INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884

REPORT
NO. 91-090

June 7, 1991

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Report on the Audit of Howell Instruments, Incorporated (Project No. 9CE-7001)

Introduction

This is our final report on the audit of Howell Instruments, Inc., for your information and use. We made the audit from February through September 1989. We originally issued five draft reports on Howell Instruments' defective pricing, which were referred to the Defense Criminal Investigative Service (DCIS). After receipt of subpoenaed information, DCIS requested that we perform a defective pricing audit of transactions covering a 6-year period at Howell Instruments, Inc., (Howell). This report summarizes the results of the DCIS request audit and incorporates the results of the five draft reports. The objective of the audit was to determine whether Howell submitted accurate, complete and current cost or pricing data in connection with DoD contracts; and specifically whether Howell disclosed to Government negotiators that labor and other operating expenses at its Puerto Rican subsidiaries were lower than those proposed and certified.

The audit verified that Howell did not disclose its lower Puerto Rican operating expenses to Government negotiators. As a result, 30 pricing actions, with total certified costs of $20,325,074, awarded to Howell between December 1980 and November 1986 were defectively priced by $1,515,245. The Department of Justice, Civil Division, used our audit results to negotiate a $925,000 settlement with the contractor under the provisions of the False Claims Act.

Scope of Audit

For the 41 pricing actions included in our audit universe, we reviewed the contractor's proposals to the Government, the Government's price negotiation memorandums, and the contractor's accounting records for the Fort Worth and Puerto Rico plants. We reviewed documents and records that related to transactions and events that occurred between December 1, 1980, and November 30, 1986. For individual pricing actions negotiated in that time

period, we reviewed documents and records related to transactions and events that occurred through the date that the contractor certified to the accuracy, completeness, and currency of its cost or pricing data. Our audit scope of 41 pricing actions incorporated the 5 pricing actions that were the subject of the 5 previously issued draft reports. The activities visited or contacted during the audit are listed in Enclosure 2.

This financial and compliance audit was made from February through September 1989 in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. The audit was made at the DCIS Dallas Field Office, Fort Worth, Texas, using documents and records provided by the contractor in response to an Inspector General, DoD, subpoena.

Internal Controls

The audit did not include an assessment of internal controls applicable to defective pricing because such an assessment was not within the scope of the DCIS request for audit support. Since Howell closed its Puerto Rican subsidiaries on November 30, 1986, all production has taken place at its Fort Worth, Texas, facility since that date.

Background

The DoD-wide Audit of Contract Pricing (Project 4CB-095) found that Howell may have violated the provisions of Public Law 87-653, "Truth in Negotiations Act," by not submitting accurate, complete, and current cost or pricing data in support of five delivery orders; one issued by the Naval Air Systems Command and four issued by the San Antonio Air Logistics Command. The contractor failed to inform Government negotiators that certain material prices were based on noncurrent data. In addition, the contractor did not disclose to Government negotiators that certain subassemblies of manufactured parts had historically been coproduced at its Puerto Rican subsidiaries where labor and overall operating expenses were lower than proposed and certified costs. The audit results were referred to the DCIS because we believed the contractor may have been aware that its Puerto Rican operating expenses were lower and may have intentionally failed to disclose the lower expenses. Between August 13 and August 31, 1987, five draft audit reports were issued for the pricing actions reviewed during the Audit of Contract Pricing; however, affected procurement contracting offices were instructed not to take action to obtain price adjustments pending completion of the investigation.

By letter dated January 18, 1989, the DCIS requested that we make a defective pricing audit of all pricing actions awarded to Howell between December 1980 and November 1986 (contractor fiscal years 1981 through 1986) for which certified cost or pricing data were submitted. The five pricing actions reviewed during Audit of Contract Pricing were included in our audit scope. The audit was limited to overpricing caused by the contractor's failure to disclose its lower Puerto Rican operating expenses in its certified proposal submissions.

Howell develops and manufactures digital indicating instruments, jet engine trimmers, test sets, and computer-based data acquisition systems for both the military and commercial markets. Howell is headquartered in Fort Worth, Texas, and operates manufacturing plants there. Until November 30, 1986, the contractor coproduced certain subassemblies at its Puerto Rican subsidiaries, Howell Data Systems, Inc., and Howell Instruments of Carolina, Inc.

Prior Audit Coverage

As of March 31, 1991, the Dallas Branch Office of the Defense Contract Audit Agency has issued one defective pricing report against the contractor. The audit report recommended the recovery of $85,158 based on the contractor's manufacture of subassemblies at its Puerto Rican subsidiaries.

Discussion

Details of the Audit. The audit disclosed information supporting the conclusion that Howell violated Public Law 87-653 by not providing Government negotiators with accurate, complete, and current cost and pricing data for 30 of 41 audited pricing actions. A summary of the 30 pricing actions, including the contractor's certified cost and pricing data and defective contract pricing of $1,515,245, is in Enclosure 1. Detailed explanations of our audit computations follow.

