

radar sets were not consistently accurate in determining the range of a target, were unable to detect a target satisfactorily, and were cumbersome to operate. After the contract for the sole-source procurement was awarded, it was necessary to stop production for 15 months while modifications were being made to correct these deficiencies. This delay unnecessarily increased the cost of the corrected units by \$356,220. In addition, we estimated that, on the basis of competitive prices obtained in a subsequent procurement, unnecessary costs of about \$1.86 million had been incurred because these sets had been procured without competition. In fact the successful bidder's price under the competitive procurement was more than 55 percent below the price paid to the sole-source producer.

"Initial award and service-test results"

"In June 1958 fixed-price redeterminable contract DA-36-039-SC-76361 was awarded by the Materiel Agency to Sperry Gyroscope Company on a sole-source basis at a cost to the Government of \$3,474,962, for the production of 462 vacuum-tube radar sets. The vacuum-tube model, suitable for Army use only as interim equipment, did not satisfactorily meet the Army's need because of its excessive weight and noise. This interim equipment was procured to furnish field units with combat-surveillance capabilities at a time when field units had no other equipment that could perform its function. This contract was awarded without the benefit of competition, and the Army justified the sole-source procurement on the basis that the Government did not have procurement data that were suitable for use in soliciting competitive bids. We did not ascertain the validity of the Army's justification at that time. The contract required that an updated set of drawings suitable for use in competitive procurement be delivered 30 days after the initial production equipment was submitted for acceptance.

"In January 1959, about 7 months after the award of the contract for 462 vacuum-tube radar sets, the Electronics Command accepted a plan, submitted by Sperry to partially transistorize the radar sets. This plan was approved, and the partial transistorization was expected to result in the silent operation of the radar sets because a battery, rather than a gasoline-engine generator would be the primary source of power. The Materiel Agency reduced the quantity of radar sets on order from 462 to 402 by a contract modification, thus making \$440,000 available toward offsetting the increased costs of \$526,000 for the partial transistorization of the radar sets. The final contract price for 402 sets, including partial transistorization and other changes, was \$3,704,108.

"In March 1960, USCONARC completed service tests of two preproduction models of the partially transistorized radar sets and concluded that (1) 3 of the deficiencies found in the service tests of the vacuum-tube-type developmental models had been carried over into the partially transistorized version without correction and (2) 20 of 29 new deficiencies found, when considered collectively, were so serious that corrective action was deemed mandatory prior to acceptance and issuance of these sets to troops. Among the major deficiencies noted and their effects on performance of the radar set were (1) erroneous range calibration, which resulted in loss of acceptable range accuracy, (2) transmission failure, which resulted in unsatisfactory detection of a target, and (3) faulty tripod design, which contributed to the cumbersome operation of the radar set and required, in many instances, time-consuming operations to realign the tripod legs. The Support Agency issued technical-action requests to the contractor in April and May 1960 that included actions to correct the above-cited deficiencies prior to production.

"Additional procurement"

"Review and approval of proposed procurements of certain items at the Materiel Agency is performed by the Procurement Planning Committee. This committee consists of three officials of the Materiel Agency, the Chief Engineer of the Support Agency, and a secretary appointed by the chairman of the committee. On May 10, 1960, the Support Agency's Chief Engineer recommended that the committee require that all improvements to the radar sets recommended by USCONARC be incorporated in the 502 additional radar sets to be procured under a modification to contract -76361. He further recommended that the contract modification negotiated should provide that the improvements be made when the sets were produced, which would preclude the necessity for engineering changes for that purpose subsequent to award of the contract modification. At that time the Procurement Planning Committee consisted of: