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22. J. R. Harris, *Lexicographic Studies in Ancient Egyptian Minerals* (Akademie-Verlag, Berlin, 1961), p. 75.
23. A. Lucas and J. R. Harris, *Ancient Egyptian Materials and Industries* (Arnold, London, ed. 4, 1962), pp. 62–63.
24. M. G. Daressy [*Ann. Serv. Antiq. Egypt.* 13 (No. 2), 43 (1913)] mentions quartzite quarries above Gebelein, but samples collected for us at that locality proved to be limestone, not quartzite. Sources of geological information on the region seem to agree that, outside of Gebel el Ahmar, there are no quartzite deposits north of the Edfu region.
25. K. Sethe, *Sitzungsber. Berlin Akad.* 1933-I, 864 (1933).
26. G. Steindorff, *Egypt* (Baedeker, Leipzig, ed. 7, 1913), p. 317.
27. ———, *ibid.*, pp. 334, 338.
28. A. Varille, *Ann. Serv. Antiq. Egypt.* 33, 85 (1933).
29. ———, *ibid.*, pp. 91–93. On p. 93, Varille states: "Thus, in spite of the verdict of the geologists, there can be no doubt about the site of the 'Mountain of sandstone,' where the colossi of Memnon were cut out." The geologists of the early part of this century indeed could not match the "pebbly" nature of the quartzite of the colossi with that of Gebel el Ahmar, but Lucas and Harris (23) confirm the occurrence of quartzite containing such inclusions in some parts of Gebel el Ahmar. We have samples with such pebble inclusions from this quarry.
30. L. Habachi, *Mitt. Deut. Archaeol. Inst. Cairo* 20, 85 (1965).
31. The words *Dw dšr* and the modern Arabic term *Gebel el Ahmar* have the same meaning—that is "Red Mountain."
32. K. Sethe, *Sitzungsber. Berlin Akad.* 1933-I, 893 (1933).
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34. I. Perlman and F. Asaro, in *Scientific Methods in Medieval Archaeology*, R. Berger, Ed. (Univ. of California Press, Berkeley, 1970), pp. 398–408.
35. For the petrographic studies we are greatly indebted to Prof. Richard Hay of the Department of Geology and Geophysics, University of California, Berkeley. Field research for the 1971 and 1972 expeditions was supported by the National Geographic Society's Committee on Research. Travel funds for A.A. and T.R.H. came from a Ford Foundation grant for graduate student traineeships in archeology. We thank the following persons for their help with our project: Dr. Zaki Iskander, director general of the Service des Antiquités, Egypt; Drs. Salah Osman, Mahmoud Abdelrazik, Henri Riad, Ahmed el Taher, Abdel Kader Selim, Labib Habashi, Rigaaie Zaki, and the late Gamal Mehrez, all of the Service; Dr. Ahmed Talaat, Egyptian Museum of Geology; Drs. Herbert Ricke and Gerhard Haeny, Swiss Institute for Research in Ancient Egyptian Architecture and Archaeology; and Ahmed Hassan Younes, who in Cairo and at Luxor acted as our intermediary. The nuclear measurements and their interpretation were performed under the auspices of the U.S. Atomic Energy Commission.

## NEWS AND COMMENT

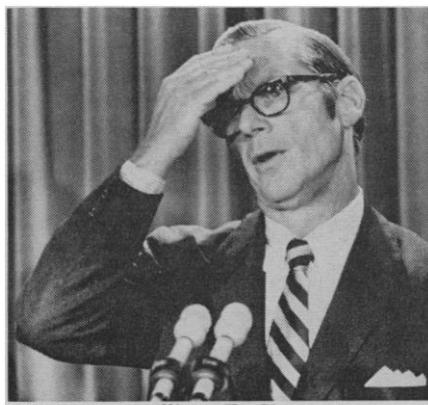
# Energy Organization: Love's Labour's Lost

Furniture movers and telephone installers were hard at work on the fourth floor of Washington's New Executive Office Building last week, setting up a comfortable new nest near the White House for the third energy policy czardom the nation has seen this year.

First came John D. Ehrlichman, the President's deposed adviser on domestic affairs, who established himself as the head of an energy triumvirate in January. That arrangement collapsed in the spring as Ehrlichman departed under the Watergate cloud. Next came John Love, who traded the security of the Colorado governorship for what turned out to be a small and rather powerless portfolio as head of the White House Energy Policy Office. In place of the EPO and Governor Love, President Nixon announced on 4 December that he was establishing by Executive order a new Federal Energy Office (FEO) to pull the nation through what promises to be a winter of severe discontent.

The new organization has a certain inner logic to it, although its legal

status and its future remain somewhat cloudy. As described in a fact sheet handed out by the White House, the FEO consolidates a number of disparate but related elements of the Interior Department, the Office of Management and Budget, and the Cost of Living Council. In the process, the FEO extends and formalizes the already considerable authority over energy policy—particularly fuel allocation—accumulated in recent months by



William E. Simon

William E. Simon, deputy Treasury secretary (and the FEO's new director) and John C. Sawhill, the OMB's man in charge of energy and natural resource budgets (now Simon's deputy).

Until Congress approves the reorganization, however, Simon and Sawhill can't legally exercise authority over the 1300 employees and \$31 million in energy programs inherited from the Interior Department. The Interior Department is being asked to cooperate voluntarily with the FEO until Congress sanctions the marriage and changes its name from Office to Administration, but Interior Secretary Rogers C. B. Morton is rumored to be less than happy with this arrangement.

