOFFEY

## British Civil Service: How To End an Era

*London.* The Wilson government has accepted the main recommendations of a blue-ribbon committee which has asked for a radical reform of the British civil service. In prospect are the most sweeping changes in the Home civil service since the famous Northcote-Trevelyan reforms of more than a century ago. The evils of that day were seen as idleness and the patronage system. Today the malaise is diagnosed as the "cult of the amateur," and the prescription is for "professionalization." A major aim of the reformers is that the way to the top be opened to scientists, engineers, and other specialists, who have been largely restricted to the middle levels of a bureaucratic caste system.

The new report\* of the committee headed by Lord Fulton damns the civil service system, but praises the civil

servants. The British civil service was one of the greatest and most typical of Victorian institutions and its members retain many Victorian virtues—intelligence, industry, and incorruptibility. But the British government machinery, which was designed to administer an empire, has proved less than efficient in dealing with proliferating social and welfare programs and nationalized industries and, perhaps more to the point, with economic planning and the management of national resources, including scientific resources and trained manpower.

Under fire from the Fulton committee and a legion of other critics is the archetype of the civil servant, the member of the top administrative class, of whom there are perhaps 3000 in a corps of about a half million. Until very recently, at least, the administrators' ranks have been filled by recruits who succeeded in the highly competitive examinations directly after taking

their university degrees, usually Oxbridge degrees. Typically, they were academic "high flyers" who had excelled in the classics, that is, Greek and Latin, language, literature, and ancient history and philosophy. They were products of public schools and the better grammar schools, which stress the formation of character as well as intellect and of a university education which trained the mind, but left it unencumbered with technical or professional training.

As the demands on government grew, it was necessary to expand the corps of "specialists"—scientists, engineers, architects, physicians, technicians—but these usually provided expertise and acted as consultants to the non-technically trained administrators who made the key recommendations to their ministers.

The operational weakness of the administrative class, according to Fulton, is their lack of managerial skills. For one thing, members of the administrative class are frequently moved from job to job and ministry to ministry as they progress upward through the hierarchy. They seldom have time to develop a professional grasp of the substance of the work of the ministry they will soon leave. Administration in the British civil service, as in most bureaucracies, is preeminently the art of the committeeman and of the drafter of policy papers. The civil servant seldom

\* *The Civil Service*, CMND 3638, vol. 1, Her Majesty's Stationery Office, 17s, 6d, and four volumes of appendices.

has much direct experience in the management of major projects. Nor is he strong in cost or systems analysis skills or other modern management techniques.

To break the mold, the Fulton committee advocates abolition of the class structure of the civil service with 1400 classified jobs and replacing it with a unified graded structure. Graduates would no longer be recruited into a particular class, administrative, executive, or clerical, nor would a brilliant university graduate entering the civil service have clearly defined prospects for advancement as he does now. The emphasis would be on promotion for merit and on better methods of training civil servants throughout their careers. A civil service staff college would be established where the stress would be on management training.

The government has agreed to the Fulton committee's recommendation for the end of Treasury dominance over the civil service. The Treasury, which is the celestial city of the mandarins, not only exercises budgetary control and heavily influences monetary and economic policy, but has for a number of years tightly controlled the civil service. The new reforms call for creation of a new civil service department responsible to the Prime Minister.

The Fulton committee's recommendations have been anticipated and generally accepted as necessary, even within the civil service. There is reason to doubt, however, that even the complete success of the Fulton reforms leading to a decisively more efficient civil service would guarantee correspondingly more effective government. In part, this is due to the relationship between Parliament and the civil service. Ministers are members of Parliament and responsible to Parliament and the country for the policies and performance of their ministries. And in Britain ministers are politicians and themselves amateurs, although, like civil servants, they may be gifted amateurs. Some observers suggest that increasing the professionalism of the civil servants and encouraging them to take more initiative could further erode control of government machinery and policy by elected officials.

