

THE 1986 CHALLENGER DISASTER: LEGAL RAMIFICATIONS

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The 1986 Challenger (Shuttle) Disaster, quite aside from the horror and personal tragedy it created, raised distinct legal ramifications which are worthy of analysis and comment. The Disaster deserves special study and attention in terms of the role it has, or might have, played in the continuing evolution of two theories or doctrines which govern the extent to which tort liability is imposed on the federal Government and the private concerns which work under contract to serve the Government's needs. The first is the so-called "*Feres* doctrine" and the second is the "Government contractor defense." As in most cases, a clear understanding of the operative facts is crucial to an appreciation of their legal import.

Background

On January 28, 1986,¹ an explosion destroyed the Space Shuttle Challenger on its Flight 51-L seventy-three seconds after the liftoff from the Kennedy Space Center, Florida. Seven astronauts were killed. Among these were two military personnel, three employees of the National Aeronautics and Space Administration ("NASA"), and two non-Government civilians, one of whom was Christa McAuliffe, who was to be the "first teacher in space."

A report issued on June 6, 1986 by an independent commission appointed by President Reagan to investigate the accident (commonly known as the "Rogers Commission") concluded that the cause of the accident was a failure in the seal of the joint (the so-called "O-Ring") situated between two segments of the right Solid Rocket Motor ("SRM"). According to the report, hot gases escaped through a leak in the joint's seal and caused the explosion which had destroyed the Challenger. The joint failure, the Commission found, was due to a "faulty design unacceptably sensitive to a number of factors [including] temperature, physical

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¹ Ironically, the Apollo fire which caused the death of three astronauts (Grissom, Chaffee, and White) occurred on January 27, 1967.

dimensions, the character of materials, the effects of reusability, processing, and the reaction of the joint to dynamic loading."²

The Commission also determined that a contributing cause of the accident was NASA's decision to proceed with the launch notwithstanding unusually cold temperatures, which affected the joint's ability to seal itself, and despite warnings from engineers at Morton Thiokol, Inc. ("MTI"), the company which had designed and furnished the SRM in question. In its 1988 opinion, the United States District Court for the Northern District of Utah stated, in the lawsuit instituted by one of the MTI engineers who warned the company, as follows:

[The Commission concluded] that the process by which that [NASA] decision was reached within NASA's complex decision-making hierarchy was itself flawed. It found that engineers at MTI, including Roger Boisjoly, were concerned with the performance of the seals in SRM joints at the predicted temperatures. Prior flights launched at significantly warmer temperatures had experienced incomplete seals and minor gas escapes. The engineers made their concerns known to MTI management and to those NASA officials directly involved with the SRM aspect of the Shuttle Program. MTI management initially recommended to NASA officials that the launch be delayed until temperatures rose. Due to pressure from NASA, MTI management reversed its position and recommended that the launch proceed despite continuing objections from Boisjoly and others.

The Commission found that the NASA officials possessing knowledge of the engineers' concern and MTI's initial recommendation failed to pass that information to NASA officials above them in the launch decision hierarchy. Those who made the final decision of whether to launch never knew of the specific concerns with the function of the joint seals at the low launch temperature. In sum, the Commission concluded that the "decision to launch the Challenger was flawed. Those who made that decision were unaware of the initial written recommendation of the contractor advising against the launch at temperatures below 53 degrees Fahrenheit and the continuous opposition of the engineers at Thiokol after the management reversed

² I Rogers Commission Report 72. See *Boisjoly v. Morton Thiokol, Inc.*, 706 F. Supp. 795, 798 (N.D. Utah 1988).

its position If the decision makers had known all of the facts, it is highly unlikely that they would have decided to launch 51-L on January 28, 1986.³

