## 4. ROLE OF THE IN-HOUSE LABORATORIES IN DEVELOPING BALLISTIC-MISSILE SYSTEMS

In analyzing the proper role of the DoD's in-house laboratories, the Task Force reviewed their involvement in developing strategic weapon systems, weaponry for general warfare, and developments for special types of warfare such as that in Southeast Asia. Strategic weapon systems and, in particular, ballistic-missile systems received the Task Force's close attention.

The growth of a very substantial industrial competence in the development of strategic weapons, which has continued at a high level during peacetime, places this area in a special situation. In this matter, there is general agreement that engineering and production should continue to be concentrated primarily in private industry, but there are different views on whether the in-house laboratories should participate fully in the advanced development of strategic weapons. There are those, particularly in the Air Force, who feel that industry should perform this function along with a special not-for-profit organization that has been established to provide the Government with technical and management assistance. In any event, up to the present time the development of large strategic missile systems for the three Military Services has been carried on largely outside the structure of the in-house laboratories.

The Task Force recognizes that the development pattern used in the area of strategic weapons has been quite successful. The combination of a strong industrial (or nonprofit) contractor and a qualified program office appears to be the accepted approach for developing major strategic missile systems such as Minuteman, Poseidon and Nike X.

If it is assumed that, during the next few years, there will be no fundamental changes in the way strategic missile systems are developed or procured, there still remain some issues involving the laboratories that must be resolved. They include the participation of the laboratories in long-range planning for strategic systems to ensure that the laboratories' R&D efforts relating to future strategic systems are significant and pertinent. The laboratories may also have the important function of troubleshooting and updating operational strategic systems. Clearly, there is need for a better understanding—and better mission statements—concerning the laboratories' participation in activities involving strategic weapon systems.