

"A list of the principal Department of Defense officials responsible for administration of activities discussed in this report is appended.

"FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

"Unnecessary costs incurred in the procurement of inaccurate radiacmeters

"The Army awarded five contracts for a total of 59,776 radiacmeter at a cost of about \$2.9 million even though it was aware, prior to the first production contract and each succeeding contract, that the radiacmeters were not suitable for Army use. In addition, over \$663,000 has been expended to modify the radiacmeters produced under the second and third contracts, and additional costs estimated at about \$200,000 will be incurred to reimburse the contractors under the fourth and fifth contracts for a temporary work stoppage until the Army investigates technical difficulties and decides whether the radiacmeters will be acceptable to using organizations. The 10,800 radiacmeters produced under the first contract have already been scrapped, and the acceptability of any of the remaining instruments is still questionable.

"These unnecessary costs have been incurred because responsible Army officials (1) were overly optimistic that deficiencies identified in tests of experimental model radiacmeters could be corrected in production despite a recommendation by the using organization not to enter into volume production until deficiencies were corrected, (2) accepted preproduction and initial production models and approved volume production without adequate and timely coordination of test data between the using organization and the engineering and procurement agencies, (3) awarded additional production contracts even though previously identified deficiencies had not been corrected, and (4) generally did not exercise their personal responsibilities to assure that Government funds were expended properly.

"Disregard of user's recommendations

"In 1954 a contract was awarded to El-Tronics Incorporated for the development of two experimental model radiacmeters, 50 of each, at a total cost of \$43,800. During 1956 and 1957 the United States Continental Army Command (USCONARC) performed a service test on some of the experimental model radiacmeters to determine their suitability for Army use. In May 1957, USCONARC reported to the United States Army Electronics Materiel Support Agency that several deficiencies were found in both models tested which made the radiacmeters unsuitable for use. The accuracy tests, included in the service tests, were performed by USCONARC after the radiacmeters were subjected to actual field use for several months. A serious deficiency noted during these tests was that the readings of the radiacmeters were not within the plus or minus 10 percent accuracy required by the technical military requirements. Inaccurate readings up to minus 78 percent were recorded during this test.

"USCONARC recommended to the Chief of Research and Development, Department of the Army, that a limited procurement of 1,100 radiacmeters be made to satisfy an immediate operational requirement, provided that the deficiencies noted in their tests were corrected in production. They recommended also that some production models be sent to them for testing. The records show that the Chief Signal Officer reported that all deficiencies initially identified in the experimental models could be corrected in production and therefore USCONARC's recommendation of limited procurement rather than volume production was disapproved by the Deputy Chief of Staff for Operations, Department of the Army.

"The first production contract was awarded in March 1958 for 7,200 radiacmeters IM-108/UD. The quantity was subsequently increased to 10,800. This contract provided that preproduction models be submitted to the United States Army Electronics Materiel Support Agency (USAEMSA) for evaluation and testing to determine conformance with applicable specifications. In the testing of the preproduction models during September 1958, USAEMSA identified several deficiencies in performance and notified the contractor that some of the radiacmeters failed to meet shock, immersion, sensitivity, and calibration specification requirements. However, USAEMSA permitted the contractor to commence production provided that the deficiencies were investigated and corrected, subject to further tests during the initial production run.