The Claims

If it had been established that the Challenger explosion had resulted in damage to foreign nationals or foreign-owned property, liability of the U.S. Government might have arisen both under the 1967 Treaty on Principles Governing the Activities of the United States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies (referred to as the "Outer Space Treaty")⁴ and the 1972 Convention On International Liability for Damage Caused By Space Objects (referred to as the "Liability Convention").⁵ By the same token, the Liability Convention expressly exempts from its coverage not only damage sustained by "nationals of the launching State" but also damage sustained by "foreign nationals during such time as they are participating in the operation of [the] space object . . . or during such time as they are in the immediate vicinity of a planned launching or recovery area as the result of an invitation by [the] launching State."⁶

Although there was one rather remarkable claim for damage to a foreign vessel, that claim was filed with NASA under the Federal Tort Claims Act ("FTCA"), and neither international treaty was invoked. Moreover, neither causation nor actual damage was found in that case.⁷

³ Boisjoly, 706 F. Supp. at 799 (citing I Rogers Commission Report 82).

⁴ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, *done* January 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205. Article VII of the Outer Space Treaty reads in pertinent part: "Each State Party to the Treaty that launches or procures the launching of an object into outer space . . . is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts . . ."

⁵ Convention on International Liability for Damage Caused by Space Objects, *done* Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187. Paragraph I of Article VIII of the Liability Convention states: "1. A State which suffers damage, or whose natural or juridical persons suffer damage, may present to a launching State a claim for compensation for such damage."

⁶ *Id.* Art. VII.

⁷ The claim in question was asserted by John Kipalni, a Brazilian boat owner, who alleged that, as he was motoring in his boat along the coast of South Carolina near the Georgia border, falling debris from the Challenger sunk his boat and killed his son who was below deck. He stated that he managed to row to shore, and that he was confronted by NASA officials at the famous South of the Border restaurant/motel complex, where they purportedly offered to pay \$20,000 to him as a quick and unpublicized settlement. The FTCA claim was denied when NASA determined that it could not verify the truth of these assertions, and no suit was instituted by Kipalni before the applicable statute of limitations expired.

Another FTCA claim involved the owners of a United States fishing vessel whose fishing rights were curtailed by reason of the post-disaster salvage operation.⁸

Because the seven Challenger astronauts were all U.S. nationals, liability to their heirs for their deaths clearly fell outside the ambit of either the Outer Space Treaty or the Liability Convention. Any redress would have to be provided to them by the federal Government under the laws of this country.

Treatment of claims by such heirs would necessarily vary somewhat based upon differences in the status of each deceased astronaut. Deaths of the military astronauts would give rise to limited survivors' benefits in the form of life insurance under the Servicemen's Group Life Insurance program, as well as other benefits under the Veterans' Benefits Act.⁹ Survivor benefits for the deceased NASA employees would be available under the Federal Employees Compensation Act ("FECA").¹⁰ On the other hand, the FTCA expressly precludes recovery for death or injury to military personnel while "engaged in combat activities . . . during time of war,"¹¹ and the FECA specifically bars recovery under the FTCA for death or injury to civilian Government employees sustained during the performance of their duties.¹²

In the case of NASA, however, claims for damage, death, or bodily injury "resulting from the conduct of the Administration's functions" may still be entertained and paid, administratively, to both military and civilian Government employees, pursuant to the National Aeronautics and Space Act of 1958, as amended.¹³ NASA is authorized thereunder to pay such claims up to \$25,000.¹⁴ If a claim in excess of that amount is

⁸ That claim, filed by Emma Sue Wolfe, was referred to the U.S. Air Force which had assumed responsibility for salvage operations. Wolfe claimed that limits established by the Air Force for salvage of debris from the Challenger prevented her from fishing for shrimp in the most fertile ocean areas and that her lost income resulted ultimately in the loss of her fishing boat (which purportedly had been repossessed). The Air Force denied the claim, and Wolfe did not pursue the matter further. The denial, it would appear, could be justified based on Wolfe's damage having been too remote (*i.e.*, not proximately caused by any Government negligence or breach of duty) or because both the NASA launch decision and Air Force decisions regarding establishment of salvage limits were within the "discretionary function" exception to FTCA coverage.