Direct Labor. Our review found that direct labor costs were defective because Howell failed to disclose the labor costs associated with items produced by its Puerto Rican subsidiaries. Certified labor costs were based on the projected average direct labor rate at the Fort Worth facility applied to the sum of the historical and estimated labor hours plus a specified percentage for unapplied direct labor. The contractor's unapplied direct labor rate consisted of pay for vacations, idle time, training, absences, receiving and inspection, shipping, holidays, painting, and tape equipment.

A review of the contractor's manufacturing history disclosed that a significant portion of subassembly effort for cables and various electronic components was performed at its Puerto Rican subsidiaries (Howell Data Systems, Inc., and Howell Instruments of Carolina, Inc.). Further analysis indicated that, between

1957 and 1986, the contractor consistently transferred a portion of assembly work to its Puerto Rican subsidiaries where labor costs and operating expenses were lower than at Fort Worth. The parts were then transferred back to Fort Worth for final rework and assembly.

The transfer of labor effort resulted in a significant reduction in manufacturing costs being realized by Howell. The Puerto Rican labor rates for the contractor's fiscal year 1981 through 1986 time period were consistently lower than Fort Worth certified average labor rates. The lower labor cost resulted in much lower costs to manufacture in Puerto Rico, although this cost difference was not passed on to the Government. In fact, the contractor consistently certified labor costs based on contract performance in Fort Worth even though parts were transferred regularly to and from the Puerto Rican subsidiaries for fabrication.

Since the contractor certified labor costs were based on all contract effort being performed in Fort Worth, we analyzed historical production to determine when the contractor used the Puerto Rican subsidiaries and whether the Fort Worth facility normally manufactured all components except during production peaks. We reviewed work order cost records for production runs of five or more units at the Fort Worth facility and the Puerto Rican subsidiaries for contractor fiscal years 1981 through 1986. The review disclosed that 848 components, ranging from cables to printed circuit boards, were regularly coproduced at the Puerto Rican plants. For 136 of the 848 components, this subassembly effort represented 100 percent of total contractor production on production runs of 5 or more units.

To establish a baseline for determining the impact of defective pricing, we segregated the contractor's total direct labor hours historically incurred during contractor fiscal years 1981 through 1986 into: Fort Worth labor hours for assemblies produced exclusively in Fort Worth, Fort Worth labor hours for assemblies with Puerto Rican coproduction, and Puerto Rican labor hours for assemblies with Fort Worth coproduction. We then determined the Puerto Rican labor and indirect expense rates by analyzing cost data for the same time period.

The Fort Worth and Puerto Rican labor rates were applied to the historical average labor hours for each of the coproduced part assemblies used in performance of the 30 pricing actions for which overpricing occurred, along with the historical coproduction percentages used to determine the expected number of units to be produced in Puerto Rico. Defective manufacturing labor costs are the result of applying certified Fort Worth labor rates and historic Puerto Rican labor rates to historic coproduction hours.

Manufacturing Overhead. Manufacturing overhead was defective because Howell failed to disclose the lower

manufacturing overhead costs associated with its Puerto Rican subsidiaries. The contractor certified manufacturing overhead costs based on performance of all labor effort at the Forth Worth facility and therefore subject to the prevailing Fort Worth overhead rate. As established in the analysis of direct labor, the contractor's records indicated that a portion of the manufacturing process was historically performed in Puerto Rico and would have been subject to overhead expense based on Puerto Rican labor costs.

We therefore computed Puerto Rican overhead rates for the contractor's fiscal year 1981 through 1986 time period based on expenses incurred at those facilities. Defective manufacturing overhead is the difference between certified manufacturing overhead costs and the manufacturing overhead costs that were supported by historical direct labor for coproduction in Fort Worth and Puerto Rico.

General and Administrative Expense. The audit disclosed that general and administrative expenses were defective because Howell failed to identify and include those expenses of the Puerto Rican subsidiaries in its costs proposals. The contractor certified general and administrative expense by applying the prevailing Fort Worth general and administrative rate to the total of manufacturing and other costs. As previously discussed, the contractor's historical production records indicated that a portion of the manufacturing process would be performed at the Puerto Rican plant and would have been subject to the general and administrative rate in effect for the Puerto Rican plant.

As with overhead expenses, we computed general and administrative expense rates for the contractor's fiscal year 1981 through 1986 time period. Defective general and administrative expense is the difference between the certified general and administrative expense and the general and administrative expense that was supported by historical coproduction in Fort Worth and Puerto Rico.

Other Elements of Cost and Profit. Because this audit was in support of a DCIS investigation of Howell's Puerto Rican manufacturing effort, a review of other elements of cost and profit was not undertaken. Therefore, we cannot render an opinion as to whether any defective pricing or offsets to defective pricing occurred. Defective cost of money and profit is the result of applying the appropriate factors to defective base costs.

