DEPARTMENT OF THE ARMY PAMPHLET

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MILITARY LAW REVIEW VOL. 86

Symposium on Contract Law:
An Overview

ARTICLES

The Allowability of Interest in Government Contracts: The Continuing Controversy

Use of Specifications in Federal Contracts: Is the Cure Worse than the Disease?

The Magic Keys: Finality of Acceptance Under Government Contracts

BOOK REVIEWS

Federal Procurement Law

Prisoners of War in International
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MILITARY LAW REVIEW (USPS 482-130)

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SYMPOSIUM ON CONTRACT LAW: AN OVERVIEW

This volume is the third symposium on procurement law or contract law published by the *Military Law Review*. The first was volume 18, published in 1962, and the second was volume 80, published in 1978.

The present volume opens with an article on allowability of contractorincurred interest expense under government contracts, by Major Theodore Cathey and Major Glenn Monroe.

The authors discuss the cost principles of section XV of the Defense Acquisition Regulation, focusing on D.A.R. section 15–205.17 in particular. That provision normally operates to disallow reimbursement by the Government of interest expense on money borrowed by a contractor to perform his contract. The authors review this provision, its application, and its exceptions.

Both Major Cathey and Major Monroe were formerly instructors in the Contract Law Division at The Judge Advocate General's School, Charlottesville, Virginia, and Major Monroe was a contributor to the symposium in volume 80 of the *Military Law Review*.

Major Gary Hopkins and Major Riggs Wilks have provided the second article in this symposium, dealing with use of specifications in government contracts. Those specifications are often highly detailed, and critics complain that such specifications may cost the Government more money, by compelling use of obsolete technology or by substituting specially designed products for commercially available ones that would serve just as well.

The authors discuss the various types of specifications, and the types of procurements in which use of each specification type is appropriate. They conclude that misuse of detailed specifications is often a result of lack of understanding of their purpose, and that total abolition of detailed specifications is undesirable.

Major Hopkins is chief of the Contract Law Division at The Judge Advocate General's School, and Major Wilks is senior instructor for that division. Major Hopkins, like Major Monroe, was a contributor to the volume 80 symposium.

The final article in this issue, on finality of acceptance in government contracting, was prepared by Mr. Thomas E. Shea. In general, the Government as a purchaser of goods and services is legally bound to make payment for them to the provider, once the Government accepts them. Mr. Shea writes about the exceptions to this general rule.

The Government may be able to revoke its acceptance of goods and services if it can show the existence of latent defects in the work performed, or fraud on the part of the contractor, or *gross* mistake amounting to fraud, or breach of warranty by the contractor. All four of these are traditional rights of purchasers, implemented in government procurement by standard contract clauses. Mr. Shea discusses the case law concerning revocation of acceptance which has been developed by the Court of Claims and by agency boards of contract appeals.

Mr. Shea is a civilian attorney employed by the Army Corps of Engineers in its Fort Worth, Texas, district. He has published several articles in other periodicals.

Of the two formal book reviews in this issue, one deals with a contract law publication. Major Hopkins has favorably reviewed the first volume of the new edition of *Federal Procurement Law*, prepared by Professors Nash and Cibinic of the George Washington University.

Finally, among the publications noted following the two book reviews, mention is made of volume **15** of Federal Publications' *Yearbook* of *Procurement Articles*, edited by John W. Whelan. The three contract law articles in volume 80 of the *Military Law Review* are reprinted in volume **15**.

It is a great pleasure for the *Military Law Review* to present this third symposium on government contract law.

PERCIVAL D. PARK Major, JAGC Editor, Military Law Review

THE ALLOWABILITY OF INTEREST IN GOVERNMENT CONTRACTS: THE CONTINUING CONTROVERSY*

by Major Theodore F. M. Cathey** and Major Glenn E. Monroe***

*This article is based upon a thesis with a slightly different title written by Major Cathey when he was a student in the 23d Judge Advocate Officer Advanced (Graduate) Course, at The Judge Advocate General's School, Charlottesville, Virginia, 1974–75. The thesis was extensively revised and updated by Major Monroe during the winter and spring of 1979.

The opinions and conclusions presented in this article are those of the authors and do not necessarily represent the views of The Judge Advocate General's School, the Department of the Army, or any other governmental agency.

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Major Monroe is the author of *An Analysis of ASPR Section XV by Cost Principle*, 80 Mil. L. Rev. 147 (1978). He has also published articles on contract costs and funding in The Army Lawyer, Feb. 1977, at 4; *id.*, July 1977, at 1; *id.*, Mar. 1978, at 35; and *id.*, July 1978, at 7. Major Monroe has also written a textbook comparing provisions of the Defense Acquisition Regulation and the state-level Model Procurement Code. This work is to be published by Michie/Bobbs-Merrill Law Publishers, Charlottesville, Virginia, within a year.

In this article on contractor-incurred interest expense, Major Cathey and Major Monroe discuss one of the cost principles of section XV of the Defense Acquisition Regulation (DAR), formerly called the Armed Services Procurement Regulation (ASPR).

The several dozen DAR cost principles state whether and to what extent contractors working under government contracts can be reimbursed by the government for specified costs or expenses incurred by them. The principles are most commonly applied to cost-type contracts, but are applicable when necessary to other contracts as well. The principles are supplemented and in some cases modified by decisions & administrative boards & contract appeals and the United States Court & Claims.

Under DAR Section 15-205.17, interest on money borrowed by a contractor to pay for expenses & performing his contract is normally not compensable. But if the government delays unreasonably in paying contractor invoices and other legitimate contractor claims, the contractor may claim interest income from the government. Such an interest claim is generally compensable. The authors discuss the history & the cost principle on interest expense, the variations & and exceptions thereto which have from time to time been recognized, and the principle's present application to government contracts.

I. INTRODUCTION

For over a decade the Court of Claims and administrative boards of contract appeals (principally the Armed Services Board) have struggled with contractors' requests for interest compensation as a cost, or interest on claims against the government. The former involves additional expenses in connection with contract performance (e.g., interest paid on money borrowed to finance the costs of performing government-ordered contract changes). Interest *on* a claim deals with delays in making payment.

Both situations will be discussed, sections II through VIII addressing the cost-of-performance issue, and section IX reviewing the delay-inpayment aspect. The recovery of interest saga is confusing and ultimately quite frustrating, At first, interest on a claim was unallowable, whereas as a cost of performance, recovery of interest was possible, indeed, for a few years, even likely at the Armed Services Board of Contract Appeals. Today, interest associated with payment delays clearly is compensable, whereas, as a cost of performance, recovery of interest is unlikely, although still possible. Recent Court of Claims decisions have *almost* eliminated any chance of compensation except for preJuly 1970 fixed-price contracts where the contractor is able to demonstrate the need to borrow in order to finance government-caused additional work. The Armed Services Board, while reluctantly following the court's lead, continues to argue, albeit as dictum, that recovery under other circumstances is appropriate.

Thus, while the rules regarding interest compensation for delays in payment have completely changed, we have come full circle with respect to the cost-of-performance issue; essentially we have taken a longjourney only to find ourselves back at the starting point.

11. THE GENESIS OF THE "NO-INTEREST" POLICY

A. SOVEREIGN IMMUNITY

The principle that the sovereign could do no wrong, or in a more practical view, could not be sued in its own courts or any other courts without its consent and permission,' had its origin in the common law. Until 1855, this principle was adopted in toto and without exception by the United States in dealings with its citizens. There was no judicial tribunal in which the citizen could litigate a private claim against the government.² In recognition of this injustice, and the abuses of the private bill system, the Court of Claims was created by the Act of February 24, 1855.³ In the first year of existence, the court indicated by its decisions an attitude of judicial conservatism, based in all probability on its belief that sovereign immunity was still a viable concept.⁴ Its attitude on in-

^{&#}x27;See, e.g., discussion at Lynch v. United States, 292 U.S. 571, 580-82 (1934).

² Sherry, The Myth that the King can do no Wrong, 22 Admin. L. Rev. 597, 599 (1970).

⁸ Act of Feb. 24, 1855, ch. 122, 10 Stat. 612.

⁴ Sherry, supra note 2, at 603.

terest can best be summed up in *Pacific Coast* S.S.Co. v. *United States*,' where it stated:

As a right in the nature of property, or as a premium or profit for the use of money, interest was not allowed at common law. Contracts for the payment of interest as an accessory or incident to principal were treated as usurious and punishable as usury. In this country the payment of interest became sanctioned by statute for contracts, express or implied, or by way of damages, either for a default in the payment of a debt or for a use or benefit derived from the money of another.⁶

Here, the court is reiterating the traditional fiat that interest will be paid only on the permission of the sovereign through its legislative offices.

This rule has a continuing vitality. In a more recent decision by an adminstrative board of contract appeals, the following was enunciated:

[T]he common law rule that delay or default in payment of money gives rise to a right to recover interest has been held not to be applicable to the sovereign government on grounds of public convenience, unless the sovereign's consent to pay interest has been exhibited by an Act of Congress, or by a lawful contract by its executive officers.⁷

The doctrine of sovereign immunity was codified by an act of Congress which stated that interest cannot be allowed on any claim except "upon a contract expressly stipulating for the payment of interest." In its present form, the statute reads:

Interest on a claim against the United States shall be allowed in a judgment of the Court of Claims only under a contract or Act of Congress expressly providing for payment thereof.'

Exceptions to the doctrine of sovereign immunity appear to be rigidly circumscribed. Interest on a claim is allowed only when some provision

⁵ Pacific Coast S.S. Co. v. United States, **33** Ct. Cl. **36** (**1897**). ⁶ *Id.* at **49**.

⁷ Gifford-Wood Co., ASBCA No. **3816**, **57-1** B.C.A. para. **1192**, at **3327** (**1957**).
⁸ Tillou v. United States, 1 Ct. Cl. **220** (1865); Act of March **3**, **1863**, ch. **92**,

^{§ 7, 12} Stat. 765.

⁹ 28 U.S.C. § 2516(a) (1976).

ment. 10 Additionally, it has been interpreted that the prohibition on the payment of interest, with two exceptions noted in the statute, was applicable not only to the Court of Claims, but to all federal courts. "In a similar vein, the Armed Services Board of Contract Appeals (hereinafter referred to as ASBCA) and the Comptroller General have held that, in the absence of a statutory or contractural provision allowing for the payment of interest, it will be disallowed. 12

B. DEFENSE ACQUISITION REGULATION (DAR) SECTION XV

Following in the shadow of the doctrine of sovereign immunity and its statutory stepchild, **28** U.S.C. **9** 2516(a) (1976), the Defense Acquisition Regulation (formerly Armed Services Procurement Regulation) has long and consistently maintained that interest is an unallowable cost. In its current form, DAR approaches interest at § 15–205.17, entitled "Interest and Other Financial Costs," **as** follows:

Interest on borrowings (however represented), bond discounts, costs of financing and refinancing operations, , , are unallowable except for interest assessed by state or local taxing authorities under conditions set forth in 9 15–205.41.¹⁴

In 1970, Defense Procurement Circular [DPC] No. 79,¹⁵ and the DAR implementation, § 15–106, made the cost principles of Section XV applicable to price adjustments of fixed-price contracts. Coupled with the consistent DAR disallowance in cost-type contracts, the recovery of interest on borrowings to finance modifications to fixed-price contracts entered into subsequent to the effective date (1July 1970) of DPC No. 79 was precluded. (It would appear, at least in part, that the concept of sovereign immunity was enjoying a continuing vitality.)

¹⁰ Komatsu Mfg. Co. v. United States, 132 Ct. Cl. 314 (1966).

¹¹ United States v. Goltra, 312 U.S. 203 (1941); United States v. North Carolina, 136 U.S. 211 (1889); Angarica v. Bayard, 127 U.S. 251 (1887); United States v. 106.64 Acres of Land, 264 F. Supp. 199 (D.C. Neb. 1967).

¹² Planetronics, Inc., ASBCA Nos. 7202 and 7636, 1962 B.C.A. para. 3366 (1962); Ms. Comp. Gen. Dec. B-158778 (14 Apr. 1966).

¹⁸ P. Trueger, Accounting Guidefor Defense Contractors 601 (6th ed. 1971).

¹⁴ DAR § 15–205.17.

¹⁵ Defense Procurement Circular No. 79 (15 May 1970).

111. PRE-BELL DECISIONS ON THE ALLOWABILITY OF INTEREST *IN* A CLAIM

A. TREATMENT BY THE COURTS

1. Interest allowed.

Phillips Construction Co., Inc. v. United States" involved a contractor who entered into a fixed-price contract with the government to build 800 Capehart housing units at Myrtle Beach." Under the Capehart Act, 18 the contractor was required, inter alia, to borrow the full amount necessary for performance expenses and to secure the loan with a note and mortgage, which arrangement was in turn guaranteed by the United States. The contract specified that the mortgagee-builder would be liable for interest in a fixed amount for a specified period. 19

During performance, adverse weather necessitated agreed-upon extensions of completion dates which were formalized by supplemental agreements. The contractor was forced to pay additional interest to his mortgage banker for these time extensions. The facts indicated that a portion of the delays was attributable to a changed condition: the inadequacy of the government-designed drain pipe. The contractor requested that the contracting officer issue a change order to cover the interest costs, but this was denied. He appealed to the ASBCA, ²⁰ and was again denied payment on the basis of a lack of statutory authority and contractual obligation on the part of the United States. The board did recognize that the contractor suffered high costs due to the adverse weather.

The contractor sued for the interest in the Court of Claims. In its opinion, the court stated:

Section 2516(a) of Title 28 of the United States Code does not prohibit the recovery of increased interest costs, in circumstances such as alleged here, in a Capehart Act contract. It was

¹⁶ Phillips Construction Co., Inc. v. United States, 179 Ct. Cl. 54 (1967).

¹⁷ Id. at **56.**

¹⁸ 42 U.S.C. § § 1594–1594k (1976); 12 U.S.C. § § 1748–1748i (1976); § § 403–406, 69 Stat. 651–653 (1955).

^{19 179} Ct. Cl. at 57.

²⁰ Phillips Construction Co., Inc., ASBCA No. **6288**, **1963** B.C.A. para. **3784** (**1963**).

inherent in the scheme of that Act that the contractor would obtain private financing and pay interest, and interest costs were placed in the very same category as more tangible costs of construction. Plaintiffs contract, as we have said, embodied that position. 28 U.S.C. § 2516(a).²¹

The board had recognized that the contractor suffered higher costs because of the adverse weather. In addition, there was evidence of the payment of increased amounts of interest to the mortgage bank. However, these evidentiary points apparently would have been of little succor to the contractor if the Capehart Act did not contemplate the payment of interest as part and parcel of the financing scheme. In a successor case involving this contract, the court made abundantly clear that the government is liable only for that interest accrued as a result of the delays attributable to the government's fault or responsibility, i.e., the changed condition. Thus, while the (first) *Phillips Construction* Co. decision represented a liberal turn by the court, it is probably clearly distinguishable from other cases as having involved the provisions of the Capehart Housing Act.

2. Interest denied.

Section 2516(a) of Title 28, United States Code, has been used by the courts to deny interest "on" claims under government contracts. A classic enunciation of this position can be found in Ramsey v. United States. The plaintiffs in this case, trustees in bankruptcy, brought action to recover on two contracts to supply caskets to the Quartermaster Corps. The contract had a redetermination clause which provided for the upward and downward revision of prices and prompt negotiation in good faith by the contracting officer. The caskets were delivered in 1947 and 1948 and the contractor requested an upward price revision which was denied by the contracting officer. The decision was appealed to the War Department Board of Contract Appeals²⁵ which granted a price increase of one

^{21 179} Ct. Cl. at 58.

²² Phillips Construction Co., Inc. v. United States, 194 Ct. Cl. 695 (1971).

^{United States v. Gerlach Live Stock Co., 339 U.S. 725 (1950); United States v. N.Y. Rayon Importing Co., 329 U.S. 654 (1947); Smyth v. United States, 302 U.S. 329 (1937); Moran Bros. Co. v. United States, 61 Ct. Cl. 73 (1925).}

²⁴ Ramsey v. United States, 121 Ct. Cl. 426 (1951).

²⁵ Sterling Mfg. Co., WDBCA No. 1722 (1949).

hundred percent. During the course of the board proceedings, the company was forced to file a petition for reorganization under chapter X of the Bankruptcy Act, Title 11, United States Code. The plaintiffs sought damages for breach of contract, contending that there was an implied condition in the contract that the government would pay for the caskets within a reasonable time after delivery and acceptance. Included, inter alia, in the prayer was the amount for interest paid on loans to finance the manufacture of the caskets.

The court opined:

The payment of interest [by the Government for delay in payment] as such was neither expressly provided for by the corporation's contract with the War Department nor by any Act of Congress. Plaintiffs attempt to avoid the effect of this by designating their claim as one for damages, consisting of interest on amounts paid out by the corporation to third persons. But, as this court pointed out in *Moran Brothers* Co. v. *United States*, 61 Ct. Cl. 73, 106, "Calling interest 'damages' or loss does not deprive it of being interest, and the statute forbids the allowance of interest."²⁶

Thus, as can be derived from the opinion, the court has interpreted the Section 2516(a) prohibition vis à vis interest on a claim as applicable to government delays in payment. Other cases have so treated this statutory prohibition.²⁷ (Interest on a claim is discussed at length in Section IX of this paper.)

B. TREATMENT BY THE ARMED SERVICES BOARD OF CONTRACT APPEALS

1. **Interest** allowed.

The ASBCA has not always marched in lock step with the courts on the question of allowing interest "in" a claim, or more specifically, when the allowability of interest claim had origin in factors such as price redetermination, type of contract involved, convenience termination or equitable adjustment. A survey of cases will serve to illustrate the board's approach in these areas.

^{26 121} Ct. Cl. 432.

²⁷ See note 23, supra.

a. Price redetermination, 1955 to 1970.

In Wichita Engineering Co., ²⁸ a 1955 case, the contract was for the rebuilding and repair of one thousand $2\frac{1}{2}$ ton trucks. The contract contained a redetermination article. At the terminus of the performance period, a dispute arose, inter alia, as to the indirect costs, including interest, in the redetermined price.

In arriving at their decision, the board stated, in pertinent part:

There was no evidence as to whether ... the parties, in negotiating the contract, ever discussed the subject of interest and its "allowability" upon price redetermination. There is no prohibition against the inclusion of interest as a cost for the purpose of pricing fixed-price contracts, including fixed-price contracts containing "Price Redetermination" articles in current regulations. ...²⁹

It should be remembered that at this time, the DAR Section XV cost principles were mandatory only as to cost-reimbursement contracts and were to be used only as a guide in fixed-price arrangements. In this case, a fixed-price contract with a redetermination clause was involved. It appears that the board lingered on the question of whether the parties discussed and clarified the question of interest (in a redetermination of price) prior to the award of the contract.

The ASBCA in *National Electronics Laboratory*, *Inc.*, ³⁰ a **1957** case, justified the inclusion of interest on a different basis. Two fixed-price contracts for shutter assemblies contained a price redetermination article which was considered binding in spite of the fact that they were not supposed to be included in the contract. The amount of the contract was in dispute, including the categories of direct labor, indirect manufacturing expense and general and administrative (G & A) expense, which incorporated a sum for interest.

The board argued against the contractor's requirement for bank financing, but then stated that it had shown, on the whole, a need for borrowings. The ASBCA allowed the interest as part of the G & A pool,

Wichita Engineering Co., ASBCA No. 2522, 6 C.C.F. para 61804 (1955).
 Id. at 52, 504-505.

³⁰ National Electronics Lab. Inc., ASBCA Nos. 2909, 3180, 57-1 B.C.A. para. 1247 (1957).

but added the caveat, "in computing the amount of profit to be allowed, it is not for consideration as a cost of performing the contract.""

In addition to the existence of the redetermination clause, the board here stressed the need for the contractor's bank financing and in the same breath enunciated the government's position that interest was not a "cost," but then allowed it as an indirect cost in the G & A pool.

In a 1961 case involving the redetermination clause, *Electronics Corporation of America*, ³² there was a fixed-price classified supply contract for electronic airborne equipment. The demands of the contract caused an unauthorized increase in the volume of work and concomitant costs. To finance these expenses, the contractor borrowed money from a New York bank on a short term (six-month) note at 3³/₄% interest. As it realized payments on the contract, it paid off the loan. The contractor questioned the reasonableness of the price of the contract pursuant to the redetermination clause and requested an upward adjustment, including a sum for interest.³³

The **ASBCA**, in arriving at its findings, quoted *Lavoie Laboratories*, *Inc.*, ³⁴ for the proposition that interest on borrowed funds in a proper case can be allowed as a cost for pricing purposes. The board also quoted eminent accounting authority to the effect that interest is just as much an out-of-pocket cost as other costs incurred by the company. The result was that the board allowed interest on the contractor's short term borrowings.

This finding appears to go a step further than the previous case (*Electronics Corporation of America*) toward the traditional industry view that interest is a cost. However, in the instant case, as well as the others cited, the redetermination clause was the vehicle for the re-evaluation of the elements of price in the contract.

b. Cost-type contracts.

The ASBCA has been consistent in denying interest in cost-reimburse-

³¹ Id. at 3662.

⁸² Electronics Corporation of America, ASBCA No. 4770, 61–2 B.C.A.para. 3134 (1961).

⁸⁸ Id. at 16,272.

⁸⁴ *Id.* at 16,284; Lavoie Laboratories, Inc., ASBCA No. 3796, 59–1 B.C.A. para 2071 (1959).

ment type contracts. However, in at least one decision, W. *Horace Williams Company*, 35 the board held that interest, though nonreimbursable as a cost, could be considered in adjusting the fee. The board stated in pertinent part:

[I]f as a direct result of additions to the work to be performed, it is necessary for a contractor to employ additional capital, or borrow additional money, interest being nonreimbursable, may be considered as a factor in calculating the equitable adjustment to be made in the fixed fee. But in that event, the necessity for additional capital or borrowed money must grow out of increased work to be performed, and not out of increased actual over estimated costs. ...³⁶

The board here appears to recognize the reality of interest as a cost by performing an "end run" and including it not as a cost factor but as an increment to the fee.

c. Convenience termination of prime contractors under pre-1960 DAR (ASPR).

The rationale for making interest a nonreimbursable item under cost-reimbursement contracts does not extend to the termination of fixed-price contracts.³⁷ The board, operating under the aegis of the pre-1960 **DAR**, allowed interest in claims pursuant to the termination for convenience clause. In a 1959 case, *Acme Coppersmithing and Machine Co.*,³⁸ the contract was terminated for convenience in an arrangement calling for the delivery of elevating and traversing assemblies. The contractor appealed from a formula settlement utilized after the failure of the parties to arrive at a negotiated settlement. Inter alia, the contractor claimed interest paid from the date of the termination of the contract and not interest accruing during the performance period. The board, following its findings in *Dunbar Kapple*, *Inc.*,³⁹ said that "the statement of principles incorporated into the contract shows 'interest on borrowings' as

³⁵ W. Horace Williams Company, WDBCA No. 86(1943), cited in H.K.Ferguson Company, ASBCA No. 2826, 57-1 B.C.A. para. 1293 (1957).

⁸⁶ Id., 57-1 B.C.A. para. 1293, at 4034.

⁸⁷ Green, Costing and Pricing in Contract Appeals Procedures, 18 Fed. B.J. 183, 193-96.

⁸⁸ Acme Coppersmithing and Machine Co., ASBCA Nos. 4473, 5016, 59–1 B.C.A. para. 2136 (1959).

⁸⁹ Dunbar Kapple, Inc., ASBCA No. 3631, 57-2 B.C.A. para. 1448 (1957).

an allowable cost, but only to the extent that it is allocable to, or should be apportioned to, the terminated **contract**."⁴⁰ The board went on to hold that the contractor had failed to make this showing in his burden of proof.

The court held in effect that interest accrued or allocated to the terminated portion of the contract is an allowable cost, but interest on borrowings after the termination date is not recoverable.

In a 1970 ASBCA case, *Douglas Corporation*,⁴¹ the issue revolved around interest on funds borrowed by the contractor before and after a 1957 termination for the convenience of the government. The actual termination settlement was not concluded until 1969 when the board decided all issues except the allowability of interest. The facts indicated that the contractor borrowed money to finance the performance of his contract before it was terminated and borrowed money subsequent to the termination to pay for the administrative costs of the termination of settlement. The board allowed interest on funds borrowed to finance the performance of the contract during the period 1957–1969 and also allowed it on funds borrowed to finance the termination settlement in the same time frame. The ASBCA labeled this accrued interest "settlement expense." However, it disallowed interest during the period that the contractor did not diligently prosecute his appeal.

It would appear that the board in *Douglas* played a semantics game in allowing interest on the termination settlement and describing it as a "settlement expense."

d. Equitable adjustment.

Interest was allowed in an equitable adjustment in a 1959 ASBCA case, *Lake Union Drydock Co.*⁴² A fixed-price contract was executed in 1951 for the construction of four wooden minesweepers. The government delayed in furnishing the government furnished property (GFP) for the construction of the ships. As a consequence, the contractor borrowed money to finance the higher costs of performance. Both parties agreed that the contractor was to be compensated for costs incurred for the tardy furnishing of supplies by the government. Among the costs re-

^{40 59-1} B.C.A. para. 2136, at 9243.

⁴¹ Douglas Corporation, ASBCA No. 14998, 70-1 B.C.A. para. 8338 (1970).

⁴² Lake Union Drydock Co., ASBCA No. 3073, 59-1 B.C.A. para. 2229 (1959).

quested was interest on money borrowed by the contractor and allocated to the claim up to the date of the appeal. The board allowed the amount of interest that the evidence established as being reasonably necessary to the performance of the contract and allocable thereto.

The board in this case was operating under the **1949 DAR** which was in effect at the time of contract formation. **As** indicated, interest was allowed in this equitable adjustment claim, but only to the extent that it was shown by evidence to be allocable to contract performance.

In a later decision, *Drexel Dynamics Corporation*, ⁴⁸ the contractor, in manufacturing mine casings for the government, incurred additional expenses due to various government delays and changes. The contractor sought recovery of \$172,448.33 as interest payments on those extra costs. The **ASBCA** felt that the bulk of this claim was in the nature of interest *on* a claim against the United States and not allowable. But, the board did allow interest on the amounts borrowed to perform the additional work imposed by the government, based on records of the amounts paid, allowing recovery of \$47,000.

It is interesting to note in this case that the contractor was not required to produce a precise rendering of expenses **as** a result of the government's changes and delays. The board accepted a fair and reasonable approximation.⁴⁴

A case⁴⁶ decided one month later by the **ASBCA** adhered to the *Drexel* holding, but did not allow interest on the financing of the accelerated contract work because progress payments were made available to the contractor on an accelerated basis at the same time. The board found these progress payments adequate to finance the changed work.

2. Interest denied.

a Price redetermination.

The **ASBCA**, contrary to its treatment of the claims discussed in the above section, has disallowed interest in price redeterminable contracts.

⁴³ Drexel Dynamics Corp. ASBCA Nos. 9502, 9617, 9793, 10608, 67-2 B.C.A. para. 6410 (1967).

⁴⁴ Id., 67-2 B.C.A. para. 6410, at 29,699.

⁴⁵ Gibbs Shipyards, Inc., ASBCA No. 9998, 67-2 B.C.A. para. 6458 (1967).

The Swartzbaugh Manufacturing Company contracted in 1947 to produce a new type of food container. The contract was firm fixed-price and because of the experimental and developmental nature of the work included a price revision clause. That provision provided for an increased or decreased contract price to be determined within 60 days of the completion or termination of contract performance. At the conclusion of the contract the contracting officer denied items of increased cost claimed by the contractor and issued a unilateral price redetermination. The contractor appealed⁴⁶ this determination, including the disallowance of interest on the extra costs of production. In reference to the allowance of interest, the board stated:

Appellant established a continuous loan with the Toledo Trust Company for the purchase of inventory and equipment required for the production of the supplies to be manufactured under this contract. The Board is quite aware that interest is popularly treated as a necessary business expense. It is an allowable cost in termination of fixed price contracts (ASPR 8–402b (14)), but for reasons explained in *Rainier*...it has been Army policy to disallow interest on borrowed money as a cost in negotiations for the revision of price. The disallowance of this interest item is therefore sustained.⁴⁷

This case had a sequel. On appeal from the decision of the contracting officer after remand for further consideration, the ASBCA reevaluated its previous position on allowability and held that interest associated with money borrowed for the purchase of inventory and equipment to perform the contract was a properly chargeable expense of performance.⁴⁸ In making this ruling, the board added the caveat that "such a charge, however, will not be permitted to serve as a base to enhance the profit of the contractor who must borrow to perform his contract as against the one who is able to provide his own operating capital."

In another case involving the redetermination clause, *Walter Motor Truck* Co.,⁵⁰ the contractor, who entered into a firm fixed-price contract

⁴⁶ The Swartzbaugh Manufacturing Co., ASBCA No. 792, 6 C.C.F. para. 61,479 (1952).

⁴⁷ 6 C.C.F. para. 61,479, at 52,157.

⁴⁸ The Swartzbaugh Manufacturing Co., ASBCA No. 3118, 57-2 B.C.A. para 1368 (1957).

⁴⁹ 57-2 B.C.A. para. 1368, at 4460.

⁵⁰ Walter Motor Truck Co., ASBCA No. 8054, 66-1 B.C.A. para. 5365 (1966).

for the manufacture of trucks in 1961, disagreed with the contracting officer's decision on a revised price.

The ASBCA denied the contractor's claim for interest as a cost and would allow only a fair and reasonable adjustment in the price as a whole. Because this was a fixed-price and not a cost contract, this adjustment in reality amounted to a diminution of profit. In addition, the board utilized an oft-repeated argument by stating that the price should be no greater because the contractor borrowed the necessary capital and that a borrower should get no more than one who used his own capital.⁵¹

b. Cost-type contracts.

Since the inception of the DAR Section XV cost principles in 1949, interest has been an unallowable cost in cost contracts. The ASBCA has been consistent in its denial of interest as the following cases willindicate.

In H. K. Ferguson Co.,⁵² the government made various changes to cost-plus-fixed-fee contracts, which nearly doubled the costs of construction. The contractor requested an increase in his fixed fee; one of the costs enumerated was interest. The board denied the contractor's claim and opined that the contractor had failed to show the amount by which interest charges were increased as a result of the changed work, and that the increase was disproportionate to the increase in cost caused by the changes.⁵³

In Daystrom Instrument Division," the ASBCA enunciated the provisions of DAR Section XV in its denial of interest. The contractor entered into a cost-plus-fixed-fee contract for the manufacture of fire control systems. The contractor took exception, inter alia, to the disallowance of interest in the G & A pool.

The board stated that costs not allowable under DAR Section XV include:

costs which relate to, and are applicable to, the performance of the contract, but which are expressly made nonreimbursable

⁵¹ 66-1 B.C.A. para. 5365, at 25,173.

⁵² 57-1 B.C.A. para. 1293.

⁵³ 57-1 B.C.A. para. 1293, at 4034.

⁵⁴ Daystrom Instrument Division, ASBCA No. 3438, 58-1 B.C.A. para. 1588 (1958).

ordinarily for reasons of policy . . . Included in [these] unallowable costs are interest, donations and entertainment expense. Such costs, to the extent applicable to the AFC contract, are required to be absorbed out of the fixed fee and cannot properly be allocated to . . . any other contract."

Interest was again disallowed as a cost, albeit in more explicit terminology.

c. Convenience termination of prime contractor pursuant to post-1960 **DAR** Section XV.

A case decided on the basis of the 1 July 1960 edition of DAR was *Navgas*, *Inc.*⁵⁶ The contract in this case was terminated for convenience. The contractor claimed, as part of his costs, the interest on a loan required to finance the contract work. The termination clause, unconventional in its wording, allowed for an equitable adjustment in the work performed. The board, quoting DAR § § 15–205.17, 8-302, and 8–701(a)(f), disallowed the interest claim.

Another case following the purview of the 1July 1960 edition of DAR and its cost principles is *Western States Painting Co.*⁵⁷ The contractor had a lump sum contract to paint housing at the Air Force Academy. His contract eventually was terminated for convenience. The contractor contended that he was entitled to interest on the unpaid portion of his claim. The termination for convenience clause provided that the determination of costs thereunder was to be governed by the cost principles of DAR Section XV, 1July 1960. The ASBCA determined that interest was not an allowable cost and was therefore not recoverable pursuant to the termination for convenience clause. The board also stated that there was no statute or provision in the contract providing for the payment of such interest.

Navgas, then, differed from Western States in the wording of the termination for convenience clause. Both cases ultimately were decided on the issue of interest as a cost.

⁵⁵ 58-1 B.C.A. para. 1588, at 5767.

⁵⁶ Navgas, Inc., ASBCA No. 9240, 65-1 B.C.A. para. 4533 (1964).

[&]quot;Western States Painting Co., ASBCA No. 13843, 69-1 B.C.A. para. 7616 (1969).

d. Equitable adjustment.

In *Terry Industries*, ⁵⁸ a nonpersonal services contract, executed in 1954, provided for the overhaul and repair of machine assemblies. The contractor sought damages based on the fact that the government was required to furnish all parts needed as GFP and failed to do so, necessitating the borrowing of money to purchase them. The contractor, as part of his claim, sought interest on the loan. The ASBCA found the claim for interest to be without foundation, as the contract terms did not provide for payment thereof. In addition, the board was unable to determine the amount of the loan, the terms of the loan transaction, or the extent the money was used in this or other contracts. It was the "impression" of the board that the contractor was, in reality, seeking the recovery of interest on money due it by the government.⁵⁹

The ASBCA in *G.M.* **Co.** *Manufacturing*, *Inc.*, ⁶⁰ denied the contractor's request for interest on an equitable adjustment, following the *Terry* holding in rendering its decision.

In summary, the Court of Claims, adhering strictly to the provisions of **28** U.S.C. § 2516(a), allowed the recovery of interest with respect to a government contract only under very narrow circumstances. Deviating from its traditional position, it allowed the recovery of interest where the Capehart Act contemplated interest **as** a part of the financing scheme and **as** a cost on par with other construction expenses.

On the other hand, the ASBCA attempted, in certain situations, to achieve an equitable balance between the respective positions of the government and the contractor by allowing interest. In fixed-price contracts with redetermination clauses, the recovery of interest was grounded on the inapplicability of DAR Section XV cost principles, the necessity for the contractor's bank financing, and presumably, the reasonableness of the rate of interest. The board has allowed interest, in redetermination, as an ordinary cost or specifically as an element of the general and administrative expense pool. Where the board has disallowed interest in redetermination, it has done so on the basis of the equality of treatment of contractors, i.e., one who borrows should get no more than one who uses his own capital.

⁵⁸ Terry Industries, Inc., ASBCA No. 3634, 59-1 B.C.A. para. 2193 (1959).

⁵⁹ 59-1 B.C.A. para. 2193, at 9591.

⁶⁰ G.M. Co. Manufacturing, Inc., ASBCA No. 5345, 60–1 B.C.A. para. 2576 (1960).

The ASBCA's treatment of cost type contracts has been consistently against the allowability of interest as mandated by the DAR Section XV cost principles. However, it has allowed interest indirectly, by sanctioning an occasional upward adjustment of the fee.

The board also has allowed interest in convenience terminations of fixed-price contracts under the mandate of the pre-1960 DAR. Generally, the contractor had the burden of showing that the borrowings were allocated or apportioned to the terminated segment of the contract. As indicated, post-1960 DAR cost principles disallowed interest on terminations in fixed-price contracts, and terminated interest claims falling within the purview of those cost principles were denied by the board.

Most importantly, the ASBCA, setting the stage for the *Bell*⁶¹ decision, allowed interest in fixed-price contracts as part of an equitable adjustment. In the cases so decided, additional expenses were incurred by the contractor due to delays and changes on the part of the government. The board allowed the quantum of interest reasonably necessary and allocable to the performance of the contract. In those cases denying recovery of interest as part of an equitable adjustment, the ASBCA was unable to ascertain the necessity and allocability of the loans. The board also grounded its denial on that shield of sovereign immunity, **28** U.S.C. § **2516**(a).

IV. THE ADVENT OF BELL V. UNITED STATES⁶²

A. INTEREST AS A RATIONAL ELEMENT OF COST IN AN EQUITABLE ADJUSTMENT PURSUANT TO THE CHANGES CLAUSE

The zenith in the court's search for a logical statement of policy on the allowability of interest in government contracts came in the case of Joseph Bell v. United States. It would appear to be a logical extension and expansion of the board's rationale in Drexel and Gibbs Shipyards, noted above, and was the first pronouncement by the Court of Claims on the question of interest entitlement in equitable adjustments. @An extensive

⁶¹ Joseph Bell v. United States, 186 Ct. Cl. 189 (1968).

⁶² Id

⁶⁸ The Rainier Co., Inc., **ASBCA** No. **3565**, **69-2** B.C.A. para. **8050**, at **37,402** (1969).

recapitulation of the facts of the instant case is necessary to understand its holdings.

The plaintiffs sought a review of the ASBCA's decision in *The Rainier Company*, ⁶⁴ in which they were denied relief in the form of an equitable adjustment. The contract in dispute required the manufacture of 62,552 bomb parachutes at a unit price of \$67,628 and a total contract price of \$4,230,266.60. A contract modification changed the delivery schedule to allow for the delivery of a pilot lot of parachutes in October, 1953, and for monthly deliveries commencing in February, 1954 at a rate of 5,500 units per month. A target completion date of January, 1955 was programmed. The contract in the case contained the so-called "broad form" changes clause set forth in paragraph 7–103.2d of the Army Procurement Procedure (APP). It stated in pertinent part:

If such changes cause an increase or decrease in the amount of work under this contract or in the cost of performance of this contract or in the time required for its performance, an equitable adjustment shall be made. 65

The parachutes were manufactured in accordance with military specifications formulated by the Ammunition Command, Joliet, Illinois. No deviations from the specifications or drawings were permitted except on the authority of the contracting officer.

The parachutes were inspected by an Army inspector during the manufacturing process and all complied with the specifications and drawings. However, the finished parachutes also were required to pass Army ballistics tests at Aberdeen Proving Ground. Testing at this facility was by sample; if a sample failed, a retest was made from a new sample in the same lot. If the contractor was determined responsible for the failure, the defect was to be remedied at his expense. Many of the parachutes failed to pass the ballistics tests. The contractor felt the procedure was unfair because he was making the parachutes in accordance with government drawings and specifications and the rejected lots represented a significant portion of his capital.

The contractor's treasurer, Joseph Bell, extremely unhappy about the situation, traveled to the Ammunition Command to discuss the military

⁶⁴ Id.

^{65 186} Ct. Cl. 193.

specifications and was told by a lieutenant to "take it easy, mark time, and we will find the answer for you."66

Later, in accordance with specification deviations developed by another parachute contractor, change order 41 was issued to remedy the test failures in all subsequent parachutes. Agreement on a price adjustment was made. As it turned out, change order 41 was only a qualified success.