⁹ The laws relating to veterans' benefits have been revised, codified, and enacted as Title 38, United States Code, Veterans' Benefits. The Servicemen's Group Life Insurance program appears at 38 U.S.C. § 765. See generally 38 U.S.C. §§ 765-779 (1988).

¹⁰ 5 U.S.C. § 8102 (1988).

¹¹ 28 U.S.C. § 2680(j) (1988).

¹² 5 U.S.C. § 8116(c) (1988).

¹³ 42 U.S.C. §§ 2451-2486 (1988) [hereinafter "NASA Act"].

¹⁴ 42 U.S.C. § 2473(b)(13)(A) (1988).

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considered meritorious, further relief may be granted with NASA's recommendation, via special Congressional legislation.¹⁵ Representatives of non-Government civilians, of course, are not precluded in any way from seeking and obtaining such administrative relief under the NASA Act.

The FTCA contemplates that tort claims against the federal Government be governed by the applicable state law where the Government "act or omission occurred" and provides in that regard that the United States is to be liable in tort "in the same manner and to the same extent as a private individual in like circumstances."¹⁶ Although under state law, liability for damage caused by dangerous products that are put into the "stream of commerce" may give rise to absolute liability, without proof of negligence, *i.e.*, proof of breach of a duty of due care,¹⁷ claims under the FTCA must assert and establish Government negligence.¹⁸ Administrative claims under the NASA Act require the showing only of proximate cause arising from the NASA acts or omissions in order to permit their payment by NASA. Proof of negligence is unnecessary.¹⁹ The FTCA excepts from its coverage claims for those Government acts or omissions which are "based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of the Federal agency or an employee of the Government, whether or not the discretion involved be abused."²⁰ With the Challenger accident, although not tested in court, it would seem that notwithstanding any abuse by NASA in allowing the launch to proceed or in failing to maintain a proper system for decision-making which would assure fully-informed decisions by those authorized to permit or cancel launches, the decision by NASA in this case would fall within the scope of the "discretionary function" exception to the FTCA, and thus preclude recovery for any astronaut's heirs or survivors through that statute. The NASA Act contains no similar "discretionary function" exception to NASA's administrative claim processing authority. By the same token, any NASA decision to award compensation under that Act is itself discretionary.

Interestingly, none of the astronauts' representatives pursued administrative claims under the NASA Act. It is likely that this avenue of relief was by-passed because of the low dollar limitation imposed (\$25,000) before special legislation is needed. Four FTCA claims filed, respectively, by representatives of one military astronaut (U.S.A.F. Lt. Col. Ellison S. Onizuka), one civilian NASA employee (Francis S. Scobee) and two other civilians (Gregory B. Jarvis and S. Christa McAuliffe) were settled by the Justice Department for an aggregate amount of \$7,735,000.

15 *Id.* at § 2473(b)(13)(B).

16 28 U.S.C. § 2674 (1988).

17 *See* *McPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050 (1916).

18 *Laird v. Nelms*, 406 U.S. 797 (1972).

19 NASA Act, 42 U.S.C. §§ 2451-2486.

20 28 U.S.C. § 2680 (1988).

Complete details of the individual claims have never been released,²¹ but the Justice Department has disclosed that of the amounts paid, 60% (\$4,641,000) was contributed by MTI and 40% (\$3,094,000) by the Government. The settlement called for payments of at least \$750,000 per family and consisted of long-term tax free annuities. The four families were treated as a group. The Justice Department decided that it was not appropriate to treat the astronauts separately even though some members were entitled to automatic compensation under the Veterans' Benefits Act.²²

Although the Government may have successfully resisted any FTCA claim based on the above-described "discretionary function" exception of the Act (as to all such claims) and, as explained below, the "*Feres* doctrine" (as to the claim of the military astronaut, Lt. Col. Onizuka), the Government has maintained that its 40% share of the settlements reflects the existence of these defenses. For reasons also explained below, MTI and the Government preferred to settle those cases rather than to litigate them.²³ (The *Smith* case, discussed separately herein, however, failed to settle -- at least as to Smith's claim against the Government -- and had to be resolved in court.) Representatives of one other astronaut, a NASA employee (Ronald E. McNair), settled solely with MTI for an undisclosed amount.