At the least, the FEA proposal adds a new kink to an already confusing sequence of messages to Congress on federal reorganization. Last June, President Nixon tossed out an earlier set of proposed organization plans for energy and natural resources, and called on Congress instead to set up three new agencies: a Department of Energy and Natural Resources, an Energy Research and Development Administration, and a Nuclear Energy Commission (*Science*, 13 July).

Then on 7 November, Nixon asked Congress to put off consideration of the DENR until next year and to concentrate instead on approving the new R & D agency. Now the White House has, in effect, partially negated the latter request. For the FEO turns out to be the "energy" part of the DENR and

would, according to the White House, be "folded into the DENR" once Congress approves *that* reorganization, if it ever does.

The House, but not the Senate, responded quickly to the idea of putting the DENR aside. Representative Chet Holifield's Government Operations Committee held a few hurried days of hearings in late November, and the ERDA proposal is expected to come up for a floor vote in the House before the Christmas recess. ERDA's reason for being, of course, is to spend or distribute much of the \$10 billion the President has pledged for energy R & D over the next 5 years.

By reopening the debate over the DENR, however, the White House also has resurrected the sticky question of how the R & D agency is supposed to relate to the resource agency. Holifield, for one, wants an independent agency answering to the President. Senator Henry Jackson (D-Wash.), on the

other hand, has said that he thinks the R & D agency either ought to be part of the DENR or subordinate to it and its strategies of resource development. The White House, publicly at least, has left unclear which role the FEA would assume. The 4 December fact sheet from the White House said only that the FEA "will be separate from ERDA" but will be responsible for "R & D coordination."

The Congress is unlikely to disentangle the President's various messages before it goes home for Christmas. In the meantime, the Senate is proceeding along a sharply divergent track from the House and Administration approaches to managing energy R & D. On 7 December, the Senate approved by an 82 to 0 vote Henry Jackson's proposal to spend \$20 billion on energy R & D over the next 10 years. Virtually all of this, at a rate of \$2 billion a year, would support nonnuclear technology; the Administration's proposal, in contrast,

calls for spending an average of just under \$1 billion over 5 years for non-nuclear work (*Science*, 30 November).

The Jackson bill's approach to management of R & D is fundamentally different from the Administration's. As an interim measure, to take effect until Congress reorganizes energy research, the bill would establish a federal research management project led by an independent chairman named by the President. Serving with the chairman would be one person of assistant secretary rank from each federal agency with a major energy research program.

The differences between the House and Senate approaches will in all likelihood be the subject of intense and secret bartering in a close conference committee of the two Houses next year. The FEA, for its part, carries the aura of a late-hatching mayfly from the Washington swamp. If it follows the pattern of its predecessors, its life expectancy is brief.—ROBERT GILLETTE

## Mapping: Shadow of the Big Bird Hovers over Mappers, OMB Report

Like the proverbial East and West which never meet, mapping, charting, and geodesy activities in the federal government have proliferated since their inception in the 1820's, but they have never managed—blue-ribbon panels notwithstanding—to get it all together. On the civilian side, for example, 28 different agencies were making land surveys of the United States last year; 17 were performing marine charting and geodesy, 14 had facilities for making aerial and satellite photos into maps and maplike products, while some 18 agencies and numerous private contractors were doing the printing.

Now, a special task force of the Office of Management and Budget (OMB), undeterred by the failure of past attempts to bring coherence into this situation, has concluded that all civilian mapping should be consolidated into a single new agency and linked more closely with the military. In their report, the task force argues that such

an arrangement could not only save the government money and streamline its operations, but also could modernize civilian mapping itself by adopting hitherto unavailable "advanced technology" developed for secret military and intelligence purposes.

OMB brass and the White House, and allegedly the National Security Council staff, are reviewing the task force's plan, which was first put forth in a 200-page classified report last March and sanitized in a shorter, public version released in October. Although implementation of the report's conclusions is far from certain, some civilian mappers are wary of them. Part of their uneasiness is easily attributable to the jitters preceding any major bureaucratic shakeup. But a more substantive worry is that the task force's approach may be the first step into bed with the military mappers. Once such a cozy partnership gets going, civilian mappers fear, the relationship will at best appear unseemly and at worst will be de-

structive of the civilian's programs. These objections seem to be the latest chapter in a long history of controversy between military and civilian mappers over classification and control of equipment, data, and programs.

The sanitized report often mentions the need for civilian mappers to adopt equipment, data, and know-how of the Department of Defense (DOD); but those who have seen the classified report indicate that it argues even more strongly than the sanitized version for military-civilian liaison. But some civilian mappers object. Said one, "There's no question that with the world situation being what it has been for the last several years, if we had to compete with the military, we would come in second, third, or even fourth."

The task force's chairman, and by all accounts its majordomo, is a 19-year veteran of the Central Intelligence Agency (CIA) named E. E. ("Wilkie") Donelson, who now works in a tight-security wing of OMB. Donelson is credited with having pulled together the Defense Mapping Agency (DMA) from warring service mapping agencies 2 years ago. Hence, for a task force that he heads to find disarray and fragmentation in the hydra-headed civilian mapping groups and to tell them to centralize is not exactly surprising.

The OMB group was composed of representatives of those agencies which