

same technique could be used to enhance medical X-rays and NIH is now arranging to sponsor work at JPL aimed at the medical application of this space related technique.

Obviously, support of the supersonic transport work is directly a part of NASA's overall responsibility for aeronautics and space. Over 200 NASA scientists and engineers work with the Federal Aviation Agency in the evaluation of the proposals that were submitted to that Agency for the development of the supersonic transport. In addition, it was the basic calculations conducted by NASA that indicated that aircraft configurations could be defined to provide a financially sound transportation system. Technological development and technological advancements are still required to make such a system fully effective and NASA as well as the FAA contractors are working to provide this technology and NASA is also working to advance technology beyond that required for the SST.

Supersonic transport models have been tested in NASA wind tunnels, engine research is underway on all of the components that would be involved in supersonic aircraft engines, noise and sonic boom studies are underway, materials work related to the high and low temperatures that will be experienced in supersonic aircraft is underway. All of this obviously fits within NASA's overall responsibility. Support is, therefore, readily provided to the FAA in these areas.

It should be emphasized that NASA is, in general, not a user agency. We are a research and development agency. The research and development work that has led to the early communications and weather satellites has resulted in operational systems under Comsat, the DOD, and the Department of Commerce. These organizations fund for the operational systems while NASA funds for the initial development work to prove out the principles involved sufficiently well that economic and other factors can be judged by the user to determine the desirability of an operational system.

In a similar way we are now conducting early phases of work to determine the technological capabilities of earth resources satellites. If the technology can be developed to provide effective surveys of agriculture output, crops, water, and other resources, timber, et cetera, through use of space systems, then agencies such as the Department of Interior and the Department of Agriculture could determine the suitability of such techniques for operational systems and they would fund for the operational systems and use their output.

In general, NASA's policy is to apply its capabilities, manpower, facilities, equipment, to the support of work requested by other agencies that are within its overall area of responsibility without requiring reimbursement by the other agency. Only those out-of-pocket costs associated with the specific equipment that must be procured or the special add-on costs beyond those that are directly a part of NASA's operating capability are provided by the other agency. This is similar to the case I described earlier where the Department of Defense provided NASA with aircraft or engine components while NASA applied its capabilities to the conduct of the work without reimbursement.

Obviously, our budget and program plans must anticipate such work. With recent reductions in our budget, particularly in our administrative operations budget, we are now hard pressed to carry out those programs for which we have a primary responsibility. We, therefore,