Several other change orders of importance to the performance were issued. Change order 37, 24 June 1954, provided for future acceptance of lots even though failing the ballistics tests, if there was no evidence explaining the failure. The contractor accepted this change order but not change order 40 which eliminated the words "may be accepted" from change order 37 and substituted "shall be given consideration towards acceptance on a waiver basis."

Evidence indicated that the production slow-down in the MayJune period occurred because the contractor was rearranging the production line in accordance with the design deviation of change order 41. At no time did the contractor suspend the production of parachutes; parachutes were submitted for test after implementation of change order 41 and some failures were still experienced.

The contractor contended, in his appearance before the ASBCA, that the test failure problem had created a deceleration in production and scheduled deliveries, all of which increased the cost of production. He gave as a rationale for the deceleration the remark of the lieutenant at Joliet to Mr. Bell and the "waiver procedure by which parachutes failing the ballistic test would be rejected and later accepted upon waiver of the requirement." The board was not persuaded by the alleged deceleration statement of the lieutenant because they felt that the reasonably prudent man would request a written confirmation and at the same time question the authority of the officer to make such a statement. After looking at all the evidence, the board found that there was delay attributable to the ballistics test failure for which the contractor was held accountable. In summation, the ASBCA found there was no deceleration under the "Broad Form" changes clause entitling the contractor to a price adjustment.

^{66 186} Ct. Cl. 195.

^{67 186} Ct. Cl. 198.

The Court of Claims disagreed with the board's holding. The fact that the parachutes did not pass the ballistics tests could be attributed to the government's defective drawings and specifications. These test failures resulted in a seven week disruption of the contractor's production during the period May-June 1954. The court felt that the ASBCA should have applied the constructive change doctrine, "by treating as done that which should have been done." Phrased another way, the contracting officer, in recognition of the government's fault should have issued a deceleration order pending correction of the government's specifications and drawings.

In addition, the court also disagreed with the board's interest cost disallowance which was grounded on a lack of evidentiary support. The court, citing *Kaman Aircraft Corp.*, 69 stated that DoD now allowed interest on borrowings as part of equitable adjustments under fixed-price contracts. It rejected the argument, often made, that this DoD practice was in conflict with 28 U.S.C. § 2516(a), opining that the statute applied only to breach claims for payment and not, as here, for a claim for the increased cost of capital involved in the performance of changed work. 70

The court went on to say:

The demand here is not based upon a "breach" but upon a change compensable under the "Changes" article which entitles the contractor to reimbursement for the resulting "increase . . . in the cost of performance of this contract." Extra interest on the borrowed money became due from Rainier because of the slowdown, and under generally accepted principles was undoubtedly an increased cost of contract performance attributable to the change. The contract performance attributable to the change.

The court also interpreted the changes clause as contemplating that additional interest costs on borrowed money could be in the very same category as more tangible costs of production. Additionally, it distinguished this fact situation from that in *Ramsey* v. *United States*, ⁷² and *Komatsu Mfg*. Co. *Ltd.* v. *United States*, ⁷³ where the claimants sought compensation for the government's delay in making payment.

^{68 186} Ct. Cl. 200.

⁶⁹ Kaman Aircraft Corp., ASBCA No. 10141, 66-1 B.C.A. para. 5581 (1966).

⁷⁰ 186 Ct.Cl. 205.

^{71 186} Ct. Cl. 206.

⁷² Ramsey v. United States, 121 Ct. Cl. 426 (1951).

⁷⁸ Komatsu Mfg. Co. v. United States, 132 Ct. Cl. 314 (1955).

The court awarded interest, though not in a specific amount, as part and parcel of the plaintiffs equitable adjustment entitlement under the changes clause.⁷⁴

The *Bell* decision can be cited as authority for several propositions. In the main, *Bell* discounted the **DAR** guidelines as to the disallowance of interest as a cost in fixed-price contracts and determined that it represented a rational cost pursuant to an equitable adjustment under the changes clause of the **contract**. The court, as an ancillary proposition, set forth, in terms of black letter law, the difference between interest as damages and interest as a cost. In support of this, the court cited *Ramsey* and *Komatsu*, which were cases involving claimants who had to borrow money because of the delay in government payments due and owing, i.e. the breach situation or interest "on" a claim as opposed to interest "in" a claim. Unfortunately, the court did not explore the ramifications of its decision in the detail necessary to give guidance to potential claimants.

B. LIMITATION OF THE APPLICATION OF 28 U.S.C. § 2516(a) BY THE COURT OF CLAIMS

The Court of Claims in *Bell* specifically outlined the applicability of **28** U.S.C. § 2516(a) in breach situations as interest "on" a claim, as noted above. Later board cases have adopted the rationale in *Bell* vis a vis government delays in making payments.

V. HOW RINGS THE *BELL* (DECISION)?

A. RE: INTEREST AS A COST OF PERFORMANCE

1. Cost principles prohibition of DPC No. 79 (1970).

As discussed, prior to 1970 the DAR Section XV cost principles were to be used only as a guide with respect to the repricing of fixed-price contracts (e.g., pursuant to contract modifications and terminations or

^{74 186} Ct. Cl. 206.

⁷⁶ C. John Turnquist, Memorandum for File, Case Note on the *Bell* Case 32 (1969), *cited in* Gary L. Kepplinger, Memorandum on Interest 8 (Aug. 16, 1973) (on file at the Office of the Navy General Counsel, The Pentagon, Washington, D.C.).

price revision and redetermination provisions). On **15** May **1970**, however, Defense Procurement Circular (DPC) No. **79** was issued, stating in pertinent part:

The purpose of this Defense Procurement Circular is to announce changes in the ASPR [DAR] effective 1 July 1970 to make mandatory the use of Section XV, Part 2, in the pricing of fixed price contracts⁷⁶ (emphasis added).

Currently this requirement is imposed by the following language:

This Section shall be used in the pricing of fixed price type contracts and contract modifications whenever cost analysis is performed. It also will be used whenever a fixed price type contract clause requires the determination or negotiation of costs. However, application of these cost principles to fixed price type contracts shall not be construed as a requirement to negotiate agreements on individual elements of cost in arriving at agreement on the total price. The final price accepted by the parties reflects agreement only on the total price. Further, notwithstanding the mandatory use of the cost principles, the objective will continue to be [to] negotiate prices that are fair and reasonable, cost and other factors considered.⁷⁷

Thus the DAR § 15–205.17 prohibition against the recovery of "interest on borrowings (however represented)" applies as well to pricing actions on fixed-price contracts entered into after 1 July 1970. The ASBCA has held that recovery of interest, as a cost, on actual borrowings made necessary by government ordered modifications to ked-price contracts is proscribed pursuant to DPC No. 79 and DAR § 15–205.17. However, as will be discussed, contractors may be able to recover at least a portion of the expense through a higher *profit* allowance.

It should be noted that in addition to the specific (DAR § 15–205.17) prohibition regarding the recovery of interest expenses, DAR Section

⁷⁶ Defense Procurement Circular No. 79, at 1 (15 May 1970). The effective date of this circular was 1 July 1970.

⁷⁷ DAR § 15–106.

⁷⁸ DAR § 15-205.17.

⁷⁹ Systems & Computer Information, Inc., ASBCA No. 18458, 78–1 B.C.A. para. 12,946 (1977).

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XV imposes other general limitations on the allowability of costs. Thus, pursuant to DAR § **1.5204**, costs are properly recoverable only "to the extent that they are reasonable . . ., allocable . . ., and determined to be allowable [according to the Cost Accounting Standards, if applicable, otherwise generally accepted accounting principles].⁸⁰

2. Allowability without cost principles.

With respect to fixed-price contracts entered into prior to July 1970, although the boards of contract appeals have repeatedly affirmed the Court of Claims' *Bell* decision, they have imposed restrictions regarding contractors' burden of proof. In general, there were two standards imposed: a clear necessity for borrowing and direct tracing of borrowed funds.

a. Clear necessity.

In Singer-General Precision, Inc., Librascope Group, 81 the ASBCA held that, in the absence of a showing of "clear necessity" for borrowing to finance government ordered changes to a fixed-price contract, the interest expense incurred with respect thereto was not recoverable. Specifically, the board opined:

 $^{^{80}}$ DAR $\S~15\text{--}204(b).$ The bracketed text is from DAR $\S~15\text{--}201.2,$ which is cited at that point in the original of the quoted text.

⁸¹ Singer-General Precision, Inc., Librascope Group, ASBCA No. 13241, 73-2 B.C.A. para. 10,258 (1973).

^{82 73-2} B.C.A. para. 10,258, at 48,425.

not find specific borrowing, necessity for borrowing, we cannot find [contractor] entitled to interest.⁸⁸

Two years later the ASBCA, in LTV Electrosystems Inc., Greenville Div., 84 stated:

[T]his Board has consistently interpreted contract provisions and the regulations applicable thereto **as** providing for the payment of interest only where borrowing and the related interest costs were incurred because of a requirement to perform additional or changed work. 86

b. Tracing.

The second prerequisite to recovery of interest imposed by the administrative boards involves a "direct tracing" requirement. For example, in *Crescent Precision Products, Inc.*, ³⁶ the ASBCA denied the contractor's claim for interest expenses incurred in order to finance government ordered modifications to his fixed-price contract. The contractor alleged borrowings of approximately \$250,000 from its parent corporation which in turn had been forced to borrow from various financial institutions. The board stated that there was—

no information concerning the parent corporation's dealings with financial institutions, nor [was there] any *reasonably direct linkage* between the borrowings and this particular contract. In addition, there is no persuasive evidence that the borrowings were in any way related to a change in contract performance.

... Recognition of intra-corporate financial transactions without a *direct linkage* to outside institutions could rapidly result in the allowance of inflated and inequitable payments to contractors⁸⁷ (emphasis added).

⁸³ Id.

⁸⁴ LTV Electrosystems, Inc., Greenville Div., ASBCA No. 14832, 75–1 B.C.A. para. 11,310 (1975).

⁸⁵ 75-1 B.C.A. para. 11,310, at 53,908.

⁸⁶ Crescent Precision Prod., Inc., ASBCA No. 18705, 74–2 B.C.A. para. 11,310 (1975).

⁸⁷ 74-2 B.C.A. para. 10,898, at 51,869-70.

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More recently, the ASBCA reiterated the requirement in the *Baifield Industries*⁸⁸ case by stating:

[Contractor's] representatives have acknowledged that while a major portion of their daily operations were performed with borrowed funds, income and profit derived from its activities also were available and used to support its daily operations. Accordingly, [contractor's] request for payment based on interest paid on borrowed funds is denied.⁸⁹

The tracing requirement is of particular importance to firms which engage in intra-corporate financing schemes, e.g., where the actual borrowing is handled at the parent or headquarters level and funding is filtered down to the particular (division or subsidiary) contractor⁹⁰—

The division or subsidiary often is treated **as** a cost center, with the parent (or headquarters level) responsible for all actual borrowings. In most circumstances, the nature of borrowings and the organization of accounting records of such corporations simply do not permit the degree of traceability-demonstrating the *impact* of a change upon corporate borrowings—which the Boards have required. As a result, most such contractors have been unable to recover interest on actual borrowings as a cost of **performance**. 91

c. Extent of recovery.

In those decisions in which interest recovery was allowed, the next issue concerned the amount due. To make this determination it is necessary to consider: amount of principal, rate of interest, and period of interest accrual.⁹²

⁸⁸ Baifield Industries, Division of A-T-O, Inc., ASBCA Nos. 13418, 13555, 17241, 77-1 B.C.A. para. 12,308 (1976).

^{89 77-1} B.C.A. para. 12,308, at 59,474.

⁹⁰ See generally L. Sidman & E. Zahler, Interest on Contract Claims: Basic Principles and Guidelines (2d ed.), The Government Contractor Briefing Paper No. 78-5, at 5 (1978). The Briefing Papers are a special series of the commercial newspaper The Government Contractor, published by Federal Publications, Inc., Washington, D.C.

⁹¹ Id.

⁹² Id.

With respect to the amount of principal, the boards of contract appeals generally attempt to determine the specific amount borrowed in order to finance the particular additional work imposed. Thus, in *National Manufacturing*, *Inc.*, 98 the ASBCA first determined the time the contractor devoted to performing a contract change, then, on a monthly basis, the money spent to fund the additional work. 94

Regarding the appropriate rate of interest, the usual approach is to allow the rate paid by the contractor, provided it is **reasonable**. Where it was "not possible from the record presented to derive with mathematical precision a representative rate for the entire period . . . applicable to resolving [an] interest claim . . . ," the ASBCA awarded a jury verdict rate. 96.

The final question as regards the amount of interest due concerns the time during which the rate is to be applied to the principal. It is well settled that the period begins to run at the time interest expenses in connection with financing the additional work are first incurred.⁹⁷ On the other hand, there has been some uncertainty as to when the period ends. Although earlier ASBCA decisions developed other standards by which to determine the interest period, the current approach was described by the board as follows—

[T]he question . . . is at what point in time does interest cease to be treated as a cost of performance of the additional work, compensable under the Changes clause, and thereafter is considered to be an unallowable cost occasioned by the Government's delay in payment. . . . [W]e determine that point in time to be when the contracting officer has taken some form of final action on a contractor's claim whether by entering into a settlement agreement or by issuing a final decision on the claim.

⁹⁸ National Manufacturing, Inc., A Teledyne Company, ASBCA No. 15816, 74–1 B.C.A. para. 10,580 (1974).

^{94 74–1} B.C.A. para. 10,580, at 50,160-62.

⁹⁸ The Oxford Corp. ASBCA Nos. 12298, 12299, 69–2 B.C.A. para. 7871 (1969).
96 Keco Industries, Inc., ASBCA No. 18730, 74–2 B.C.A. para. 10,711at 50,951 (1974). See also, Ingalls Shipbuilding Division, Litton Systems, Inc., ASBCA No. 17579,78–1 B.C.A. para. 13,038, αff d on reconsideration, 78–1 B.C.A. para. 13,216 (1978).

⁹⁷ L. Sidman & E. Zahler, supra note 90, at 5.

⁹⁸ Id., at 5-6.

... [However], where actual contract performance and costs attributable to the extra work have extended beyond the date of the contracting officer's final decision, we have allowed interest expense until performance ceased. *National Manufacturing, Inc.*, ASBCA No. **15816, 74–1** B.C.A. para. **10,580.** 99

3. Interest as a cost of performance: Summary.

As regards cost-reimbursement contracts and repricing actions on post-July 1970 ked-price contracts, DPC No. 79 along with regulatory and judicial implementation effectively have blocked the recovery of interest as a cost of performance. As to pre-July 1970 fixed-price contracts, the ASBCA has been willing to allow recovery provided there existed aclear necessity for the borrowings, and the borrowed funds could be traced to the additional work. If a contractor is held entitled to recover interest costs, the quantum is calculated by considering the amount of principal, rate of interest, and period of interest accrual.

B. RE: IMPUTED INTEREST

In contrast to those situations in which contractors actually have incurred a liability (principal plus interest due the lending institution) in order to perform additional work brought about by government action, contractors also have claimed entitlement to imputed interest on equity capital tied up in such financing. The ASBCA, beginning with the *New York Shipbuilding Co.*¹⁰⁰ decision, has been receptive to these and, more recently, actual borrowings claims. Thus contractors have been able to recover imputed interest compensation where no actual borrowing occurred¹⁰¹ and where the contractor "was unable to demonstrate that a general course of borrowing was affected by the change."¹⁰² This imputed interest theory represents the currently prevalent approach to resolving interest claims. Accordingly, a rather careful analysis of the significant **Curt of** Claims and ASBCA decisions addressing the theory will be developed.

⁹⁹ Keco Industries, Inc., ASBCA No. 18730, 74–2 B.C.A. para. 10,711, at 50,951–62 (1974).

New York Shipbuilding Co., A Division of Merritt-Chapman & Scott Corp., ASBCA No. 16164, 7 6 2 B.C.A. para. 11,979 (1976).

¹⁰² L. Sidman & E. Zahler, supra note 90, at 6.

1. The New York Shipbuilding case. 103

The contractor had been awarded seven pre-1970 fixed-price contracts for the construction of 13 ships at prices totalling \$320 million. These contracts contained progress payment clauses which called for almost total government financing. Alleging additional work brought about by formal and constructive changes, the contractor sought compensation for these modifications and escalation claims at a total of \$67.7 million. To pay for the additional work, the contractor had used its equity capital as opposed to either borrowings or government financing. New York Shipbuilding Co. maintained that but for the changes, the money used to finance them would have been placed in "conservative, interest-bearing certificates." By settlement agreement (contractor paid \$53.2 million) the parties resolved all entitlement disputes except as regards the recovery of interest on funds used to finance the changed work. 104

The board held:

We have found [contractor] entitled to recover, as part of its equitable adjustment for changed work, a return for the use of its equity capital to the extent not otherwise adequately compensated in the equitable adjustment—regardless of the absence of actual borrowings. . . . We have found such entitlement as part of profit to be not only consistent with but required by decisions of this Board. . . . ¹⁰⁵ (emphasis added)

Thus, interest on equity capital was determined an integral part of the "equitable adjustment") due contractors pursuant to the changes clause, not as an element of cost but as part of the *profit* required to insure "fair compensation." The characterization as profit was made despite the contractor's extensive arguments for the allowance of imputed interest as a cost and "lengthy and persuasive expert accounting and economics testimony" in support thereof. 107

Treating interest as an element of profit is significant. Because DAR

¹⁰⁸ 7 6 2 B.C.A. para. 11,979.

¹⁰⁴ 7 6 2 B.C.A. para. 11,979, at 57,400 (statement of the case).

¹⁰⁵ 7 6 2 B.C.A. para. 11,979, at 57,457.

¹⁰⁶ 7 6 2 B.C.A. para. 11,979, at 57,428.

¹⁰⁷ 7 6 2 B.C.A. para. 11,979, at 57,437.

Section XV applies only to the allowability of *costs*, ¹⁰⁸ its prohibitions, specifically DAR § 15–205.17, presumably are not applicable. Accordingly, under the recovery as an element of profit approach, it should be irrelevant whether a contractor had a pre- or post-July 1970 fixed-price contract. On the other hand, by including interest as part of the fee, a contractor may not be entitled to full recovery (dollar-for-dollar) of the expense as would be the case if it were classified as a cost of performance. ¹⁰⁹ Specifically, as noted in *New York Shipbuilding*, the contractor is entitled only to "fair compensation"—

As a general proposition, therefore, we believe the concept of "equitable adjustment" demands that a contractor be fairly compensated for the use of private capital on changes. At least in cases where the equitable adjustment is determined after the work is performed, however, it must be determined whether the normal profit otherwise payable, without an extra amount specifically for the use of capital, is adequate to provide such compensation. In making this determination, it is appropriate to consider all the circumstances of the given case, including normal progress payments and profit levels in the industry.

... This proposition is equally applicable whether the private capital is borrowed or equity capital" [emphasis added].

Presumably, therefore, if it could be demonstrated that a contractor would be fairly compensated at the rate of "normal profit otherwise payable," an additional amount for interest would be unnecessary.

2. Fischbach & Moore International Corp. 111

Although several ASBCA cases prior to New York Shipbuilding¹¹² allowed recovery of imputed interest as a cost **d** performance,¹¹³ the

¹⁰⁸ DAR § 15-000.

¹⁰⁹ L. Sidman & E. Zahler, supra note 90, at 7.

^{110 76-2} B.C.A. para. 11,979 at 57,428.

¹¹¹ Fischbach & Moore Int'l Corp., ASBCA No. **18146,77–1** B.C.A. para. **12,300** (1976).

^{112 76-2} B.C.A. para. 11,979.

¹¹⁸ See, e.g., Ingalls Shipbuilding Div., Litton Systems, Inc., ASBCA No. 17717, 761 B.C.A. para. 11,851 (1976); Aerojet-General Corp., ASBCA No. 17171,74–2 B.C.A. para. 10,863 (1974); Drexel Dynamics Corp., ASBCA No. 9502,67–2 B.C.A. para. 6410 (1967).

board appeared to have completely abandoned this approach in the *Fisch-bach & Moore* decision. 114

The contractor was held entitled to an equitable adjustment to his fixed-price contract as a result of constructive changes imposed by the government. The contractor claimed entitlement to \$340,744, the *interest* on borrowings made necessary by the change. Although the board would not allow recovery of the expense as a cost (because there was insufficient evidence of "clear necessity" and "direct tracing"; see part V, A, 2, above), the contractor was awarded an additional profit factor as compensation for the use of its equity or borrowed capital.

Thus, the board went a step further. While reaffirming the New York Shipbuilding characterization of interest as an element of profit, the ASBCA applied it to actual borrowings. This additional step made complete the departure from those earlier decisions in which the board required a showing of "clearnecessity" and "tracing" in order to recover interest on actual borrowings. As noted earlier, however, had the contractor been able to make these showings, presumably the total interest cost would have been allowed, whereas as an element of profit, the interest factor is considered only to the extent necessary to insure "fair compensation."

It is important, therefore, to note that in **all** of the cases subsequent to **New York Shipbuilding** and **Fischbach & Moore**, where interest has been allowed, it has been treated **as** an additional element of profit."

3. Extent of recovery.

As examined with respect to interest **as** a cost of performance, to determine the extent of recovery **as** regards imputed interest (**as** an element of profit), these factors must be considered: amount of principal, rate of interest, and period of interest accrual.

¹¹⁴ 77-1 B.C.A. para. 12,300.

¹¹⁶ Singer-General Precision, Inc., Librascope Group, ASBCA No. 13241, 73-2 B.C.A. para. 10,258 (1973).

¹¹⁶ Crescent Precision Prod., Inc., ASBCA No. 18705, 74–2 B.C.A. para. 11,310 (1975).

 ¹¹⁷ Ingalls Shipbuilding Div., Litton Systems, Inc., ASBCA No. 17579, 78–1
 B.C.A. para. 13,038, aff'd on reconsideration, 78–1
 B.C.A. para. 13,216 (1978);
 Baifield Indus., Div. of A-T-0, Inc., ASBCA No. 18057, 77–1
 B.C.A. para. 12,348 (1977);
 L. Sidman & E. Zahler, supra note 90, at 8.

Similar to earlier board decisions, the basic consideration for determining the amount of principal is the cost of the changed work for which the government is responsible. As noted in *New York Shipbuilding*, "the principal on which the return for the use of capital should be computed should be the increased amount of private capital the contractor was *forced to invest in the changes*. ..." (emphasis added). The emphasized language (i.e., "forced to invest") can have important consequences. For example, in *Baifield Industries*, where the contractor invested funds to finance changed work but waited three years to submit a monetary claim, the ASBCA granted interest compensation only from the date of claim submission.

In contrast to the earlier board approach regarding the appropriate rate of interest, the decisions on imputed interest as an element of profit have used six per cent simple interest.¹²¹ However, the rate, without exception to date, has been pursuant to a jury verdict determination after comparison with various other rates.¹²² The following explanation regarding rate is illustrative of the current approach:

[W]e [have] held that the increased profit is not dictated by the rate [contractor] paid on borrowing and compounding was not appropriate. We so hold in this appeal. Absent a factual showing compelling a higher profit allowance, we conclude that a profit factor of 6% is fair and reasonable.¹²³

With respect to the interest period, as was the approach in the cost of performance area, it begins to run on the date funds were first committed to financing the additional work.

As to the termination of the period, the ASBCA has taken a different tack. Instead of ending at the time of the contracting officer's final decision, the board's current practice is to use the date of its decision. ¹²⁴ As pointed out in *Fischbach & Moore*

¹¹⁸ L. Sidman & E. Zahler, supra note 90, at 8.

¹¹⁹ **76–2** B.C.A. para. **11,979** at **57,431**. See *also*, Baifield Indus., Div. of A–T–O, Inc., ASBCA No. **18057**, **77–1** B.C.A. para. **12,348** at **59,748** (**1977**).

^{120 77-1} B.C.A. para. 12,348.

¹²¹ L. Sidman & E. Zahler, supra note 90, at 8.

 $^{^{122}} Id.$

^{123 77-1} B.C.A. para. 12,348,at 59,748.

¹²⁴ L. Sidman & E. Zahler, supra note 90, at 8.

In a case in which interest on borrowings was claimed as a cost incident to performing work under a change order, we held that the interest period terminated on the date of the contracting officer's decision, after which the interest costs were no longer costs of performance but, rather, costs attendant on the Government's delay in making payment of the claim, which it has been the courts' historic policy to deny. ... [I]n the present case we do not allow [contractor] to recover interest on its borrowings as a cost. Instead, we hold that [it] is entitled to be compensated in the form of increased profit, for the use of its equity or borrowed capital in the performance of the changed work. Since such use continues, and is compensable, beyond the date of the contracting officer's final decision, to the date of our decision fixing the amount due and payable ... for the constructive change in this appeal, we hold that the latter date, marking the end of the disputes process provided for in the contract is the appropriate terminal date. ... 125

4. Imputed interest: Summary.

Beginning with the late 1976 New York Shipbuilding decision, the ASBCA began to regard interest claims not as a cost of performance but as an element of profit in the computation of an equitable adjustment. In subsequent decisions the board made clear that this rationale applied with equal force to interest on borrowings and as compensation for the use of equity capital. Thus, not only were the earlier tests of "clear necessity" and "tracing" no longer applicable, but also the DAR Section XV proscriptions regarding interest recovery apparently became irrelevant

This novel approach also ushered in new considerations regarding the amount of recovery. Although the principal was still the additional expense brought about by the government and the commencement of the interest period remained tied to the date of initial funds disbursement, the ASBCA altered two other factors. Even though the board began to speak in terms of a jury verdict rate, six per cent simple interest has been the norm. More importantly, the date ending the interest period is that of the board's decision.

¹²⁵ Fischbach & Moore Int'l *Corp.*, ASBCA No. 18146, 77–1 B.C.A. para. 12,300 (1976).

VI. COURT OF CLAIMS REACTION AND ASBCA RESPONSE

A. COURT OF CLAIMS REACTION

Since the 1968 *Bell* case the discussion has reviewed exclusively ASBCA decisions—not at all surprising in view of the government's inability to appeal the board's allowability determinations. Recent Court of Claims decisions, however, have cast serious doubt on the reliability of the administrative board approach.

The court reaffirmed its *Bell* holding, allowing interest costs as part of an equitable adjustment for changed work where the contractor actually paid the interest and could prove that the borrowing was forced or otherwise made necessary by the changed work. However, the court declined to follow the imputed interest line of board cases. ¹²⁶ In one of the first of these decisions, *Framlau Corp.* v. *United States*, ¹²⁷ the Court of Claims had occasion to review the ASBCA's denial of an interest claim related to changes in the contractor's 1967 fixed-price contract. (The 1972 board decision was, of course, prior to its *New York Ship-building* holding.) In affirming the disallowance of interest recovery, the court explained—

Since the board's denial of interest on overhead and changes expenses was based on plaintiffs failure of proof concerning plaintiffs borrowings, plaintiff urges that we abandon the *Bell* standard and follow the board's recent cases allowing recovery of interest without regard to whether debt or equity capital is used. This we are not prepared to do. It may be argued that different treatment of debt and equity capital follows an artificial distinction and that it rewards thin capitalization, but we are constrained by . . . 28 U.S.C. § 2516(a) (1970) and further believe that the distinction is supported by reason in that the cost to the contractor of borrowing capital is clearly determinable, while the value to him of the use of equity capital is not so readily ascertainable. 129

¹²⁶ See, e.g., Dravo Corp. v. United States, Ct.Cl. No. 315-77, slip op. at 8(Feb. 21, 1979).

¹²⁷ Framlau v. United States, 215 Ct. Cl. 185 (1977).

¹²⁸ Framlau Corp., ASBCA No. 14666, 72–1 B.C.A. para. 9279 (1972).

^{129 215} Ct.Cl. at 199.

In the contemporaneous Singer Co. ¹⁸⁰ decision (also involving an appeal from a pre-New York Shipbuilding ASBCA decision¹³¹) the court affirmed the ASBCA's earlier approach in which interest recovery was denied because the contractor was unable to demonstrate a clear necessity for borrowing to finance changed work. 182 Commenting on Singer Co. in h v o Corp. v. United States, 183 the court opined—

[I]t is clear that this court still holds to the view that direct tracing to a specific loan or necessity for increased borrowing is still required to be proven in order for a contractor to recover for interest costs under an equitable adjustment theory. 184

In the h v o Corp. case, the court had occasion to review these determinations by the Engineers Board of Contract Appeals: first, that the recovery of imputed interest on equity capital theory was incorrect and, further, in order to be compensated for interest expenses on actual borrowings, a contractor must show the existence of a direct loan or the necessity to increase existing borrowing arrangements to finance the changed work. In affirming the board's decisions, the court noted—

This court requires that a clear necessity for borrowings occasioned by the change be proven. ... A mere showing of a history of business borrowings and a course of dealings with various banks during the time frame at issue is insufficient to prove a claim for interest. 185

Citing Fmmlau Corp. v. United States, the court also specifically refused to adopt the imputed interest equity capital theory. 136

B. ASBCA RESPONSE

As to the ASBCA's response to the Court of Claims reaction, the

¹⁸⁰ Singer Co., Librascope Div. v. United States, 215 Ct. Cl. 281 (1977).

¹⁸¹ Singer-General Precision, Inc., Librascope Group, ASBCA No. 13241, 73-2 B.C.A. para. 10,258 (1973).

¹³² Id.

¹⁸⁸ Dravo Corp. v. United States, Ct.Cl. No. 315-77, slip op. at 8 (Feb. 21, 1979). 134 Zd., at 10.

¹⁸⁵ Id., at 13.

¹³⁶ Id., at 14.

board, in *Ingalls Shipbuilding*, "noted that it was aware of the *Framlau* and *Singer* Co. decisions. 188 Nevertheless, interest recovery (imputed compensation as profit for use of capital) was allowed under this rationale:

Both of those cases addressed the question of *interest* not of profit for use of capital. We do not consider either of those decisions **as** precedent affecting the present applicability of our previous decisions allowing profit for use of capital.¹³⁹

C. COURT OF CLAIMS REACTION TO RESPONSE

In turn, however, the Court of Claims clearly is not in complete agreement with the distinction drawn by the ASBCA. In discussing the Engineers Board's rejection of the contractor's (Dravo Corp.) arguments for interest compensation, the court stated—

[T]he Board rejected plaintiff's argument largely on the ground that the reservation by plaintiff was limited only to a claim for *interest* and did not preserve consideration of an additional *profit* allowance to compensate it for the use of its equity capital. . . . In light of the court's recent decision in *Framlau*, . . . it need not be decided whether plaintiffs reservation was broad enough to cover its present position. For, even if consideration for an additional profit allowance was reserved, the court in *Fmmlau* rejected a contractor's recovery for the use of its equity capital. ¹⁴⁰

D. REACTION-RESPONSE-REACTION: SUMMARY

Even though the Court of Claims arguably could be cited **as** the progenitor of the interest recovery line of cases by its **Bell** decision, it has

¹⁸⁷ See cases cited at note 96, supra.

¹⁸⁸ Ingalls Shipbuilding Div., Litton Systems, Inc., ASBCA No. 17579, 78-1 B.C.A. para. 13,038 at 63,692 aff d on reconsideration, 78-1 B.C. A. para. 13,216 (1978).

¹⁸⁹ *Id. Accord*, Fraass Survival Systems, Inc., ASBCA No. **22114**,78–2 B.C.A. para. **13**,445 (1978).

i40 Dravo Corp. v. United States, Ct.Cl. No. 315-77, slip op. at 14 (Feb. 21, 1979).

steadfastly refused to follow the ASBCA's New York Shipbuilding and later decisions. The court has made it very clear that as an element of cost, interest is recoverable only where actual borrowing has occurred and there is a showing of a requirement for either a direct loan or increased borrowing to finance the changed work. The ASBCA reacted by "limiting" the court's comments to interest as a cost of performance, not as an element of profit. However, the recent Court of Claims Dravo Corp. decision does not appear to support this position.

VII. CAVEAT CONCERNING CONTRACTS AWARDED BEFORE JULY 1970

It is important to keep in mind that all the cases discussed have involved contracts awarded before July 1970, i.e., before the effective date of DPC No. 79. Thus, the cost principles proscription against recovery of interest has not been applicable.

While there is some indication that with respect to post-DPC No.79 contracts, the ASBCA will not look favorably upon contractors' claims for interest compensation, no matter how characterized¹⁴¹ (perhaps in reaction to the Court of Claims position), sound arguments supporting continued interest recovery can be advanced.

As noted, several ASBCA decisions classified interest compensation as an element of *profit*, hence the DAR Section XV *cost* principles would have no application. It is addition, the specific Section XV prohibition (DAR § 15-205.17) speaks in terms of "interest on borrowings." Several ASBCA decisions have allowed imputed interest compensation for the use of equity capital, i.e., even in the absence of borrowings. Also, DAR § 15-205.50, Facilities Capital Cost of Money, provides that the "imputed cost determined by applying a cost of money rate to facilities capital employed in support of Defense contracts" is an allowable expense. This language, coupled with DAR § 15-204, Application of Prin-

¹⁴¹ See, e.g., J.W. Bateson Co., Inc., ASBCA No. 22337, 78–2 B.C.A. para. 13,523 (1978), and Systems & Computer Information, Inc., ASBCA No. 18458, 78–1 B.C.A. para. 12,946 (1977).

¹⁴² L. Sidman & E. Zahler, supra note 90, at 9.

¹⁴⁸ Id.

¹⁴⁴ DAR § 15–205.50(a).

ciples and Procedures, provides, arguably, additional support for the recovery of an imputed interest factor:¹⁴⁵

With respect to all items, whether or not specifically covered, determination \mathbf{c} allowability shall be based on the principles and standards set forth in this part and, where appropriate, the treatment \mathbf{c} similar or related selected items¹⁴⁶ (emphasis added).

Finally, a glance at two recent ASBCA cases in this area provides at least a hint that the board may be reluctant to abandon its *New York Shipbuilding* position.

In **J**. W. *Bateson* Co., *Inc.*, ¹⁴⁷ the ASBCA considered a claim for interest recovery on funds borrowed to pay for government changes on a contract awarded in **1972** (i.e., *after* the effective date of **DPC** No. **79**). Although the contractor's claim was denied, the board indicated that recovery was still *possible*:

A protracted discussion of [contractor's] failure to prove is unnecessary since under the terms of the contract, the payment of interest is unallowable as a *cost* in the pricing of adjustments. Counsel argues that [contractor] should be allowed additional profit for the use of capital it was forced to invest when it was entitled to an equitable adjustment under the contract. He equated the interest claimed to a cost necessary to provide additional working capital to pay the "extraordinary cost expenses" and cites New York Shipbuilding. ... The facts do not bring this case within the ambit **c** the New York Shipbuilding case in which there was conclusive proof that large sums **c** capital that could have been otherwise invested were tied up because **\delta** the Government's actions. That fact has not been established here. Accordingly, [the] claim for interest cost allegedly incurred to finance the changed work is denied. The alternative claim for additional profit based on alleged loss of use of capital is also denied¹⁴⁸ (emphasis added).

¹⁴⁵ L. Sidman & E. Zahler, supra note 90, at 9.

¹⁴⁶ DAR § 15-204(d).

¹⁴⁷ J.W. Bateson Co., Inc., ASBCA No. 22337, 78-2 B.C.A. para. 13,523 (1978).

¹⁴⁸ 78–2 B.C.A. para. 13,523, at 66,269.

From the ASBCA's discussion, it is clear that in post-DPC **No.** 79 (i.e., after 1July 1970) contracts, interest as a cost cannot be recovered. On the other hand, allowability as an element of profit apparently still is a possibility. Had the contractor correctly classified the expense (i.e., as an element of profit necessary for the equitable adjustment) and been able to demonstrate "conclusivelythat large sums of capital, which could have been otherwise invested, were tied up because of government actions" then, indicates the board, compensation would have been appropriate.

A few days later, in *Mecon Co.*, ¹⁴⁹ the ASBCA provided additional support for the accuracy of this conclusion, although interest recovery again was denied. Because the contract was awarded on 29 March 1971, compensation for interest as a *cost* clearly was not possible. In response to the contractor's contention that he was entitled to an upward equitable adjustment in the contract price, in the form of increased *profit*, to compensate for the use of his capital, the board stated—

In order to recover under this theory, the [contractor] must prove that it invested its capital to finance the extra work. ... As the [contractor] has failed in its burden of proof, it is not entitled to an upward adjustment in the contract prices¹⁵⁰ (emphasis added).

Thus, not only are there fairly persuasive theoretical arguments in support of continued interest recovery at the ASBCA, notwithstanding recent Court of Claims comments to the contrary, the board continues to evidence sympathy for its allowability **as** an element of profit in equitable adjustments.

VIII. SUMMARY: WHAT IS CURRENTLY "THE LAW"?

What results when we step back to make some (any?) sense of these Court of Claims and administrative board decisions from *Bell* to the present? The following observations, of course, amount to little more than informed speculation; however, we believe they establish general guidelines which have the support of most of the important cases in the area.

¹⁴⁹ Mecon Co., ASBCA No. 22813, 78–2 B.C.A. para. 13,542 (1978).

¹⁵⁰ 78-2 B.C.A. para. 13,542, at 66,343.

With respect to pre-July 1970 fixed-price contracts it is clear that the boards and Court of Claims will allow compensation for interest expenses as part of an equitable adjustment for changed work where the contractor actually paid the interest and could prove that the borrowing was made necessary by the changed work. If the contractor used his own capital to finance the additional work on his pre-DPC No. 79 fixed-price contract, the ASBCA likely would grant relief (as an additional element of profit) whereas the Court of Claims probably would deny it.

As regards post-July 1970 fixed-price contracts, it is extremely unlikely that the Court of Claims will grant interest compensation, no matter how characterized. The ASBCA probably also will deny relief except under the most compelling circumstances, again, as an item of additional profit.

IX. INTEREST ON A CLAIM

A. DEFENSE PROCUREMENT CIRCULAR NO. 97

In contrast to the principal topic of the paper, interest actually paid on money borrowed to finance changed work or as compensation for the use of equity capital therefor, this section considers, in essence, interest for *delays in payment*."

In Section 11, A, above, we glanced at the statutory provision permitting the award of interest "on a claim against the United States in a judgment of the Court of Claims only under a contract or Act of Congress providing for payment thereof." This language has been interpreted to apply as well to appeals before agency boards of contract appeals." In general, "the statutory restriction has been rigidly enforced." ¹⁵⁴

However, on 15 February 1972, DPC No. 97, was issued. This amendment required incorporation of a "Payment Of Interest On Contractor's Claims" clause in all future contracts (other than for small purchases) containing a disputes clause. The required DAR clause provides:

 $^{^{151}}$ See, e.g., United States v. Thayer-West Point Hotel Co., 329 U.S. 585 (1947). 152 28 U.S.C. $\S~2516(a)$ (1976).

¹⁵⁸ L. Sidman & E. Zahler, *supra* note 90, at 2. See, e.g., Fruehauf Corp., PSBCA No. 197, 76–1 B.C.A. para. 11,771(1976).