Results of Settlement Negotiations. Our audit results were used by DCIS and the Department of Justice, Civil Division, to negotiate a $925,000 settlement with the contractor under the provisions of the False Claims Act. The settlement agreement was signed on March 20, 1991. The agreement relieves the contractor of any further criminal, civil, or administrative liability for overpricing related to its Puerto Rican manufacturing costs. In

addition, the agreement specifically disallows any legal expenses incurred by the contractor as a result of either the audit of contract pricing or the DCIS investigation.

Report Staffing

Since this report contains no recommendations, management is not required to provide comments. Any comments on this final report should be provided by August 6, 1991. We appreciate the courtesies and cooperation extended to the audit staff. The audit team members are shown in Enclosure 3. The distribution of this report is shown in Enclosure 4. Please contact Ms. Bobbie Sau Wan, Project Manager, at (703) 614-6262 (DSN 224-6262) or Mr. Salvatore D. Guli, Program Director, at (703) 614-6285 (DSN 224-6285), if you have any questions concerning this report.

Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Enclosures

cc: Secretary of the Army
Secretary of the Navy
Secretary of the Air Force

LISTING OF PRICING ACTIONS DEFECTIVELY PRICED BASED ON CONTRACTOR'S FAILURE TO DISCLOSE LOWER PUERTO RICAN OPERATING EXPENSES

Pricing Action (and Prime Contractor, if applicable)	Contractor's Certified Data	Amount of Defective Contract Pricing
N00383-82-C-3903	$ 324,332	$ 17,344
F33657-75-C-0377 (Pratt & Whitney)	878,403	57,025
F33657-80-C-0333 (Pratt & Whitney)	2,118,817	95,258
F33657-79-C-0739 (Pratt & Whitney)	2,311,355 (1)	200,812
F41608-83-C-0003 GB06 issued by Navy Aviation Supply Office	299,529	10,024
F41608-82-G-0003 BS07, BS08 issued by Army Aviation Systems Command	1,229,374	112,484
N00383-82-C-5020	1,948,398	60,969
Solicitation DAAJ09-81-Q-0378	180,357	13,335
N00383-81-C-5563	126,145	19,662
F41608-86-C-0706	283,732	7,276
N00383-86-C-6421	856,571	84,771
DLA400-86-C-5539	348,424	23,503
F41608-85-G-0050 BS05 issued by Army Aviation Systems Command	405,109	7,904
F41608-85-G-0050 BS04 issued by Army Aviation Systems Command	145,166	16,169
Solicitation DAAJ09-Q-0110	476,188	37,619
F33657-82-C-0258 (Pratt & Whitney)	110,871 (2)	1,742
F33657-82-C-0258 (Pratt & Whitney)	750,245 (2)	38,623
Prime contractor P.O. 26347-2011 (Sikorsky Aircraft)	693,209	30,146
F41608-84-G-0001 0032	842,072	96,238
F41608-84-G-0003 0082	837,265	135,936
F41608-84-G-0034 0090	1,072,450	127,397
F41608-83-G-0003 EF01 issued by Navy Air Systems Command	1,313,015	48,844
F41608-82-G-0003 0057	787,630	71,325
F41608-82-G-0003 0025	114,771	5,659
F41608-82-G-0003 0026	108,780	6,270
N00383-81-C-0741	182,433	10,431
F41608-83-G-0003 GB01 issued by Navy Aviation Supply Office	617,437	93,229
N00383-80-C-4135	120,348	4,544
F33657-80-C-0218 P012 (Pratt & Whitney)	140,543	19,008
F33657-79-C-0739 (Pratt & Whitney)	702,105 (1)	61,698
	$20,325,074	$1,515,245

(1) Although awarded as one contract, these two pricing actions were proposed, certified, and negotiated separately.

(2) Awarded by prime contractor separately, although later combined under one contract.

ACTIVITIES VISITED OR CONTACTED

Defense Agency

Defense Criminal Investigative Service, Dallas Field Office
Ft. Forth, TX
Defense Contract Audit Agency, Central Region
Irving, TX

Other Government Agencies

U.S. Department of Justice, Commercial Litigation Branch
Washington, DC
Office of the Assistant U.S. Attorney for the Northern District
of Texas, Fort Worth, TX

Contractor

Howell Instruments, Inc., Fort Worth, TX

Others

Gibson, Dunn & Crutcher, Washington, DC
Coopers & Lybrand, Arlington, VA

LIST OF AUDIT TEAM MEMBERS

David K. Steensma, Director, Contract Management Directorate
Salvatore D. Guli, Program Director
Bobbie Sau Wan, Project Manager
Edward L. Grimm, Team Leader
Mable Randolph, Editor
Velma L. Johnson, Administrative Support

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Other Defense Activities

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Commander, Defense General Supply Center

Non-DoD Activities

Office of Management and Budget
U.S. General Accounting Office
  NSIAD Technical Information Center
U.S. Department of Justice, Civil Division
Office of the Assistant U.S. Attorney for the Northern District of Texas

Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
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