1. While no incontrovertible answer can be given for a prognosis of the probable life of the Loran-A system, considering the use now made of the system, the status of other navigational systems, the economics of the various systems and the views of others in government, it is believed unlikely that Loran-A will phase out of existence within 20 years. Some reduction of the system reasonably can be expected within the next ten years. The requirement for U. S. territorial portions of the system may last as long as 30 years.

2. Based on the foregoing assumptions it is appropriate that the Coast Guard proceed with a redesign of Loran-A equipment, aiming toward replacing present equipment commencing in 1971 or 1972. The new equipment should utilize high quality oscillators, be fully automatic and have the maximum MTBF and maintainability. It will be essential that system operation and maintenance personnel requirements be reduced significantly if budgetary approval for procurement and installation of the new equipment is to be realized. Hopefully, the new equipment could be in service in all the stations serving U. S. territorial waters by 1976.

3. The status and extent of the standby/reserve equipment must be resolved. In this regard, it is deemed appropriate that:

   a. The standby/reserve equipment level be maintained at two high power triads and that this equipment be carried in HQCM,

   b. All obsolete, unserviceable and excess Loran-A equipment be abandoned, as you recommend,

   c. The standby/reserve equipment be of the most recent design and be maintained serviceable, except as noted below,

   d. Orderly phasing of newly procured equipment into the system be accomplished by substitution using the standby-reserve equipment (not to exceed use of the equipment comprising one chain) and that the equipment thus replaced, if of recent design, be rehabilitated and returned to standby/reserve
e. Rehabilitation be confined, as much as possible, to those stations outside the territorial U. S.

B. R. RYAN