¹⁵⁴ L. Sidman & E. Zahler, supra note 90, at 2.

PAYMENT OF INTEREST ON CONTRACTS' CLAIMS (1976 JUL)

- (a) If an appeal is filed by the Contractor from a final decision of the Contracting Officer under the DISPUTES clause of this contract, denying a claim arising under the contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the Contractor. Such interest shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, from the date the Contractor furnishes to the Contracting Officer his written appeal under the DISPUTES clause of this contract, to the date of (i) a final judgment by a court of competent jurisdiction, or (ii) mailing to the Contractor of a supplemental agreement for execution either confirming completed negotiations between the parties or carrying out a decision of a board of contract appeals.
- (b) Notwithstanding (a) above, (i) interest shall be applied only from the date payment was due, if such date is later than the filing of appeal; and (ii) interest shall not be paid for any period of time that the Contracting Officer determines the Contractor has unduly delayed in pursuing his remedies before a board of contact appeals or a court of competent jurisdiction. ¹⁵⁶

Although the provision is considered to express a procurement policy of such significance as to require that it be read into contracts under the "Christian Doctrine," the administrative boards have steadfastly refused to accord it retroactive effect. 157

It is important to note that the clause does not cover all delay in payment possibilities. It addresses only the filing of an **appeal** from a contracting officer's final decision under the disputes clause. Thus, in **The**

¹⁵⁵ DAR § 7-104.82.

¹⁵⁶ See, e.g., R.C. Hedreen Co., ASBCA No. 21695, 78–2 B.C.A. para. 13,254 (1978). DAR § 1-333 requires that the clause be included in all contracts, except small purchases.

¹⁵⁷ See, e.g., Cloverleaf Development Co., ASBCA No. 20181, 7 6 1 B.C.A. para. 11896 (1976).

Diomed Corp., ¹⁵⁸ the ASBCA denied interest recovery where the government unquestionably delayed payment because there was no *dispute* as to entitlement. ¹⁵⁹ Likewise, the ASBCA denied recovery where the contractor failed to file an appeal from the contracting officer's denial of the particular (interest) claim. ¹⁶⁰

B. COMPUTATION

If the adjudicating body determines that interest is due pursuant to the clause, how is the amount calculated? The clause provides most of the answers.

The principal is the "amount of the claim finally determined owed by the Government," as determined by a court, board, or the parties. ¹⁶¹

As regards rate, the clause ¹⁶² provides for payment of simple interest in the amount established by the Secretary of the Treasury pursuant to Public Law 92-41. ¹⁶³

The interest period begins on the "date the Contractor furnishes... his written appeal under the Disputes Clause;" however, if payment was not due until a time later than the filing of an appeal, the period commences at the later date. The period terminates when a court renders final judgment or the contractor is furnished a supplemental agreement reflecting a board decision between the parties. Finally, the clause warns that interest is not to be paid—

¹⁵⁸ The Diomed Corp., ASBCA No. 20399, 75–2 B.C.A. para. 11,491 (1975).
¹⁵⁹ L. Sidman & F. Zahler *supra* note 90, at 2. In this case the Government has

¹⁵⁹ L. Sidman & E. Zahler, *supra* note 90, at 2. In this case the Government had admitted liability.

¹⁶⁰ T.M. Industries, ASBCA No. 20676, 7 6 1 B.C.A. para. 11,833(1976).

¹⁶¹ DAR § 7-104.82(a).

¹⁶² DAR § 7-104.82.

¹⁶⁸ Act of July 1, 1971, Pub. L. No. 92-41, § 2(a)(3), 85 Stat. 97, codified at 50 U.S.C. app. § 1215(b)(2) (1976), amending the Renegotiation Act of 1951, Pub. L. No. 82-9, 65 Stat. 7, codified at 50 U.S.C. app. § § 1211-1233 (1976). The rate is established anew every six months.

¹⁶⁴ DAR § 7-104.82(a).

¹⁶⁵ DAR § 7–104.82(b).

¹⁶⁶ DAR § 7-104.82(a).

for any period ...that the Contracting officer determines the Contractor has unduly delayed in pursuing his remedies before a board ... or court. ... 167

C. CONTRACT DISPUTES ACT OF 1978¹⁶⁸

Section 12 of the Contract Disputes Act of 1978, effective 1 March 1979, provides:

Interest on amounts found due contractors on claims shall be paid to the contractor from the date the contracting officer receives the claim pursuant to section 6(a) from the contractor until payment thereof. The interest . . . shall be paid at the rate established by the Secretary of the Treasury pursuant to Public Law 92–41 (85 Stat. 97). . . .

Thus, the interest period begins at the time the contracting officer receives the **claim**, ¹⁶⁹ not when the appeal from a contracting officer decision is filed.

The provisions of the Act apply mandatorily to contracts entered into on **or** after 1 March 1979. Furthermore, with respect to contracts made before this date, the contractor may elect to proceed under the provisions of the Act. ¹⁷¹

x. CONCLUSION

Two aspects of interest compensation have been addressed: "on" a claim (i.e., for delays in payment), and as a cost of contract performance.

While the rules regarding the former have undergone a complete change, at least it is fairly clear just when and how much compensation is due.

¹⁶⁷ DAR § 7-104.82(b).

¹⁶⁸ Pub L. No. 95–563, 92 Stat. 2383 (1978), to be codified at 41 U.S.C. § § 601–

¹⁶⁹ Id. at § § 6 and 12.

¹⁷⁰ Id. at § 16.

¹⁷¹ Id.

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As to interest associated with contract performance, the rules also have changed, so much so in fact that at present we are essentially back to the starting point! However, it is quite possible that within the next few years the ASBCA will discover a rationale, acceptable to the Court of Claims, which will permit recovery. Recent board and court cases have hinted at this result; now we need only await the discovery.

USE OF SPECIFICATIONS IN FEDERAL CONTRACTS: IS THE CURE WORSE THAN THE DISEASE?*

by Major Gary L. Hopkins** and Major Riggs L. Wilks, Jr.***

In this article, the authors discuss the various types of specifications used in government contracts, and their relative merits and demerits. Detailed specifications, for example, limit a contractor's discretion, giving the government more control over design and manufacturing processes, while functional specifications merely direct a contractor to achieve a certain result, leaving it to him to determine the manner of doing so.

*The opinions and conclusions presented in this article are those of the authors and do not necessarily represent the views of The Judge Advocate General's School, the Department of the Army, or any other governmental agency.

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Use of detailed specifications has been attacked in recent years. It is argued by some that such specifications prevent contractors from using the latest technology, or from substituting commercially available products for specified ones. The government may in such cases spend more than necessary for its goods and services. Functional specifications, it is said, can avoid these problems.

The authors conclude that problems encountered with detailed specifications are often based upon a lack of understanding of the purposes of such specifications. In their proper place, such as weapons manufacture, detailed specifications are more desirable than functional ones. The reverse is likely to be true for procurement of typewriters or automobiles.

The authors recommend that clearer guidance on selection of specifications be made available to government contracting personnel, and that where appropriate discretion to make such selection be given them as well.

I. INTRODUCTION

[T]ake a three-year old buck goat and tie him up within doors for three days without food. On the fourth day give him fern to eat and nothing else. When he shall have eaten this for two days, on the night following enclose him in a cask perforated at the bottom under which holes place another sound vessel in which thou wilt collect his urine. Having in this manner for two or three nights sufficiently collected this, turn out the buck and temper thine instruments in this urine. Iron instruments are also tempered in the urine of a young red-haired boy harder than in simple water.'

Although this rather detailed instruction for tempering iron, which was formulated in 1000 **A.D.** by a medieval Benedictine monk, is not widely called for in steel producing circles today, it illustrates the fact that man has made efforts for many centuries to describe methods for accomplishing tasks, manufacturing products, or rendering services.

¹ James W. Flanagan, The Function of Specifications (1969) (technical report).

Any reasonable transaction between a buyer and seller requires the buyer to describe his needs in a sufficiently precise manner to enable the seller to furnish the required item or service. Such descriptions many be very brief, such as, "I need a loaf of rye bread", or they may be very complex, such as a government specification of 40,000 words to describe a computer package. In either instance one requirement is constant—the description must be sufficiently complete and accurate to permit the seller to respond adequately. A good expression of this requirement is found in the Report of the Commission on Government Procurement.

Effective acquisition requires . . . from the outset . . . that the full context of the user's need be clearly understood. The absence of such understanding increases the total cost of procurement and inhibits the ability of the user to perform **effectively**.²

A well-drafted specification is an invaluable tool in any acquisition.

Specifications are a part of almost every buy-sell operation . . . [Specifications permit] the buyer [to] refer to [them] to establish what he expects to receive and the basis on which he will accept the product. The seller can refer to specifications with each order, negating the need to write new and elaborate descriptive supporting documents each time he makes a delivery. The 'specification'thus defines the responsibilities of both buyer and seller.'

In recent years the use of such specifications has come under severe criticism and numerous proposals to eliminate or limit their use have been made. This paper will examine the current law related to the use of detailed specifications. Additionally, it will analyze two major proposals for change and suggest alternative courses of action.

11. DEFINITIONS, SPECIFICATION TYPES AND BASIC CONCEPTS

The vast majority [of individuals] would gain as much fromwiser

² 3 Report of the Commission on Government Procurement 15 (1972).

³ National Academy of Sciences, Report on Materials and Process Specifications and Standards 13 (1977) [hereinafter referred to as the National Academy Report].

spending as from increased earning. Important as the art of spending is, we have developed less skill in its practice than in the practice of making money . . . To spend money is easy, to spend it well is hard.⁴

The importance of specifications in the contracting process cannot be overemphasized because they are one of the means used to insure wise expenditure of public funds.

The specification may be called the basis for [acquisition] for it controls the spending of money. It is a technical annex to the contract and gives the contracting officer and the contractor the necessary requirements, quality assurance provisions, and preparation for delivery requirements to enter into a contract. Once the contract is in effect the specification becomes a legal and binding element of that **agreement.**⁵

Everyone connected with the acquisition process should understand what specifications are and how they are used.

The definition of specification varies in different contexts. To one person it may signify delivery requirements, to another the term may relate to a description of an item or service and yet a third might think of the term **as** relating to models or samples. The Commission on Government Procurement in **1973** defined specifications **as** a description of

essential technical requirements for materials, products, or services. They specify the minimum requirements for quality and construction of materials and equipment necessary to an acceptable **product.**⁶

The Federal Procurement Regulation describes specification as

a clear and accurate description of the technical requirements for a material, product, or service, including the procedure by

⁴ Mitchell, The Backward Art of Spending Money, Amer. Econ. Rev. (June 1912).

⁵ U.S. Army Logistics Management Center, *Document on Specification Waiting*. The Army Logistics Management Center is located at Fort Lee, Virginia.

^{6 3} Report of the Commission on Government Procurement 18 (1973).

which it will be determined that the requirements have been met. Specifications for items or materials contain also preservation, packaging, packing, and marking requirements.'

Other definitions of specifications abound. However, they are essentially the same.

In federal contracting there are two broad categories of specifications: (a) standard specifications used by many agencies for similar requirements and (b) specifications prepared by a particular activity or user to meet a need not covered in a standard specification. The ffit category of specifications is made up of very precise documents that **are** highly coordinated before issuance. The second category, locally prepared specifications, may amount to only a short purchase description^s of the item or service to be purchased.

Standard or prepared specifications are further broken down into four distinct categories or types: (a) federal specifications, (b) **interim** federal specifications, (c) military specifications, and (d) departmental specifications.

A federal specification is one which covers "those materials, products, or services, used by two or more Federal agencies (at least one of which is a civil agency), or new items of potential general application, promulgated by the General Services Administration and mandatory for use by all executive agencies.'*

⁷ Federal Procurement Regulation § 1–1.305, 41 C.F.R. § 1–1.305(1978), 30 Fed. Reg. 16,110 (1966) [hereinafter cited as FPR].

⁸ A purchase description has been described as a description of an item or service that accurately reflects the needs of the government while avoiding unduly restrictive requirements which tend to limit competition without satisfying a real need. Hearings on the Federal Acquisition Act of 1977 Before the Subcomm. on Federal Spending Practices and Open Government of the Comm. on Governmental Affairs, United States Senate, 95th Cong., 1st Sess. 105 (1977). The Federal Property Management Temporary Reg. E-59, 40 Fed. Reg. 12031, March 5, 1979, defines a purchase description as "(a) simplified purchase document which covers products or services by reference to brand names . . ., brand names or equal with sufficientsalient characteristics to permit a variety of distinct products to qualify for award, or by use of a complete functional description utilizing only those minimum performance requirements necessary to ensure that a satisfactory quality level is obtained."

⁹ FPR § 1-1.305(a).

An interim federal specification is defined **as** a "potential Federal specification issued in interim form for optional use by **agencies."** Such specifications include interim changes to existing federal specifications. They provide a means of testing a proposed specification or specification change while preventing defects and increasing accuracy before the specification is made mandatory for use.

A military specification is one that is "issued by the Department of Defense, used solely or predominantly by and mandatory on military activities."¹¹

A departmental specification is the civilian agency counterpart of the military specification. A departmental specification is a "specification developed and prepared by, and of interest primarily to a particular Federal civil agency, but which may be of use in procurement by other Federal agencies." ¹²

The definitions make it clear that both federal specifications and military specifications are generally mandatory for use. ¹⁸ If one exists for an item or service needed by an activity, it must be used. Exceptions do exist, however. Federal specifications need not be used if:

- (1)The purchase is required under a public exigency and a delay would be involved in using the applicable specification to obtain agency requirements;¹⁴
- (2) The total amount of the purchase does not exceed \$10,000;15
- (3) The purchase involves items of construction for new processes, or items for experiment, test, or research and develop-

¹⁰ FPR § 1-1.305(b).

¹¹ FPR § 1-1.305(c).

¹² FPR § 1-1.305(d).

¹⁸ Military specifications are mandatory only for military activities. The General Services Administration is authorized by **40** U.S.C. § 487(a) and (b) to "prescribe . . . standard purchase specifications" mandatory for use by federal agencies.

¹⁴ FPR § 1-1.305-2(a).

¹⁵ FPR § 1-1.305-2(b).

ment, until such time as specifications covering them are issued

- (4) The purchase involves spare parts, components or materials required for repair or maintenance of existing equipment, or for similar items required for maintenance or operation of existing facilities or installations;¹⁷
- (5) The items are purchased in foreign markets for use of overseas activities of agencies;¹⁸
- (6) An Interim Federal specification is used by an agency in lieu of the Federal specification;¹⁹
- (7) Where otherwise authorized by law.²⁰

Additionally, the Defense Acquisition Regulation (DAR)²¹ provides that federal specifications do not have to be used for:

- (1) purchase of items authorized for resale except military clothing, and
- (2) purchases for construction when nationally-recognized in-

Federal and Military specifications and adopted industry documents to the extent that they are applicable to the item or service required, shall be used for: (i) purchase incident to research and development; (ii) purchase of items for test or evaluation; and (iii) purchase of laboratory test equipment for use by Government laboratories . . .

Defense Acquisition Regulation § 1–202(c) (1976 ed.) [hereinafter cited as DAR].

¹⁶ FPR § 1–1,305–2(e). This exception seems somewhat contradictory. How can federal specifications be waived for use if they don't exist in the first place? Federal specifications are mandatory for use only if one exists. Nonetheless, in relation to the items covered by the "exception," the Defense Acquisition Regulation provides:

¹⁷ FPR § 1–1.305–2(d).

¹⁸ FPR § 1-1.305-2(e).

¹⁹ FPR § 1–1.305–2(f).

²⁰ FPR § 1–1.305–2(g).

²¹ Until 1978, the Defense Acquisition Regulation was called the Armed Services Procurement Regulation.

dustry and technical source specifications and standards are available."

DAR also provides that a federal specification need not be used when "determined by the Department of Defense to be inapplicable."²³

In addition to the above, there are other means of classifying specifications. Often they are categorized as either "design" or "performance" specifications.²⁴ Design specifications establish "precise measurements, tolerances, materials, in process and finished product tests, quality control, inspection requirements, and other specific information."" This type has the greatest degree of precision of any specification used in federal contracting. Conversely, performance specifications relate only operational characteristics for the desired item.²⁶ They do not include design, measurement or other specific details. Compliance by the contractor with the performance specification is judged solely by conformance of the item offered with the performance requirements stated. Does the aircraft fly so high, go so fast, and carry so much?

A design specification contains a complete description of the equipment in terms of its physical characteristics requiring the contractor to manufacture the specific item to meet the description in the specification. . . . The Government uses such specifications to obtain standardization, interchangeability of spare parts and complete uniformity of product

Riemer, Handbook & Government Contract Administration 710 (1968).

²² DAR § 1-1202(b)(i) and (ii).

²³ DAR § 1–1202(a)(i).

In broad terms, specifications can be defined as either performance specifications or design (detailed) specifications. A performance specification states the requirements in terms of operation or function of the equipment . . . Such specifications are used extensively in development contracts and also used in manufacturing contracts where competition is desired between different contractors' equipment which may vary in detail but which all meet the general performance requirements of the Government.

²⁵ Monitor Plastic Co., ASBCA No.14447, 72–2 BCA 9629 (1972)

²⁶ Id. In Work Statements and Specifications, a definitional document prepared by the U.S. Army Logistics Management Center, Fort Lee, Virginia, performance specifications are defined as "the complete performance requirements of the product for the intended use, and . . . the necessary interface and interchangeability characteristics. It covers form, fit and function."

Specifications may be classified, also, as system, development or product specifications. A system specification provides "the technical and mission requirements for a system as an entity, allocates requirements to functional areas (or configuration items), and defines the interfaces between or among the functional areas."²⁷ Development specifications apply to items below the system level and state performance, interface and other technical requirements in sufficient detail to permit design engineering for service use, and evaluation.²⁸ A product specification is one below the systems level which states item characteristics in a manner suitable for acquisition, production and acceptance.²⁹

Regardless of the method of classification, certain similarities exist with regard to **all** specifications. Perhaps the most important similarity is the function of specifications **as** a means **of** controlling the government contract relationship. The specification establishes rules, provides methods, and outlines the course of performance that is to be followed during the life of the contract. That such control is essential during the life of the contract. That such control is essential during a contract, and particularly a government contract, was well stated by Senator Paul H. Douglas in 1951:

In a free market, prices are fixed impersonally by the forces of supply and demand, and, therefore, adjustments in quantities procured, and hence in unit prices, are made according to the schedules of costs and profits. There is little room for corruption or undue favoritism here. In contrast, when the government makes the decisions about prices, quantities produced, and what firms may enter an industry, the door is wide open for the exercise of favoritism and corruption.³⁰ These matters are life

²⁷ Id.

²⁸ Id.

²⁹ Id

⁸⁰ In this respect see the Hearings on DOD Industry Relations: Conflict of Interest and Standards of Conduct Before the Joint Comm. on Defense Production, 95th Cong., 2d Sess., Feb. 2, 1976, wherein massive efforts by industry to influence government buying practices are discussed. At page 2 of that hearing Senator Douglas' remarks are strongly seconded by a statement of Senator Proxmire. He states:

[[]W]e are all aware that the exchange of hospitality and similar benefits is a regular part of the American business scene. No one, I believe, has

or death to the businessman or industrialist. **A** hostile government may put him out of business, while a friendly administration may give him great profits.³¹

Table 1, below, demonstrates how a specification seeks to "control" the relationship.

The specification sets the parameters within which each party to the transaction must work. Such constraints are necessary because of the great power that the government commands when it enters the market place. In addition to the restraints imposed by the specification itself, there are many rules that relate to the proper use of specifications by the government when acquiring goods and services. To insure that all potential sellers are provided a fair and equal opportunity to compete, federal officials must know and follow these rules.

111. CURRENT LAW ON THE USE OF SPECIFICATIONS

A. CONTRACT FORMATION

The Armed Services Procurement Act provides:

(b) The specifications in invitations for bids (formally advertised contracts) must contain the necessary language and attachments, to permit full and free competition. If the specifications in an invitation for bids do not carry the necessary descriptive language and attachments, or if those attachments are not ac-

suggested that this should be changed. Yet in the commercial sector there are strong disincentives, strong disciplines, to awarding contracts on the basis of good will alone. Such may not be the case with Government contracts. Here the only protection results from clear-cut contracting regulations and statutes and hard nosed enforcement of them.

³¹ James W. Flanagan, *Function of Specifications* (1969) (technical report) (quoting remarks of Senator Paul H. Douglas during the Godkin Lectures at Harvard in 1951).

TABLE 1. OBJECTIVES IN WRITING SPECIFICATIONS FOR MATERIALS, FINISHES AND PROCESSES³²

Objective	Explanation
1. Definition	1. Define items precisely, and provide uniform definitions of specific items.
2. Improvement	2. Target needed improvements to items or practices.
3. Cost-effectiveness	3. Make systems more cost-effective by standardizing items and practices for multiple use, through deletion of superfluous requirements.
4. Requirement	4. Comply with contract requirements for design, manufacturing, and quality assurance at lowest cost.
5. Guides	5. Provide guidelines and instructions to engineers, shop personnel, inspectors, purchasing agents and others.
6. Inspection	6. Provide inspection criteria for precise acceptance or rejection of items and practices.
7. Reliability	7. Insure consistent quality products that are neither over-specified nor under-specified.
8. Records	8. Provide uniform technical records of items that have been purchased or manufactured.
9. Forum	9. Provide a forum for a unified and cost-effective consensus of opinion during the development of documents for multi-usage items.
10. Safety	10. Promote safety and focus on product liability which have an economic impact on the product.

⁸² National Academy Report, supra note 3.

cessible to all competent and reliable bidders, the invitation is invalid and no award may be made.³³

The Defense Acquisition Regulation amplifies this requirement at 1–1201(a) by requiring "(p)lans, drawings, specifications or purchase descriptions for procurements (to)...describe the supplies and services in a manner which will encourage maximum competition.""

Responsibility for the specifications used in a particular purchase rests with the agency making the buy. The Comptroller General has consistently ruled that the contracting agency is responsible for "drafting proper specifications reflective of (the) needs" of the government. The specifications can be developed based on actual experience of an agency related to the need to be filled, engineering analysis, logic, or similar rational bases. Further, when such rational bases are used to formulate specifications, the General Accounting Office (GAO)³⁷ will not intervene unless an aggrieved party can show "by clear and convincing evidence that a contract awarded on the basis of such specifications would by unduly restricting competition be a violation of law." In drafting specifications to meet this test, some general guidelines are available to federal agencies.

First, the specifications, like the rest of the solicitation, must be clear and complete. They must be constructed so that all bidders may under-

^{% 10} U.S.C. § 2305(b) (1976).No similar provision is found in the Federal Property and Administrative Services Act.

³⁴ DAR § 1-1201(a).

⁸⁵ Comp. Gen. B-191116, September 29, 1978, 78-2 CPD 247; Comp. Gen. B-185582, Jan. 12, 1977, 77-1 CPD 19;55 Comp. Gen. 1362, 76-2 CPD 181 (1976). ("CPD" is the Comptroller General's Procurement Decisions, published by Federal Publications, Inc., Washington, D.C. Hyphenated numbers refer to volumes, and ending numbers, to paragraphs.)

Of course, the agency or contracting activity discharges this responsibility when it uses a required Federal **or** Military specification. However, even when such specifications are used, the contracting activity has a duty to "tailor" the specification to meet the actual requirement.

³⁶ Comp. Gen. **B-185712**, August **10**, **1976**, **76–2** CPD **144**. See also, Comp. Gen. **B-191116**, September **29**, **1978**, **78–2** CPD **247**.

⁸⁷ The terms "Comptroller General" and "General Accounting Office" are used interchangeably in this article.

³⁸ Comp. Gen. B-189390, B-189937, January 27, 1978, 78-1 CPD 70.

stand and know in advance what it is that the government requires them to furnish. As stated by the GAO, unless invitations for bids, including the specifications, are clear, complete and unambiguous as to all essential requirements, "... there can be no accurate and indisputable basis on which to determine which bid offers compliance with contract conditions and fulfillment of all project needs at the lowest price."³⁹

Many times this easily stated rule is difficult to apply. Contracting people must be continually alert to possible ambiguities or lack of clarity in contract specifications. Otherwise, seemingly precise specifications containing defects can slip past those reviewing them. For example, suppose a requirement for an alarm system for a large building. To effectively alarm this building so that police could respond rapidly to an unauthorized entry, "zones" are required. That is, small segments of the building would be selected and an alarm system installed therein. Each alarm would be connected to a master control panel. Thus, when forced entry sets off an alarm, a light would appear on the panel and establish the exact area of entry. Suppose further, that the invitation for bids (IFB) to fill this requirement included the drawing set forth in Illustration 1, below.

If the specifications contained no further information on the number of "zones" required than that shown in Illustration 1, they would be defective. What is the meaning of "minimum acceptable zones"? Does this refer to the size of each zone? If so, why not simply state that the space must be zoned in strict accordance with the drawing? On the other hand, "minimum acceptable zones" may be a bottom limit on the number of zones and allow the bidders to vary the size of zones by increasing the number, or by enlarging the size of some while reducing the size of others. Whatever the meaning, it is clear that the proposed specification would not convey to potential bidders the government's requirements in clear and complete terms.

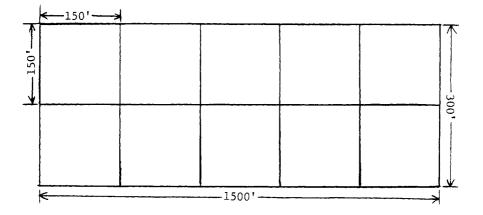
Another closely related requirement for specifications is that they must be definite. Specifications cannot permit government requirements to be varied to an undefined extent. For instance, the following clause was required to be struck from an IFB:

Minor deviations from this specification may be allowed where bidder has indicated in detail the manner in which his offered

^{39 48} Comp. Gen. 326, 328 (1968).

ILLUSTRATION 1. DRAWING INCLUDED IN HYPOTHETICAL INVITATION FOR BIDS

Minimum acceptable zones are reflected on the schematic below:



units differ from this specification. The contracting officer's decision will be final as to acceptability.⁴⁰

Removal of the clause was necessary, according to the Comptroller General, because "clauses allowing deviations have no place in formally advertised procurements since they do not generally permit free and equal competitive bidding."⁴¹

The basis for the Comptroller General requirement is well founded. If the government does not state its needs in a definite manner, bidders will be unable to respond intelligently and contract award will become a very inexact and subjective process. Costly and time consuming solicitations will be required to be repeated because bid responses will vary greatly.

An example of this is found in a **1958** General Accounting Office opinion issued in response to a letter from the Maritime Commission requesting guidance on the award of a contract for life **boats**. The proposed contract resulted from a formally advertised solicitation. The solicitation resulted in twenty-one bids ranging in price from **\$14,502** to **\$80,000** per ship set. The Maritime Commission proposed to make award to the fourth low bidder. After examining the facts, the GAO made it clear that no award should be made. This conclusion was based in large part on article A–2 of the general specifications:

2. The intent of the plans and specifications is to define the general scope and show the general features and arrangement and not necessarily the details.⁴³

Such language, ruled the GAO, was impermissible because it did not provide a basis for "exact comparison of bids." The GAO continued by stating that "specifications must define the product to be contracted for in terms sufficiently definite to assure that every bid made in compliance therewith will be for substantially the same **product.**"

The requirement for definite specifications also precludes a bidder from

^{40 52} Comp. Gen. 815, 817 (1973).

⁴¹ *Id.* See *also*, 51 Comp. Gen. 518 (1972); 44 Comp. Gen. 529 (1965); 43 Comp. Gen. 544 (1964).

⁴² 37 Comp. Gen. 479 (1958).

⁴⁸ Id. at 480.

⁴⁴ Id. at 481.

drafting his own specification in response to a solicitation. In 1964 the GAO addressed just such a situation wherein an invitation for bids issued by the Park Service for a one-motor grader permitted bidders to submit bids on an item that did not conform to the specifications, provided the specifications for the nonconforming product were supplied with the respective bids.

The GAO required the Park Service to readvertise for the grader because the original solicitation permitted "bidders to draft their own plans and specifications from which (the contracting officer) may select the article considered most **preferable**." This procedure, concluded the GAO, "does not comply with the requirements of competitive bidding."

In addition to the foregoing requirements, specifications must state only the actual needs of the government without being *unduly* restrictive. Note the use of the term "unduly restrictive". Any specification by its very nature is restrictive. As stated in the Report of the Task Force on Specifications and Standards of the Department of Defense:

To be effective, a specification must be an essentially arbitrary selection of one or more proven ways to accomplish a goal from a much larger sub-set of possible approaches.⁴⁷

The goal, **of** course, is to select the best way to obtain the required goods or services without becoming so arbitrary that the specifications unnecessarily limit competition.

The concept of drafting specifications that describe the actual needs of the government without unduly restricting competition derives from section **2305** of Title 10, United States Code. GAO construction of section **2305**(b) of that title⁴⁸ is as follows:

The basic principle underlying Federal procurement is that full and free competition is to be maximized to the fullest extent possible, thereby providing qualified sources an equal oppor-

^{45 43} Comp. Gen. 544, 545 (1964).

⁴⁶ Id.

⁴⁷ Report of the Department of Defense Task Force on Sepcifications and Standards, at 1-4 (Apr. 1977).

^{48 10} U.S.C. § 2305(b) (1976). This provision is quoted in the text above note 33, supra.

tunity to compete for Government contracts. See, 10 US Code 2305.... Our office has taken the position that ... various solicitation provisions, while obviously restrictive of competition in the broadest sense, need not be regarded as unduly restrictive when they represent the actual needs of the procuring agency.⁴⁹

Using this approach, the GAO has ruled that the following are not, per se, unduly restrictive of competition: (1) use of design specifications;⁵⁰ (2) a requirement that bidders demonstrate product experience;⁵¹ (3) requirements limiting bidders to particular geographical areas;⁵² or (4) a requirement to use a patented item.⁵⁸

The key is not whether a specification contains restrictions, but that the restrictions contained are such that they describe the government's actual needs. The GAO "will not question an agency's determination of what its minimum needs are, or what will satisfy those needs, unless there is a clear showing that the determination has no reasonable basis." Any specification that "dictates the manner in which the Government's requirement be fulfilled beyond stating the Government's minimum need, is restrictive of competition." 55

Actual or minimum needs can be described **as an** item or service that **fully** satisfies the government's requirements. A specification that sets out the government's actual needs will be written in terms which "will permit the broadest field of competition within the minimum needs *required*, not the maximum *desired*." ⁵⁶ (emphasis added)

⁴⁹ 53 Comp. Gen. 102, 103 (1973); see also, 52 Comp. Gen. 640 (1973); Comp. Gen. B-193693, April 3, 1979, 79-1 CPD 232, wherein specifications for lease of text editing equipment were struck down because the contracting agency could not demonstrate any reasonable basis related to the government's critical needs to support certain requirements in the specification. The decision points out that when limitations in specifications are called into question as unduly restrictive the government must have more than "unsupported conclusions" to justify specification limitations.

⁵⁰ Comp. Gen. B-189563, February 1, 1978, 78-1 CPD 89.

⁵¹ 48 Comp. Gen. 291 (1968).

⁵² Comp. Gen. B-157053, August 2, 1965.

⁵⁸ Comp. Gen. **B-169883**, April 9, **1971** (unpublished).

⁵⁴ Comp. Gen. B-193501, March 27, 1979, 79-1 CPD 204 at 2.

⁵⁵ Comp. Gen. B-181102, B-180720, August 15, 1974, 74-2 CPD 101.

⁵⁶ 32 Comp. Gen. 384, 387 (1953).

In applying the rule each case will turn on its own facts.⁵⁷ This can create anomalies such as that described by Professors Nash and Cibinic of the George Washington National Law Center:

The minimum needs rationale . . . is used by the Comptroller General when he has found that there is insufficient justification for the inclusion of the restrictive features or the procuring agencies have abused their discretion by overstating their needs in order to limit competition. One difficulty encountered by the Comptroller General in this area is that a restrictive feature may be justified on the basis of one Government need even though it is not necessary to satisfy another need. ⁵⁸ (emphasis added)

Notwithstanding the need to look at each case on its own facts, some general rules have developed related to drafting the statement of the government's minimum needs. Although a single limiting feature in a specification might not render it unduly restrictive of competition, an unnecessary cumulation of requirements may render that same specification unreasonable. ⁵⁸ A specification will not be upheld by the GAO if it was adopted for the purpose of unduly restricting competition. ⁶⁰

One other area deserves particular mention. Generally, specifications cannot be drafted around the product of one supplier. Ordinarily, such specifications are found to be unduly restrictive of competition because they provide a manufacturer an undue competitive advantage over other firms. For example, in 1973 the GAO upheld the Army in a protest against the award of a contract for certain sales training programs. ⁶¹ The specifications used to describe the training followed an earlier presen-

⁵⁷ See, e.g., Comp. Gen. B–193153, Mar. 7, 1979, 79–1 CPD 160, where specifications with geographical restrictions were held to be unduly restrictive and not a correct expression of agency minimum needs. *Compare*, 54 Comp. Gen. 29 (1974) where a similar geographic limitation was upheld.

⁵⁸ 1Nash and Cibinic, Federal Procurement Law 237 (3rd ed. 1977), citing Comp. Gen. B-179704, 74-1 CPD 191; Comp. Gen. B-181116, November 7, 1974, 74-2 CPD 243. See Major Hopkins' review of Federal Procurement Law at page 151 of the present volume.

⁵⁹ Comp. Gen. B-185605, July 1, 1976, 76-2 CPD 1.

⁶⁰ Schnitzer, Government Contract Bidding 180 (1976). See also, Comp. Gen. B-160134, 14 November 1966; but see, 39 Comp. Gen. 563 (1960).

⁶¹ Comp. Gen. B–178474, September 11, 1973 (unpublished).

tation by a particular firm. The Army decided to cancel the solicitation and resolicit the requirement because the specifications were restrictive and not otherwise adequate for purposes of formal advertising. A similar result was reached in a 1959 GAO ruling wherein the specifications for the purchase of snowplows were found to be descriptive of a single manufacturer's product. 62

The General Accounting Office will strike down a specification even if it is not taken verbatim from a manufacturer's product so long as the government specification was "drawn from known characteristics and features" of that manufacturer's item. 63 However, this result will not follow if the contracting agency can establish that the features incorporated into the government specification were essential to fulfill the government's minimum needs. 64

Some differences in concepts related to specifications and their use exist between negotiated and formally advertized acquisitions. In fact, one basis for negotiating a contract rather than using the formally advertized method of contracting is that adequate specifications cannot be drafted. 65 More often than not performance specifications rather than design specifications are used in negotiated contracts. Just the reverse is true in formal advertising. More flexibility is available during negotiation than during formal advertising. Bids that very from the essential requirements of the specifications in formal advertising must be rejected as nonresponsive. 66 This is not the case in negotiated contracts. 67 Not the least consideration in this respect is the fact that negotiation permits discussion between the government and the various offerors. 68 Such discussions may include any aspect of an offeror's proposal including the technical portion. This can vary the product ultimately accepted by the government at contract execution. No such freedom is available in formal advertising.

^{62 39} Comp. Gen. 101 (1959).

^{63 32} Comp. Gen. 384, 386 (1953).

⁶⁴ See, 53 Comp. Gen. 478 (1974); Nash and Cibinic, supra note 58, at 237.

⁶⁵ 10 U.S.C. § 2304(a)(10) (1976); DAR § 3–210.2(xiii). See also Comp. Gen. B–190203, March 20, 1978, 78–1 CPD 215.

⁶⁶ See, e.g., Comp. Gen. B-191980, October 30, 1978, 78-2 CPD 306.

⁶⁷ See, e.g., Comp. Gen. B-192025, Sep. 5, 1978, 78-2 CPD 171.

⁶⁸ In fact discussions are required unless certain exceptions are met. 10 U.S.C. § 2304(g) (1976).

B. CONTRACT PERFORMANCE

After a contract is executed, questions related to contract specifications do not disappear. Many times questions arise as to the interpretation of specifications or possible specification defects that prevent performance or increase the cost thereof. Resolution of such problems often has a significant effect on contract costs.

Where the government furnishes specifications to a contractor and requires the contractor to follow them, there is an implied warranty by the government that the specifications supplied are adequate for the contractor to properly complete performance. ⁶⁹ In other words, the government warrants that if the specifications are followed, a satisfactory product will result. ⁷⁰ The warranty can be implied from the terms of the contract or the actions of the government.'' Normally, the warranty applies to design specifications, ⁷² but it may attach when performance specifications are used if the performance specifications contain design details. ⁷³ The government can protect itself from potential liability as the result of faulty performance specifications by including an effective disclaimer. ⁷⁴

The fact that the government furnishes design specifications and warrants those specifications does not protect the contractor from liability

⁶⁹ Steel Products Engineering Co. v. The United States, 71 Ct. C1. 457 (1931). *See also*, United States v. Spearin, 248 U.S. 132 (1918). The warranty includes time as well as technique. In other words, the government warrants that its specifications are adequate to allow timely and efficient completion of the contract. *See*, Ordnance Research, Inc., ASBCA No. 17167. 76–1 BCA 11,740.

⁷⁰ United States v. Spearin, 248 U.S. 132 (1918). See also, Union Electric and Manufacturing Co., Inc., ASBCA 3811, April 1.5, 195.5, 58–2 BCA 1966.

⁷¹ United Telecommunications, Inc., NASA BCA 771–13, October 31, 1972. 72–2 BCA 9754.

⁷² See generally, Monitor Plastics Co., ASBCA 14447, supra, note 25.

⁷³ General Dynamics Corp., ASBCA 13001, May 19, 1972, 77–2 BCA 9478; Bethlehem Steel Corp, ASBCA 13341, November 19. 1971, 72–1 BCA 9186. The concept that the United States warrants design specifications is often difficult to apply because many times contract requirements are necessarily a mixture of performance and design requirements.

⁷⁴ Bethlehem Steel Corp, ASBCA No. 13341, Nov. 1971, 71–2 BCA 9186: see also, Viewlex Inc., ASBCA No. 12584, Jan. 21, 1971, 71–1 BCA 8692.

in all instances. A contractor has no basis to complain unless the specifications are misleading, impossible to perform or otherwise **defective.**⁷⁶ The contractor must use proper manufacturing techniques in performing the **contract.**⁷⁶ This means that the government has the right to expect a contractor to meet the standard of a reasonably intelligent and experienced contractor in performing the **contract.**⁷⁷ In meeting that standard the contractor must develop his own manufacturing processess and techniques. The government is under no duty to assume that **function.**⁷⁸

These rules are well demonstrated by the case of Sancolmar Industries, Inc., 79 decided by the Armed Services Board of Contract Appeals in 1973. The contract in dispute was for painting certain equipment. The contractor, who was unable to perform, claimed that the failure was caused by defective specifications that failed to set out the sequential steps needed to coat and paint certain assemblies.

