points of long standing NASA/NACA policy can also be cited to illustrate the substantial freedom and independence of the NASA field installations:

1. It should be emphasized that NASA is a research and development agency. Because this is true, the NASA Headquarters has just as strong an interest as its field installations in the development of the strongest possible R&D capability and the preservation of the flexibility to take advantage of new research opportunities and serve the most significant national goals which are within its capabilities. Thus, the goals of the Headquarters and the laboratories are in consonance.

2. Center directors have flexibility and significant authority to control the

assignment of their people.

3. Center directors have the responsibility as well as authority to ask for more

people if they need them.

4. Center directors have authority and responsibility to initiate requests for new or additional facilities and research equipment necessary to carry out their work.

The realities of the budget process frequently mean that a laboratory director does not always get what he asks for, and there may be fiscal or policy reasons which cause agency management or the Executive Branch to turn down resource requests. But the basic policies of center director discretion and control over his own work force and research facilities are well understood and have played an important part in maintaining flexibility. NASA has a unique capability to manage large scale R&D programs of many kinds and to sustain a research program over a broad range of technology. This capability is in our laboratory structure and innovative ideas and concepts for research usually generate in these labs and are initiated by them.

Question No. 6. Several agencies have set up procedures to appraise the performance of contractors that do research and development for them, or that manage agency laboratories. What procedures does NASA use, and what consideration has been given to applying the standards and procedures of these appraisal processes to NASA operated laboratories? To what extent would this

 $be\ desirable?$

Response. NASA recognizes that the appraisal of the effectiveness of its research and development activities is an important part of management, and this applies whether these activities are inhouse or contracted. We have developed systems for R&D contractor performance evaluation tied to the basic requirements of contract management and administration, and also tied to our incentive fee patterns. Indeed, the NASA inhouse technical competence provides the capability to make such evaluations. In addition, many of our R&D contractors are those who design, fabricate and operate hardware for NASA rather than those who do research, and their performance can be judged rather precisely in terms of cost, performance, ability to meet schedules, and the success of the mission. These same criteria are also used to judge inhouse NASA performance in those laboratories which are flight mission oriented and are charged with the management of flight hardware.

In the special case of the Cal Tech/JPL contract which is for research and development, NASA regularly evaluates technical and administrative performance using an evaluation board composed of representatives designated by the

Administrator.

Evaluations are performed semiannually and are based upon criteria established by the Board. In addition, there are two other regularly scheduled meetings each year in order to discuss trends, questions or performance factors which could become agenda items at subsequent formal evaluation meetings.

Since NASA Centers undergo continuous technical, functional and management review the extrapolation of the Cal Tech/JPL appraisal is not contemplated. For NASA's inhouse Centers, the most effective appraisal system has been demonstrated to be reliance on continued close and regular technical and professional Headquarters/Center communications and association, plus regular reviews and appraisals by functional staff offices.

Question No. 7. The DOD witness proposed the elimination of manpower controls on cross-agency work in order to achieve flexibility similar to that available to the AEC contract laboratories. What is your opinion of this proposal?

Response. While the idea of relief from manpower limitations for crossagency work has some attraction, we feel that the necessary flexibility for undertaking work between agencies should be possible within present budget approval techniques. Where relatively small manpower commitments would be required of a performing agency in doing work in its general area of responsibility for another agency, it should be possible to absorb these requirements