A newspaper report stated that "the father and brother of mission specialist Judith A. Resnik signed an agreement with shuttle contractor Morton Thiokol, Inc. for payments said to total \$1.5 million to \$2.5 million."²⁴ The article continues by stating that although the federal Government contributed to similar settlements [as described above] with four of the Challenger families in December 1986,

the attorney for the Resniks stated that the Department of Justice cut off negotiations with him The Justice Department spokeswoman, Amy Brown, confirmed that Government "has declined to participate in any further settlements with Challenger families other than the four that it negotiated on behalf of the National Aeronautics

²¹ A Freedom of Information Act ("FOIA") suit against the Justice Department instituted by NBC News to obtain documents regarding these settlements was eventually settled, with the Department of Justice's agreement to a partial release of information. Another FOIA suit, instituted against NASA by the New York Times, resulted in a court order to release cockpit tapes of the astronauts' voices which recorded their conversations just prior to the explosion.

²² N.Y. Times, Mar. 8, 1988, at A-1.

²³ "According to papers filed in a FOIA suit, the Justice Department seeking to avert 'highly complex tort litigation' began meeting with some of the Challenger families in an effort to reach an overall settlement." Wash. Post, Feb. 19, 1988, at A-3.

²⁴ *Id.*

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and Space Administration and Morton Thiokol in 1986."²⁵

The Smith Case and The "Feres Doctrine"

Jane J. Smith, as executrix of the estate of her husband, Navy Commander Michael J. Smith (one of the military astronauts who perished in the Challenger Disaster), had filed an FTCA claim with NASA which was neither granted nor denied by NASA. That claim was not settled with the Justice Department before Mrs. Smith filed suit in the United States District Court for the Middle District of Florida, Orlando Division, against the Government, MTI, and Lawrence Mulloy (NASA's Rocket Booster program chief) for 1.5 billion dollars. In response to this lawsuit, the Government filed a motion to dismiss. The Court granted that motion and dismissed Smith's complaint as to the Government, based on application of the "Feres doctrine."²⁶ The Court likewise dismissed a separate count of the complaint which sought injunctive relief against both NASA and MTI aimed at halting further performance of MTI's SRM contract. It did so because Smith had failed sufficiently to allege facts that would establish her standing to maintain an action for such relief.²⁷ The U.S. Court of Appeals for the Eleventh Circuit affirmed these dismissals.²⁸ Smith's petition for a writ of *certiorari* was subsequently denied by the U.S. Supreme Court.²⁹ Smith's case against MTI was settled before the Eleventh Circuit decision was issued. U.S. District Judge Robert R. Merhige, Jr. made the settlement official on August 26, 1988 in Richmond, Virginia.³⁰

The "Feres doctrine" is a "judicially created" exception to the waiver of sovereign immunity under the FTCA and was established initially in the eponymous 1950 decision, *Feres v. United States*.³¹ There, the U.S. Supreme Court held that "the Government is not liable under the Federal Tort Claims Act for injuries to servicemen where the injuries arise out of or are in the course of activity incident to the service."³² The "Feres doctrine" was extended by the Supreme Court in a 1977 decision, *Stencel Aero Engineering Corp. v. United States*,³³ which held that the Government will similarly not be liable to its contractors for contribution or indemnity where military personnel have realized recovery against contractors for

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Id.

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Smith v. Morton Thiokol, Inc., 712 F. Supp. 893 (M.D. Fla. 1988).

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Id. at 900.

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Smith v. United States, 877 F.2d 40 (11th Cir. 1989).

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Smith v. United States, 110 S. Ct. 1111 (Memo. Ord., Feb. 20, 1990).

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Smith, 877 F.2d at 41.

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Feres v. United States, 340 U.S. 135 (1950).

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Id. at 146.