In denying the contractor's claim, the Board held that the government was under no duty to provide sequential painting steps. Instead, ruled the Board, it was the contractor's obligation in the ordinary performance of the contract "to devise finishing and painting procedures and techniques to apply the finish and paint required by the specifications and drawings."

The scope of the warranty will vary with the facts of each case. When the item to be furnished is to be fabricated using mass production techniques, the government impliedly warrants that the specifications will be suitable for mass production methods." When government specifications provide tolerances to be used in the manufacturing process, the contractor is entitled to assume that a satisfactory product will result

⁷⁵ See, Conco Engineering Works, Inc., ASBCA No. 12997 and 13655, January 19, 1971, 71-1 BCA 8697.

⁷⁶ See, generally, Baltimore Contractors, Inc., GSBCA Nos. 3066, 3068, October 30, 1974, 74–2 BCA 10908.

⁷⁷ J. B. Williams Co., Inc. v. United States, 196 Ct. C1. 491 (1971).

⁷⁸ Sancolmar Indus., Inc., ASBCA No. 15469, Oct. 25, 1973, 73–1 BCA 10318. ⁷⁹ *Id.*

⁸⁰ Id.

⁸¹ Switlik Parachute Co., ASBCA No. 15560, January 4, 1973, 73-1 BCA 9865. See also, Whittaker Corp., Power Sources Div., ASBCA Nos. 14191, 14722, 14740, 15005, 15628, March 30, 1979, 79-1 BCA 13,805.

even if manufactured to the extremes of those tolerances. 82 If government specifications permit alternative methods of performance, the government warrants that either method will produce a satisfactory result. 83

Although the government is said to warrant the accuracy of design specifications, such specifications need not be absolutely accurate, In *John McShain*, *Inc. v. The United States*, ⁸⁴ the plaintiff sued alleging breach of contract by the United States in connection with a construction contract for an extension of the State Department Building. McShain's claim was based upon defective specifications and the government's implied warranty of accuracy. Finding for the plaintiff, the court stated:

It is a well established rule of law that when the Government issues detailed drawings and specifications for a contractor to follow, there is an implied warranty that conformance with such drawings and specifications will result in satisfactory completion of the work. [citations omitted] Although Government furnished specifications need not be perfect, they must be adequate for the task or "reasonably accurate." [emphasis added]

A specification may be defective for numerous reasons. It may be ambiguous, ⁸⁶ faulty," impossible of performance, ⁸⁸ inadequate, ⁸⁹ indefinite, ⁹⁰ inconsistent, ⁹¹ unsuitable for use, ⁹² erroneous, ⁹³ or vague. ⁹⁴ The common thread of these defects is that the contractor is unable to

⁸² Ithaca Gun Co., Inc. v. The United States, 176 Ct. C1. 437, 443 (1966). See also, REDM, ASBCA Nos. 10213, 10308, 10739, February 14, 1966, 66-1 BCA 5376, reconsideration, 66-1 BCA 5634.

⁸³ Detweiler Bros., Inc., ASBCA No. 17897, Sep. 19, 1974, 74-2 BCA 10858.

⁸⁴ John McShain, Inc. v. The United States, 188 Ct. C1. 830 (1969).

⁸⁵ Id., at 833.

⁸⁶ See, e.g., States Roofing & Metal Co., Inc., ASBCA No. 21860, April 10, 1978, 78–1 BCA 13161.

⁸⁷ See, e.g., Hicks Corp., ASBCA No. 10760, March 18, 1966, 6 6 1 BCA 5469; Delphi Indus., AGBCA No. 76160, March 6, 1978, 78–1 BCA 13058.

⁸⁸ See, e.g., American Hydrotherm Corp., ASBCA No. 5678, April 18, 1960, 60–1 BCA 2617.

⁸⁹ North American Phillips Co. et al v. United States, 175 Ct. Cl. 71 (1966).

⁹⁰ Id

⁹¹ J. W. Bateson Co. Inc., VACAB 712, May 31, 1968, 68-1 BCA 7055.

⁹² Federal Electric Corp., ASBCA 13030, June 26, 1969, 69-2 BCA 7792.

⁹⁸ F. J. Henry Inc., ASBCA 3106, August 29, 1956, 56-2 BCA 1048.

⁹⁴ J. W. Bateson Co., Inc., FAACAP 6625, March 29, 1966, 66-1 BCA 5479.

perform the required work because of some failure in government furnished specifications. These failures entitle the contractor to an equitable adjustment that will include the costs of attempting to perform the work under the defective specifications as well as the cost of performing any work under changes to those specifications to correct the defect. However, for the contractor to recover, the specifications must be in fact defective rather than just difficult to perform. However,

In addition to the above defects, specifications may be rendered in-adequate by failure on the part of the government to disclose information needed by a contractor to perform. The premier case in this area is *Helene Curtis Industries v.* **The** *United States.* 97 Helene Curtis entered acontract with the Army to supply a disinfectant which was to be a "uniformly mixed powder or granular material." The disinfectant had been developed by the government resulting in the knowledge that grinding would probably be necessary to produce an acceptable product. This knowledge was not made available to Helene Curtis. Accordingly, Helene Curtis incurred significant costs attempting to perform the government specifications before discovering the need for grinding. Holding for Helene Curtis, the court addressed the requirement for the government to reveal its superior knowledge. First, the court discussed situations where the government was under no duty to provide information.

The question remains whether this conduct [failure to disclose information] on the part of the Government amounted to a breach of contract. The [government] insists not. It says that unforeseen difficulties do not entitle a contractor to increased compensation; that the specification in this case was an end-product specification which did not require any particular

⁹⁵ Hol-Gar Manufacturing Corp. v. The United States, 175 Ct. Cl. 518 (1966); see also, J. W. Hurst & Sons Awnings, Inc., ASBCA No. 4167, February 20, 1959, 59–1 BCA 2095, wherein the board stated: "Where... the change is necessitated by defective specifications and drawings, the equitable adjustment to which a contractor is entitled must, if it is to be equitable... include the cost which it incurred in attempting to perform in accordance with the defective specifications and drawings."

⁹⁶ See, e.g., Continental Consol. Corp., ASBCA No. 10376, July 12, 1966, 66–1 BCA 5694; N. Fiorito Co. Inc., ASBCA No. 10037, 10041, February 17, 1966, 66–1 BCA 5381.

⁹⁷ Helene Curtis Industries v. The United States, 160 Ct. Cl. 437 (1963).

method or process of manufacturing the disinfectant and that the government contracted for [Helene Curtis'] technical know-how and manufacturing skills, depending on it to produce the end-product. We can accept these general propositions but they do not decide this concrete case. . . There are many contracts—generally relating to known or standard products, or where the ratio of actual and potential knowledge definitely favors the contractor, or where a contractor can reasonably be expected to seek the facts for himself—in which the Government may be under no duty to volunteer information in its files. 98

However, the court then indicated when the government was under a duty to disclose information.

But as our rulings show, there are other instances in which the [government] is clearly under such an affirmative obligation and cannot remain silent

. . .

Although it is not a fiduciary toward its contractors, the Government—where the balance of knowledge is so clearly on its side—can no more betray a contractor into a ruinous course of action by silence than by the written or spoken word. 99

Naturally, for a contractor to recover costs flowing from the government's failure to disclose vital information, the contractor must have been misled by the nondisclosure. ¹⁰⁰ Additionally a contractor will not be entitled to relief if he is experienced and would ordinarily be charged with knowledge of the type not disclosed by the government.'''

The government's liability for specifications is not absolute. A contractor will not be able to recover for breach of the government's implied warranty of specifications if (1)the defect in the specifications was patent or (2) the government included a clear warning in the solicitation that the specifications could contain defects.

⁹⁸ Id., at **443-44.**

⁹⁹ Id., at 444.

¹⁰⁰ See, e.g., Morrison-Knudsen Co. v. United States, 170 Ct. Cl. 712 (1965).

¹⁰¹ See, e.g., H. N. Bailey & Associates v. The United States, **196** Ct. Cl. **156** (**1971**). For a good summary of the law related to nondisclosure by the government of vital information, see, Nash and Cininic, supra note **58**, at **141–150**.

It is a canon of government contract law that an ambiguous contract, unless the ambiguity is patent or obvious, is to be read against the drafter, generally the government. However, a contractor will be liable for any additional costs of performing a contract when presented with an obvious omission, inconsistency or discrepancy of significance unless the contractor calls the defect to the attention of government personnel. A specification is obviously or patently defective "when a bidder is unable to prepare a bid without resolving doubts about the specification." Under such circumstances, there is an affirmative duty on the part of the contractor to inquire.

The contractor "should call attention to an obvious omission in a specification, and make certain that the omission was deliberate, if he intends to take advantage of it." The purpose of the rule is to enable the government to cure specification defects before contract execution.

The rule that a contractor, before bidding, should attempt to have the government resolve a patent ambiguity in the contract's terms, is a major device of preventive hygiene: it is designed to avoid ... post-award disputes. ... The rule is the counterpart of the canon in government procurement that an ambiguous contract, where the ambiguity is not open or glaring, is read against the Government (if it is the author). 107

The duty to inquire may arise from a specific patent ambiguity or omission, 108 or it may result from reading the contract as a whole. For instance, in *Mallory Construction Company*, 109 the contractor executed a contract for certain electrical work which included a requirement for "patching" roads. When the work was completed, the contractor had not filled a trench 1100 feet long by 2 feet deep. The contractor, argued that a trench of this nature was too large to be the subject of the patching

¹⁰² W. G. Construction Corp., ASBCA No. **22339**, May **31**, **1978**, **78–2** BCA **13272**.

¹⁰³ Beacon Construction Co. v. The United States, 161 Ct. Cl. 1 (1963).

¹⁰⁴ Atoka Plumbing Co. ASBCA No. **12831**, November **14**, **1968**, **68–2** BCA **7382**.

Beacon Construction Co. v. The United States, supra note 103, at 7.
 Ring Construction Co. v. The United States, 142 Ct. Cl. 73134 (1958).

¹⁰⁷ **S.O.G.** of Arkansas v. United States, **212** Ct. Cl. **125**, rehearing, **212** Ct. Cl. **131** (1976).

¹⁰⁸ See, e.g., Santa Fe Engrs., Inc., ASBCA No. **22426**, June **15**, **1978**, Contract Appeals Decisions Reports para. **13,311** (advance sheet).

¹⁰⁹ Mallory Const. Co., ASBCA No. **20890**, August **18**, **1976**, **76–2** BCA **12083**.

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requirement of the contract. In denying the contractor's contention the Armed Services Board of Contract Appeals (ASBCA) stated:

Mallory's interpretation that it could walk away from the job leaving a gaping 1100 foot by **2** foot obstacle in the road was unreasonable. We hold that the drawings and specifications taken as a whole raised a "duty to inquire" whether repaving was a contract obligation.¹¹⁰

The extent of the duty to inquire varies with the facts of each case. A good statement of this proposition is found in *CML Macarr Inc.*, ¹¹¹ wherein the ASBCA stated:

The duty to inquire encompasses a burden to make the Government aware of the discrepancies and if the Government's response does not clarify the matter further inquiry may be called for. 112

However, after sufficient inquiry is made, the burden of dealing with the defective specification shifts to the government. Failure on the part of the government to clarify or otherwise correct the discrepancy will render the government responsible for any reasonable costs incurred above the contract price by the contractor in attempting to perform. 114

The government may protect itself to some extent from contractor claims for defective specifications "by inserting provisions in the contract clearly calling upon possible contractors to be aware of a problem in interpretation to seek an explanation before bidding." For example,

¹¹⁰ Id.

¹¹¹ CML-MACARR, Inc., ASBCA No. 19950, July 29, 1976, 76-2 BCA 12047.

¹¹² Id. Note that the discrepancies must be major before the duty to inquire arises. "[Contractors] are obligated to bring to the Government's attention major discrepancies or errors which they detect in the specifications or drawings, or else fail to do so at their peril. But they are not expected to exercise clairvoyance in spotting hidden ambigulities ..." Blount Bros. Const. Co. v. United States, 171 Ct. Cl. 478, 496 (1965).

¹¹⁸ CML-Macarr Inc., supra note 111.

¹¹⁴ *Id.* See *also*, Laburnum Construction Corp. v. The United States, 163 Ct. Cl. 339 (1963).

¹¹⁵ WPC Enterprises, Inc. v. United States, 163 Ct. Cl. 1, at 7 (1963).

in Coditron Corp., 116 the ASBCA heard an appeal under a contract for electron tube test sets. The government had furnished the contractor with drawings which contained defects that rendered the contractor's performance more difficult. The contract also contained a "Production Drawing Changes" clause that provided in part:

The contractor agrees to thoroughly check the Government drawings . . . Inaccuracies, incompleteness, errors, etc., of the drawings will be resolved by consultation with the [Government] . . . The Government will not be responsible for damages or extra costs resulting from an inadequate check . . . ¹¹⁷

The Board indicated that such clauses could be included in government contracts, but had limited effect.

When a disclaimer or exculpatory clause goes beyond imposing upon the contractor a duty to make a reasonable examination of specifications for obvious errors, the courts and boards of contract appeals more narrowly construe the reach of such clauses. The Court of Claims has held that "broad exculpatory . . . clauses cannot be given their full literal reach, and do not relieve the [government] of liability" for equitable adjustments under specific contract provisions. ¹¹⁹ In essence, the court indicated that general provisions in specifications could not be used to override specific contract clauses. ¹²⁰ However, such exculpatory clauses may provide full protection to the government against claims by contractors for defective specifications when properly drafted. ¹²¹

¹¹⁶ Coditron Corp., ASBCA Nos. **18129**, **19152**, February **27**, **1976**, **76–1** BCA **11818**.

¹¹⁷ Id.

¹¹⁸ Id

¹¹⁹ United Contractors v. The United States, **177** Ct. Cl. **151**, **165** (**1966**).

¹²¹ See, Rixon Electronics, Inc. v. The United States, 210 Ct. Cl. 309 (1976); compare, Thompson Ramo Woolridge, Inc. v. United States, 175 Ct. Cl. 527 (1966).

C. IMPOSSIBILITY OF PERFORMANCE AND DEFECTIVE SPECIFICATIONS

Impossibility of performance is a common law doctrine that has vitality in the field of federal contracts. Conversely, the doctrine that the government warrants its specifications and is responsible for defects therein has no exact counterpart in the common law. The two concepts are often related in federal contracts, however, and the defense of impossibility of performance is seldom available to a contractor absent defective specifications. 128

Impossibility of performance can result from actual impossibility or from commercial impracticability. Actual impossibility means that it was "infact physically impossible to meet the contract requirements," while commercial or practical impossibility means that "even though performance may actually be possible, such performance involves extreme

¹²³ See, e.g., E. L. Cournand Co., ASBCA No. 5678, 60–1 BCA 2617 (1960). This proposition is well demonstrated in Union Electric and Manufacturing Co., Inc., ASBCA No. 3811, October 24, 1958, 58–2 BCA 1966, wherein the contractor who was unable to perform a government contract argued impossibility. The ASBCA found for the contractor, but on the theory of defective specifications and breach by the government of its implied warranty of the specifications.

The only instance when impossibility might arise in the absence of defective specifications is that in which a performance specification calls for a product beyond the state of the *art* and a contractor knowingly agrees to perform believing that he can achieve the required performance nonetheless. However, if the defense of impossibility were raised in this instance, the contractor would lose if the government defended on the ground that the contractor assumed the risk of impossibility. Note that in such a case the specifications would *not* be defective, although the required performance was impossible. *See* Electro-Nuclear Laboratories, Inc., ASBCA No. 9863, 65–1 BCA 4682 (1965).

¹²⁴ Walter F. Pettit, *Impossibility & Performance: Basic Principles and Guidelines*, The Government Contractor Briefing Papers No. 66–5 (2d ed. 1966). *The Government Contractor* is a commerical newspaper published every two weeks by Federal Publications, Inc., Washington, D.C., and *Briefing Papers* is a series of essays on specialized topics of government contract law published every two months.

¹²² The closest parallel is the common law doctrine of *contra proferentum*, wherein a document is construed "against the party who proffers" it. Blacks Law Dictionary (4th ed. 1957).

difficulties or unusual expenses which were not contemplated by the (contractor) or the Government at the time the contract was signed."125

Actual impossibility almost always results from defective specifications. This was the case in *Owens-Corning Fiberglas* Corp. v. The United States. ¹²⁶ Owens-Corning entered into a fixed price contract with the Atomic Energy Commission. For a portion of the contract, Owens-Corning used a subcontractor to carry out certain tunneling and tests of a polyurethane foam called for in the specifications. The subcontractor was unable to perform because of defects in the specification requirements related to the polyurethane foam. Owens-Corning ultimately instituted a claim against the United States on behalf of the subcontractor. Owens-Corning urged that the specifications could not be performed. The Court of Claims found for Owens-Corning stating:

We see no justification for throwing upon the plaintiff a **loss** which is a direct result of faulty specifications promulgated by the Government. [The result which the government had in mind in its specifications] was impossible of attainment."

Commercial or practical impossibility may also follow from defective specifications. In L. W. Foster Sportswear Co. v. The United States, 128 the government and Foster entered a contract for 54,000 goatskin flying jackets. The government furnished detailed specifications which proved to be defective. Single garments could be produced under the specifications, but mass production was impossible. The Court of Claims held:

This court has adopted **an** approach to impossibility based on 'commercial impracticability' which fully embraces the concept that 'commercial practicability ceases where the demands of mass production *can* no longer be satisfied through the means of mass production.¹²⁹

¹²⁵ Id.

¹²⁶ Owens-Corning Fiberglas Corp. v. United States, 190 Ct. Cl. 211 (1969).
127 Id., at 224. See also Hollingshead Corp. v. United States, 124 Ct. Cl. 681 (1953).

¹²⁸ L. W. Foster Sportswear Co. v. United Statee, 186 Ct. Cl. 499 (1969).

 ¹²⁹ Id., at 506-07. See also Whittaker Corp., Power Sources Div., ASBCA Noa.
 14191, etc., Mar. 30, 1979, 79-1 BCA 13805; Johnson Electronics, Inc., ASBCA No. 9366, Dec. 31, 1964, 65-1 BCA 4628; Capson Mfg. Co., ASBCA No. 6105, Sep. 30, 1960, 60-2 BCA 2803.

To recover on the grounds of impossibility, the claimant must show that no other contractor could have performed the work¹³⁰ and the contractor urging impossibility must not have assumed the risk of nonperformance.¹³¹

III. GENERAL CRITICISMS OF DETAILED SPECIFICATIONS

For many years the driving goal in public purchasing at all levels of government was to standardize goods and services purchased through the use of definite **specifications.** A 1941 study of the Los Angeles, California, purchasing system demonstrates this early trend.

[T]he Los Angeles County Bureau of Efficiency found considerable room for improvement in the field of standardization . . . It lauded progress. . . made, but recommended acceleration of the good work in the future. 188

The method urged to accomplish fully the task of standardization was to adopt "definite written specifications where **feasible**." ¹³⁴

¹⁸⁰ Whittaker Corp., Power Sources Div., ASBCA Nos. 14191, etc., Mar. 30, 1979, 79-1 BCA 13805; Owens-Corning Fiberglas Corp. v. United States, 190 Ct. Cl. 211 (1969). See also Riemer, Handbook & Government Contract Administration 717-18 (1968).

¹⁸¹ Dynalectron Corp. v. The United States, 207 Ct. Cl. 349 (1975); Mech-Con Corp., GSBCA No. 1373, December 9, 1964, 65–1 BCA 4574; Ryan Aeronautical Co., ASBCA No. 13366, May 13, 1970, 70–1 BCA 8287; Pettit, supra note 124.

The contractor may be presumed to have assumed the risk when: 1) he has superior knowledge . . . , 2) the contract is for a venture into the unknown whereby in the nature of the work the contractor had anobvious risk of failure, 3) the contract contains performance specifications, however, all the circumstances must be considered such as type of contract, what the parties intended, 4) design of specification proposed by the contractor.

Riemer, note 130 supra, at 717.

¹⁸² In referring to specifications by type,, the adjectives "detailed," "definite," "design," and "detailed product" are used interchangeably in this article.

¹⁸⁸ Beckett and Plotkin, Governmental Purchasing in the Los Angeles Metropolitan Area 56 (1941).

¹⁸⁴ Id., at 7.

The use of standard specifications in government purchasing has many advocates and many reasonable arguments to support the advocacy. **Ar**guably, such specifications promote low prices.

The uniform standard purchase specification is necessary to obtain free and open competition in bids on a fair and equitable basis. They ensure that the public buying agency obtains the item it specifies and pays for [it] at the lowest cost. 185

Other benefits derive from the use of standard specifications. A good list of such advantages is found in an early treatise on industrial purchasing. They include:

1)adequate specifications evidence definite thought and careful study of the needs of the government and how to satisfy those needs:

- 2) specifications provide a standard for insuring the product delivered is usable and of the proper quality;
- 3) specifications allow for standardization; and
- 4) competition on a fair and equal basis is promoted.¹³⁷

Certainly, standard specifications do promote many of these desirable aims. Such specifications are not, however, without their faults. It is these faults which are coming under constant attack today and are causing much of the effort directed at abolishing the use of such specifications.

Although criticisms of design or detailed specifications were expressed periodically prior to 1970, ¹³⁸ no serious suggestion to change or abolish

¹⁸⁵ Aljian, Purchasing Handbook 18-22 (1958). There is some support for the opposite view—that government standard specifications actually increase the price of goods sold to the United States, particularly where a standard commerical item could meet the government's need. See generally Hearings before the Subcomm. on Federal Spending Practices and Open Government of the Comm. on Governmental Affairs on the Federal Acquisition Act of 1977, U.S. Senate, 95th Cong., 1st Sess., (1977) [hereinafter referred to as 1977 Hearings].

¹³⁶ Lewis, Industrial Purchasing (1940).

¹⁸⁷ Id., at 150.

¹⁸⁸ Id., at 151. See also Riemer, supra note 130, at 711-12.

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the use of such specifications occurred until 1973 in the Report of the Commission on Government Procurement. The Commission cited two major problems with detailed specifications. First, such specifications were often old and used outdated technology. Second, many other specifications, standards and requirements were included in a single federal specification by reference. This made it difficult for a supplier to understand exactly what product was to be supplied. In addition to these two major complaints, the Commission castigated detailed specifications because:

Purchase of items under Federal specifications when comparable commercial products are available usually results in greater cost to the government.

Use of Federal specifications that prescribe specific designs may deny the Government the benefit of technological progress because the high cost of testing alternate designs discourages industry.

Overly strict interpretation of specifications for commercial products forces producers out of Government work, thus reducing competition.

Since specifications establish a minimum quality level, the offering of a better quality is not encouraged. 142

These criticisms led the Commission to make the follow recommendations. 148

- 1. Require that development of new Federal specifications for commercial type products be limited to those that can be specifically justified.
- **2.** Reevaluate all commercial product-type specifications every five years.

^{189 3} Report of the Commission on Government Procurement.

¹⁴⁰ *Id.*, at 19.

¹⁴¹ *Id.*, at 19.

¹⁴² Id., at 20.

¹⁴⁸ Id., at 18, 20.

- **3.** Use purchase descriptions when Federal specifications are unavailable.
- **4.** Exclude packaging, packing and marking requirements from commercial product specifications.

The floodgates of criticism opened after the **1973** Commission report. Members of Congress became interested in the problem and explored at length the use of detailed specifications in government buying. The Commission's criticisms were reviewed and new complaints were added.

Detailed specifications are viewed **as** a roadblock to **innovation**. Typical of the complaints in this respect was that voiced by Mr. Vico E. Henriques, Vice President of the Computer Business Equipment Manufacturers Association, during Senate hearing on the Federal Acquisition Act of **1977**.

Specifications take a long time to develop and very frequently by the time they are published an industry . . . has developed new technologies that outdate and supersede the specifications. Procurement by Federal specifications of products in a high technology area, can have the effect of denying the government the opportunity to procure the newest and most efficient product. 146

In a word, specifications become obsolete. 146

Such a provision is found in S. 5, the Federal Acquisition Reform Act, 96th Cong., 1st Sess. 514 (1979). That bill would require "all specifications [to] be reviewed at least every five years, and [to bel cancelled, modified, revised, or reissued as determined by such review." Such a review would allow the reviewing body to consider a number of important factors with regard to whether a detailed specification is appropriate for the particular requirement. Such considerations

¹⁴⁴ See S. Rep. No. 95–715, Federal Acquisition Act of 1977, 95th Cong., 2d Sess. 21 (1978), wherein it is stated, "Probably the worst thing is the formidable bar to innovation erected by mandated design."

^{145 1977} Hearings, supra note 135, at 221.

¹⁴⁶ Admittedly, detailed specifications do become outdated. Technology does advance. But, there is no reason to abandon the use of such specifications because some have not been updated. It would be better to require periodic review of specifications to determine if new advances need to be incorporated, or if the specifications are even needed any longer.

Competition, a key goal of the federal contracting process, is seen as diminished when detailed specifications are employed. An overstatement of the problem was made recently by Senator Lawton Chiles of Florida.

It seems clear that the more detail we write into specifications, the less people will be able to submit a bid to start with. It actually reduces competition down to one or two people.¹⁴⁷

Admittedly, detailed specifications may prevent some firms from competing, but it is doubtful, and no evidence was proffered, that detailed specifications, particularly highly coordinated ones such as federal specifications or military specifications, reduced competition to one firm. First, that is a contradiction in terms. One firm is by definition sole source, not competition. Additionally, if a specification produced such results, it would, in all likelihood, be overly restrictive, requiring rewriting, '@ or call for negotiation under a performance specification. A more realistic assessment of when and under what conditions detailed specifications may limit competition was made by Mr. William C. McCamont, Executive Vice-President of the National Association of Wholesaler-Distributors:

The present use of specifications is an impediment to many firms, particularly smaller and medium size firms, which are not knowledgeable about the myriad of details surrounding federal specifications and bidding procedures. The assessment of detailed specifications is a threshhold many firms are reluctant to venture near. 149

A final major criticism of detailed specifications is the so called "specification tree." This term is used to describe the procedure whereby a specification for a product will contain references to other specifications

should include: 1) the expected impact on cost of using a detailed specification, 2) whether additional options or increased flexibility could be written into the specification, 3) whether new technology has developed that should be incorporated, 4) the possibility of consolidating various detailed specifications, 5) use of existing industrial specifications or standards in lieu of government specifications or 6) using functional specifications.

¹⁴⁷ **1977** Hearings, *supra* note **135**, at **383**.

¹⁴⁸ See discussion of unduly restrictive specifications in text of this article above notes **47** through **64**, *supra*.

¹⁴⁹ **1977** Hearings, *supra* note **135**, at **698**.

and standards. For instance, in 1973 the Commission on Government Procurement found that the specification for light bulbs referenced 313 other specifications and standards. Not surprisingly, "(f)irms doing business with the Government regularly have complained of this problem" 151

However, while it is true that most specifications do reference other specifications and standards, the light bulb horror story is not representative of all detailed specifications. Too often the critics of such specifications point to a few well known examples similar to that of the light bulb. Specifications for mouse traps and cocoa beverage powder are prime examples. This creates an appearance that all detailed specifications are as cumbersome when something between perfection and absolute worthlessness is more akin to the truth. Additionally, many of the items referenced in a specification will remain in a contract regardless of the type of specification or purchase description used because of statutory requirements.

The specifications tend ... to continually refer to other documents, other specifications. These probably continue to grow because as we have different laws that are introduced into the procurement process, such as OSHA [Occupational, Safety and Health Act] regulations, such as EPA's [Environmental Protection Agency] ... then the documentation must necessarily increase ... 154

[I]n the mass of some 40,000 documents contained in the Department of Defense Index of Specifications and Standards (DODISS), there are bound to be some ludicrous requirements which make great anecdotes—a fifteen page specification for chewing gum comes to mind. There is a tendency to use such documents to disparage the system in general, rather than look for its strengths.

¹⁵⁰ Commission Report, supra note 139, at 20.

¹⁵¹ Id.

¹⁵² This method of attacking detailed specifications was noted by the 1977 report of the Department of Defense Task Force on Specifications and Standards. In that body's 1977 Report, at page 1-5, it is stated:

¹⁶⁸ The Federal specification for mousetraps is 100,000 words long and weighs 2 pounds. There are two specifications for cocoa beverage powder, a federal specification and a military specification. The requirements of each differ and each refers to the other specification.

^{154 1977} Hearings, supra note 135, at 421.

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Requirements such as these have nothing to do with defining the actual needs of the user, but are required to carrry out national social and economic goals. To attack detailed specifications for complying with the law seems somewhat brazen, particularly when any replacement for them must do the same.

The barrage of criticism has led to many proposals to eliminate the use of detailed specifications in all but a few highly restricted areas such as for items requiring standardization.¹⁵⁵ The two major recommendations for change center around the purchase of commercial products and the use of functional specifications in lieu of detailed specifications.

IV. BUYING COMMERCIAL PRODUCTS

The Federal government buys \$8 billion worth of commercial and commercial-type items each year. 156 It maintains a \$4 billion inventory of such items and annually disposes of \$658 million worth of new items because there is no demand for them. 157 This waste could be reduced by altering the methods used by the United States to buy commercial products. For instance, except for defense or defense preparedness items, the government could buy commercial products only as needed and allow private industry to "warehouse" the items for the government until again needed. Not only would the costs of stocking items by the government be reduced, but also the need to dispose of unwanted materials would be eliminated.

¹⁵⁵ H.R. 2990, The Federal Acquisition Reform Act, 96th Cong., 1st Sess. 102(a)(1)(D). This provision emphasizes the current trend to reduce, or at least attempt to reduce, detailed specifications by providing that the "administrator for Federal Procurement Policy is authorized and directed . . . to establish and oversee a program to reduce agency use of detailed product specifications."

¹⁵⁶ The Government Executive 43 (Apr. 1977). The total cost of federal procurement in fiscal year 1977 was \$66 billion. The Federal Property Management Regulations define "commercial product" as "[a] product from regular production sold in substantial quantities to the general public and/or industry at established market or catalog prices." Fed. Prop. Mgmt. Regs., Temp. Reg. No. E-59, 44 Fed. Reg. 12,031 (1979).

¹⁵⁷ Id.

What is needed to insure effective, less costly purchases of commercial items? A fair list was formulated during a seminar sponsored by the Department of Defense and the Experimental Technology Incentive **Pro**gram of the National Bureau of Standards. A few of the recommendations made during this seminar deserve particular consideration.

First, the government must have some means to determine what is available commercially. Obviously, the United States must know which items manufactured for the general public meet government requirements before it can acquire those items for public use. This is not a paramount consideration when purchases are made using detailed specifications because the contractor agrees to manufacture the required item according to that specification. The government knows that the item, if properly manufactured according to the specification, will serveits needs. However, to meet the specification, a seller may have to alter production methods, retool, retrain, or hire additional labor. Such changes are costly and can increase government expense. Thus, if a readily available commercial product will do the job, it should be purchased.

Conversely, the commercial market needs to be made more aware of government needs. If the government is open about current and future needs, it may prompt businesses to come forth with standard commercial products that will fill those requirements. **This** of course **will** avoid the potential costs discussed above.

Generally, detailed specifications should not be used to purchase commercial products. Certainly, for low technology, high volume items such as paper clips, pencils, paper products and similar requirements the use of detailed specifications is not particularly bad because such items are manufactured in a similar manner. There is little chance of significant technological breakthroughs that would render the government's specification obsolete. However, when this is not the situation, why require a company to manufacture an item to meet a particular specification when the same company's commercial product will fill the government's actual need?¹⁵⁹ After all, it is the need that is important, not what a

¹⁵⁸ See 2 Govt. Purchasing Outlook 5 (Feb. 17, 1978).

¹⁵⁹ In Hearings before the Senate Subcomm. on Federal Spending Practices and Open Government, it was noted that "[mlany firms should be able to lower their prices to the Government by offering standard quality commercial products without the additional expense of modifying or manufacturing to a special Government specification." 1977 Hearing, supra note 135, at 90.

specification may require. ¹⁶⁰ In high technology areas it is even more critical that detailed specifications not be used where an adequate commercial product exists. Changes in these areas are rapid, specifications soon become dated and the government buy would thus lag behind commercial products developed for the open market. ¹⁶¹ For commercial products, it is much more effective to use purchase descriptions rather than detailed specifications, in acquisitions by the government. It is for this reason that the Office of Federal Procurement Policy (OFPP)has begun a major effort to change the method used to purchase such products.

In 1977, OFPP published a memorandum to the Secretaries of the various executive agencies. ¹⁶² The memorandum listed six objectives that federal acquisition of commercial products should achieve:

1. maximum use of commercial distribution channels;163

¹⁶⁰ A response often made to the criticism that detailed specifications may overspecify the government's actual needs is that detailed specifications can be tailored to a particular need. Department of Defense Directive **4120.21**, Specifications and Standards Application, April **9**, **1977**, provides at paragraph IV.A. that specifications "must be applied and tailored by giving due consideration to the required performance versus costs and achievement of minimum required operational needs." Tailoring is defined in paragraph III.B. of the same directive as the "process by which individual requirements (sections, paragraphs or sentences) of the selected specifications and standards are evaluated to determine the extent to which each requirement is most suitable for a specific material acquisition and the modification of these requirements, where necessary, to assure that each tailored document involved states only the minimum needs of the government."

Although tailoring a specification to a particular requirement is certainly appropriate, in many cases it is not possible due to time contraints or the lack of personnel at a particular contracting activity technically qualified to review and modify such specifications. Nor would such tailoring necessarily reflect the products available on the commercial market that could meet the government's actual needs.

¹⁶¹ "Federal [specifications] are not very responsive to change in the commercial market. This is not because the spec. writers don't attempt to keep up with the latest developments, but technological product changes happen very quickly." 1977 Hearings, *supra* note 135, at 159.

¹⁶² Office of Federal Procurement Policy Memorandum, Subject: Implementation of Policy on Acquisition and Distribution of Commercial Products, Dec. **27**, **1977** [hereinafter referred to as OFPP Commercial Products Memorandum].

¹⁶³ The General Accounting Office has suggested a need to pursue this goal aggressively. See General Accounting Office (GAO) Report to the Congress, Uni-

- **2.** reduction of government stocked commercial items;
- **3.** elimination of all unnecessary government specifications for commercial products and packaging;
- **4.** tailoring government specifications to reflect commercial practices to the maximum extent when such specifications cannot be eliminated;
- 5. elimination of acquisition and distribution redundancies,
 - 6. produce user satisfaction. 164

The OFPP goals are modest and reasonable. They are not a sweeping mandate to eliminate **ALL** product specifications, but only those specifications that are unnecessary because existing commercial products could meet the government's requirement. Detailed specifications could still be used for purposes of insuring standardization or for purchasing items unique to the government. They could be used, also, where it is demonstrably cheaper for the government to buy items under aparticular specification.

The Department of Defense has implemented the OFPP policy on purchase of commercial products. Department of Defense Directive **5000**. **37**, dated September **29**, **1978**, states:

E. *Policy.* . . . DoD components shall:

1. Purchase commercial, off-the-shelf, products when such products will adequately serve the government's requirement,

formed Procurement Decisions for Commercial Products are Costly, PSAD-77-170 (Oct. 26, 1977). The GAO suggests at page 6 of the report that "agencies . . . use commercial distribution channels to supply commercial products unless it is cost effective to do otherwise." Cost effectiveness is to be determined by using "full cost" comparisions between buying commercial products using commercial distribution channels and purchase of commercial items for stockage in federal warehouses. The elements of full cost to the Government are demonstrated in Illustration 2, below.

¹⁶⁴ OFPP Commercial Products Memorandum, supra note 162.

TABLE 2. DECISIONAL FACTORS FOR SELECTION OF SPECIFICATION TYPE

Standardization $\mathbf{x}\mathbf{x}$ High Reliability хx Selection Flexibility $\mathbf{x}\mathbf{x}$ Best Price $\mathbf{x}\mathbf{x}$ хx Commercial Products хx Full Competition $\mathbf{x}\mathbf{x}$ ХX Latest Technology $\mathbf{x}\mathbf{x}$ Special Packaging $\mathbf{x}\mathbf{x}$ provided such products have an established commercial market acceptability, and

2. Use commercial distribution channels in supplying commercial products to users when it is economically advantageous to do so and the impact on military readiness is acceptable. ¹⁶⁶

The policy, when fully implemented, will promote seven major objectives: 1%

- 1. Acquire commercial, off-the-shelf, products when such products will adequately serve the Government's requirements, provided such products have an established market acceptability.
- **2.** Encourage, recognize and evaluate technological innovations in commercial items that are applicable to defense needs.
- **3.** Optimize research, engineering, acquisition and support costs and enhance the opportunity for life cycle cost saving.
- **4.** Eliminate unnecessary Government specifications for commercial products and /or adopt non-Government specifications and standards where **feasible**. ¹⁶⁷
- **5.** Implement acquisition procedures designed to optimize the Government's advantage while minimizing the administrative burden to the contractor and the Government.
- 6. Validate feasible commercial item logistics support alterna-

¹⁶⁵ Department of Defense Directive 5000.37, Acquisition and Distribution of Commercial Products (ADCP), para. E, Sep. 29, 1978 [hereinafter referred to as ADCP].

¹⁶⁶ Id., para. D.

¹⁶⁷ A DOD effort concurrent with purchasing commercial products is one to eliminate government specifications if commercial specifications or standards are available. There exists a large body of such specifications which have been developed as a result of standardization efforts outside the government. The Department of Defense instruction, or regulation, regarding the use of these specifications and standards is DODI 4120.20, *Development and Use & Non-Government Specifications and Standards*, December 28, 1976.

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tives insuring the least costly, acceptable life cycle support plan is chosen.

7. Foster competitive industrial sources for . . . Government requirements . . . ¹⁶⁸

The requirement to buy commercial products has made significant progress in many areas, from beef to undershirts. ¹⁶⁹ The approach used for commercial product acquisitions is a combination of purchase description and use of a commercial products clause. A commercial product purchase description, called an item description, has been defined as:

descriptions . . . stated in functional terms to the maximum extent possible to permit a variety of distinct products to qualify for award or, when a particular product must be designated in terms of performance specifications to stipulate a range of acceptable characteristics or minimum standards."

In conjunction with such descriptions a solicitation will include a commercial products clause. Typical of such clauses is the one considered in a May, 1978 Comptroller General decision. That clause provided:

The equipment to be furnished hereunder [a pipe bending machine] must be a manufacturer's standard commercial product. For purposes of this contract, a standard commercial product is one which, within a period commencing two years prior to the opening date of this soliciation, has been sold by the manufacturer or his distributor in reasonable quantities to the general public or government in the course of conducting normal business operations. Nominal quantities, such as models, samples, prototypes or experimental units will not be considered as meeting this requirement."

¹⁶⁸ ADCP, supra note 165.

The Department of Defense policy expressed in DOD Directive No. 5000.37 has been incorporated into part 11 of the proposed Federal Acquisition Regulation [hereinafter referred to as FAR]. See note **224**, *infra*.

