

volume production of new equipment is not undertaken when the results of tests of experimental models disclose that the item is unsuitable for field use or (2) when equipment with known deficiencies is authorized for production with the understanding that the deficiencies will be corrected, appropriate testing techniques are applied in a timely manner to determine that the items being procured will meet the requirements of the user in order to minimize the number of defective items produced.

"By letter dated June 18, 1963, the Deputy Assistant Secretary of the Army (Installations and Logistics) stated that the Department of the Army concurred with our findings. He stated that the Army had a standing policy that volume production of new equipment is not undertaken if the results of tests of experimental models disclose that the item is unsuitable for use. He advised also that normal procedures require that appropriate and timely testing techniques be applied to assure that new items meet the user's requirements. He stated that the Department of the Army is investigating further the causes for the conditions cited in this report and that further production of the equipment will not be accomplished until existing technical problems have been solved and the field user's accuracy requirements are met.

"The Deputy Assistant Secretary stated further that, on the basis of results of tests, it was concluded that the design of the IM-108/PD radiacmeter was sound but that further investigation of the specific causes for the inaccuracies would be made. However our review disclosed that responsible engineering personnel at the USAEMSA, Fort Monmouth, New Jersey, agreed that the contractors met all specifications but that there was a defect in the design of the radiacmeter. In view of the position taken by the Deputy Assistant Secretary, it is evident that a conflict of opinions exists within the Army as to the soundness of the design of the IM-108/PD, later designated the IM-174/PD radiacmeter. We did not attempt to determine whether the deficiencies in the radiacmeter resulted from the contractors' production practices or from the Government's design specifications.

"Conclusions

"Volume production of new equipment, generally, should not be undertaken when the results of tests performed by the user on experimental models disclose deficiencies that render the item unsuitable for field use. Further, when equipment with known deficiencies is authorized for volume production, with the understanding that these deficiencies will be corrected in the production model, it is of the utmost importance to determine, by appropriate testing techniques at the earliest possible time, that the deficiencies have been corrected and that the item is suitable for field use. These actions require timely and effective coordination between the responsible testing and procurement organizations.

"Notwithstanding the Army's policy that volume production of new equipment is not undertaken if the results of tests in experimental models disclose that the item is unsuitable for use, our review disclosed that deficiencies had been identified in the radiacmeters IM-108/PD experimental models that rendered the item unsuitable for use, but a decision was made to enter into volume production and a contract was awarded. Furthermore, four additional contracts for the production of these radiacmeters were awarded even though previously identified deficiencies had not been corrected. As a result, 10,800 radiacmeters that were procured at a cost of \$606,000 are now being eliminated from the Army's supply system, 24,834 other radiacmeters costing over \$1.2 million have been modified at a cost of over \$663,000, and additional costs estimated at about \$200,000 will be incurred because of a temporary work stoppage under the fourth and fifth contracts. As of September 18, 1963, the acceptability of any of the radiacmeters for Army use is still questionable pending the results of tests of the modified instruments.

"Recommendations

"We recommend to the Secretary of the Army that (1) those cases where supply management officials, because of the urgency of requirements for equipment, elect to overrule the recommendations of the using forces with respect to performance of the equipment and elect to enter into production before all known deficiencies are corrected be referred to the Assistant Secretary of the Army (Installations and Logistics) for his approval, (2) in the investigation of the specific causes for the deficiencies in the radiacmeters that are the subject of this report, the Department of the Army determine, and advise us, whether