

members in the pending crucial decision on atomic energy.<sup>23</sup>

Seaborg's heading the AEC proved a boon to the isotopic power program. In the course of his career prior to entering government he had been involved in the discovery of plutonium and many of the transuranium elements. He was co-discoverer of certain isotopes, including Pu-239 and U-233. As the AEC Chairman, he kept abreast of developments in isotopic power, arranging to be briefed on RTG programs soon after his arrival at the agency.<sup>24</sup>

Together with Seaborg, another man crucial to a growing space-nuclear partnership was James Webb, who was called on by the Kennedy Administration to head NASA as it stood on the threshold of the space age. Webb had held several key administrative positions in Washington. He had been Executive Assistant to the Secretary of the Treasury in the early Truman years, and the Director of the Bureau of the Budget when the AEC was formed. In 1952 he had served as Undersecretary of State. Noted for his expertise in administration, Webb saw the New Frontier being faced by NASA as a venture in both space science research and development and administrative research and development.<sup>25</sup>

When it was behind him, Webb saw the experience at NASA as a lesson in the role of political factors in essentially scientific programs. He observed that:

If NASA program managers, scientists, engineers and top officials had not thought of their work in political... terms... if they had not arranged their activities to gain support from other NASA divisions, Congress, the Bureau of the Budget, the scientific community, etc.—Apollo would not have met its goals...

...political relationships are not... something added on to the work of line managers or program officials as less important than other duties; these relationships are an integral part of their work, inasmuch as personal relationships and a sensitivity to the total environment are essential parts of leadership responsibilities if the system is to work at all.<sup>26</sup>

A second basic lesson was the importance of being able to adapt to continuous change. This, Webb found, was permitted by a feedback mechanism in the form of an executive secretariat established at NASA\* to provide senior

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\*The secretariat at NASA consisted of Administrator Webb, his Deputy Administrator, Hugh Dryden, and Associate Administrator, Robert Seamans, Jr.