To an American observer, the British system seems to allow no opportunity for appointments which are similar to those of our presidential system of bringing in specially qualified men from outside the government to fill cabinet,

sub-cabinet and other upper management posts. An experiment in this direction by the Wilson government in which C. P. Snow and others with scientific credentials were brought into government was a quiet failure. And the cabinet system doesn't offer much chance of securing a Robert McNamara as Defense Minister. The Fulton committee laments the lack of mobility which would allow scientists, engineers and other professionals to move invigoratingly between government, industry, and the universities. The pattern followed by John Wilson in making two round trips between the National Science Foundation hierarchy and the University of Chicago in the past decade and by Herbert Holloman in moving from General Electric to the Com-

merce Department to the presidency of the University of Oklahoma would be most unusual in Britain. Nor is there a tradition comparable to that in the French and Japanese civil services of "getting in, getting on and getting out," which permits bright bureaucrats at a fairly early age to move out of government into top jobs in private and government-owned industry.

The machinery of government and the habits of public servants in Britain, therefore, hardly seem to guarantee that public policy is made and carried out in the most effective way. One serious defect, according to the Fulton committee, is the secrecy which surrounds the making of so many decisions. Because the governing party, in effect, has a monopoly on information

## Sonic Booms Shake Up Officials

Sonic booms are damaging prehistoric Indian dwellings and rock formations in national parks and monuments in the southwestern United States, according to government officials who are responsible for the preservation of these historic remnants. However, the Defense Department denies that there is a connection between the damage and the booms, caused by aircraft.

Reportedly hardest hit are the fragile, red-walled recesses of de Chelley National Monument in northeastern Arizona, where sonic booms have occurred frequently over the past 3 years.

Utah's Bryce Canyon, with its red sandstone columns, and the Indian dwellings in Colorado's Mesa Verde National Park, also are reported to have suffered damage from sonic boom vibrations.

While Senators Clinton P. Anderson (D-N.M.) and Margaret Chase Smith (R-Maine), Senate Aeronautical and Space Committee members, called for a federal investigation of the boom problem more than 1 year ago, little action has been taken. And a statement made by John W. Perry, USAF Transportation and Communications deputy, in a letter to Clarence F. Pautzke, Interior Department Deputy Assistant Secretary, did increase alarm within the National Park Service. Perry said that sonic booms have become "a fact of life" and that problems associated with booms "will continue to grow."

Concern in Washington has continued to grow also. The Transportation Department has commissioned a natural environment panel to study the effects of sonic boom on the national parks, and Robert Linn, panel chairman, has announced that data recorders will be placed in four national parks—Yellowstone, Yosemite, Bryce, and Mesa Verde, to record the frequency and intensity of the booms.

National Park Director George B. Hartzog, Jr., has said that undetected damage possibly has occurred already in remote park areas. In a report, dated 10 January 1967, to Interior Secretary Stewart Udall, Hartzog gave an example of the damage: "On October 12, shortly after three exceptionally short booms, approximately 10 to 15 tons of dirt and rock was found to have fallen from one of the formations. . . ."

National Park Service officials, such as Kevin McKibbin, Chief Park Ranger at Canyon de Chelley, find the possibility of new collapses particularly distressing because many of the park ruins which could be destroyed have never been excavated thoroughly by archeologists.—M.M.

and an automatic majority in Parliament, there is little real discussion of policies in the formative stage. An attempt to mitigate this closed system has been launched in the House of Commons with the formation of specialized committees on agriculture, science and technology, and education. Some indication of the way things work is to be found in a recent episode. The Treasury drastically cut the number of positions for clerks which the new committees requested for their staff work. This would have been unimaginable effrontery in the United States, but

came to light in Britain only when the chief clerk of the House of Commons was called in to explain to a subcommittee of the committee on science and technology about difficulties in getting its work done.