¹⁶⁹ See, Federal Contract Reporter No. 781, A-12 through A-13, May 14, 1979, for a discussion of commercial products purchased in the textile area.

¹⁷⁰ Fed. Prop. Mgmt. Reg., Temp. Reg. No. E-59, 44 Fed. Reg. 12,031 (1979).

¹⁷¹ Comp. Gen. B-190336, May 24, 1978, 78-1 CPD 394, at 1-2.

These procedures for buying commercial products have been challenged in a number of protests to the Comptroller General. As a result, there is a body of decisional law related to such purchases by the United States.

Such clauses have withstood challenges that they unreasonably restrict competition. For example, in 1975 the Marine Corps solicited proposals for electronic signal **generators**.¹⁷² The equipment to be furnished was to be "commercial off-the-shelf equipment which incorporates one or more military requirements to permit it to more fully meet military **needs**."¹⁷³ One offeror, AUL Instruments, Inc. (AUL), was eliminated from final negotiations because the product offered was "built from scratch" rather than a modified commercial product. AUL protested to the GAO alleging, among other grounds, that the requirement for commercial, off-the-shelf equipment unduly restricted competition. Denying the protest, the GAO stated:

[W]e find no merit to AUL's argument that the requirement for commercial equipment was unduly restrictive of competition . . . [T]he agency has not unreasonably restricted competition to particular classes of businesses or insisted that the equipment offered must be rated by a particular professional society. The Marine Corps simply wanted to purchase equipment which was based on a commercially available design in order to avoid the risks of purchasing an unproven design.¹⁷⁴

When a commercial products clause is included in a contract and relates to product acceptability, it is a matter of **responsiveness**, ¹⁷⁵ not **respon-**

¹⁷² Comp. Gen. B-186319, September 1, 1976, 76-2 CPD 212.

¹⁷³ Id.

¹⁷⁴ Id., at p. 9. That such clauses are intended to reduce design risks is a common rationale in GAO decisions. In a **1978** opinion the **GAO** stated: "The purpose of the clauses requiring . . . standard . . . recorder/producer was to assure the Air Force of not becoming involved in a high risk, research and development effort . . ." Comp. Gen. B-190789, May 10, 1978, 78-1 CPD 353.

¹⁷⁵ To be considered for award, a bid must comply in all material respects with the invitation for bids so that, both as to method and timeliness of submission and as to the substance of any resulting contract, all bidders may stand on an equal footing.

DAR § 2-501(a).

sibility.¹⁷⁶ This is demonstrated in a 1978 GAO opinion.¹⁷⁷ International Harvestor (IH) protested the award to AM General Corporation (AMG) of a contract for the manufacture of commercial trucks. The solicitation required offerors to have been manufacturers of the commercial trucks being offered. AMG was going to furnish trucks under license from a different company. The contracting officer stated that the commercial product limitation applied to the "product, not the offeror." GAO by implication upheld this determination. Further, in a later case, the GAO specifically stated that commercial product clauses relate to product acceptability and responsiveness, not to responsibility of the offeror.¹⁷⁸

When commercial products clauses are included in a solicitation, award under that solicitation cannot be made unless preceded by a determination that the potential awardee will offer a commercial product. ¹⁷⁹ If it is determined that the intended awardee is incapable of furnishing a commercial product, an award to that party is improper. ¹⁸⁰ The rationale supporting this position was set forth in a recent Comptroller General decision:

A responsible prospective contractor is one with adequate financial resources to perform, an ability to meet delivery schedules, a good record of prior performance, a satisfactory record of integrity, and otherwise eligible for award. DAR § § 1–902 and 1–903.1.

Proposals will be accepted and considered only from those offerors determined by the Government to currently manufacture commercial . . . generator sets on a production line basis and currently market them to the commercial airline industry in substantial quantities and who propose to furnish representative generator sets.

The decision does not affect other statutory requirements related to responsibility determinations or bidder acceptability such as debarred bidders (see DAR Section I, Part 6) or determinations as *to* whether a bidder is a manufacturer or regular dealer under the Walsh-Healey Public Contracts Act, as amended. Pub. L. No. 846, 74th Cong., 2d Sess., 49 Stat. 2036 (1936), codified at 41 U.S.C. § \$35–45.

¹⁷⁶ Comp. Gen. B-191116, Oct. 2, 1978, 78-2 CPD 247.

¹⁷⁷ Comp. Gen. B-189794, Feb. 9, 1978, 7S-1 CPD 110.

¹⁷⁸ Comp. Gen. B-191116, Oct. 2, 1978, 78-2 CPD 247. The clause in that case stated:

¹⁷⁹ Comp. Gen. B-184451, June 1, 1976. 76-1 CPD 351 ¹⁸⁰ Id

[T]he Government should not represent that it has minimum requirements of such a nature that it must restrict competition to only those who are capable of providing standard commercial products when in fact the Government's minimum needs can be fulfilled with the provisions of something less than a standard commercial product. ¹⁸¹

The push to buy standard commercial products is here to stay, not-withstanding the Comptroller General requirement that such products be purchased only when they in fact represent the minimum needs of the Government. The benefits to be derived are many. Specification maintenance costs, e.g., costs of revision, will be reduced. Obsolescence will no longer be a problem because the most current commercial technology, incorporated in the commercial product, will be available to the Government. Warehouse costs will be reduced as the Government avails itself of the commercial distribution system. Small business may well benefit because it can offer its commercial product without the requirement to manufacture in accordance with a particular government specification.¹⁸²

Although the benefits flowing from the purchase of commercial items are many, care must be exercised. Such products should not be purchased where standardization or interchangeability of parts is of major concern. For instance, combat equipment should be standardized to insure ease of repair and maintenance in the field. Standards must be developed to determine that a product offered has been accepted in the commercial

¹⁸¹ Comp. Gen. B-190336, May 24, 1978, 78-1 CPD 394, at 3.

¹⁸² There is some question whether buying commercial products without reference to detailed specifications is always beneficial to small business. During the **1977** hearings on the Federal Acquisition Act of **1977**, the following testimony was presented by a small business owner:

We have been informed ... that [the Air Force] intend[s] to procure aircraft starting units under ... the Commercial Commodity Acquisition Program. These units ... have historically been supplied to the Air Force by small businesses. ... The Air Force intends to buy these units under the new program restricting bidders to those who have supplied units to commercial sources. [Those bidders are exclusively large businesses.] If the Air Force is permitted to implement this plan it will virtually eliminate small business [participation in this procurement].

¹⁹⁷⁷ Hearings, *supra* note **135**, at **260**. The answer to this criticism is to draft the commercial products clause to permit firms to offer products sold in substantial numbers in the commercial market place or to the government.

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market place. 188 This in turn will require market research into commercial products available to meet a particular need. 184

Every effort should be made to buy acceptable commercial products without the use of detailed specifications. However, intelligent selection must be made of the items to be purchased. Not everything can be turned over to commercial markets without detailed requirements from the user activity. The commercial product concept is not a substitute for thought in the process of determining government needs and the method best suited to meet those needs.

V. FUNCTIONAL SPECIFICATIONS

The most commonly suggested substitute for the much maligned detailed specification is the functional specification. A functional specification is defined as:

a description of the intended use of a product required by the Government. A functional specification may include a statement of the qualitative nature of the product required and, when necessary, may set forth those minimum essential characteristics and standards to which such products must conform if it is to satisfy its intended use.¹⁸⁵

The use of such specifications is seen by many as a panacea. If any malady is discovered in the buying process, take two functional specifications, keep warm, go to bed and all will be well in the morning. The list of

¹⁸⁸ Such commercial product acceptability is required by DOD Directive No. 5000.37, discussed in the text above notes 165–68, *supra*.

¹⁸⁴ Professor Ralph Nash, of the George Washington National Law Center, very succinctly described the need for market surveys when testifying on the Federal Acquisition Act of 1977, the predecessor bill to S. 5, the Federal Acquisition Reform Act. Professor Nash stated: "What is needed is a system which requires procuring agencies to thoroughly screen the commercial market, to ascertain if there are commercial products available before detailed specifications are prepared." Obviously, if such products are not available, detailed specifications must then be considered. 1977 Hearings, *supra* note 135, at 615. S. 5 incorporates this. See S. 5, Federal Acquisition Reform Act, *supra* note 146, at § 2(b)(3).

¹⁸⁵ S. 5, Federal Acquisition Reform Act, *supra* note 146, at § 3g.

advantages cited to support the use of functional specifications is virtually endless. For example:

Significant cost saving opportunities are created (by the use of functional specifications) because a variety of product solutions may be considered. . . . More firms, especially small business, will be likely to complete. ¹⁸⁶ Innovation and the play of new technologies will be encouraged. . . , The use of commercially available products will be encouraged, doing away with the need for suppliers to redesign products. ¹⁸⁷

Another advantage resulting from the use of functional specifications was asserted during hearings on the Federal Acquisition Act of 1977:

The use of functional specifications should reduce federal paperwork to the extent that the procurement agency will no longer have to prepare detailed and voluminous product specifications as have been provided in the past. 188

That functional specifications are the wave of the future is unquestionable. We must, however, take care not to spawn a tidal wave. Under the Federal Acquisition Act of 1977 (S. 1264), ¹⁸⁹ the use of such specifications would have been mandatory ¹⁹⁰ unless use of detailed specifications was authorized for a particular purchase by an agency head or his delegee. ¹⁹¹ The Act never became law and eventually died. However, in its

To the maximum extent practicable and consistent with needs of the agency, functional specifications *shall* be used to permit a variety of distinct products or services to qualify and to encourage effective competition (emphasis supplied).

¹⁸⁶ This is not a proven fact. Similar "advantages" are attributed to purchase of commercial products, but are challenged by some small businesses. *See* note 182, *supra*.

¹⁸⁷ S. Rep. No. 95–715, Federal Acquisition Act of 1977, 95th Cong., 2d Sess. 21 (1977).

¹⁸⁸ 1977 Hearings, *supra* note 135, at **203.**

¹⁸⁹ S. 1264, 95th Cong., 2d Sess. (1977), reprinted in S. Rep. No. 95–715, Federal Acquisition Act of 1977, 95th Cong., 2d Sess. (1978).

¹⁹⁰ Id. This bill provides in § 202(c):

¹⁹¹ *Id.* In § 202(d), it is provided: "The preparation and use of detailed product specifications in a purchase description shall be subject to prior approval by the agency head."

place, like the proverbial Phoenix rising from the ashes, came the Federal Acquisition Reform Act (S. 5).¹⁹² A rose by any other name is still S. 1264, and Senate Bill 5, like its predecessor, will make the use of functional specifications mandatory¹⁹³ unless a waiver is granted to use detailed specifications. %

Because of the emphasis on functional specifications, it is necessary to understand how they would work in the acquisition process. First, it should be noted that the only thing really new about functional specifications is the name. For years a similar entity, the purchase description, has been available to contracting personnel. The Defense Acquisition Regulation (DAR) discusses purchase descriptions at section 1–1206.1(a). It states:

A purchase description may be used in lieu of a specification [when otherwise authorized] . . . A purchase description should set forth the *essential physical and functional characteristics* (emphasis added) of the materials or services required. As many of the following characteristics as are necessary to express the minimum requirements of the Government should be utilized in preparing purchase descriptions:

- (i) common nomenclature;
- (ii) kind of material . . .
- (iii) electrical data, if any;

Exceptions to the requirement to use functional specifications will be extensive. This is certainly true where other policy considerations require the use of detailed specifications. For example, on 9 August 1979, President Carter approved plans for the National Supply System, which would require, among other things, standardization of supplies and equipment purchased throughout the Government. Standardization necessarily requires the use of detailed specifications. *See* President Carter's memorandum for the Hon. James T. McIntyre, Jr., Director, Office of Management and Budget, subject: National Supply System (9 Aug. 1979).

¹⁹² S.5, Federal Acquisition Reform Act, *supra* note 146. The companion bill in the House of Representatives is H.R. 2990, Federal Acquisition Reform Act, 96th Cong., 1st Sess. (1979).

¹⁹⁸ S. 5, *supra* note 146, at § 202(c).

¹⁹⁴ Id., at § 202(d).

- (iv) dimensions, size or capacity;
- (v) principles of operation;
- (vi) restrictive environmental conditions;
- (vii) intended use, including—(A) location within assembly and
- (B) essential operating conditions;
- (viii) equipment with which the item is to be used;
- (ix) other pertinent information that further describes the item

Note the similarity of the purchase description and the definition of a functional specification. ¹⁹⁶ Obviously, to insure competition on an equal basis, functional specifications will need to include at least that information and specificity that purchase descriptions provide. Otherwise, bidders and offerors will be left to determine by mere conjecture what the government wants. During a discussion of functional specifications in the hearings on the Federal Acquisition Act of 1977, it was pointed out that such specifications must clearly determine and adequately state the government's needs because "the government as a buyer may not be placed in the position of having to share such discretionary authority to prescribe its needs." ¹⁹⁷

In order to insure an adequate functional specification it will be necessary to "establish salient functional characteristics" for items desired to be purchased. Such characteristics are currently used with brand name or equal purchase descriptions. Thus, some guidance is available on the development and use of salient characteristics.

Salient characteristics provide the common basis needed by potential contractors to be able to compete equally for a contract. Under brand name or equal purchase descriptions, the failure to include all salient characteristics in a solicitation renders that solicitation defective.

Bidders offering "equal" products should not have to guess at

¹⁹⁵ **DAR** § 1–1206.1(a).

¹⁹⁶ See discussion of system specifications in text above note 27, *supra*.

¹⁹⁷ 1977 Hearings, *supra* note **135**, at 106.

¹⁹⁸ Id., at 107.

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the essential qualities of the brand name item . . . (T)hey are entitled to be advised in the invitation of the particular features or characteristics of the referenced item which they are required to meet. An invitation which fails to list all the characteristics deemed essential, is defective. 199

Surely those who champion functional specifications desire an equal clarity of description and do not desire to place bidders in the position of having to guess at the "essential qualities" of the item to be furnished. Just as surely, it would be patently unfair for the government to judge an item based upon a desirable feature that was not made known to the bidder in the solicitation. This is particularly true in formal advertising (competitive sealed bid) where award must be made on the basis of the bid submitted without any discussions. Thus, functional specifications must list all important features of the item or service to be purchased. Failure to do so must lead inevitably to the conclusion that such a deficient description is defective, cannot furnish the basis for full and free competition, and would result in an improper award.

Once competition is engendered, award must be made and contract performance commenced. In negotiated contracts award following a solicitation using functional specifications should present no problems because discussions could be held between the government and the offerors to clarify any doubtful areas. Such is not the case when the formal advertising method of acquisition is employed.

¹⁹⁹ 48 Comp. Gen. 441, 444 (1968), *citing* Ms. Comp. Gen. B-157857, Jan. 26, 1966 (unpublished).

²⁰⁰ In § 2b(9) of S. 5, Federal Acquisition Reform Act, it is stated that federal contracting practices must be conducted so as to "rely on and promote effective competition." In § 2b(9)(D), it is further stated that there must be an "absence of bias or favoritism in the solicitation, evaluation, and award of contracts."

²⁰¹ Such discussion would of course be subject to the rules of fairness currently applied. This includes holding discussions with *all* offerors in the competitive range if discussions are held with any such offeror, *See*, *e.g.*, DAR § 3–805.1(a) and § 3–805.2; Comp. Gen. Dec. B–181723, 27 Mar. 1975,75–1 CPD 675. *See also* S. 5, *supra* note 146, at § 303(a). All offerors are to be advised in advance of the evaluation factors to be used in making an award. *See*, *e.g.*, 50 Comp. Gen. 788 (1971); 50 Comp. Gen. 59 (1970).

Formal advertising requires that award be made to the low, ²⁰² responsive, ²⁰³ responsible ^{ZU} bidder. Unlike negotiated contracts, discussions are not allowed after bid opening. Thus, there must be sufficient information available to the government from the invitation and resultant bid to determine that an item offered is responsive to the functional characteristics listed in the invitation and yet still maintain a sufficiently broad description to "encourage innovation and the application of new technology." ²⁰⁵ The problem was succinctly summed up by Robert Judson, Executive Director of the United States Navy Center for Acquisition research.

It is difficult to state a purchase description in such general terms of Government needs that it elicits a broad range of responses and at the same time have the description be precise enough to act as the basis for judging the acceptance of deliveries under a contract.²⁰⁶

For those who would rejoice at this statement, seemingly indicating the death, or at least incapacity, of functional specifications, don't hasten to light the funeral pyres! Although difficult, evaluation for award under a functional specification is not impossible. As in brand name or equal solicitations, a data requirements clause²⁰⁷ could be included. Each bidder would be required to submit descriptive data that affirmatively dem-

²⁰² See Comp. Gen. Dec. B-190703, Dec. 8, 1977, 77-2 CPD 448.

²⁰⁸ To be responsive, a bid must conform with all the essential requirements of the invitation for bids, or be rejected. See DAR § 2-301(a).

²⁰⁴ A responsible bidder is one that is demonstrably *able* to perform the contract. DAR § 1–903.1 lists the following minimum standards that a bidder must meet if he is to be considered responsible:

⁽i) have adequate financial resources, or the ability to obtain such resources . . . ,

⁽ii) be able to comply with the required or proposed delivery schedule

⁽iii) have a satisfactory record of performance . . .,

⁽iv) have a satisfactory record of integrity . . ., [and]

⁽v) be otherwise qualified and eligible to receive an award under applicable laws and regulations. . . .

²⁰⁵ S. 5, Federal Acquisition Reform Act, supra note 146, at § 2(b)(3).

²⁰⁶ 1977 Hearings, *supra* note 135, at 94.

²⁰⁷ See DAR § 7–2003.10; FPR § 1–1.307–6(a)(2). Brand-name-or-equal purchase descriptions are discussed at DAR § 1–1206.2.

onstrate the item offered by the bidder is responsive to the requirements of the functional specification.

This does not mean that the bidder must prove compliance. He need only supply sufficient data to allow the government to determine compliance in fact. ²⁰⁸ Merely quoting back the functional specification or promising to conform, however, should not be sufficient to meet the data requirement. ²⁰⁹ Instead, the data offer should demonstrate factually that the product meets the specification.

For instance, suppose the following, oversimplified, functional description: Camera, using cartridge film pack, not more than 2" to 3" high, $\frac{1}{2}"$ to $\frac{1}{4}"$ deep and $\frac{4}{2}"$ to $\frac{5}{2}"$ long. A bidder supplying descriptive data that stated the camera offered was cartridge loaded, 2" to 3" high, $\frac{1}{2}"$ to $\frac{1}{4}"$ deep and $\frac{4}{2}"$ to $\frac{5}{2}"$ long should be rejected because the descriptive data is merely repetitive of the functional description. It does not factually establish compliance. Conversely, the following descriptive data would do so: Camera, cartridge loaded, $\frac{2}{2}"$ high, 1" deep, and 5" long.

In addition to descriptive data, other approaches are available for insuring that the item offered is responsive to the functional description in the invitation. Preaward surveys currently used to determine a bidder's responsibility could be expanded to include a determination that the product offered meets the functional specifications." Testing requirements could be included in solicitations that would require offered items to meet the test before award of a contract. A warranty of compliance with the functional specifications could be furnished by each bid-

²⁰⁸ See Ms. Comp. Gen. B-161122, May 11, 1967,

²⁰⁹ Under brand-name-or-equal descriptions a mere promise to conform to salient characteristics, or a promise that an "equal" item is "identical" with a brand name, does not satisfy the descriptive data requirement. *See* Ms. Comp. Gen. B-169482, Sep. 16, 1970.

²¹⁰ See DAR § 1-905.4 for a discussion of preaward surveys.

der. Whatever the method used, from the foregoing it is clear that the use of functional specifications is possible in both negotiated and formally advertised acquisitions. The real question is: what price is the government willing to bear to use such specifications?

Although functional specifications have their advantages, they also carry with them disadvantages. The Comptroller General has described a number of these difficulties.

[U]sing functional specifications is not free from complex, and potentially costly, difficulties. Initially, the Government must expend considerable effort in drafting the specifications. Offerors must then translate the specifications into their own individual equipment and softwares approaches. This can involve a considerable amount of detail, may result in a variety of solutions to the Government's requirements and may be quite costly. A substantial effort on the part of the Government is then required to evaluate the **proposals**.²¹¹

Each of the Comptroller General's observations is valid. Drafting a functional specification is not as easy as some who support such specifications would suggest. A somewhat exaggerated example of the lack of understanding of the problem is found in a Senate Report on the Federal Acquisition Act of 1977. That report as an example of the manner in which functional specifications would promote innovation stated:

For example, stating a need **as** 'Rodent elimination' rather than calling for a particular moustrap design could foster some imaginative solution. The 'better mousetrap' of folklore may not be a conventional mousetrap at all., ...²¹²

If the only description used in an invitation was to require an item that eliminates rodents, chances are that the oldest of **all** rodent eliminators, old Tom the alley cat, would qualify. Or perhaps an enterprising contractor would offer one each, hand held, manually operated baseball bat. Much more is necessary to provide an accurate description capable of insuring that the Government gets what it needs. Failure to carefully

²¹¹ Comp. Gen. Dec. B-188990, Sep. 9, 1977, 77-2 CPD 182.

²¹² S. Rep. No. 95-715, supra note 144, at 21.

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draft a functional specification may well allow many agencies' fears about the use of such specifications to become reality. Loosely drafted functional specifications could provide "a fly-by-night garage type operation . . . to take advantage of (government) leniency and win on a low-bid basis with a generally poor quality product."²¹³

Another potential danger of a poorly drafted functional specification is the possiblity that a product requirement of the government might be overlooked, omitted and ultimately not met by the furnished item because the specification did not require it. This has occurred already in certain instances where detailed specifications were scrapped in favor of functional specifications. The Defense Logistics Agency²¹⁴ developed a functional specification to buy men's undershirts. The description was used in an invitation for bids, bids were received and a contract awarded. Only then was it discovered that the specification did not have requirements related to shrinkage of the garments. The result—those of you wearing size 42 shirts purchased under this specification—beware! Your size 42 may become a size 32 after the first washing. This specification has been changed, but the basis for such problems remains. Failure to exercise care in drafting functional specifications can produce the same result that lack of care promotes in drafting detailed specifications-defective ifications.

The Comptroller General also recognized the problem of time consuming evaluations if functional specifications are used. This is true regardless of the method employed by the Government to insure that the product offered is responsive to the invitation. If descriptive data is used, the government's technical people must study the data and determine that the product offered is responsive before award is possible. If preaward surveys are expanded to include a study of the offered item, necessarily more time will be required to complete the survey. Additionally, the survey team used will need to include technical people that otherwise might not be required. This is certainly true if the invitation for bids specifies tests that must be conducted before award can be made.

²¹⁸ **1977** Hearings, supra note 135, at 63.

²¹⁴ A description of this purchase was related to the authors by an employee of the Defense Logistics Agency.

Contrast each of these approaches with the situation that exists when detailed product specifications are used. No preaward survey or tests are required of the product to be supplied. Descriptive data would normally be superfluous. Why? Because if the contractor follows the detailed specification using acceptable manufacturing techniques a product acceptable to and meeting the needs of the government will result.

Other problems attach to the use of functional specifications, particularly if such specifications become mandatory. There are certain instances when such specifications might reduce rather than promote competition. For instance, in the construction industry buildings are not erected based on general descriptions. Precision is essential. If the government does not provide detailed engineering and architectural designs, the bidders must develop them on their own-clearly a more advantageous situation for large firmsthan for small. This was noted by the Associated General Contractors of America (AGC):

AGC believes that the mandatory use of functional and/or performance specifications in construction procurement will limit competition. Using contracting techniques that require bidders to incur development expenses will severely prejudice small and emerging construction firms having limited resources to undertake such development work.²¹⁵

Additionally, there are government requirements that are simply not suitable for purchasing with functional specifications. Highly technical interrelated equipment must be described in detail to insure compatibility and correct operation. For instance, building an Apollo space vehicle or a nuclear carrier requires the highest precision. This detail may evolve during construction, but it is something more that a mere functional statement.²¹⁶

Proponents of mandatory use of functional specifications offer two major rebuttals to the foregoing criticisms. First, it is argued that two-step formal advertising procedures are available under S.5, the Federal Acquisition Reform Act. ²¹⁷ Unfortunately, two-step procedures have

²¹⁵ **1977** Hearings, *supra* note **135**, at **651**.

²¹⁶ For a brief discussion of this problem, *see* **1977** Hearings, *supra* note **135**, at 506-07.

²¹⁷ See S. 5, supra note 146, at § 202(e).

their own drawbacks and limitations. Performance requirements and descriptions of general requirements must be drafted during the first step: request for technical proposals. Offerors must have at least some idea of that which the government desires them to furnish. Such descriptions may be painted with a broad brush and not even reach the level of a functional specification, but thought and care is required, nonetheless. A big factor that limits the use of the two-step method is the amount of time needed to accomplish both steps. Adequate technical personnel must be available to evaluate technical proposals submitted during step one. The ultimate evaluation of offered technical proposals can be very time consuming, particularly if any discussions are required. Following the evaluation, acceptable offerors must then develop and submit prices upon which award will be made during the second step.

Members of government have considered the problems inherent in the use of two-step formal advertising and placed limits on its use. The Defense Acquisition Regulation limits the use of this acquisition method by providing:

Two-step formal advertising shall be used ... when all of the following conditions are present ...

- (i) available specifications or purchase descriptions are not sufficiently definite or complete . . .
- (ii) definite criteria exist for evaluating technical proposals . . .
- (iii) more than one technically qualified source is expected to be available:
- (iv) sufficient time will be available for use of the two step method; and
- (v) a firm fixed-price or fixed-price contract with economic price adjustment will be used. 218

The second defense to criticism is that the requirement in S.5 to use functional specifications could be waived in favor of detailed specifications. The bill provides in regard to the use of detailed specifications:

²¹⁸ DAR § 2-502.

The preparation and use of detailed product specifications (in lieu of functional specifications) in a purchase description shall be subject to prior approval by the agency head.²¹⁹

The agency head can delegate this authority to the next highest organizational level **practicable**. However, this waiver authority "is not to be an invitation for the routine use of detailed product **specifications**." The authority to waive the requirement to use functional specifications in favor of detailed product specifications is better than no authority at all, but it is not the best approach to specification selection.

Waivers, too, take time. The higher the level, usually the more time, effort and paperwork involved. In many instances "class" waivers for whole groups of items or for a particular agency would be required.

The Department of Agriculture considers definitive specifications as essential to 95% of all solicitations. The use of only functional/performance specifications would require us to either process waivers or exercise the two step formal advertising method ... The volume of waiver requests [estimated 8000 annually] ... would create a logiam and cause delays. 222

Why create a system with built-in delays that affect the selection and use of specifications when it is unnecessary to do so? Other, betteroptions exist. To require the use of functional specifications unless waived is to create the same problem currently experienced with detailed specifications. They would be used in situations for which they are not really appropriate simply because it is easier and less time consuming than engaging in the two-step method or obtaining a waiver. Far better to express a strong preference for the use of functional specifications but leave to the contracting and using personnel the determination of the appropriate specifications to be used in a particular contract.

Allowing the selection of specifications to fit the particular buy will permit the use of that type of specification most appropriate under the circumstances. Functional specifications could be used for the purchase of commercially available products, an area where they would be partic-

²¹⁹ S. 5, supra note 146, at § 202(d).

²²⁰ Id., at § 601.

²²¹ 1977 Hearings, supra note 135, at 434.

²²² Id., at 918-19.

ularly warranted. They could be used also in high technology areas of rapid change where detailed specifications soon become dated. Conversely, detailed specifications could be used in those areas for which they are peculiarly appropriate, such as construction, spare parts, and to obtain compatability or standardization. The government then would be using the talents and experience of the contracting and using personnel who are intimately involved with the particular purchase—qualities for which the government pays good money.

VI. CONCLUSIONS AND RECOMMENDATIONS

No one in government or industry is completely happy with the current state of specifications and their use in federal contracting. The disgruntlement is not without reason. Detailed product specifications are not perfect by any means. They have faults which *at times* lead to reduced competition, costly purchases or the acquisition of products manufactured under outdated technology.

However, notwithstanding such faults, detailed specifications do have their place. At times, such as in construction, they are by far the most appropriate type of specification to be used. Deficiencies in such specifications should not be allowed to push Congress or executive agencies to the other extreme—total abolition, or at least severe limitation on the use of detailed product specifications. Instead, all specification options should be available to contracting personnel for use when appropriate. It is not as difficult as some seem to think to provide contracting and using activities guidance in specification selection and then allow them to select. A suggested approach was discussed in the July 1978 issue of the Defense Management Journal.

Decisional factors should be developed and supplied to contracting personnel that point to the appropriate specification type to be used in various acquisitions. For instance, when standardization is important, or configuration control, performance, maintainability or interchangeability are essential, the use of detailed specifications is indicated. Similarly, if high reliability is critical, such as in the space program or the purchase of military hardware, detailed specifications are more appropriate than functional. Conversely, where commercial products would meet the government's need or a variety of approaches to meeting that need is desired, functional specifications are appropriate. If technological change is rapid,

functional rather than detailed specifications should be used. The factor approach is set forth in simplified form in Table 2, below.²²³

One final area must be examined in determining the appropriate specification type: market research. As mentioned earlier, one must know what is available in the market place that will fulfill the government's requirements. Additionally, government personnel must know how the market in question operates. There is a significant difference between the manner in which automobiles are manufactured and marketed and the way that weapons are developed and sold. For example, generally, a prospective bidder on automobiles will not redesign the automobile to meet a detailed product specification, so a functional specification would be appropriate. However, because of the need for compatibility and standardization of machine gun parts, a detailed specification would be in order. The appropriate rule to adopt would be to determine what the respective market place has to offer the government to meet its needs and then tailor the specification, including selection of specification type, around that market place.²²⁴

²²³ This table was suggested by figure 5 in the article, *Tapping the Commercial Market Place*, Def. Mgmt. J. 37 (July 1978).

²²⁴ See discussion at note 174, supra. See also 1977 Hearings, supra note 135, at 615–16, for a good description of the concept of market research by Professor Ralph Nash, Jr., of the George Washington University National Law Center, Washington, D.C.

The proposed FAR includes coverage of the concept of market research, and discusses that concept at length. The proposed FAR provides:

11.005 Acceptability.

- (a) The acceptability of commercial products to meet Government needs should be decided on the basis of quality, reliability, performance, product life, and logistics support requirements.
- (b) When a defined Government need cannot be met precisely by an available commercial product, consideration shall be given to relaxing the specified need or to acquiring a modified commercial product. When product modifications are considered, a cost/benefit trade-off analysis shall be made. Factors to be considered in this analysis include—
- (1)An estimate of the cost of modification and impact on supply support capabilities, compared with the estimated costs of a Government-specified item;
- (2) Delivery schedules for modified commercial products, compared with those required for a Government-specified item; and

Finally, more trust must be placed in government personnel to make appropriate decisions. Such an approach is essential if the federal government is to avoid one of the significant criticisms and pitfalls of the

- (3) The impact on competition in current and planned acquisitions.
- (e) When user needs previously fulfilled by acquisition of products produced under detailed specifications are to be fulfilled by acquisition of commercial or commercial-type products under this Part 11, the contracting officer must consider the impact on previous producers, particularly those that are small or disadvantaged business concerns. Provided that they meet user needs, products previously produced and acquired under detailed specifications shall continue to be considered for acquisition for a reasonable, limited period in order to give producers time to develop commercial markets. The contracting officer shall determine the period to be allowed on a case-by-case basis after consultation with the previous producers, technical personnel, and the activity's small and disadvantaged business utilization specialists.

11.006 Evaluation and award.

- (a) Adequate market research and analysis will establish either the practicability of making an award on price alone or the need to consider other factors. When other factors are to be considered, the evaluation criteria shall permit consideration of the benefits to be derived by trade-offs, where feasible, among product capability, purchase price, distribution costs, and operation and support costs.
- (b) When market research and analysis reveals commercial or commercial-type products that have demonstrated acceptability and reliability in meeting commercial needs similar to those of the Government, Government testing and Government-established and monitored quality assurance requirements shall be held to a minimum. Government testing shall normally be limited to those situations in which adequate market data are not available, as in the case of new products that have not had time to establish their reliability. In such cases, testing may be justified in order to take advantage of new technology products.
- (c) The availability, scope, and duration of commercial warranties, determined during market research and analysis, will provide adequate bases for sound decisions on the Government's willingness to rely on commercial warranties. When the Government's interest requires a special or additional warranty provision, the provision shall be identified as a line item in the solicitation, with submission as a line-item price required.

11.007 Distribution options.

(a) The most advantageous logistics support option may be selected in advance of the solicitation, on the basis of the results of market research

mandatory use of detailed specifications, a problem equally applicable to mandatory use of functional specifications. This view was expressed by Michael J. Timbers, president of the Washington Management Group

and analysis. If selection is deferred until evaluation of offered distribution alternatives, it must be based on evaluation and award criteria that include trade-off analysis of Government needs, cost, and other factors. Alternatives available for distributing commercial products to Government users include—

- (1) Centrally managed contracts that permit suppliers to deliver products for Government stock replenishment or directly to users, or that permit pickup by users;
- (2) Local purchase with commercial delivery of products for Government stock replenishments or directly to users, or that permit pickup by users: and
- (3) A contractor-managed support function located on a Government facility or installation.
- (b) Government distribution systems for commercial products shall be used only when commercial systems are not available or when it has been conclusively determined (for national security, efficiency, economy, or other valid reason) that such use is in the Government's best interest.
- (e) When consideration is given to distribution of a commercial product through Government facilities, all known cost, operational, and administrative factors shall be considered, including the following:
- (1)Inventory obsolescence, breakage, theft, damage, or deterioration of quality through aging in Government storage.
- (2) Transportation, including loading, unloading, unpacking, and repackaging.
 - (3) Physical storage (facilities and personnel).
 - (4) Accounting and inventory.
 - (5) Enforcement of warranties.
 - (6) Determination of liability for defects.
 - (7) National stock numbering/cataloging.
 - (8) Requisitioning and ordering procedures.
 - (9) Alternative funding arrangements.
 - (10) Funds required to acquire and maintain inventory.

TABLE 2. DECISIONAL FACTORS FOR SELECTION OF SPECIFICATION TYPE

Factors	Specification Type	
	Functional	Detailed
Standardization	ļ	XX
High Reliability		XX
Selection Flexibility	XX	
Best Price	XX	XX
Commercial Products	XX	
Full Competition	XX	XX
Latest Technology	XX	
Special Packaging		XX

and a former commissioner of the Federal Supply Service, General Services Administration, in testimony before a Senate subcommittee on federal spending:

Every procurement officer I met in the federal government wanted to save dollars and provide products the agencies needed. They became frustrated when the system would not give them *flexibility* to achieve their goals.* (emphasis added)

Change in the manner of using specifications in federal acquisitions is indicated, and is certainly needed. Such change, however, should come at the hands of a skilled surgeon, not a wood cutter.

²²⁵ 1977 Hearings, supra note 135, at 160.

THE MAGIC KEYS: FINALITY OF ACCEPTANCE UNDER GOVERNMENT CONTRACTS*

by Thomas E. Shea, Esquire**

As a general rule, once the Government or any other purchaser accepts supplies or services, the sellor has a right to receive payment. In certain situations, however, the purchaser can revoke his or her previously given acceptance, and refuse to make payment or demand refund of payment made. Mr. Shea discusses these situations in the context of federal government procurement.

Mr. Shea identifies four "keys" which "unlock" the Government's acceptance of goods or services. These are latent defects, fraud, gross mistake amounting tofraud, and breach of warranty. In government contracts these four traditional rights are all buttressed by standard inspection clauses and other provisions.

As with other aspects of federal government procurement, the Court of Claims and the various agency boards of contract appeals have developed a specialized body of law concerning the keys to acceptance. Mr. Shea analyzes this body of law and concludes that, though complex, it is relatively stable and reliable for both the Government and its contractors.

^{*}The opinions and conclusions expressed in this article are those of the author and do not necessarily represent the views of The Judge Advocate General's School, the U.S. Army Corps of Engineers, the Department of the Army, orany other governmental agency.

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I. INTRODUCTION

The purpose of this article is to consider those situations in which the Government, as a contracting party, has the right to revoke its acceptance of supplies or services. Because of the specialized clauses used in government contracts, the rights and duties of both parties with respect to the finality of acceptance differ from those in the non-governmental, commercial world. ¹

In commercial transactions, finality of acceptance with respect to "goods" is governed by the Uniform Commercial Code, as modified by the legislature in each state. In the areas of construction and services, the rules are more diverse, each state holding to its own particular combination of statutory and case law. In the federal arena, contract requirements are governed by the Defense Acquisition Regulation (DAR) in the Department of Defense (DOD), and by the Federal Procurement Regulations (FPR) in civilian agencies.

However, where federal law is silent, the boards of contract appeals have relied on modem law (in preference to the old common law of contracts), which is likely also to be state rather than federal law. Kain Cattle Co., ASBCA No. 17124,73–1 B.C.A. 9999;Catalytic Eng'r. & Mfg. Corp., ASBCA No. 15257, 72–1 B.C.A. 9342;Production Unlimited, Inc., VACAB No. 541,661 B.C.A. 5444. In Reeves Soundcraft Corp., ASBCA Nos. 9030,9130,1964 B.C.A. 4317, the board noted the wide acceptance of the Uniform Commercial Code [U.C.C.], and quoted Alexander Pope, who said, "Be not the first by whom the new are tried, nor yet the last to lay the old aside," id., at p. 20,877.See Everett Plywood & Door Corp. v. United States, 419 F. 2d 425 (Ct. Cl. 1969).

¹ The validity and construction of contracts of the United States are federal questions and are not controlled by state law. United States v. Allegheny County, 322 U. S. 174, 183 (1944); United States v. Latrobe Constr. Co., 246 F. 2d 357 (8th Cir. 1957); Flight Test Eng'r. Co., ASBCA No. 7661, 1962 B.C.A. 3606.

² U.C.C. § § 2–606 through 2-608.

³ See Squillante, Transactions not Within the Code Sales, 76 Com. L. J. 101 (1971).

⁴ The Defense Acquisition Regulation [hereinafter referred to as D.A.R.] appears with identical section numbering in Title 32 of the Code of Federal Regulations [hereinafterreferred to as C.F.R.]. Hereinafter in this article, citations to D.A.R. will not include the parallel C.F.R. references. The D.A.R. was formerly called the Armed Services Procurement Regulation, or A.S.P.R.

⁵ Title **41**, C.F.R. The Federal Procurement Regulations will hereinafter be referred to as F.P.R.

II. CLAUSES AFFECTING FINALITY

A. DOD FIXED PRICE CONTRACTS

The four "keys" which will unlock the finality of the Government's acceptance of goods or services under fixed-price DOD contracts are: (1) latent defects, (2) fraud, (3) gross mistakes amounting to fraud, and (4) the rights of the Government under any warranty provisions.

