

cepted by the Electronics Command before any modified radiacmeters were submitted to USCONARC for retesting in March 1961. Before the USCONARC test results were received by the Electronics Command in July 1961, an additional 10,717 radiacmeters, or the remaining portion of the third production contract, were accepted, and in June 1961 a fourth production contract for 11,417 radiacmeters was awarded.

"Radiacmeters scrapped because of potential casualties and fatalities to users

"In December 1961, personnel of the Electronics Command determined that all 35,634 radiacmeters procured under the first three production contracts had major deficiencies. Although a more stable radiacmeter was produced as a result of the May 1960 modification, tests showed that the radiacmeters were still subject to large errors in reading if one or more battery cells failed. The users would not be aware of this error during actual field use and their remaining in an area with excessive radiation could result in casualties and fatalities. Therefore, instructions were issued in May 1962 by the Commanding General of the United States Army Electronics Materiel Agency (USAEMA) to all commands that the initial production of 10,800 radiacmeters costing \$606,000 should be disposed of.

"Acceptability of radiacmeters still questionable even after modifications

"The Electronics Command determined that it would be economically practicable to rework the radiacmeters produced under the second and third contracts, which were also subject to similar deficiencies in calibration accuracy. The costs incurred at Lexington and Sacramento Army Depots to modify these radiacmeters, which have not yet been field tested by the Army, have amounted to \$663,611.

"In January 1962, a fifth production contract was awarded for an additional 8,400 radiacmeters. The quantity was subsequently increased to 12,725. USAEMSA determined that it was also necessary to change the specifications applicable to the fourth and fifth contracts in order to produce a more satisfactory radiacmeter. This change in specifications required certain modifications which were approved by the Electronics Command. All radiacmeters were then required to meet the plus or minus 10 percent calibration accuracy as provided by the original technical military requirements and would be redesignated radiacmeter IM-174/PD.

"Results of tests performed on initial production models from the fourth and fifth contracts by USAEMSA engineers and the Lexington Army Depot in May 1963 showed, however, that various engineering deficiencies in the modified IM-174/PD radiacmeters posed a question as to whether the radiacmeters would be acceptable in meeting the requirements of the using organizations. One of the limitations identified by these tests was that, after being used, the equipment could not be used again for a period of 72 hours. The reason for this limitation is due to the type of tube contained in the modified radiacmeters. This was the same deficient tube identified by the USAEMSA engineer in August 1959.

"On July 25, 1963, the Commanding General, United States Army Electronics Command, advised USAEMA that no further contracts for the production of the IM-174/PD radiacmeters were to be made either on the basis of the add-on quantities or new contracts. Subsequently on August 22, 1963, the Commanding General, United States Army Electronics Command requested USAEMA to enter into supplemental agreements with the contractors under the fourth and fifth contracts to provide for temporary work stoppages of 120 days. This temporary delay in work under these contracts will result in additional costs to the Government of about \$200,000. During this period a technical investigation of the deficiencies in the IM-174-PD radiacmeters will be performed. Extensive tests of a total of 128 radiacmeters, comprising 64 produced under the fourth contract and 64 from the fifth contract, will be made by the Lexington Army Depot. Subsequent to a review of the results of these tests, the Army will make a decision whether to resume production on this item or terminate the fourth and fifth contracts.

"Agency comments

"On April 11, 1963, we brought our findings to the attention of the Department of the Army and proposed that it institute effective controls and place responsibility within the Army Materiel Command to assure that either (1)