Ministers do explain and defend their decisions in the House of Commons, but seldom do critics have the information or the expertise to make a serious challenge. In cases of scientific or technical decisions this is particularly true. The recent decision to take Britain out of the European 300 GeV accelerator project, primarily on financial grounds,

was an instance when some discussion of the implications for British science policy might have been expected; none was forthcoming. The Minister of Technology has been pondering important decisions on the future of Britain's nuclear power industry, in which the government plays a key role, but there has been virtually no real public discussion of alternatives. It is clear that Britain today faces serious problems in organizing its government and that the state of the civil service, although important, is only one element.—JOHN WALSH

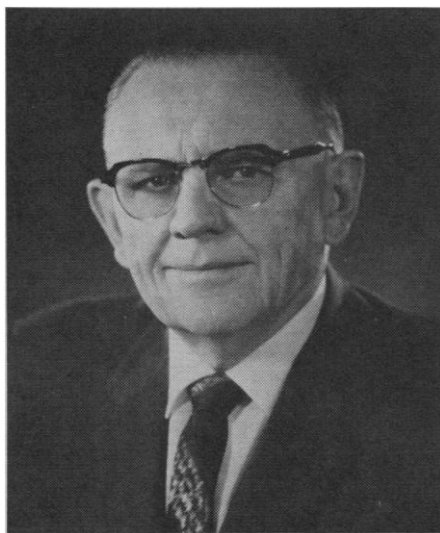
## Congress: Redwoods, Scenic Rivers Bills Suffer Setback

On 15 July the House of Representatives took up several bills under suspension of the rules, a procedure by which debate is limited, amendments are barred, and a two-thirds majority is required for passage. Among the bills handled in this way were three important natural-resource measures—a redwoods national park bill; a bill to initiate a national system of wild and scenic rivers; and a \$1.5-billion rivers and harbors bill authorizing numerous navigation, flood control, and multi-purpose dam projects in some 31 states.

The redwoods and scenic rivers bills suffered badly under the cavalier parliamentary procedure employed, while the rivers and harbors bill—the classic pork-barrel measure—rolled through. The redwoods park bill, brought up by Representative Wayne N. Aspinall of Colorado, chairman of the Interior and Insular Affairs Committee, was pronounced outrageously inadequate by a number of congressmen, but they had no chance to amend it. Their options were either to accept the bill as reported from committee or to risk getting no redwoods bill at all. Most members accepted it, and the bill passed overwhelmingly.

Aspinall seems as concerned to protect California's lumber industry as to preserve some major stands of redwoods. His House-passed bill would create a

28,400-acre park, less than half the size of the 66,384-acre park contemplated in the bill passed last year by the Senate. The smaller park would, moreover, consist largely of redwoods acreage already being protected in California state parks. Aspinall thus will go to the House-Senate conference on this legislation in a position to seek a more modest compromise than would have been the case had the House bill provided for a bigger park. He has promised to accept a park significantly larger than that described in the House bill.



Wayne N. Aspinall

However, neither of the two Democratic congressmen he has named to join him as House conferees—Roy A. Taylor of North Carolina and Harold T. Johnson of California—has been an advocate of a large park.

The scenic rivers bill was rejected by the House, at least in part because the suspension-of-the-rules procedure allowed no amendments. It unexpectedly came under attack from some New York and Pennsylvania congressmen who objected to its designation of the Susquehanna as a stream to be protected from development pending a study of it as a potential scenic river. Aspinall and other sponsors of the measure were willing to drop the Susquehanna from the bill but, under the circumstances, they could not.

How did the House happen to be acting on these bills under suspension of the rules?

Long-drawn-out sessions clearly have become a problem for Congress, and in election years the dawdling ways of many congressional committees exasperate members eager to go home and campaign. The House Rules Committee, from which legislative committees normally seek permission to bring bills to the floor, decided this spring to force the pace of business. It announced on 22 May that, except for emergency measures, no bills reported from committee after 8 July would be considered for clearance to the floor. It indicated that its last regular meeting of the session would be held on 9 July.

This policy had the support of the House majority and minority leadership as well as that of many other members. (The leadership was hoping, though vainly, that the House would be able to adjourn in early August.) As the 8 July deadline approached,