The inspection clauses for fixed-price supply, ⁷ and research and development contracts* state: "Except, as otherwise provided in this contract, acceptance shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud." The clause for fixed-price construction contracts states: "Acceptance shall be final and conclusive except as regards latent defects, fraud, or such gross mistakes as may amount to fraud or as regards the Government's right under any warranty or guarantee." ⁹

The difference between these clauses is that the construction clause specifically includes warranty rights as an exception to finality of acceptance, while the research and development and supply clauses are silent on this point. ¹⁰ This omission should not be construed as indicating that warranty rights do not operate as an exception to finality of acceptance in research and development or supply contracts in the same manner as construction contracts. In fact, the effect of warranty provisions is the same in all three cases, considering the different subject matter of the contract types. ¹¹

⁶ All Department of Defense contracts are governed by D.A.R. and most other government contracts are governed by F.P.R. The Office of Federal Procurement Policy is presently attempting to consolidate these two regulations.

⁷ D.A.R. § 7–103.5(a), subpara. (d),

⁸ D.A.R. § 7-302.4(a), subpara. (d).

⁹ D.A.R. § 7–602,11(f), See Defense Procurement Circular No. 76–5 (15 October 1976).

¹⁰ Warranties are seldom used in cost-reimbursement contracts. Such use must be approved by the chief of the responsible purchasing office. D.A.R. § 1–324.2(a).

¹¹ See notes 169-86 infra and accompanying text.

B. D.O.D. COST-REIMBURSEMENT AND OTHER CONTRACTS

The relevant provisions for cost-reimbursement contracts are more complicated. The clause entitled "Inspection of Supplies and Correction of Defects" is prescribed for use in cost-reimbursement type supply contracts. This clause provides as follows:

At any time during performance of this contract, but not later than six (6) months (or such other period as may be provided in the Schedule) after acceptance of the supplies or lots of supplies last delivered in accordance with the requirements of this contract, the Government may require the Contractor to remedy by correction or replacement, as directed by the Contracting Officer, any supplies or lots of supplies which at the time of delivery thereof are defective in material or workmanship or otherwise not in conformity with the requirements of this contract. Except as otherwise provided in paragraph (c) hereof, the cost of any such replacement or correction shall be included in Allowable Cost determined as provided in the clause of this contract entitled "Allowable Cost, Fixed Fee and Payment". but no additional fee shall be payable with respect thereto.

(c) Notwithstanding the provisions of paragraph (b) hereof, the Government may at any time require the correction or replacement by the Contractor, without cost to the Government, of supplies or lots of supplies which are defective in material or workmanship, or otherwise not in conformity with the requirements of this contract, if such defects or failures are due to fraud, lack of good faith or willful misconduct on the part of any of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives, who has supervision or direction of (i) all or substantially all of the Contractor's business, or (ii) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (iii) a separate and complete major industrial operation in connection with the performance of this contract. The Government may at any time also require correction or replacement by the Contractor, without cost to the Government, of any such defective supplies or lots of supplies if the defects or failures are caused by one or more individual employees selected or retained by the Contractor after any such supervisory personnel has reasonable grounds to believe that such employee is careless or otherwise unqualified. ¹²

The clause further provides:

Except **as** provided in this clause and **as** may be provided in the Schedule, the Contractor shall have no obligation or liability to correct or replace supplies or lots of supplies which at the time of delivery are defective in material or workmanship or otherwise not in conformity with the requirements of this contract.¹³

The clauses entitled "Inspection and Correction of Defects" which are prescribed for cost-reimbursement type research and development contracts, 14 and for time and materials and labor hours contracts, 15 are

(b) At any time during performance of this contract, but not later than six (6) months (or such other time **as** may be provided in the Schedule) after acceptance of all of the end items (other than designs, drawings, or reports) to be delivered under this contract, the Government may require the Contractor to remedy by correction or replacement, as directed by the Contracting Officer, any failure by the Contractor to comply with the requirements of this contract. Any time devoted to such correction or replacement shall not be included in the computation of the period of time specified in the preceding sentence, except as provided in (d) below. Except as otherwise provided in paragraph (c) below, the allowability of the cost of any such replacement or correction shall be determined as provided in the clause of this contract entitled "Allowable Cost, Fixed Fee, and Payment", but no additional fee shall be payable with respect thereto. Corrected articles shall not be tendered again for acceptance unless the former tender and the requirement of correction is disclosed.

(e) Notwithstanding the provisions of paragraph (b) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if such failure

 $^{^{12}}$ D.A.R. § 7-203.5(a), subpara. (b) and (c). See Defense Acquisition Circular No. 76-16 (1 Aug. 1978).

¹⁸ D.A.R. § 7-203.5(a), subpara. (f). See Defense Acquisition Circular No. 76-16 (1 Aug. 1978).

¹⁴ D.A.R. § 7-402.5(a)(1) states:

essentially the same as that for cost-reimbursement supply contracts, above. Changes of wording among the clauses are non-substantive and are made because of the different subject matter involved.

Under the inspection clause for facility contracts, the correction of defects is clearly divided into two categories: the first for which the contractor receives compensation, and the second which is unreimbursed.

- (b) The Contracting Officer may at any time require the Contractor to remedy by correction or replacement any Facilities or work which are defective or otherwise not in conformity with the requirements of this contract. Except as otherwise provided in paragraph (c) below, such corrections and replacements shall be carried out at Government expense if under the terms of this contract the Facilities or work thus corrected or replaced were initially provided or required to be performed at Government expense.
- (c) The Contracting Officer may at any time require the Contractor, without cost to the Government hereunder or under

is due to fraud, lack of good faith or willful misconduct on the part of any of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives, who has supervision or direction of (i) all or substantially all of the Contractor's business, or (ii) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (iii) a separate and complete major industrial operation in connection with the performance of this contract. The Government may at any time also require the Contractor to remedy by correction or replacement, without cost to the Government, any such failure caused by one or more individual employees selected or retained by the Contractor after any such supervisory personnel has reasonable grounds to believe that any such employee is habitually careless or otherwise unqualified.

- (d) The provisions of paragraph (b) above shall apply to any corrected or replacement end item or component until six months after its acceptance.
- (f) Except as provided in this clause and as may be provided in the Schedule, the Contractor shall have no obligation or liability to correct or replace articles which at the time of delivery are defective in material or workmanship or otherwise not in conformity with the requirements of this contract.

¹⁵ D.A.R. § 7-901.21.

any of its related procurement contracts or subcontracts, to correct or replace any Facilities or work which are defective or otherwise not in conformity with the requirements of this contract, if such defects or failures are due to:

- (i) fraud, lack of good faith, or willful misconduct on the part of any of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives who has supervision or direction of—
 - (A) all or substantially all of the Contractor's business;
- (B) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed; or
- (C) a separate and complete major industrial operation in connection with the performance of this contract; or
- (ii) The conduct of one or more individual employees selected or retained by the Contractor after any of the supervisory personnel described in (i) above has reasonable grounds to believe that any such employee is habitually careless or otherwise unqualified. ¹⁶

C. CONTRACTS UNDER THE FEDERAL PROCUREMENT REGULATIONS

The contract clauses providing exceptions to finality of acceptance under the Federal Procurement Regulations (FPR) are similar to those contained in **DAR**. The language contained in the standard inspection clause for fixed-price supply contracts enumerates the same basic three exceptions to the conclusiveness of acceptance—latent defects, fraud, and gross mistakes amounting to fraud—as does its sister clause under **DAR**. ¹⁷ The Inspection of Supplies and Correction of Defects clause for cost-reimbursement type supply contracts ¹⁸ and the Inspection and Cor-

¹⁶ D.A.R. § 7–702.6. Insertion of the clause found at D.A.R. § 7–702.6 is required by D.A.R. § 7–703.6 for facilities acquisition contracts, and by D.A.R. § 7–706.9 for accountable facilities contracts.

¹⁷ 41 C.F.R. § 1-7.102-5(d).

¹⁸ 41 C.F.R. § 1–7.202–5.

rection of Defects clause for cost-reimbursement type research and development contracts under FPR are similar to those same clauses under DAR.²⁰

D. LITIGATION EXPERIENCE

Litigation concerning finality of acceptance has arisen chiefly under fixed-price contracts. Questions regarding finality under non-fixed-price contracts have rarely found their way into board and court decisions. This phenomenon may be due to the difference in contract inspection clauses.

On their faces, the inspection clauses for cost-reimbursement contracts under FPR and DAR, as well as facilities contracts and time, material and labor hour contracts under DAR, carry more substantial burden-of-proof problems than do the clauses for fixed-price contracts. Under the clause for cost-reimbursement contracts, the acceptance door remains locked unless the Government can prove that the defect is due to "fraud, lack of good faith, or willful misconduct" on the part of a supervisory representative of the contractor, or that the defect is caused by an employee "selected or retained by the Contractor after any such supervisory personnel has reasonable grounds to believe that such employee is habitually careless or otherwise unqualified." If the Government is unable to show that the defect was thus caused, the contractor may still be required to remedy the problem, but only at government expense. 22

Compared to the four primary keys under fixed-price contracts — latent defects, fraud, gross mistakes amounting to fraud, and warranty rights—the keys under cost-reimbursement contracts are apparently more difficult to turn. This is not to imply that the keys under fixed-price contracts are easy to prove; they are not. However, the keys of fraud, lack of good faith, and willful misconduct under non-fixed-price contracts all involve the element of intent, which presents onerous problems of proof. By the same measure, the key of fraud under fixed-price contracts has never been successfully asserted in litigation except under the False Claims

¹⁹ 41 C.F.R. § 1–7.402–5.

²⁰ See notes 12–14 supra and accompanying text.

²¹ D.A.R. § § 7–203.5(a), subpara. (c); 7–402.5(a)(1), subpara. (c); and 7–901.21, subpara. (c); 41 C.F.R. § § 1–7.202–5(c) and 1–7.402–5(c).

 $^{^{22}}$ D.A.R. § § 7–203.5(a), subpara. (b); 7–402.5(a)(1), subpara. (b); and 7–901.21, subpara. (b); 41 C.F.R. § § 1–7.202–5(b); and 1–7.402–5(b).

Act. ²³ While the keys of latent defects, gross mistakes amounting to fraud, and warranty rights present their own proof problems, they do not require proof of subjective intent.

In addition to the differences in inspection clauses between fixed-price and cost-reimbursement contracts, the basic nature of a cost-reimbursement contract may reduce the likelihood that the Government would attempt to open the door of finality, by requiring the contractor to remedy a defect without additional compensation. The basic theme in such contracts is that the contractor should be reimbursed for his costs based upon a reasonable level of performance and efficiency. The same is not true for fixed-price contracts where the contractor has agreed to provide certain goods or services for a fixed price. The Government is not concerned primarily with the contractor's efficiency, but only with delivery of an acceptable final product.

In the first case the contractor usually loses nothing for correcting a defect after acceptance, since it will be reimbursed. ²⁴ The fact that acceptance has been made is of relatively little practical significance compared with a fixed-price contract. There, correction of a defect after acceptance comes out of the contractor's pocket, and finality of acceptance becomes crucial. ²⁵

In part as a result of these differences in the language and nature of fixed-price and cost-reimbursement type contracts, litigation has focused almost exclusively on the four exception keys to the finality of acceptance under fixed-price contracts. Even so, the principles contained in the decisions are applicable in general terms to the finality of acceptance in all government contracts.

III. ACCEPTANCE

Before examining the keys to the door of finality, we should examine the lock: acceptance. "As used in Government contracts, 'acceptance'

²³ See notes 102-16 *infra* and accompanying text.

²⁴ **D.A.R.** § \$7–203.5(a), subpara. (b); 7–402.5(a)(1), subpara. (b); and 7–901.21, subpara. (b); 41 C.F.R. § \$1–7.202–5(b); and 1–7.402–5(b).

²⁵ Of course, if the Government directs correction of the defect after acceptance without holding one of the exception keys, the contractor would be entitled to an equitable adjustment for the work under the changes clause.

generally means the act of an authorized representative of the Government by which the Government assents to ownership by it of existing and identified supplies, or approved specific services rendered, as partial or complete performance of the contract."²⁶ By acceptance, the Government acknowledges that the supplies or services are in conformity with contract requirements.²⁷ Acceptance is the responsibility of the contracting officer or his authorized representative,²⁸ and may be made by one agency on behalf of another agency with binding effect.²⁹

The purpose of acceptance is to signal that the seller or contractor has fulfilled its part of the bargain. ³⁰ At some time the obligations of the parties under a contract must end. Acceptance of performance by the buyer is generally the signal of this final point with respect to the seller's obligations, ³¹ and payment signals the end of the buyer's obligations. ³²

"Though the mere acceptance of title to the goods should not necessarily be regarded as an agreement to accept the goods in full satisfaction of the seller's obligations, by the express terms of the contract such are sult may be brought about." This is what government contracts do through the language of the inspection clauses. The language for fixed-price contracts states that acceptance shall be conclusive with the exceptions stated—the keys —and the inspection clauses for non-fixed-price contracts also limit the Government's rights after acceptance. These clauses clarify and limit the basic rights of the Government, making resort to the sometimes confusing and contradictory common law unnecessary, at least in the first instance.

^{26 41} C.F.R. § 1–14.201. Under D.A.R. § 14–001.6, "[a] cceptance means the act of an authorized representative of the Government by which the Government assumes for itself, or as agent of another, ownership of existing and identified supplies tendered or approves specific services rendered, as partial or complete performance of the contract on the part of the contractor."

^{27 41} C.F.R. § 1-14.201.

^{28 41} C.F.R. § 1-14.204.

²⁹ D.A.R § 14-306(a); 41 C.F.R. § 1-14.204.

[&]quot;See D.A.R. § 14-001.6 and 41 C.F.R. § 1-14.201. See also 5A Corbin on Contracts § § 1228 and 1230 (1964).

⁸¹ See 5A Corbin on Contracts § 1230 (1964).

^{82 5}A Corbin on Contracts § 1228 at 507 (1964).

^{38 5} Williston on Contracts § 717 at 414 (3d ed. 1961).

³⁴ See notes 7-9, 17 supra, and accompanying text.

⁸⁵ See notes 12, 14, 15, 18, 19 supra, and accompanying text.

³⁶ See 5 Williston on Contracts § § 700-713 (3d ed. 1961).

The Uniform Sales Act, and later the Uniform Commercial Code (UCC), provided certainty and ease of application in the absence of conflicting contract language. Although not directly applicable to government contracts, the uniform acts, and especially the UCC, have gained acceptance for guiding the courts and boards in the absence of contrary federal precedent. 37

Under the UCC, acceptance plays an important role in the law of sales. ³⁸ In considering the effect of acceptance, the code provides that the acceptance of goods by the buyer precludes rejection and if made with knowledge of a non-conformity cannot be revoked because of it unless the acceptance was on the reasonable assumption that the non-conformity would be seasonably cured. ³⁹ In accordance with the generally accepted view on the finality of acceptance, the UCC treats acceptance as an important event not easily set aside.

The general attitude of both the UCC and the government contract clauses is the same, and their treatment of the exceptions to finality are similar in effect. While the inspection clauses for fixed-price contracts enumerate specific exception keys, the UCC language is somewhat more general concerning the grounds for revocation of acceptance but is more

Much confusion existed before the adoption of the uniform statutes on the right of a buyer who has accepted goods to sue for damages thereafter because of their defective quality or because of other defects in the seller's performance.

Id., § 700 at 365.

³⁷ See note 1, supra. The application of the U.C.C. to federal contracts has not been clearly defined and its application has often been rejected.

While we have not considered the Uniform Commercial Code as enunciative of Federal common law, we have in the past looked to this Code for guidance when there was no other Federal precedent available. Adequate legal precedent here being available, we do not come to a consideration of the provisions of the Uniform Commercial Code.

Meeks Transfer Co., A.S.B.C.A. No. **11819**, 68–1 B.C.A. **7063**, at p. **32**,644. In Kain Cattle Co., A.S.B.C.A. No. **17124**, **73–1** B.C.A. **9999**, at **46**,921, the board noted: "In the absence of express contractual provisions this Board has resorted to the Uniform Commercial Code as a recognized source of Federal common law."

³⁸ See U.C.C. § § 2-606 thru 608.

³⁹ U.C.C. § 2–607(2).

specific in the manner of revocation. ⁴⁰ Revocation under the code is allowed if the non-conformity "substantially impairs its value" and if acceptance was made:

- a) on the reasonable assumption that its non-conformity would be cured and it has not been seasonably cured; or
- b) without discovery of such non-conformity if his acceptance was reasonably induced either by the difficulty of discovery before acceptance or by the seller's assurances. 41

A comparison of the UCC and inspection clauses reveals non-parallel approaches, with both similarities and differences. Under the UCC, revocation is allowed only if the non-conformity substantially impairs the value of the thing accepted. 42 There is no similar requirement under the government inspection clauses, and none has been imposed by the courts or boards. This is in line with the perfect-tender rule applicable to government contracts by which the seller is required to conform exactly to the contract requirements. 43 The exception to finality under paragraph (a) of the code does not have a direct parallel in the inspection clauses. Under the fixed-price clauses, the Government could not revoke its acceptance for such patent defects unless based upon fraud, gross mistake or warranty rights. 44

Paragraph (b) of the UCC provides two additional grounds for revocation. The first concerns a situation in which acceptance was made without discovery of the non-conformity because of "the difficulty of discovery." ⁴⁵ This closely approximates the concept of latent defects, although the comments to the code do not elaborate on the point. ⁴⁶ The second exception under this paragraph is for acceptance induced by the seller's assurances. ⁴⁷ This would cover the exception keys of fraud and gross mistake amounting to fraud found in the inspection clauses. The com-

⁴⁰ U.C.C. § 2-608.

⁴¹ U.C.C. § 2-608.

⁴² U.C.C. § 2-608(1).

⁴³ Data Entry Systems, Inc., A.S.B.C.A. No. 17393, 73-2 B.C.A. 10,149, at 47.720.

⁴⁴ See notes 7-9 supra and accompanying text.

⁴⁵ U.C.C. § 2–608(1)(b).

⁴⁶ U.C.C. § 2–608, comments.

⁴⁷ U.C.C. § 2-608(1)(b).

ments to the code note that assurances may be made either in good faith or bad faith, and that any remedy accorded by the article is available to the buyer under the code sections on fraud. 48

The event of acceptance is an important signal in a contractual relationship. As recognized in contacts outside the government contracts arena, acceptance plays a significant role in discharging the buyer's obligation. The finality of acceptance will not be lightly set aside.

IV. LATENT DEFECTS

One of the primary keys for unlocking the finality of acceptance is discovery of a latent defect. Simply stated, a latent defect is one which is not reasonably discoverable at the time of acceptance. 49 More completely, a latent defect is one which is hidden from sight and knowledge, existing at the time of acceptance, which is not discoverable by reasonable inspection. 50 The question of whether a defect is reasonably discoverable has been one of the most litigated issues in the area of finality of acceptance.

If the Government is able to show that a defect is latent, then it is entitled to exercise any contractual remedy. ⁵¹ It is as if acceptance had not occurred. The Government may properly require the contractor to correct the defect under the provisions of the inspection clause. ⁵² If the

⁴⁸ U.C.C. § 2-608, comment 3.

⁴⁹ Kaminer Constr. Corp. v. United States, 488 F.2d 980 (Ct. Cl. 1973); Southwest Welding & Mfg. Co. v. United States, 413 F.2d 1167 (Ct. Cl. 1969); Cross Aero *Corp.*, A.S.B.C.A. No. 14801, 71–2 B.C.A. 9075.

⁵⁰ See Kaminer Constr. Corp. v. United States, 488 F.2d 980 (Ct. Cl. 1973);Trio Chemical Works, Inc., G.S.B.C.A. Nos. 2572, 2583, 70–1 B.C.A. 8156.

⁵¹ Philos Constr. Co., D.O.T. C.A.B. No. 67-33, 68-2 B.C.A. 7110, at 32,939. The board held: "Since we find the defects to be latent, the Government was authorized upon discovery of these defects to re-open the contract and to avail itself of all provisions of the original contract, notwithstanding the prior acceptance and final payment."

⁵² Triple "A" Machine Shop, Inc., A.S.B.C.A. No. 16844, 72–1 B.C.A. 9826. The standard inspection clause for fixed-price construction contracts provides that the Government may correct the defects and charge the cost thereof to the contractor. D.A.R. § 7–602.11(c).

contractor fails to correct the defect, the Government may charge the contractor for cost of repairing the defect. ⁵⁸ This may include the cost of checking, readjusting or even replacing other parts necessitated by the repair of the defective part. ⁵⁴ Where necessary, the Government may recover such extra costs of inspection as the natural and probable consequences of the contractor's failure to comply with the contract requirements. ⁵⁵

In *United States* v. *Franklin Steel Products*, *Inc.*, ⁵⁶ the contractor provided aircraft engine bearings which were accepted and later found to be defective. After finding that the defects were latent, the Ninth Circuit held that the contractor was liable for all damages which were direct and proximate results, and that such consequential damages may include replacement of defective goods, and damages for injuries caused by the defective goods. Although the contract price for the bearings was \$28,890, the Government was able to recover the contract price plus \$147,060 in consequential damages. ⁵⁷ The court also noted that the meas-

The Contractor shall, without charge, replace any material or correct any workmanship found by the Government not to conform to the contract requirements, unless in the public interest the Government consents to accept such material or workmanship with an appropriate adjustment in contract price.

Under paragraph (c) of this inspection clause (for fixed-price construction contracts), if the contractor does not promptly replace rejected material or correct rejected workmanship, the Government may, by contract or otherwise, correct the problem and charge the cost to the contractor, or may terminate the contract. The inspection clauses for other types of fixed-price contracts provide similar remedies. See D.A.R. § 7-103.5, 7-302.4 and 41 C.F.R. § 1-7.102-5.

It is unlikely that a contractor would be terminated for default based upon discovery of a latent defect. However, the option is available under the language of the inspection clauses. The point has apparently not been litigated.

⁵³ Under D.A.R. 7-602.11(b),

⁵⁴ Triple "A" Machine Shop, Inc., A.S.B.C.A. No. **16844**, **73–1** B.C.A. **9826**; F. L. Jacobs Co., A.S.B.C.A. No. **3385**, **57–1** B.C.A. **1242**.

⁵⁵ Wilson & Co. v. United States, **137** F. Supp. **435** (Ct. Cl. **1956**); Triple "A" Machine Shop, Inc., A.S.B.C.A. No. **16844**, 73–1 B.C.A. **9826**.

⁵⁶ **482** F.2d **400** (9th Cir. 1973), cert. denied, **415** U.S. **918** (1974). ⁵⁷ Id., at **404**.

ure of damages is not different whether recovery is based upon a latent defect or on fraud. 58

A. INSPECTION REQUIREMENTS

A defect is not latent if, at the time of acceptance, it could have been discovered either by a reasonable inspection ⁵⁸ or by an inspection procedure required by the contract. ⁶⁰ Where the Government could have discovered the defect by such an inspection, the defect will be considered patent and acceptance will not be unlocked. This is true even if the inspection was not actually made. ⁶¹ The exceptions to finality do not protect the Government against the negligence of its own representatives. ⁶²

In Hercules Engineering & Manufacturing Co., 63 post-acceptance inspection of drive assemblies manufactured by a contractor revealed defects in the dimensional specifications. The board found that these defects were not latent because a reasonable inspection would have discovered the defects before the units were accepted. The board found that the Government had ample opportunity before acceptance to appropriately measure the units and discover that the dimensions did not meet the specifications. In reaching its decision, the board observed that the Government's failure to inspect or discover the defects which a reasonable inspection would have disclosed did not render the defects latent. Therefore, the conclusiveness of the final acceptance was not diminished by such failures of the items to meet the contract specifications.

A defect that is apparent on visual examination is not latent. ⁶⁴ In one case the Court of Claims held that, at the time of acceptance, a road was

⁵⁸ See also United States v. Aerodex, Inc., 469 F.2d 1003 (5th Cir. 1972).

⁵⁹ Federal Constr. Co., A.S.B.C.A.No. 17599, 73-1 B.C.A. 10003.

⁶⁰ Southwest Welding & Mfg. Co. v. United States, 413 F.2d 1167 (Ct. Cl. 1969); Gordon H. Ball, Inc., A.S.B.C.A. No. 8316, 1963 B.C.A. 3925.

⁶¹ Herley Industries, Inc., A.S.B.C.A. No. 13727, 71-1 B.C.A. 8888.

⁶² Instruments for Industry v. United States, 496 F.2d 1157 (Ct. Cl. 1974).

⁶³ A.S.B.C.A.No. 4979, 59-2 B.C.A. 2426.

⁶⁴ Royson Eng'r Co., A.S.B.C.A. Nos. 15438,15734,73-2 B.C.A. 10299; Federal Constr. Co., A.S.B.C.A. No. 17599, 73-1 B.C.A. 10003.

visually rough and out of alignment in many sections; a readily observable condition for which the Government could not later recover. ⁶⁵

Defects that are essentially dimensional are generally not latent since they are easily discoverable by measurement, a reasonable test. ⁶⁶ However, this standard for judging reasonableness has not always been applied where other factors militate against it. In *Kaminer Constr. Corp. v. United States*, ⁶⁷ sixteen undersized bolts which were not hidden from sight were a latent defect. The contractor built a tower and derrick for the Government. Failure of eight of the bolts caused the entire structure to collapse. In its decision, the Court of Claims noted that there were 11,967bolts on the tower and derrick. The contractor had a 60-man work crew on the job, while the Government was represented by a single inspector. The court considered it unreasonable to expect that the inspector would find that the contractor was using 1¼ inch bolts in place of the specified 1¾ inch bolts.

Difficult questions have arisen in cases concerning whether the Government should have conducted a test that would have revealed the defect or non-conformity prior to acceptance. The decisions in such instances are based more upon fact than law, the boards and courts being guided by a general standard of reasonableness. ⁶⁸ In *Herley Industries, Inc.*, ⁶⁹ the Government contended that the contractor's use of beryllium-copper alloy in lieu of copper or trumpet brass gave rise to a latent defect because because it could not be discovered by reasonable tests. The use of the beryllium-copper alloy was confirmed by laboratory tests conducted approximately 10 months after completion of the contract.

The board found that the nature of the materials used could not be determined by visual examination or by the tests applied during contract performance. However, the board noted also that the terminative factor

⁶⁵ Roberts v. United States, 357 F.2d 938 (Ct. Cl. 1966).

⁶⁶ Platt Mfg. Co., A.S.B.C.A. Nos. 19906, 19907, 76-2 B.C.A. 12016.

^{67 488} F.2d 980 (Ct.Cl. 1974). At the board of contract appeals level, the case was Eng. B.C.A. No. 2833, 68-2 B.C.A. 7321, on motion for reconsideration, 70-1 B.C.A. 8257.

⁶⁸ See, e.g., Southwest Welding & Mfg. Co. v. United States, 413 F.2d 1167 (Ct. Cl. 1969); Harrington & Richardson, Inc., A.S.B.C.A.No. 9839, 72–2 B.C.A. 9607.

⁶⁹ A.S.B.C.A. No. 13727, 71-1 B.C.A. 8888.

in ascertaining latency is whether or not the defect could have been discovered by exercise of care which is ordinary and reasonable under the particular circumstances of the situation. The fact that a defect may be hidden from sight or even unascertainable through tests applied during contract performance, does not preclude using still other tests which would have uncovered the defect and which, under the circumstances, should have been applied or at least considered for use. The Government initiated and established the test requirements in this case, not the contractor. Under these circumstances the defective material should have been discovered

On the other hand, the fact that some conceivable test could have revealed a defect at the time of acceptance is not by itself conclusive that the defect is patent. ⁷⁰ Where a test is neither customary nor economically feasible, the Government is not required to perform it, and may later recover on the basis of the latent defect. ⁷¹

In RoysonEngr. Co., 72 the board concluded that the Government was entitled to revoke its acceptance of adjustable links in missile handling bands which were discovered to be brittle due to overheating in excess of the contract requirements. The decision found that the brittleness was a latent defect because its discovery required a laboratory test which was not required under the contract and which was beyond categorization as a reasonable inspection. The Government did not discover the brittleness until these extensive laboratory tests were made subsequent to the failure of the items.

In another case, the use of non-specification steel in rifle receivers was a latent defect because it was not discoverable by a reasonable inspection. ⁷⁸ The contract specified use of contractor-prepared certificates of compliance as a substitute for government testing. The board found that this procedure tended to negate any understanding that the defect could have been patent. The certificates warranted the absence of a defect that was practicably discoverable only by chemical analysis after an electronic screening procedure. The record showed that no routine method of testing

⁷⁰ Pilaras Painting Co., A.S.B.C.A. No. 15813, 72–2 B.C.A. 9505; F. W. Lang Co., A.S.B.C.A. No. 2677, 57–1 B.C.A. 1334.

⁷¹ F. W. Lang Co., A.S.B.C.A. No. 2677, 57-1 B.C.A. 1334.

⁷² A.S.B.C.A. No. 13926, 70-2 B.C.A. 8600.

⁷⁸ Harrington & Richardson, Inc., A.S.B.C.A. No. 9839, 72-2 B.C.A. 9507.

the steel of rifle receivers was actually in existence at the time, and that spectrographic testing would have been tedious and costly.

Where a defect is detectable by the method of inspection specified in the contract, the Government cannot successfully turn the latent defect key. 74 The fact that an inspection procedure is prescribed in the contract serves as persuasive evidence that the inspection procedure is reasonable. An interesting dilemma for the Government was pointed out in the case of *Southwest Welding & Manufacturing Co. v. United States*. In that case the Court of Claims held that welding defects on penstocks for the power plant units of a dam project were not latent. The specified radiographic inspection of the welds conducted prior to acceptance did not reveal defects but later ultrasonic inspection revealed defects in three percent of the welds.

The court found that either the indications of welding defects shown by the ultrasonic inspection were not latent because they were discoverable by a reasonable means of inspection, or they were not rejectable defects at all because not interdicted by the inspection and performance standards set forth in the contract. The Government could not contend that the indications were rejectable defects under the inspection standards, and at the same time argue that it could not reasonabley have discovered the defects under the inspection requirements of the contract. The decision properly found that the Government was attempting to impose a higher standard of performance after acceptance than required by the contract. ⁷⁵

In *Milton Machine Corp.*, ⁷⁶ the board allowed the Government to revoke acceptance of warheads because of latent defects not discoverable by a reasonable inspection. After accepting the warheads, the Government discovered that certain welds were defective and thereafter required the contractor to cure the defects. The welds in question were accepted after visual penetrant inspection at both the point of origin and that of destination. However, after stringent vibration tests, the Government discovered that one of the units was defective and thereafter found the welding defects to be the cause. The board considered the contractor's claim that the vibration tests appeared to be too stringent, but concluded that the nature of such a test or any other test is irrelevant

⁷⁴ Gordon H. Ball, Inc., A.S.B.C.A. No. 8316, 1963 B.C.A. 3925.

^{75 413} F.2d 1167 (Ct. Cl. 1969).

⁷⁶ A.S.B.C.A.No. 15397. 72-1 B.C.A. 9203.

if it is determined that the contractor's failure to meet the contract requirements caused a latent defect.

Although at first glance *Southwest* and *Milton* appear to be at odds, the holdings are consistent. The distinction is that the welds in *Milton* did not meet contract requirements, and the Government was able to show that the contractor had not complied with the welding procedure requirements of the contract. In *Southwest* there was no similar demonstration; the Government simply required a higher standard after acceptance than was required by the contract.

B. BURDEN OF PROOF

As the proponent, the Government bears the burden of proving that a defect was latent. While various cases have discussed different aspects of the picture, there appear to be three basic requirements: First, the Government must demonstrate that the defect could not have been reasonably discovered at the time of acceptance. "This is the basic and most litgated issue. In order to carry its burden of proof with respect to this, the Government must prove what constitutes a reasonable inspection in the circumstances and why this type of inspection would not have revealed the defect.

The Armed Services Board of Contract Appeals (A.S.B.C.A.) discussed the burden of proof with respect to latent defects in *Geranco Manufacturing Corp*. ⁷⁹ In that case, the Government sought to recover the cost of repairing steam cleaners but the board denied the claim, stating that it had failed to prove that the defects were latent. Noting that this was an affirmative claim by the Government against the contractor, the board stated that the Government had the burden of proof to show that the alleged defects were latent. The decision included the further observation that, at common law, under the Uniform Sales Act, and also under the U.C.C., inspection and acceptance are not conclusive and do not bar the buyer from making a subsequent claim for defects, if he acts promptly; but under such circumstances the buyer has a heavy burden of proof. The board found that the Government had failed to present evidence showing that the defects were latent and had failed to show what a normal or reasonable inspection would have been.

⁷⁷ T. M. Industries, A.S.B.C.A. No. 19068, 75–1 B.C.A. 11056.

⁷⁸ Dale Ingram, Inc., A.S.B.C.A. No. 12152, 74-1 B.C.A. 10436.

⁷⁹ A.S.B.C.A. No. 12376, 68-1 B.C.A. 6898.

Second, the Government must be prepared to show that the defect existed at the time of acceptance and was not caused by events after acceptance. 80 Although this has not often been an issue in the reported decisions, whenever there is a question of when the defect arose, the Government, as proponent, must bear the burden of proof. 81

The third proposition that the Government must prove is that the defect, and not something else, caused the problem." This issue is only applicable in those cases where the defect causes a problem or failure which is the basis of the Government's complaint. In *Jo-Bar Manufacturing Corp.*, the board held that, by electing to set aside its final acceptance on the basis of a latent defect, the Government assumed the burden of proving the latent defect by a "preponderance of credible evidence." The board noted several inadequacies in the Government's case, including a lack of proof that the latent condition actually caused the problem and a failure to show that the problem was not the result of other causes.

V. GROSS MISTAKE AND FRAUD

While the concept of latent defect is primarily concerned with the standards required of the Government in conducting its inspection, the questions of gross mistake amounting to fraud focus on the actions of the contractor. These two keys are based upon a standard of conductrequired of the contractor for the protection of the Government. Although based upon principles borrowed from tort law, the issues are presented in their contract context. When the conduct of the contractor falls below the contractually required standard, the Government is able to avail itself of these keys to unlock finality of acceptance.

A. GROSS MISTAKE AMOUNTING TO FRAUD

Although the exception of "gross mistake amounting to fraud" has been contained in government contracts at least since 1927, there were apparently only three reported cases dealing with the issue prior to 1972. e-Since that time it has become a more popular key to the finality door.

⁸⁰ Marmon-Herrington Co., A.S.B.C.A. No. 10889, 67-2 B.C.A. 6523.

⁸¹ J. W. Bateson Co., F.A.A.C.A.P. No. 66-25, 66-1 B.C.A. 5479.

⁸² Jo-Bar Mfg. Corp., A.S.B.C.A. No. 18292, 73-2 B.C.A. 10353.

⁸³ A.S.B.C.A. No. 18292, 73-2 B.C.A. 10353, at 48,896.

⁸⁴ See Catalytic Eng'r and Mfg. Corp., A.S.B.C.A. No. 15257, 72-1 B.C.A. 9342,

At least part of the credit for this new awareness must be given to the exhaustive decision of the A.S.B.C.A. in *Catalytic Engineering and Manufacturing Corp.* 85 In that case the board held that a contractor had made a gross mistake amounting to fraud when it manufactured the end pieces of dehydrator cartridges out of a different material than required by the contract without notifying the Government of the change.

Before reaching its decision, the board engaged in an extensive discussion of the meaning of gross mistake amounting to fraud. It observed that the expression means something different than fraud per se. After considering a series of related definitions, the board concluded that the term means that:

there must first be a major or great or serious mistake made and that this mistake must have occasioned the acceptance of the supplies that did not conform to contract requirements. . . , "Gross mistake" connotes a mistake so serious or uncalled for as not to be reasonably expected, or justifiable, in the case of a responsible contractor for the items concerned. Finally the Board concludes that a gross mistake would be understood to amount to fraud when the misleading statement or action is made by mistake and without an intent to deceive but induces the acceptance of supplies not conforming to contact requirements to the buyer's detriment. 86

This treatment of gross mistake amounting to fraud was consistent with the earlier decision of the Court of Claims in *Bar-Ray Products*, *Znc.* v. *United States*. ⁸⁷ In that case the court upheld a decision by the A.S.B.C.A. ⁸⁸ in which the government inspector had accepted photographic processing units that were defective. Although a visual examination at the time of acceptance disclosed a number of obvious deviations from the contract requirements, the units were accepted because of as-

at p. 43,358. The three cases are: Perfect Packed Products Co., A.S.B.C.A. No. 629 (25 September 1951): Bar-Ray Products, Inc., A.S.B.C.A. No. 4834, 59–1 B.C.A. 2181, affd, Bar-Ray Products, Inc. v. United States, 340 F.2d 343 (Ct. Cl. 1964); and Kaminer Constr. Corp., Eng. B.C.A. No. 2833, 68–2 B.C.A. 7321.

⁸⁵ A.S.B.C.A. No. 15257, 72-1 B.C.A. 9342.

⁸⁶ Id., at 43,365.

^{87 340} F.2d 343 (Ct. Cl. 1964).

⁸⁸ Bar-Ray Products, Inc., A.S.B.C.A. No. 4834, 59-1 B.C.A. 2181.

surances from the contractor that the deviations had been previously approved. After detailing the facts, but without an extensive discussion of the legal issues, the court found: ". . . it is evident from the circumstances of this case that acceptance of the units was induced by such gross mistake as to amount to fraud." 89

The exception for gross mistake amounting to fraud has not been applied blindly. 90 A demonstration that a gross mistake has been made is not alone sufficient. "In order to substantiate a claim of gross mistake amounting to fraud, it is essential also to demonstrate that the gross mistake complained of actually induced the final acceptance which is sought to be set aside." 91 In another case, 92 a contractor manufacturing truck-mounted shops was entitled to additional compensation for fitting the shops with cross members after acceptance. Additional cross members on the pre-production models were eliminated by the manufacturer on the production models without notification to the Government, contrary to the contract requirements. The Government accepted the units but later ordered the change after a unit failed during testing. The decision held that the failure to notify the Government of the elimination of the cross members was a simple mistake, but was not "palpable or flagrant or irreconcilable" and, therefore, not a gross mistake amounting to fraud 93

The cases reveal that in approaching the question of gross mistake amounting to fraud, it is necessary to consider all the circumstances. In *Jo-Bar Mfg. Corp.*, ⁹⁴ the contractor was required to manufacture and test high-strength aircraft bolts and to provide certification that its product met the contract requirements. The board found that the contractor had made gross mistakes in its interpretation of the contract requirements and had made a misrepresentation to the inspector. After reciting

⁸⁹ Bar-Ray Products, Inc. v. United States, 340 F.2d 343 (Ct. Cl. 1964) at 351.

⁹⁰ See A.C.E.S., Inc., A.S.B.C.A. No. 19376, 75-2 B.C.A. 11525; Onus Co., A.S.B.C.A. No. 16706, 72-2 B.C.A. 9722.

⁹¹ Hydro Fitting Mfg. Corp., A.S.B.C.A. No. 16394, 73-2 B.C.A. 10081, at 47,368.

⁹² Stewart Avionics, Inc., A.S.B.C.A. Nos. 15512, 15893, 75-1 B.C.A. 11,253.

⁹³ Id., at 53,631.

⁹⁴ Jo-Bar Mfg. Corp., A.S.B.C.A. No. 17774, 73-2 B.C.A. 10311.

the legal standards that were discussed in the *Catalytic Engineering* case, ⁹⁶ the board held that the contractor's action had "destroyed the conclusiveness of the Government's prior acceptance." ⁹⁶

In cases where the evidence has been clear and where the latent defect exception is not applicable, the boards have been willing to use the gross mistake key. However, where a latent defect is also involved, the boards have preferred to base their decisions on the less onerous grounds. As an example, in *Trio Chemical Works, Inc.*, 97 the acceptance by the Government of aerosol cans of lacquer was held by the Government Services Board of Contract Appeals (G.S.B.C.A.) not to be binding. After completion of the contract and acceptance by the Government, it was discovered that the lacquer failed to dry properly. Chemical analysis revealed that the lacquer did not contain the principle ingredient called for by the specifications.

The board rejected the contractor's contention that acceptance was conclusive because the contractor's labels indicated that the specified ingredient had been used and had submitted erroneous test reports which had delayed the Government's discovery of the nonconformance. **As** a result, the omission of the specified ingredient had been concealed and was, therefore, a latent defect. The board found there was no occasion for the Government to subject the lacquer to a chemical analysis before acceptance.

Although the G.S.B.C.A., in this case, chose to base its decision on the grounds of a latent defect, it is clear that the decision could also have been based on gross mistake amounting to fraud because of the misrepresentations made by the contractor. A similar approach was taken by the Court of Claims in *Kaminer Construction Corp. v. United States.* 98 The Engineer Board of Contract Appeals had found that the Government was entitled to revoke its acceptance based upon a gross mistake amounting to fraud. *On appeal, the court upheld the result but based its decision only on latent defect.

⁹⁵ See notes 85–86, supra, and accompanying text.

⁹⁶ Jo-Bar Mfg. Corp., A.S.B.C.A. No. 17774, 73-2 B.C.A. 10311, at 48,684.

⁹⁷ G.S.B.C.A. Nos. 2572, 2583, 70-1 B.C.A. 8156.

^{98 488} F.2d 980 (Ct. Cl. 1973).

⁹⁹ Eng. B.C.A. No. 2833, 68-2 B.C.A. 7321.

B. FRAUD

According to *Williston on Contracts*, acceptance is subject to the universal rule that an assent procured by fraud may be rescinded. ¹⁰⁰ The question of what constitutes fraud is not an easy one. Fraud is "difficult to define; there is no absolute rule as to what facts constitute fraud; and the law does not provide one 'lest knavish ingenuity may avoid it'." ¹⁰¹ In *Weiss* v. *United States*, the court observed: "The law does not define fraud; it needs no definition; it is as old as falsehood, and as versable as human **ingenuity**." ¹⁰²

Despite the lack of a specific definition, there are traditionally several requirements for establishing a case of fraud: (1)a false representation, either actual or implied, or the concealment of material facts; (2) knowledge of the falsity, or statements made in reckless and wanton disregard of the facts; (3) an intent to mislead another into relying on the representation; (4) actual reliance on the false representations; and (5) injury as a consequence of the reliance. ¹⁰³ At least in dicta, the A.S.B.C.A. has adopted these traditional requirements for the fraud exception under the standard inspection clauses. ¹⁰⁴

The most important distinction between fraud and gross mistake amounting to fraud lies in the area of intent. ¹⁰⁵ With gross mistake amounting to fraud, it is not necessary to prove that the contractor had an intent to deceive. It is sufficient that a serious yet unintentional mistake was made. ¹⁰⁶

Because of its elusiveness, fraud has not often been used as a key to the acceptance lock. This writer has been unable to find a single case in which the Government was able to revoke its acceptance based upon the fraud exception of the standard inspection clauses. As noted earlier, ¹⁰⁷

^{100 (3}rd ed. 1961) § 718.

¹⁰¹ White v. Union Producing Co., 140 F.2d 176, 178 (5th Cir. 1944).

^{102 122} F₁2d 675 (5th Cir. 1941), cert. denied, 314 U. S. 687 (1941).

^{108 12} Williston on Contracts § 1487A, at 330 (3d ed. 1970).

¹⁰⁴ Stewart Avionics, Inc., A.S.B.C.A. Nos. 15512, 15893, 75–1 B.C.A. 11253.

¹⁰⁶ Bar-Ray Products, Inc. v. United States, 340 F.2d 343 (Ct. Cl. 1964); Catalytic Eng'r. & Mfg. Corp., A.S.B.C.A. No. 15257, 72-1 B.C.A. 9342.

¹⁰⁶ Id.

¹⁰⁷ See notes 97–99, supra, and accompanying text.

the boards and courts have been reluctant to base their decisions on grounds of gross mistake amounting to fraud where the same result could be achieved under the guise of latent defect. With respect to fraud, the aversion appears to be even stronger. Moreover, the reported cases reveal few serious attempts by government counsel to assert fraud under the inspection clauses as the basis for unlocking finality of acceptance.

In *Dale Ingram*, *Inc.*, ¹⁰⁸ the Government attempted to revoke acceptance on grounds of latent defect, fraud, gross mistake amounting to fraud, and departures from specific requirements of the contract. Because the warranty period had expired, the board held that as a matter of law the only exceptions to finality that the Government could assert were latent defects and fraud. ¹⁰⁹

After finding the defects were not latent, the board turned its attention to the question of fraud. The contractor had provided affidavits and a certificate of inspection to the Government stating that the work had been completed in accordance with the specifications and, in effect, that all the plywood was mahogany, which was contrary to fact. However, the Government representative to whom the certificate was furnished did not rely on it as being factually correct. After he received it, he continued to believe that the plywood contained woods other than mahogany and accepted it despite its noncompliance with the specifications because he believed it to be suitable for its intended purpose. The board concluded that, although the contractor had executed the false affidavits and certificates intending to induce action by the Government, nevertheless there was no fraud, because there was no actual reliance.

"Fraud is a difficult thing to prove. It is impossible to look into the recesses of another's mind. Conclusions, usually, must be reached by a process of reasoning and the logical analysis applied to facts and circumstances that are known or disclosed in the record." ¹¹⁰ Aside from the difficulties with proof, there is usually little reason for a government attorney to assert, or for a tribunal to decide, an issue of fraud, because the gross-mistake-amounting-to-fraud exception will accomplish the same

¹⁰⁸ A.S.B.C.A. No. 12152, 74-1 B.C.A. 10436.

 $^{^{109}}$ The board found that the exceptions from finality under the inspection clause only applied to source inspections and were therefore inapplicable. Id., at 49,329–30

¹¹⁰ Carrier Corp. v. United States, 328 F.2d 328, 334 (Ct. Cl. 1964).

end with less effort. When the necessity of finding an intent to deceive is eliminated, there is no need to accuse the contractor of fraud. The A.S.B.C.A. has also indicated that for fraud cases it will require the Government to meet a higher standard of proof than the mere preponderance of the evidence which suffices for a gross mistake amounting to fraud. ¹¹¹

C. THE FALSE CLAIMS ACT

The False Claims Act ¹¹² provides that a person making a claim against the Government, knowing it to contain any fraudulent or fictitious statements, shall be liable for specified damages. The purpose of the Act is to protect the funds and property of the Government broadly from fraudulent claims, ¹¹³ and to provide for restitution of money taken from the Government by fraud. ¹¹⁴

Although not specifically listed as an exception to finality of acceptance under the standard inspection clauses, a successful action under the False Claims Act can serve as a key to finality. Where a contractor supplies goods with an intent to deceive, the Government is entitled to recover despite final acceptance. ¹¹⁵ The fact that the Government fails to inspect the goods prior to inspection does not relieve the contractor of its liability. ¹¹⁶

¹¹¹ Catalytic Eng'r. & Mfg. Corp., A.S.B.C.A. No. 15257, 72-1 B.C.A. 9342.

¹¹² The False Claims Act was adopted in 1863. Act of Mar. 2, 1863, c. 67, 12 Stat. 696, re-enacted as Rev. Stat. § \$3490-94, 5438. The part of the Act dealing with civil prohibitions is now codified at 31 U.S.C. § \$231 et seq. (1976). The language used in Title 31 differs in some important respects from that contained in the Revised Statutes. Since Title 31 has not been enacted into positive law, the text of the Revised Statutes controls. See United States v. Bronstein, 423 U.S. 303, 305 n.1 (1976); United States v. Neifert-White Co., 390 U.S. 228, 228-29 n.1 (1967).

¹¹³ Rainwater v. United States, 356 U.S. 590 (1958).

¹¹⁴ United States ex. rel. Marcus v. Hess, 317 U.S. 537, rehearing denied, 318 U.S. 779 (1943).

¹¹⁵ United States v. National Wholesalers, **236** F.2d **944** (9th Cir. **1956**), *cert. denied*, **353** U.S. **930** (**1957**).

¹¹⁶ United States v. Aerodex, Inc., 469 F.2d 1003 (5th Cir. 1972).

Under the Act, the Government is entitled to recovery of double damages and \$2,000 for each violation. In considering the question of damages under the Act, the Supreme Court has held that the number of forfeitures is not inevitably measured by the number of contracts, but is measured with respect to the number of specific acts of the defendant. ¹¹⁷ The Court also held that the Government's actual damages are to be doubled before any subtractions are made for the compensatory payments previously received by the Government, thus maximizing the impact of the double damages provision. ¹¹⁸

The question of whether the Government is entitled to consequential damages is not entirely settled. In *United States* v. *Aerodex*, ¹¹⁹ the Fifth Circuit held that consequential damages are not recoverable. In that case, the United States sought damages for the expense of removing defective parts which had been installed before discovery of the fraud. The court declined to allow these damages under the False Claims Act, but allowed them under the warranty contained in the contract. The Fourth and Sixth Circuits have allowed consequential damages although not in contexts involving acceptance of goods. ¹²⁰

One of the most difficult questions under the Act has been the standard for intent. The result has been a split among the circuits. The Sixth Circuit requires "intentional fraud and misrepresentation" which the Government must establish by "clear, unequivocal and convincing evidence." r The Fifth Circuit requires that the evidence must demonstrate "guilty knowledge or guilty intent. 122 The Ninth Circuit has adopted the position that the Congress did not intend to incorporate fraud or intent

¹¹⁷ United States v. Bornstein, 423 U.S. 303, 310–13 (1976).

¹¹⁸ *Id.* at 314–17.

^{119 469} F.2d 1003 (5th Cir. 1972).

¹²⁰ United States v. Ekelman & Assoc., 532 F.2d 545 (6th Cir. 1976); Toepleman v. United States, **263** F.2d 697 (4th Cir.), *cert. denied sub nom.*, Cato Bros. v. United States, 359 U.S. 989 (1959).

¹²¹ United States v. Ekelman & Assoc., 532 F.2d 545, 548 (6th Cir. 1976), quoting United States v. Ueber, 299 F.2d 310, 314 (6th Cir. 1962).

¹²² United States v. Aerodex, Inc., 469 F.2d 1003, 1007 (5th Cir. 1972), *quoting* United States v. Priola, 272 F.2d 589, 594 (5th Cir. 1959); United States v. Ridglea State Bank, 357 F.2d 495, 498 (5th Cir. 1966).

to defraud into each portion of the Act¹²³ and, moreover, that when a person files a claim which he knows to be false "there is a reasonable inference, almost a necessary implication, that he intends to deceive."¹²⁴

Most recently, the Seventh Circuit has clarified its position, holding that a broker who submitted false bids for approval as part of a collusive arrangement was liable under the forfeiture provisions of the Act although the Government did not prove a specific intent to deceive. "After considering the division of opinion among the circuits, the court concluded that the act is non-penal and that only knowledge of the falsity is required. In balance, it appears that the question will continue to depend on the view adopted by each circuit until the Supreme Court provides the final answer.

Faced with a choice of proceeding under the inspection clause or the Act, the forfeiture and double damages provisions of the Act provide an incentive to proceed in that direction. Proceeding under the inspection clause allows the Government to try the case in the first instance before one of the contract appeals boards, with appeal to the Court of Claims. Under the False Claims Act, the trial is in district court with a more formal trial and appeal to a circuit court of appeals. Thus far, the option of the False Claims Act has prevailed.

VI. WARRANTIES

A warranty is a promise or affirmation given by a seller to a purchaser regarding the nature, usefulness, or condition of the supplies or performance of services to be furnished. The principle purposes of a warranty in a Government contract are to delineate the rights and obligations of the contractor and the Government for defective items and services and to foster quality performance. Generally, warranties survive acceptance of the contract items for a stated period of time or use, or until the occurrence of a specified event, notwithstanding other contractual provisions pertaining to acceptance by the Government. 126

¹²³ United States v. Mead, 426 F.2d 118 (9th Cir. 1970).

¹²⁴ Fleming v. United States, 336 F.2d 475, 479 (10th Cir. 1964), cert. denied, 380 U.S. 907 (1965).

¹²⁵ United States v. Hughes, 585 F.2d 284 (7th Cir. 1978).

¹²⁶ D.A.R. § 1-324.1, See also 41 C.F.R. § 5A-1.370-1.

Although not used in all government contracts, ¹²⁷ warranty provisions may provide the Government with important rights which affect the finality of acceptance. Under the standard warranty clauses, the effect of a breach of warranty is to negate finality of acceptance. ¹²⁸ However, where there is no evidence that the materials or workmanship used by the contractor failed to meet the specifications, the fact that the contractor is required to cure certain minor deficiencies while the Government is in use or possession of the work does not negate final acceptance. ¹²⁹ In S & E Contractors, Inc., ¹³⁰ the board noted that acceptance does not terminate the contractual relationship between the parties if the guarantee or warranty provision has not expired, and that the disputes clause, applicable to such collateral obligations, gives the board jurisdiction.

Under the standard warranty of supplies clause, the contracting officer may require the contractor to correct or replace the defective supplies or may retain the goods with an equitable adjustment in price. ¹³¹ Where the contractor fails to replace or correct the defective supplies, the Government may, by contract or otherwise, replace or correct the supplies itself and recover the cost from the contractor. ¹³² The contractor may also be responsible for consequential damages caused by the breach. ¹³³ Because the remedies contained in the warranty provisions of the contract are exclusive, the Government cannot demand a remedy which is not specifically expressed. ¹³⁴

¹²⁷ The criteria for use of warranties are determined by the regulations of individual agencies. The criteria for General Services Administration (GSA) contracts are contained in 41 C.F.R. § § 5A-1.370-2 and 5A-1.370-3. For D.O.D. contracts the criteria can be found in D.A.R. § 1-324.2. The factors to be considered include the nature of the item, cost, administration, enforcement difficulties, criticality of meeting the specifications, and trade practice.

¹²⁸ Platt Mfg. Co., A.S.B.C.A. Nos. 19906, 19907, 76-2 B.C.A. 12016.

¹²⁹ Bell & Flynn, Inc., A.S.B.C.A. No. 11038, 66–2 B.C.A. 5855.

¹⁸⁰ A.S.B.C.A. No. 11044, 65–2 B.C.A. 5206.

^{131 41} C.F.R. § 5A-1.370-4(a), subpara. (c); D.A.R. § 7-105.7(a), subpara. (d).

¹³² 41 C.F.R. § 5A-1.370-4(a), subpara. (e); D.A.R. § 7-105.7(a), subpara. (f),

¹⁸⁸ United States v. Franklin Steel Products, Inc., 482 F.2d 400 (9th Cir. 1973); United States v. Aerodex, Inc., 469 F.2d 1003 (5th Cir. 1972).

¹⁸⁴ Mercury Chemical Co., A.S.B.C.A. No. 12554, 69–1 B.C.A. 7730.

A. THE WARRANTY KEY

In order to unlock finality by using the warranty key, the Government must sustain a substantial burden. By a preponderance of the evidence, ¹³⁵ it must prove that the contractor was given requisite notice ¹³⁶ of a warranted defect, ¹³⁷ resulting from application of a warranty cause, ¹³⁸ and occurring within the warranty period. ¹³⁹

The Government must comply with the notice requirement contained in the warranty clauses. ¹⁴⁰ Under the standard warranty provisions for supply contracts, the contracting officer must give notice to the contractor within one year after delivery of the nonconforming supplies. ¹⁴¹ For construction contracts the Government must notify the contractor within a reasonable time after discovery of the failure, defect, or damage. ¹⁴² When the contract does not specify the time for notice, it must be issued within the warranty period. ¹⁴³ At least in this last case, it appears that notice is effective at the time it is issued rather than at the time of receipt. ¹⁴⁴ Notice given within the warranty period is sufficient with respect to nonconformities discovered after the warranty period if they relate to the original nonconformity. ¹⁴⁵

The boards have generally taken a relaxed attitude with respect to the requirements for the content of the notice. Because the standard warranty clauses do not include any specific requirements, the general rules

¹³⁵ Admiral Corp., D.O.T. C.A.B. No. 70-2, 71-2 B.C.A. 9098.

¹³⁶ Klefstad Eng'r. Co. & Blackhawk Heating & Plumbing Co, V.A.C.A.B. No. 705, 69–1 B.C.A. 7675.

¹⁸⁷ H. P. Carney d/b/a Carney Constr. Co., A.S.B.C.A. Nos. 8222, 8556, 1964 B.C.A. 4149.

¹⁸⁸ Admiral Corp., D.O.T. C.A.B. No. 70-2, 71-2 B.C.A. 9098.

¹⁸⁹ Phoenix Steel Container Co., A.S.B.C.A. No. 9987, 66-2 B.C.A. 5814.

¹⁴⁰ Vi-Mil, Inc., A.S.B.C.A. Nos. 16820, 18005, 75–2 B.C.A. 11435.

^{141 41} C.F.R. § 5A-1.370-4(a), subpara. (a); D.A.R. § 7-105.7(a), subpara. (b).

¹⁴² D.A.R. § 7-604.4.

¹⁴⁸ Klefstad Eng'r, Co. & Blackhawk Heating & Plumbing Co., V.A.C.A.B. No. 705. 69–1 B.C.A. 7675.

¹⁴⁴ Id. at 35,625.

¹⁴⁵ Phoenix Steel Container Co., A.S.B.C.A. No. 9987, 66-2 B.C.A. 5814.

applicable to notice at common law and under the uniform acts are applied. ¹⁴⁶ The notice must "fairly apprise the seller of the defects asserted, repel any inference of waiver of the defect, and at least by implication assert that there has been a violation of the buyer's **rights**." ¹⁴⁷ A written exercise of an option under the warranty clause implicitly notifying the contractor of the breach is sufficient. ¹⁴⁸

The second requirement is that the Government be able to demonstrate that there was a warranted defect. 149 It is not sufficient that there be a defect; it is also necessary that the defect be within the purview of the warranty provision. 150 In deciding whether a warranty is applicable to a specific defect, the courts and boards have given the warranty clauses a narrow interpretation, and defects outside their scope are not implied. 151 Although a warranty clause may impose responsibility on the contractor for correction of all defects or failures, even such broad language cannot be held to shift the burden of proving that the defects were within the contractor's responsibility under the warranty. 152 This stance is consistent with the principle that because acceptance is final, the party attempting to unlock the finality door must bear a substantial burden to overturn acceptance. Where a large quantity of items are involved, sampling is not sufficient to prove defects in all items where the contract requires 100 percent inspection. ¹⁵³ The Government must demonstrate that the defect exists with respect to an item in accordance with the requirements of the contract. Because of the importance of finality of acceptance, it is appropriate that the rules for judging whether a defect exists after acceptance should be at least as stringent as for the determination for defects prior to acceptance.

The third, and often the most difficult requirement, is that the defect

¹⁴⁶ Penn State Coat & Apron Mfg. Co., A.S.B.C.A.No. 6151, 61-1 B.C.A. 2902. ¹⁴⁷ *Id.* at 15,156.

¹⁴⁸ Monroe Garment Co., A.S.B.C.A.No. 14465 et. al., 71-2 B.C.A. 9142.

¹⁴⁹ Clinical Supply Corp., A.S.B.C.A. Nos. 15466, 15652, 15653, 72–1 B.C.A. 9452

¹⁵⁰ LTV Electrosystems, Inc., A.S.B.C.A. No. 13830, 70-2 B.C.A. 8428.

 ¹⁵¹ See Clinical Supply Corp., A.S.B.C.A. Nos. 15466, 15652, 15653, 72-1 B.C.A.
 9452; LTV Electrosystems, Inc., A.S.B.C.A. No. 13830, 70-2 B.C.A. 8428.

 ¹⁵² R. H. Fulton, Contractor, I.B.C.A. No. 769–3–69, 71–1 B.C.A. 8674.
 ¹⁵⁸ Teltron, Inc., A.S.B.C.A. No. 14894, 72–2 B.C.A. 9502.

must be due to a warranted cause. ¹⁵⁴ The Government has the burden of proving that something within the guarantor's area of responsibility was the probable cause of the unsatisfactory condition. ¹⁵⁵ Although the Government must demonstrate the cause of the defect by a fair preponderance of the evidence, it need not establish the cause of the defect with absolute certainty; it need only show that the most likely or probable cause of failure or defect, when considered together with other possible causes, was within the responsibility of the contractor under the warranty. ¹⁵⁶

In some applications it is required that the defect have existed at the time of acceptance. ¹⁵⁷ In *Phoenix Steel Container Co.*, ¹⁵⁸ the A.S.B.C.A. determined that a contractor was not liable for breach of warranty because the Government failed to prove that the item supplied failed to conform to contract requirements at the time of delivery. It was evident at the time of final inspection and acceptance that the items complied with the specifications. The fact that the results of post-acceptance tests showed nonconformance with the specifications could have been explained as due to intervening factors. These results were not necessarily indicative of nonconformance at the time of delivery. As a consequence, the Government was found not to have met its burden of proof, and recovery against the contractor was denied. It appears that the necessity for the defect to have existed at the time of acceptance is simply part of the requirement that the defect was due to a warranted cause and was not caused by some action of the Government after acceptance.

In the course of proving that a defect has triggered a warrenty clause, the Government may be required to affirmatively demonstrate that its subsequent actions were not responsible for the problem. ¹⁵⁹ Where the Government had altered items which became inoperative subsequent to inspection and acceptance, ¹⁶⁰ or where the defect may have been caused

¹⁵⁴ Baldwin-Lima-Hamilton Corp. v. United States, 434 F.2d 1371 (Ct. Cl. 1970).

¹⁵⁵ Araco Co., V.A.C.A.B. No. 532, 67-2 B.C.A. 6440.

¹⁵⁶ Admiral Corp., D.O.T.C.A.B. No. 70-2, 71-2 B.C.A. 9098, at 42,160.

¹⁸⁷ See e.g. Vi-Mil, Inc., A.S.B.C.A. Nos. 16820, 18005, 75–2 B.C.A. 11,435.

¹⁵⁸ A.S.B.C.A. No. 9987, 66-2B.C.A. 5814.

¹⁵⁹ Kalcor Coatings Co., G.S.B.C.A. No. 3572, 74-1 B.C.A. 10468.

¹⁶⁰ South Portland Erg'r Co., I.B.C.A. Nos. 770-3-69, 771-4-69, 69-2 B.C.A. 8033.

by improper maintenance, ¹⁶¹ or vandalism, ¹⁶² recovery under the warranty clause has been denied. In *S & E Contractors, Inc.*, the A.S.B.C.A. observed:

It is not sufficient for the Government to prove the existence of a defect. In proving that the defect was due to a cause for which the contractor is responsible under the guarantee clause, rather than a cause for which the Government is responsible, e.g., misuse by the Government, the proof does not have to be absolute, The Government can sustain its burden of proof under the guarantee clauses by showing through a preponderance of the evidence that defective materials, workmanship, or design of the equipment is the most probable cause of the damage to the equipment when considered with reference to other possible causes of damage. ¹⁶⁸

The final requirement of the warranty key is to prove that the defect or failure occurred within the warranty period. ¹⁶⁴ Although the warranty provisions in government contracts usually specify the warranty period, there is difficulty in some cases determining when the warranty period begins. Under the standard warranty of supplies clause, ¹⁶⁵ notice of the breach must be given within one year after delivery, thereby effectively limiting the warranty period. For construction contracts the standard period is one year from the date of final acceptance or possession, whichever is earlier. ¹⁶⁶

In Klefstad Engineering Co. & Blackhawk Heating & Plumbing Co., ¹⁶⁷ the contractor warranted air conditioning equipment for one year from the date of completion. Although the Government may have had use or partial use of the facility in February, a subsequent final inspection revealed major deficiencies and the Government refused to recognize the work as complete until these deficiencies had been completed in March. Under the warranty clause, which provided a one year warranty from the date of completion, the board held that the warranty period did not begin until acceptance in March, despite prior use by the Government,

¹⁶¹ Araco Co., V.A.C.A.B.No. 532, 67-2 B.C.A. 6440.

¹⁶² Fire Detection Service, Inc., I.B.C.A. No. 901-4-71, 72-1 B.C.A. 9385.

¹⁶³ A.S.B.C.A. No. 11044, 67-1 B.C.A. 6175, at 28,611.

¹⁶⁴ Araco Co., V.A.C.A.B. No. 532, 67-2 B.C.A. 6440.

¹⁶⁵ 41 C.F.R. § 5A-1.370-4(a), subpara. (a); D.A.R. § 7-105.7(a), subpara. (b).

¹⁶⁶ D.A.R. § 7–604.4(a), subpara. (a).

¹⁶⁷ V.A.C.A.B.No. 705, 69-1 B.C.A. 7675.

B. CUMULATIVE RIGHTS

In 1958 the **A.S.B.C.A.** considered the question of whether warranty rights survived acceptance in a contract containing language very similar to the present day inspection and warranty of supplies clauses. ¹⁷² The board concluded:

We think it to be clear that when the words "Except as otherwise provided in this contract" in the Inspection article are read together with the words "Notwithstanding the provisions of the clause of this contract entitled 'Inspection' " and the Guarantee article, the conclusiveness that would otherwise attach to the

There is no similar problem with construction contracts. The inspection clause for construction contracts specifically lists warranty rights as an exception to the finality of acceptance. The warranty of construction clause explicitly does not limit the Government's rights under the inspection and acceptance clause. D.A.R. § § 7–602.11(f), 7–604.4(a), subpara. (g).

¹⁶⁸ 41 C.F.R. § 1–7.102–5(d); D.A.R. § 7–103.5(a), subpara. (d).

^{169 41} C.F.R. § 5A-1.370-4(a), subpara. (a); D.A.R. § 7-105.7(a), subpara. (a).

¹⁷⁰ 41 C.F.R. § 5A-1.370-4(a), subpara. (i); D.A.R. § 7-105.7(a), subpara. (j).

¹⁷¹ Wisconsin Machine Corp., A.S.B.C.A. No. 18500,74–1 B.C.A. 10,397; General Electric Co., I.B.C.A. No. 442-6-64, 65–2 B.C.A. 4974.

¹⁷² The relevant language of the inspection clause was identical. The "Guarantee article" stated: "Notwithstanding the provisions of the clause entitled 'Inspection', the Contractor guarantees. . . ." McGrath & Co., A.S.B.C.A. No. 1949, Navy Appeals Panel, 58–1 B.C.A. 1599, at 5824.

"final acceptance" does not attach in view of the Guarantee article. Because of the Guarantee article the "final acceptance" is not conclusive when, at the time of delivery and without knowledge of the Government, the articles accepted did not conform to the requirements of the contract and/or were not free from defects in material and workmanship. ¹⁷⁸

The second side of the question is whether warranty provisions limit the Government's rights with respect to the exceptions to the finality of acceptance set forth in the Inspection clause. The cumulative effect of the remedy provisions under a warranty clause and the right of the Government to revoke acceptance for latent defects was demonstrated in Cottman Mechanical Contractors, Znc. 174 In that case, the board held that a contractor was liable for all repairs which were necessitated by a latent defect in a steam distribution line which the contractor had installed under a government contract. Although the defect was not discovered until expiration of the warranty, the contractor was liable because the inspection and acceptance clause excepted latent defects from the effects of finality. Under the board's interpretation, the provisions constituted protection against latent defects without regard to time, and the two provisions were construed as cumulative, therefore reserving the Government's rights under the inspection and acceptance clause. The Interior Board of Contract Appeals reached the same conclusion, arguing that "the Guarantee clause contains no intimation of an intention to widen the area of conclusiveness by excluding or modifying the exceptions for latent defects "175

In 1972 the Court of Claims ruled on a challenge to a decision of the A.S.B.C.A. ¹⁷⁶ in which the board had found that the warranty survived acceptance even where the Government had knowledge of the defect prior to acceptance. The decision of the Armed Services Board had concluded that the warranty made no distinction between patent and latent defects and was applicable because under its terms the contractor agreed

¹⁷³ Id

¹⁷⁴ A.S.B.C.A. No. 11387, 67-2 B.C.A. 6566.

¹⁷⁵ General Electric Co., I.B.C.A. No. 442–6–64, 65–2 B.C.A. 4974 at 23,457. *See also*, Federal Pacific Electric Co., I.B.C.A. No. 334, 1964 B.C.A. 4494.

 ¹⁷⁶ Gresham & Co. v. United States, 200 Ct. Cl. 97,470 F.2d 542 (1972), reversing on other grounds Gresham & Co., A.S.B.C.A. Nos. 13812, 13865, 70-1 B.C.A. 8318.

that the supplies would conform to the specifications at the time of delivery notwithstanding inspection and acceptance. Therefore, the limitations on the exceptions to finality under the inspection clause were overridden by the warranty clause. ¹⁷⁷ The Court of Claims reversed the board's decision on other grounds without commenting on the warranty question. ¹⁷⁸

Without guidance from a higher court, the boards continued to interpret the two clauses as being consistent. ¹⁷⁹ The smooth sailing was disrupted by a decision of the Second Circuit in *Instruments for Industry*, *Inc.* v. *United States*. ¹⁸⁰ The contract eontained the standard inspection clause and also a non-standard one-year guarantee provision which did not include the "(n)otwithstanding inspection and acceptance" language or any other provisions specifically negating the effect of the inspection clause.

The court observed:

It is very difficult to harmonize the face of the two clauses which do not in words or by clear inference refer to each other. On the one hand, if the "Guaranty" article preserves the Government's rights to order correction of or payment for non-latent defects for one year after delivery—as it seems to say—then the earlier acceptance is clearly not "conclusive" as the "Inspection" clause explicitly declares for non-latent deficiencies. On the other, if the "Guaranty" clause in this contract is limited in application—because of the presence of the "Inspection" provision—to latent defects, then its actual scope would be less than its literal terms. The "Guaranty" article, thus restrictively read, would give the Government a flat right to correction of, or price adjustment for, latent defects for one full year after delivery, but with a co-existing further right, if the circumstances prove it reasonable, thereafter to revoke acceptance under the "Inspection" clause with respect to latent defects. 181

¹⁷⁷ Gresham & Co., A.S.B.C.A.Nos. 13812, 13865, 70-1 B.C.A. 8318 at 38,693.
¹⁷⁸ Gresham & Co. v. United States, 200 Ct. Cl. 97, 470 F.2d 542 (1972).

¹⁷⁹ Platt Mfg. Co., A.S.B.C.A. Nos. 19906, 19907, 76–2 B.C.A. 12016; Vi-Mil, Inc., A.S.B.C.A. Nos. 16820, 18005, 75–2 B.C.A. 11,435 and 11,618.

¹⁸⁰ **496** F.2d **1157** (1974).

¹⁸¹ Id. at 1160.

As a means of reconciling the two clauses, the court rejected the language "except as otherwise provided in this contract" in the inspection clause. The court did so because a contractor could not be expected to anticipate that this "camouflage and unusual reversal" would follow from the "bland generality of '(e)xcept as otherwise provided in this contract'." The court also rejected prior board decisions as irrelevant or distinguishable and relied on the doctrine of contm proferentem to hold that the guarantee did not survive acceptance.

The *Instruments & Industry* decision has not had an appreciable effect on the decisions of the A.S.B.C.A. In Wisconsin Machine Corp., the A.S.B.C.A. relegated its discussion of *Instruments* for *Industry* to a footnote. 188 The board considered the district court's decision 184 but distinguished it on the grounds that the court had found the guarantee clause there to be less favorable to the Government than the standard supply warranty clause. The Second Circuit decision received a passing reference in Dunrite Tool & Die, Ltd., 185 where the board again determined that the warranty clause was applicable despite the fact that the inspection clause did not specifically include warranty rights as an exception to the finality of acceptance. Later cases have not bothered to distinguish *Instruments* for *Industry*. ¹⁸⁶ While none of these later cases involved a non-standard warranty clause omitting the "(n)otwithstanding inspection and acceptance" language of the standard inspection clause, it is evident that the A.S.B.C.A. has not been persuaded by the arguments of the Second Circuit. Because the identical language found in *Instruments* for *Industry* is unlikely to appear again, it is probable that the decision will be limited to its facts and will gather dust in an ignored corner of the law

C. IMPLIED WARRANTIES

Under the UCC, the implied warranty of merchantability provides that goods transferred will be **as** described, and are fit for the ordinary pur-

I = Id.

¹⁸⁸ A.S.B.C.A. No. 18500, 74-1 B.C.A. 10,397n.2, at 49,097.

¹⁸⁴ In re Instruments for Industry, Inc., No. 66B-412, 16 G.C. 376 (D.C.N.Y. 1973).

¹⁸⁶ A.S.B.C.A. No. 19416, 75-1 B.C.A. 11072 at 52,711.

¹⁸⁶ Wagner Awning & Mfg. Co., A.S.B.C.A. No. 19986, 77-2 B.C.A. 12,720.

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poses for which such goods are used. 187 The implied warranty for a particular purpose requires that the goods be fit for the particular purpose when the seller has reason to know of the purpose, and knows also that the buyer is relying on the seller's skill or judgment to select or furnish the goods. 188 Under the UCC, implied warranties may be modified or excluded. 189 The code also provides that implied warranties are excluded with respect to defects which an examination should have revealed, if the buter has examined the goods as fully as he desires, or if he refuses to examine the goods. 190 Unless such construction is unreasonable, implied warranties are construed as being consistent and cumulative with express warranties. 191

In Reeves Soundcraft Corp., the A.S.B.C.A. considered implied warranties to be applicable to a government contract which did not contain a standard inspection clause. 192 Under the standard inspection clause for supply contracts, there is no exception for implied warranties from the finality of acceptance and, therefore, implied warranties are inapplicable. 198 However, fixed-price construction contracts provide an exception from finality for "the Government's rights under any warranty or guarantee."" Although not yet litigated, it appears that this provision would include rights under implied warranties as an exception to finality. However, because the UCC implied warranties only apply to "goods, 195 this is of dubious value. Moreover, since 1974, the Defense Acquisition Regulation has provided that, when express warranties are included in contracts, except contracts for commercial items, all implied warranties of merchantability and fitness for a particular purpose are to be excluded. 196

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<sup>187</sup> U.C.C. § 2–314(1).
<sup>188</sup> U.C.C. § 2-315.
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¹⁸⁹ U.C.C. § 2-316.

¹⁹⁰ U.C.C. § 2–316(3).

¹⁹¹ U.C.C. § 3-317.

¹⁹² A.S.B.C.A. Nos. 9030,9130,1964 B.C.A. 4317. However, the boardconcluded that the evidence did not entitle the Government to recover.

¹⁹³ Republic Aviation Corp., A.S.B.C.A. Nos. 9934, 10104, 66-1 B.C.A. 5482.

¹⁹⁴ D.A.R. § 7–602.11(f) (emphasis added).

¹⁹⁵ U.C.C. § 2-102.

¹⁹⁶ D.A.R. § 1-325(a). See also the warranty of supplies clause at D.A.R. § 7-105.7(a), subpara. (i).

VII. CONCLUSION

Acceptance is an important event signaling a crucial milestone in the relationship between buyer and seller. The finality of acceptance is not lightly set aside; the several keys may be used to unlock the door only where clearly justifiable. Through the interplay between government regulations and evolving case law there has developed a relatively stable basis for the determination of the rights of both the contractor and the Government.

BOOK REVIEW:

FEDERAL PROCUREMENT LAW

Nash, Ralph C., Jr., and John Cibinic, Jr., Federal Procurement Law, 3d ed., volume I. Washington, D.C.: The George Washington University, **1977.** Pp. **938.** Cost: \$40.00.

Reviewed by Major Gary L. Hopkins"

When members of the Judge Advocate General's Corps complete the basic class, most expect to practice criminal law. My expectations upon completion of the basic class in 1970 were no different. When I arrived at my first duty assignment, Fort Wolters, Texas, you can imagine, therefore, my dismay to learn that I was to be the legal adviser to the installation contracting officer. Unreviewed contracts littered my new desk, a protest was pending before the General Accounting Office, and the contracting officer was in the midst of negotiating a \$13 million helicopter maintenance contract. I was in the midst of heart failure.

Anyone familiar with the Armed Services Procurement Regulation (now Defense Acquisition Regulation) knows that it is not the most succinct introduction to the field of federal contract law. Nor is it an access to case law in the area. My salvation in both respects was the **1969** edition

^{*}JAGC, U.S. Army. Chief, Contract Law Division, The Judge Advocate General's School, Charlottesville, Virginia, 1979–80. Instructor and senior instructor, 197679. Author of Legal Implications of Remote Sensing of Earth Resources by Satellite, 78 Mil. L. Rev. 57 (1977), and Contracting with the Disadvantaged, Sec. 8(a) and the Small Business Administration, 7 Pub. Cont. L. J. 169 (1975), and other writings. Co-author with LTC Robert M. Nutt of The Anti-Deficiency Act (Revised Statutes 3679) and Funding Federal Contracts: An Analysis, 80 Mil. L. Rev. 51 (1978).

¹ The Judge Advocate Officer Basic Course is taught at The Judge Advocate General's School, Charlottesville, Virginia. Nine weeks in length, it is given three times a year. Its stated purpose is "[t]o provide officers newly appointed in the Judge Advocate General's Corps with the basic orientation and training necessary to perform the duties of a judge advocate." Concerning substantive content, "[t]he course stresses military criminal law and procedure and other areas of military law [i.e., administrative and civil law, contract law, and international law] which are most likely to concern a judge advocate officer in his first duty assignment." The Army Lawyer, Mar. 1979, at 27.

of Federal Procurement Law by Professors Ralph C. Nash, Jr. and John Cibinic, Jr. This text served also in later years as a case book during a course of study on government contract law. It was just as effective for this purpose as when I used it as a deskbook at Fort Wolters. Without doubt, the book fulfilled the original purpose of the authors to provide a text "to support the teaching of the law of federal procurement and to serve as a deskbook for lawyers practicing in this field."

In **1977** my old reliable 1969 edition gave way, in part, to volume I of the third edition of Federal Procurement Law. Volume I covers contract formation and related matters. Volume 11, when published, will deal with contract performance.

Since I obtained my copy of volume I in 1978, I have used it extensively in my work as senior instructor in the Contract Law Division of The Judge Advocate General's School. I have never been disappointed.

The text provides a quick reference to the basic rules of contract formation in federal contracts. Most important in this respect are the notes which follow major cases in the book. The notes are short, well edited summaries of the law with case citations. They come closer to miniarticles on their respective areas than notes in the typical law school casebook. This of course makes them far more useful to the practitioner in the field.

In addition to providing clear, easily readable summaries of every facet of the law related to contract formation, the noted cases are an invaluable starting point for research in depth. This is particularly true because, unlike many indices and research sources, the case synopses are extremely accurate. Admittedly, a lawyer should not practice law from case summaries. However, it is nice to look up a case and have it really stand for the proposition for which it is cited. This is the result when the case notes in Federal Procurement Law are used.

As a casebook, Federal Procurement Law has many good points to recommend it. It is logically organized to permit the novice to follow, step by step, the process leading to contract formation in federal procurement. The major cases selected by the authors are more than just "leading" cases. They provide all the basic rules, ranging from authority to contract, to contesting contract award, analyzed and thoroughly discussed, that a student of government contract law should know. These major cases are then reinforced and expanded by the note cases. Addi-

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tionally, the book provides practical guidance on various procedural matters, such as processing a bid protest to the General Accounting Office.

Overall, the book is concise, readable (certainly so for a "casebook"), organized and accurate. It clearly reflects the years of experience and broad understanding of government contract law possessed by the authors. The book is a must for every practitioner. In this respect, I recommend that lawyers headed to their various assignments in criminal law quietly pack a copy of Federal Procurement Law in a corner of their suitcase. You never know when you'll hear those terrifying words: "Welcome, Captain. I've decided to make you my legal adviser to the contracting officer."

BOOK REVIEW:

PRISONERS OF WAR IN INTERNATIONAL ARMED CONFLICT

Howard S. Levie, *Prisoners* of *War in International Armed Conflict.** Newport, Rhode Island: Naval War College International Law Studies, Volume **59**, **1978**. Pp. **529**. For sale by the Superintendent of Documents, **U.S.** Government Printing Office, Washington, D.C. **20402**.

Reviewed by James A. Burger**

Professor Howard Levie has written a remarkable and very useful book on the practice of states in regard to prisoners of war. It is not just an update or supplement to other works such as the authoritative International Committee of the Red Cross's Commentary on the Geneva Prisoner of War Convention written by Doctors Pictet and de Preux. Rather, Professor Levie follows the prisoner of war from the moment of his capture to his ultimate release and repatriation, commenting within this framework on the relevant provisions of the Geneva Convention and on major problems in implementing the Convention.

What distinguishes Professor Levie's book from other books on the subject is his practical approach. He breaks with the article-by-article

*Howard Levie, recently of the Saint Louis University School of Law, occupied the Charles H. Stockton Chair of International Law at the Naval War College during the 1971–1972 academic year. Professor Levie's work is the 59th volume of a series of treatises on international law subjects compiled and printed by the Naval War College. This series was published, for the most part, on an annual basis from 1901 through the mid-1960's. It is now being reinstituted, and this book is the first of the new series.

Professor Levie's book was briefly noted at 84 Mil. L. Rev. 151 (1979).

**Major, JAGC, United States Army. Student at the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas. Former chief, International Law Division, The Judge Advocate General's School, Charlottesville, Virginia, 1978–79. Author of several other book reviews published in the *Military Law Review*.

¹ Pictet, Jean S. (ed.), and de Preux, Jean, Commentary on the III Geneva Convention Relative to the Treatment of Prisoners of War. Geneva, International Committee of the Red Cross (1960).

analysis found in the official ICRC Commentary and instead brings together and correlates all the numerous and scattered provisions of the 1949 Convention which are concerned with any particular facet of a prisoner of war problem. He also breaks with what he refers to as the "optimistic idealism" which characterized the Commentary. He considers the authors of the official work to be idealists who interpreted the convention as they would like to see it applied. Professor Levie endeavors to present the provisions of the convention as they are understood by the Parties, and as they have been observed or disregarded in practice by States.

Using this format, Professor Levie begins with the capture of an enemy combatant. Is he entitled to prisoner of war status? One requirement for entitlement to PW status is that combatants wear a "fixed distinctive sign." Professor Levie notes that it must be such that the item cannot be removed or disposed of at the first sign of danger:

A handkerchief, or rag, or armband slipped onto or loosely pinned to the sleeve does not meet this definition. An armband sewed to the sleeve, a logo-type of sufficient size displayed on the clothing, a unique type of jacket—these will constitute a fixed and distinctive identifying insignia, effectively separating the combatant of the moment from the rest of the population.²

He then discusses the new identification provision under the 1977 Protocols to the Geneva Prisoner of War Convention of 1949. The only condition now required is that arms be carried openly during actual military operations. Levie notes this, admitting that the new provision is better adapted to the type of conflict which has been taking place in recent years, but he remarks that the weakness of the new provision is that every case will involve a "contested factual determination" as to whether PW status should be granted.

Professor Levie makes constant reference to available regulations. Once a prisoner is captured, how is he to be treated? In regard to labor which may be required of a prisoner of war, he cites United States Army

² Levie, Prisoners of War in International Armed Conflict 48 (1978).

⁸ Protocol I, para. **42**, Diplomatic Conference on Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflict: Protocols I and II to the Geneva Convention, 16 International Legal Materials 1391 (1977).

Regulation **633–50,**⁴ which provides that work of a "military character" includes construction of items which are used exclusively by members of the armed forces for military purposes, *e.g.*, arms, uniform items, or gun emplacements. It does not include items which may be used by either military or civilian personnel, such as soap, buildings, or even roads. He notes that this differs from the ICRC position that work on anything which may have an incidental military purpose would be prohibited. ⁵ This certainly would include roads and buildings which might be used for a military purpose but are not necessarily of a "military character."

He also draws from actual experience. In regard to the selection of what is called in the convention the "prisoners' representative," it is required that he be freely elected by secret ballot. Levie asks, "What if the camp commander rejects any candidate whom he considers 'unfit'," refusing to permit the names of persons to appear on a ballot unless they have previously demonstrated willingness to collaborate with army activities. Or what if he insists on inspection of all ballots before they are placed in the ballot box? These, he remarks, were the procedures followed by the Chinese Communists in Korea.' And he says that there is no reason to expect that it will not be the manner in which prisoners' representatives are selected in the future in conflicts involving what he calls "like minded nations or belligerents."

While relying heavily on U.S. experience, Professor Levie presents the positions of other states as well whenever possible. In regard to Article **85**, which provides for judicial guarantees, he says that the Soviet Union and all the other Communist countries have made reservations to Article **85**. They generally maintain that war criminals are not entitled to such protection. While the Soviet Union maintains that prisoners of war would be entitled to trial and would lose their rights only after conviction and during punishment, North Vietnam insisted that captured US soldiers and airmen were all "major war criminals" and not entitled to the status from the moment of capture. ⁸

⁴ Army Regulation No. **633–50**, Apprehension and Confinement: Prisoners of War: Administration, Employment, and Compensation, para. 298b(1) (8 Aug. **1963**).

⁵ Levie, *supra* n. 2, at 234.

⁶ Geneva Convention Relative to the Treatment of Prisoners of War, art. 79.

⁷ Levie, *supra*, n. 2, at 296.

⁸ Id., at 382.

The book is extremely well documented. Numerous footnotes give a vast number of illustrative facts and sources of reference. Aside from this there are exhaustive tables of abbreviations, and lists of relevant articles, books, and documents. Professor Levie's book is a very valuable reference work on prisoner of war law and problems. There are tables of statutes which include foreign as well as domestic references, and of cases ranging from the World War II war crimes trials to the more recent *Calley* case involving the well publicized incident at My Lai. He includes the entire text of the 1949 Geneva Prisoner of War Convention. Finally, there is a very helpful index to the entire book.

The reader should not think that Professor Levie has an entirely pessimistic attitude on the application of the convention. He notes that, while perhaps 95% of the Russians taken prisoner by the Germans during WW II perished while the convention was not applicable between these two nations, 90% of U.S. soldiers taken prisoner by the Germans returned. The treaty was being observed between these two nations.

Professor Levie's work is a very valuable addition to the books and materials available on prisoners of war. It is a must reference work for military law libraries and should become an authoritative and frequently cited guide on the subject. It may stand out as the best "practical guide." While there probably will always be violations of the Prisoner of War Convention, it is likely that there will also be significant complicance. In any case it is necessary that there be knowledge of what the rules are, how they have been applied in the past, and how they may be understood today, A reading of Professor Levie's book will make this task a great deal more easy.

PUBLICATIONS RECEIVED AND BRIEFLY NOTED

I. INTRODUCTION

Various books, pamphlets, tapes, and periodicals, solicited and unsolicited, are received from time to time at the editorial offices of the *Military Law Review*. With volume 80, the *Review* began adding short descriptive comments to the standard bibliographic information published in previous volumes. These comments are prepared by the editor after brief examination of the publications discussed. The number of items received makes formal review of the great majority of them impossible.

The comments in these notes are not intended to be interpreted as recommendations for or against the books and other writings described. These comments serve only as information for the guidance of our readers who may want to obtain and examine one or more of the publications further on their own initiative. However, description of an item in this section does not preclude simultaneous or subsequent review in the *Military Law Review*.

Notes are set forth in Section IV, below, are arranged in alphabetical order by name of the first author or editor listed in the publication, and are numbered accordingly. In Section II, Authors or Editors of Publications Noted, and in Section III, Titles Noted, below, the number in parentheses following each entry is the number of the corresponding note in Section IV. For books having more than one principal author or editor, all authors and editors are listed in Section 11.

The opinions and conclusions expressed in the notes in Section IV are those of the editor of the *Military Law Review*. They do not necessarily reflect the views of The Judge Advocate General's School, the Department of the Army, or any other governmental agency.

II. AUTHORS OR EDITORS OF PUBLICATIONS NOTED

Bennet, Marion T., Wilson Cowen, and Philip Nichols, Jr., *The United States Court of Claims: A History* (No. 1).

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Bieber, Doris M., Dictionary & Legal Abbreviations Used in American Law Books (No. 2).

Binkin, Martin, and Irene Kyriakopoulos, Youth or Experience? Manning the Modern Military (No. 3).

Cowen, Wilson, Marion T. Bennet, and Philip Nichols, Jr., *The United States Court & Claims: A History* (No. 1).

Department of the Army, Pamphlet No. 623-105, The Officer Evaluation Reporting System "InBrief" (No. 4).

Dill, Alonzo T., author, and Edward M. Riley, editor, George Wythe: Teacher of Liberty (No. 5).

Garling, Marguerite, and the Writers and Scholars Educational Trust, The Human Rights Handbook: A Guide to British and American International Rights Organizations (No. 6).

Kyriakopoulos, Irene, and Martin Binkin, Youth or Experience? Manning the Modern Military (No. 3).

Nichols, Philip, Jr., Marion T. Bennet, and Wilson Cowen, *The United States Court & Claims: A History* (No. 1).

O'Brien, William V., U.S. Military Intervention: Law and Morality (The Washington Papers, vol VII, no. 68) (No. 7).

Stockholm International Peace Research Institute, Postures for Non-Proliferation: Arms Limitation and Security Policies to Minimize Nuclear Proliferation (No. 8).

Stockholm International Peace Research Institute, World Armaments and Disarmament: SIPRI Yearbook 1979 (No. 9).

Whelan, John W., editor, volume 15, Yearbook & Procurement Articles (No. 10).

Writers and Scholars Educational Trust, and Marguerite Garling, The Human Rights Handbook: A Guide to British and American International Rights Organizations (No. 6).

III. TITLES NOTED

Dictionary of Legal Abbreviations Used in American Law Books, by Doris M. Bieber (No. 2).

George Wythe: Teacher of Liberty, by Alonzo T. Dill and edited by Edward M. Riley (No. 5).

Human Rights Handbook: A Guide to British and American International Rights Organizations, by Marguerite Garling and the Writers and Scholars Educational Trust (No. 6).

Pamphlet No. **623–105**, The Officer Evaluation Reporting System "In Brief," by Department of the Army (No. 4).

Postures for Non-Proliferation: Arms Limitation and Security Policies to Minimize Nuclear Proliferation, by Stockholm International Peace Research Institute (No. 8).

SIPRI Yearbook 1979: World Armaments and Disarmament, by Stockholm International Peace Research Institute (No. 9).

United States Court of Claims: A History, by Marion T. Bennet, Wilson Cowen, and Philip Nichols, Jr. (No. 1).

U.S. Military Intervention: Law and Morality (The Washington Papers, vol. VII, no. 68), by William V. O'Brien (No. 7).

World Armaments and Disarmament: SIPRI Yearbook 1979, by Stockholm international Peace Research Institute (No. 9).

Yearbook of Procurement Articles, edited by John W. Whelan (No. 10).

Youth or Experience? Manning the Modern Military, by Martin Binkin and I rene Kyriakopoulos (No. 3).

1. Bennet, Marion T., Wilson Cowen, and Philip Nichols, Jr., *The United States Court of Claims:* A *History*. Washington, D.C.: Committee on the Bicentennial of Independence and the Constitution of the Judicial Conference of the United States. Part I, 1976, pp. xii, 236. Part 11, 1978, pp. xii, 184. Paperback.

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This two-volume work is a government publication, prepared for the Bicentennial by a committee of Court of Claims judges. The first volume contains biographical sketches of the various judges; the second volume, an account of the origins, development, and jurisdiction of the Court of Claims.

Part I, The Judges, 1855–1976, was written by Marion T. Bennett. It contains biographies of forty-seven judges, arranged in chronological order by date of their first appointment to the Court of Claims. The biographies are from two to four pages in length, and include pictures of the judges. The text is supplemented by eight tables providing statistical information about the judges, such as their order of appointment, dates of birth and death, states from which appointed, length of service, political party membership, and other data.

Part I provides for the convenience of the reader a foreword, preface, and two tables of contents. The first table of contents lists the judges in the chronological order in which their biographies are presented. The second lists the judges' names in alphabetical order.

Part II is entitled, "Origin—Development—Jurisdiction, 1855–1978." It was written by the entire Court of Claims committee, Wilson Cowen, Philip Nichols, Jr., and Marion T. Bennett. It is organized in three sections. Section One, by Wilson Cowen, covers the court's history from 1855 to 1887. Section Two sets forth the events of the years from 1887 to 1925, and was written by Philip Nichols, Jr. The third section, by Martin T. Bennett, brings the court's history up to mid-1978.

The second part closes with five tables, providing information about the judges, trial commissioners, and clerks, summarizing the numerous statutory authorities for the court's activities, and updating part I of the history.

Part II has a foreword and a detailed table of contents, as well as pictures of the old and new courthouses. Each of its three sections is separately footnoted.

Marion T. Bennett, the primary author of this history, has been an associate judge on the Court of Claims since 1972. Previously he had served as a trial commissioner or trial judge since 1949. During the 1940's he was a member of the House of Representatives.

Wilson Cowen, also a former trial commissioner, was appointed chief judge of the Court of Claims in 1964 and served until his retirement in 1977. He was at one time a county judge in Texas, and held a number of federal posts before and during the Second World War.

Philip Nichols, Jr., has been an associate judge of the Court of Claims since 1966, after serving two years as a judge on the Customs Court. Previously he was in private practice, and over the years had held various positions in the Department of Justice, the Treasury Department, and other federal agencies.

2. Bieber, Doris M., Dictionary & Legal Abbreviations Used in American Law Books. Buffalo, New York: William S. Hein & Co., Inc., 1979. Pp. 337. Paperback.

In this small book are collected in alphabetical order some 17,000 legal abbreviations, most of them obscure. It is designed for use by legal researchers and others who frequently use legal literature.

Most of the entries are one or two lines in length: the listed abbreviations are simply spelled out in full, i.e., "American Bar Association" for "ABA" and also "A.B.A." Although the emphasis is on American abbreviations, some of the legal abbreviations of other English-speaking countries, especially the United Kingdom, former British colonies, and Commonwealth states, are also included. A few Latin phrases found in the English common law also appear. Finally, there are a handful of others, such as "ABM" for "antiballistic missiles," which are not legal abbreviations but which may increase the usefulness of this work.

The book opens with a foreword and an introductory essay, "Guide for the Use of This Volume." At the close of the book are lists of the abbreviations for the eleven United States courts of appeals, and, state by state and district by district, all the United States district courts.

The compiler of this work, Doris M. Bieber, is the law librarian for the Vanderbelt Legal Information Center and Law Library at Nashville, Tennessee.

3. Binkin, Martin, and Irene Kyriakopoulos, *Youthor Experience? Manning the Modern Military*. Washington, D.C.: The Brookings Institution, **1979.** Pp. **x, 84.** Cost: **\$2.95.** Paperback.

This short book is the latest item in the Brookings Institution series, "Studies in Defense Policy." It deals with the question whether the United States armed forces should continue to be composed primarily of young people, with a sharply pyramidal grade structure and high annual turnover of personnel. The authors answer this in the negative, on grounds of cost and efficiency. They propose that the military retirement system and grade structure be changed to make it both possible and worthwhile for military members to remain in the service longer than at present.

The book is organized in six chapters. It opens with an introduction, followed by a chapter explaining why military personnel tend to be younger than people in other occupational groups. Chapter 3, "Youth, Experience, and Effectiveness," discusses changes in the organization and skill requirements of the annual services which make obsolete the emphasis on youthfulness which has been the norm since the First World War.

High turnover of active-duty military personnel makes easier the difficult task of filling the ranks of reserve units. Also, some believe that this high turnover has important social consequences, first, in preventing the military from developing into a separate society, and, second, to make available the presumed benefits of military training to as many young people as possible. In chapter 4, the authors question the need for a large reserve force, and they express doubt concerning the alleged social benefits of the large annual turnover.

In chapter **5**, the costs and benefits of the present structure of manpower and possible alternative structures are reviewed. This leads the reader into the last chapter, "Reforms for the Long Term," discussing retirement and the grade structure.

Many tables and charts are sprinkled throughout the book, most of them a half page or less in size. The book has a foreword and a table of contents.

The authors are both members of the staff of the Brookings Foreign Policy Studies program. The Brookings Institution describes itself as "an independent organization devoted to nonpartisan research, education, and publication in economics, government, foreign policy, and the social sciences generally." Its aims are "to aid in the development of sound public policies and to promote public understanding of issues of

national importance." The Brookings Institution was founded in 1927, through consolidation of three other similar organizations.

4. Department of the Army, *Pamphlet No. 623–105*, *The Officer Evaluation Reporting System "InBrief."*) Washington, D.C.: Department of the Army, **1979**. Pp. ii, **40**.

This official publication provides information about the use of the new officer evaluation report form, DA Form 67–8 (1 Sep. 1979), and its companion forms, DA Form 67–8–1, the OER support form, and DA Form 67–8–2, the senior rater profile report.

The pamphlet is organized into eleven unnumbered chapters. The opening chapters provide an overivew of the key elements of the reporting system, and its general functions and purposes. A chapter on new features discusses briefly the increased participation of the rated officer in the process, the senior rater concept and profile, and the new rules for establishment of rating chains. The flow of paperwork is discussed and illustrated with a chart in the fourth chapter.

The next three chapters describe the purposes and uses of DA Form 67–8–1, the OER support form. Most of this two-page form is completed by the rated officer. He or she provides information, in narrative form, concerning his or her significant duties and responsibilities, major performance objectives, and significant contributions. This form is used only during the rating process, and is not sent forward to Department of the Army with the completed OER form. The purpose of the support form is to give the rated officer an opportunity to express his or her views to the various raters in the chain. There are small blocks for optional rater comments.

The chapter entitled, "Purposes of DA Form 67–8," the longest chapter in the pamphlet, explains the use of the new officer evaluation form. The form is dissected, part by part, in seven sub-chapters.

The ninth chapter deals with DA Form 67–8–2, the senior rater profile report. The new evaluation system contemplates that most rated officers will have only a rater and senior rater, with no intermediate rater. Thus the rating philosophy of the senior rater takes on increased importance. The profile report shows whether a particular senior rater is inclined to be more easy or more harsh in his evaluation of subordinates than is the

average senior rater. The profile report becomes part of the senior rater's personnel file.

The extensive changes in the role of the senior rater (formerly, reviewer) are intended to ensure that more senior-officer comments are made available to selection boards and others who make decisions and recommendations based on evaluation reports, and to ensure, further, that those comments are more objective than in the past, when commenting was primarily the responsibility of officers closer to the rated officer.

The last two chapters provide additional guidance for the rated officer, rater, and senior rater, and additional support form examples. Examples of completed forms and sections of forms are scattered throughout the pamphlet. Since a numerical score will no longer be part of an officer's rating, narration takes on greater importance under the modified system.

The pamphlet offers a table of contents for the convenience of users. The pamphlet was prepared by personnel of the U.S. Army Military Personnel Center at Alexandria, Virginia.

5. Dill, Alonzo T., author, and Edward M. Riley, editor, *George Wythe: Teacher* of *Liberty*. Williamsburg, Virginia: Virginia Independence Bicentennial Commission, **1979.** Pp. 101.

This biography of one of America's first noteworthy legal scholars was prepared as part of Virginia's observance of the bicentennial anniversary of the Revolution. George Wythe, a signer of the Declaration of Independence, is perhaps not as well known outside Virginia as others among the founding fathers. He was not a military hero. Although he held a number of state and local offices, he never served in the federal government, except in convention delegacies. His lasting contribution came through his work as a professor of law at the College of William and Mary, Williamsburg, Virginia. The uniqueness of such a role may be hard to appreciate, considering that the United States now has some two hundred law schools, accredited and otherwise, Wythe was the first professor of law on the North American continent, and the second in the English-speaking world. (The first was a professorship at Oxford, created early in the eighteenth century.) Many men prominent in the founding of the United States were among Wythe's students, including Thomas Jefferson.

Born about 1726 of a prominent Virginia family, George Wythe became a lawyer and held a number of posts in Virginia's colonial legislature. On a part-time basis he operated a private school, teaching law and other subjects. It was during this time that Jefferson took lessons from Wythe. After the Revolution, Wythe continued to serve in the legislature for a few years, becoming Speaker of the House of Delegates for a short time. Thereafter he was appointed a judge, or chancellor, of the High Court of Chancery, or court of equity. He held this position, through various judicial reorganizations, until his death. In 1779 he was appointed to the newly-created law professorship at William and Mary College. He died in 1806 as the result of poisoning by a relative.

The book is organized into fourteen chapters. Footnotes for all chapters are collected together at the end of the volume. There are several illustrations, including black-and-white reproductions of paintings of Wythe and others important in his career.

6. Garling, Marguerite, and the Writers and Scholars Educational Trust, *The Human Rights Handbook:* **A** *Guide to British and American International Rights Organizations.* New York City, New York: Facts on File, Inc., **1979.** Pp. xvi, **299.** Cost: **\$25.00.**

This book is a catalog of some two hundred organizations involved in various ways in the promotion of human rights. Primary attention is given to British-based organizations, but substantial attention is given to American and international organizations as well. The rights in consideration are those defined by the United Nations Universal Declaration of Human Rights, especially rights pertaining to self-expression, association, and movement.

The book is organized into four parts. Part A focusses on the United Kingdom; part B, on the United States; part C, on international non-governmental organizations; and part D, on international organizations which are inter-governmental in character. Parts A, B, and C are organized into subparts dealing with voluntary organizations, professional organizations, and refugee assistance. These first three parts are further subdivided into numbered chapters. Each chapter opens with a short essay, a couple of pages in length, discussing the various categories of organizations in general terms. A few organizations are listed for cross-reference purposes in more than one chapter.

In part A, "The United Kingdom," the subpart on voluntary organizations contains five chapters which together comprise more than one-fourth of the book. Chapter 1, "Human Rights Organizations," contains descriptions of nine organizations, from Amnesty International, to the United Nations Association. Chapter 2 discusses five scholarship aid organizations; chapter 3, five voluntary overseas aid organizations; and the fourth chapter, twenty churches and religious organizations, from Aid to the Church in Need, to the World Jewish Congress. This first subpart concludes with a long chapter 5, "Committees and Support Groups," containing descriptions of twenty-eight organizations, from the Ad Hoc Group for Democracy in Thailand, to the Uruguay Human Rights Committee.

Subpart 11, "Professional Organizations," contains ten short chapters. These are, "Academics," "Students," "Scientists," "Medicine," "Psychiatry," "Writers," "Visual and Performing Arts," "Journalists," "Political Parties," and "Trade Unionists." Forty-seven organizations are discussed in these chapters.

Subpart III, "Refugees," opens with chapters discussing the problems faced by refugees seeking admission to and settlement in the United Kingdom. Chapter 18 describes ten refugee organizations, and chapter 19, two organizations dealing with conscientious objectors.

Part B, "United States of America," contains three subparts analogous with the subparts of part A. However, it consists of only eight chapters altogether. The compilers of *The Human Rights Handbook* intend to expand this part and also parts C and D in future editions.

Subpart I, "Voluntary Organizations," in part B, consists of three chapters, on human rights organizations, churches and religious organizations, and committees and support groups. Forty-four organizations are listed. Subpart 11, "Professional Organizations," has four chapters, on scientists, lawyers, medicine, and writers and publishers. Thirteen organizations are listed. Subpart 111, "Refugees," describes five organizations in its one chapter.

Part C, dealing with international non-governmental organizations, has the same three subparts as parts A and B. Subpart I on voluntary organizations has three chapters. Chapter 1, "Human Rights Organizations," lists thirteen organizations. The second chapter, on churches and religious organizations, discusses eight groups; and the third, on schol-

arship aid and student organizations, covers six. Subpart II, "Professional Organizations," has three chapters, on lawyers, professional organizations, and international union organizations and political parties. Eighteen organizations are listed in this subpart. Subpart III discusses seven groups which assist refugees.

Part D, on international intergovernmental organizations, discusses seven organizations, including the United Nations and three of its agencies. Also included are the European Commission of Human Rights, the Inter-American Commission on Human Rights, and the International Labour Organization.

The book includes an appendix which sets forth the text of the United Nations Declaration of Human Rights. Additional aids for the reader are a table of contents, preface, and introduction, and, at the end of the book, a bibliography and subject-matter index.

Marguerite Garling compiled this book for the Writers and Scholars Educational Trust. That London-based organization exists to oppose censorship and promote freedom of expression worldwide. It publishes a bimonthly magazine, the *Index on Censorship*.

Facts on File, Inc., of New York City, is associated with Commerce Clearing House, Inc., of Chicago, Illinois.

7. O'Brien, William V., *U.S. Military Intermention: Law and Morality (The Washington Papers, vol. VII, no. 68).* SAGE Publications, Beverly Hills, California, 1979. Pp. 88. Cost: \$3.50. Paperback.

This short book deals with the problem of military intervention by the United States in the affairs of other countries. Examples discussed in the text are the Dominican intervention of 1965, and the Vietnam War. The author, proceeding from a traditional moral viewpoint, measures United States performance against the standard of the just war. He suggests guidelines to be followed in the future by United States policy makers when considering whether to intervene.

The book is organized into seven chapters. After a short introductory chapter, the second chapter provides an overview of the place of military intervention in United States foreign policy at the present time. Chapter III analyzes the concept of intervention with reference to the various

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bases or justifications for intervention. The fourth and fifth chapters deal respectively with international law and with moral standards in relation to intervention. Chapter VI, the heart of the book, focusses on the just war concept as it relates to activities of the United States in Vietnam and the Dominican Republic. The last chapter summarizes the author's views concerning the factors which the United States should consider when occasions for intervention arise in the future.

For the convenience of readers, the book offers a table of contents and a preface. Footnotes and references are collected together at the end of the volume.

The author, William V. O'Brien, is a professor of government at Georgetown University, Washington, D.C., and a retired Army reservist. This book was prepared for the Center for Strategic and International Studies, Georgetown University, sponsor of the "Washington Papers" series.

8. Stockholm International Peace Research Institute, Postures for Non-Proliferation: Arms Limitation and Security Policies to Minimize Nuclear Proliferation. London, U.K.: Taylor & Francis, Ltd., 1979. Pp. viii, 168. Cost: U.K. pounds 6.50.

This book discusses the Treaty on the Non-Proliferation of Nuclear Weapons of 1968, its history, purposes, negotiation, and effectiveness. Particular attention is given to incentives and disincentives for states without nuclear weapons to acquire them. An account is given also of a review conference of the states parties to the treaty, held in 1975. The book concludes that little or no progress has been made in giving non-nuclear weapons states the security needed to deter them from acquiring nuclear weapons.

The book is organized into five chapters. The introductory chapter sets forth the definitions and premises of the institutional author of the book. Chapter 2, the heart of the book, summarizes the strategic debate concerning arms limitation and security policies related thereto. It is here that objectives of the non-nuclear weapons states in acquiring or not acquiring nuclear weapons are considered.

The third chapter reviews the negotiations of 1965 through 1968 which led to the Non-Proliferation Treaty. Arms limitation and disarmament

measures, security guarantees, and provisions for review, duration of the agreement, and withdrawal therefrom, are all discussed. The various draft treaties of 1965, 1967, and 1968 are all examined. Chapter 4 deals with the 1975 review conference and chapter 5 sets forth the book's conclusion in two pages.

For the convenience of the reader, the book offers a preface, table of contents, and subject-matter index. Footnotes are grouped together after chapter 5, under the heading, ('References." An appendix lists ten other SIPRI publications related to nuclear non-proliferation.

The Stockholm International Peace Research Institute describes itself as "an independent institute for research into problems of peace and conflict, especially those of disarmament and arms regulation." Founded in 1966 to commemorate Sweden's 150 years of peace, SIPRI is funded by the Swedish Parliament. The membership of SIPRI's governing board is international. SIPRI's present director is Dr. Frank Barnaby, of the United Kingdom.

9. Stockholm International Peace Research Institute, *World Armaments and Disarmament: SIPRI Yearbook 1979.* London, U.K.: Taylor & Francis, Ltd., 1979. Pp. xviii, 698.

This annual publication provides a comprehensive review of the past year's developments in weaponry worldwide. All types of weapons technology, production, and marketing are examined, but primary attention is given to nuclear weaponry. Arms control efforts, such as the SALT talks and the UN Special Session on Disarmament, are discussed at length.

The book is organized into nineteen numbered chapters, with numerous appendices, tables, and figures or charts, setting forth an abundance of statistical information concerning weapon types, quantities, expenditures, development, production, marketing, distribution, and trends. The overall picture presented is one of upward trends in most indicators, with modest progress toward disarmament.

After an introduction, the first three chapters review the economics of weaponry, focussing on expenditures, production, and the arms trade. Chapter 4 discusses military uses of outer space, and the fifth chapter focuses on nuclear power and proliferation and its control. The next three

chapters deal with naval weaponry, including submarines, missiles launched therefrom, and antisubmarine warfare.

Chapter 9, "The Prohibition of Inhumane and Indiscriminate Weapons," is available together with chapter 14, "The Humanitarian Rules of War," in a separate pamphlet. These chapters were reprinted for use in conjunction with a special United Nations conference on certain conventional weapons. The conference was held in Geneva during September 1979.

The tenth chapter discusses destruction of stockpiles of chemical weapons. Chapters 11 and 12 examine disarmament sessions of the United Nations, and chapters 13, 14, and 15 review arms control agreements and the humanitarian rules of war. Chapter 16 catalogues the nuclear explosions detonated by various countries during the past few years.

The seventeenth chapter discusses briefly "confidence-building in Europe," with emphasis on notification of military manuvers and peaceful settlement of disputes. The eighteenth chapter examines the role of nongovernmental organizations in promoting disarmament. The final chapter sets forth a chronology of major events affecting disarmament issues which occurred in 1978.

For the convenience of readers, the book offers a preface and a detailed table of contents, followed by an equally detailed list of tables and figures, or charts. Footnotes are grouped together at the end of each chapter. The numerous appendices are also inserted after the chapters to which they pertain. The book closes with a short list of errata, and a subject-matter index.

SIPRI has published a summary of the major points of the 1979 year-book in a separate 38-page brochure, "Armaments or Disarmament? The Crucial Choice."

The Stockholm International Peace Research Institute describes itself as "an independent institute for research into problems of peace and conflict, especially those of disarmament and arms regulation." Founded in 1966 to commemorate Sweden's 150 years of peace, SIPRI is funded by the Swedish Parliament. The membership of SIPRI's governing board is international. SIPRI's present director is Dr. Frank Barnaby, of the United Kingdom.

10. Whelan, John W., editor, volume **15,** *Yearbook* of *Procurement Articles*. Washington, D.C.: Federal Publications, Inc., **1979.** Pp. xvi, **1424.**

The annual *Yearbook* of *Procurement Articles* is a collection of all available articles dealing with government procurement or contract law published during the calendar year preceding the year of issuance of the volume. Some earlier articles may be included also. Thus, of the seventy articles reprinted in volume 15, the 1979 volume, forty-nine are dated 1978; thirty, 1977; and one, 1976.

The reprints are photographic copies of the articles in their original form, including original page numbers. *Yearbook* page numbers are added in the outside vertical margins of the pages. Articles are separated by inserted title pages, which give the full citation to the reprinted article, with a short scope note, usually two, three, or four lines in length. The articles themselves vary widely in length. The longest fills ninty-six pages, but most are far shorter, some being as few as four or six pages in length.

The volume opens with a commentary by the editor, John W. Whalen, on a topic selected by him. The commentary is an annual feature. In volume 15, the commentary deals with the *Arms* Export Control Act of 1976, codified at 22 U.S.C. 2751-2794 (1976). Professor Whelan reviews the history, provisions, and purposes of this act, concluding with recommendations for its improvement.

The articles reprinted deal with every imaginable subject relevant to federal government procurement. A few discuss state procurement as well. Some of the many topics covered are: affirmative action, the Occupational Safety and Health Act, escalation clauses, the Cost Accounting Standards Board, disputes procedures, fraud, evaluation factors, costs of socioeconomic programs, shipbuilding claims, patents, termination of subcontracts, settlement of termination claims, computerized legal research, the Freedom of Information Act, contracts for consultant services, and the GAO audit clause. Many other topics are covered as well in the articles reproduced in volume 15, the largest volume of the series thus far.

Twenty-five different journals and law reviews are represented among the seventy reprinted articles. The *National Contract Management Quarterly Journal* (called *National Contract Management Journal* until **1978**) is by far the most heavily represented, with thirty articles. The

American Bar Association's *Public Contract Law Journal* runs a poor second, with six articles. The *Federation* of *Insurance Counsel Quarterly* and the *George WashingtonLaw Review* each have four articles reprinted. The *Air Force Law Review* and the *Military Law Review* are tied with three each, while the *Labor Law Journal* and the *Government Accountants Journal* each have two.

The three *Military Law Review* articles are all from volume 80, a contract law symposium issue published in 1978. The first article is "The Anti-Deficiency Act (Revised Statutes 3679) and Funding Federal Contracts: An Analysis," 80 *Mil. L. Rev.* 51 (1978), 15 *Y.P.A.* 727 (1979). written by Major Gary L. Hopkins and Lieutenant Colonel Robert M. Nutt. This is the longest of the articles reproduced in volume 15. Major Hopkins is co-author of another article in the present volume of the *Review* also.

The second *Review* article is "An Analysis of ASPR Section XV by Cost Principle," 80 *Mil. L. Rev.* 147 (1978), 15 *Y.P.A.* 823 (1979), by Major Glenn E. Monroe. This is the second longest of all the articles appearing in volume 15. Major Monroe is co-author of another article appearing in the present volume of the *Review*.

The last of the three articles is "Settlement of Claims Arising from Irregular Procurements," 80 *Mil. L. Rev.* 220 (1978), 15 *Y.P.A.* 899 (1979), by Major Percival D. Park.

For the convenience of users of volume 15, the book offers, in addition to the inserted title pages and other features mentioned above, a detailed table of contents, including the scope notes from the inserted title pages, mentioned above. The table of contents is followed by a two-page "Guide to Use." At the end of the volume, there appear an index of authors, a table of leading cases, and a short subject-matter index.

The editor, John William Whelan, is a professor of law at the Hastings College of Law of the University of California. He is co-author, with Robert S. Pasley, of a casebook, *Federal Government Contracts* (1975). Associate editor William J. Ruberry is an administrative law judge on the Armed Services Board of Contract Appeals.

Volume 15 was mentioned very briefly in "Publications Received and Briefly Noted," at 85 *Mil. L. Rev.* 188 (1979). Last year's volume, No. 14, covering articles first published in 1977 and before, was briefly noted at 82 *Mil. L. Rev.* 225 (1978).

INDEX FOR VOLUME 86

I. INTRODUCTION

This index follows the format of the vicennial cumulative index which was published as volume 81 of the *Military Law Review*. That index has been continued in succeeding volumes. Future volumes will contain similar one-volume indices. From time to time the material of volume indices will be collected together in cumulative indices covering several volumes.

The purpose of these one-volume indices is threefold. First, the subject-matter headings under which writings are classifiable are identified. Readers can then easily go to other one-volume indices in this series, or to the vicennial cumulative index, and discover what else has been published under the same headings. One area of imperfection in the vicennial cumulative index is that some of the indexed writings are not listed under as many different headings as they should be. To avoid this problem it would have been necessary to read every one of the approximately four hundred writings indexed therein. This was a practical impossibility. However, it presents no difficulty as regards new articles, indexed a few at a time as they are published.

Second, new subject-matter headings are easily added, volume by volume, as the need for them arises. An additional area of imperfection in the vicennial cumulative index is that there should be more headings.

Third, the volume indices are a means of starting the collection and organization of the entries which will eventually be used in other cumulative indices in the future. This will save much time and effort in the long term.

This index is organized in five parts, of which this introduction is the first. Part 11, below, is a list in alphabetical order of the names of all authors whose writings are published in this volume. Part III, the subject-matter index, is the heart of the entire index. This part opens with a list of subject-matter headings newly added in this volume. It is followed by the listing of articles in alphabetical order by title under the various subject headings. The subject matter index is followed by part IV, a list of all the writings in this volume in alphabetical order by title.

The fifth and last part of the index is a book review index. The first

part of this is an alphabetical list of the names of all authors of the books and other publications which are the subjects of formal book reviews published in this volume. The second part of the book review index is an alphabetical list of all the reviews published herein, by book title, and also by review title when that differs from the book title. Excluded are items appearing in "Publications Received and Briefly Noted," above, which has its own index.

All titles are indexed in alphabetical order by first important word in the title, excluding a, an, and the.

In general, writings are listed under **as** many different subject-matter headings **as** possible. Assignment of writings to headings is based on the opinion of the editor and does not necessarily reflect the views of The Judge Advocate General's School, the Department of the Army, or any governmental agency.

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