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Stencel Aero Eng'g Corp. v. United States, 431 U.S. 666 (1977), *reh'g denied*, 434 U.S. 882 (1977).

injuries partially resulting from Government negligence. (Frequently, the "Feres doctrine" has been referred to as the "Feres-Stencel doctrine").

The District Court in *Smith* took pains to enumerate and explain the "three rationales" underlying the "Feres doctrine":

First, the distinctively federal character of the relationship between the Government and Armed Forces personnel necessitates a federal remedy that provides simple, certain, and uniform compensation, unaffected by the fortuity of the situs of the alleged negligence. Second, because those injured during the course of activity incident to service receive generous statutory veterans' disability and death benefits, it is unlikely that Congress intended to include them within the scope of FTCA coverage. Third, a suit based upon service-related activity involves the courts "in sensitive military affairs at the expense of military discipline and effectiveness." *Johnson*, 107 S. Ct. at 2063 (quoting *United States v. Shearer*, 473 U.S. 52, 59, 105 S.Ct. 3039, 3044, 87 L. Ed. 2d 38 (1985)). To determine whether a claim is barred by *Feres*, this court must consider all three rationales and apply each of them to the facts of this case. *Del Rio v. United States*, 833 F.2d 282, 286 (11th Cir. 1987). When a case falls within the bounds of *Feres*, the court has no jurisdiction to hear the case. *Stanley v. Central Intelligence Agency*, 639 F.2d 1146, 1157 (5th Cir. 1981); see *Atkinson v. United States*, 825 F.2d 202, 204 n.2 (9th Cir. 1987).³⁴

Although acknowledging the unpopularity of the "Feres doctrine," the District Court in *Smith* felt bound by it, especially in light of the recent Supreme Court decision in *United States v. Johnson*,³⁵ which not only reaffirmed the "vitality" of the doctrine, but in so doing overturned an Eleventh Circuit decision in which the Court of Appeals had refused to apply it to a case involving negligence by a non-military Government employee (an FAA air traffic controller whose negligence allegedly resulted in the wrongful death of a Coast Guard helicopter pilot). Negligence by NASA (non-military) employees thus would not take the *Smith* case outside the ambit of the "Feres doctrine."

The "critical issue" identified by the Court in *Smith* was stated in terms of the first *Feres* "rationale," i.e., whether or not Commander Smith's participation as an astronaut in the Shuttle Program at the time of his

³⁴ *Smith*, 712 F. Supp. 893 (M.D. Fla. 1988).

³⁵ *United States v. Johnson*, 481 U.S. 681 (1987).

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death could be considered "performing activities incident to his federal service."³⁶ In making this determination, the Court applied a test set forth by the Fifth Circuit Court of Appeals in *Parker v. United States*.³⁷ The test calls for the consideration of three factors: (1) the duty status of the service member; (2) the place where the injury occurred; and (3) the activity in which the serviceman was engaged at the time of the injury.

While detailed to NASA (pursuant to the terms of a long-standing agreement between NASA and the military departments which had been affirmed in 1959 by President Eisenhower), although not subject to direct military orders and not required to perform regarding military duties, Commander Smith nevertheless retained his military rank and privileges (including veterans' benefits under the VBA) and remained subject to military policies and directives (at least to the extent they did not affect his NASA responsibilities).

The fact that Commander Smith's death did not occur on a military base, the Court found, would not "preclude application of the '*Feres* doctrine' to bar recovery under the FTCA."³⁸ Further, notwithstanding his not performing what might be regarded as normal military activities, the Court found Commander Smith's participation in the Shuttle Program to have been only by virtue of his "status as a member of the armed services" and as a result of his participation in a military program under which military personnel "are detailed to NASA to perform appropriate services."³⁹ In short, the Court found that the "three factor" test had been fully satisfied in Commander Smith's case. Thus, the Court found no difficulty in concluding that Commander Smith had been performing activities "incident to" his military service at the time of his death.

The Court found that the third of the previously enumerated three "rationales" underlying the "*Feres* doctrine" might not apply to Smith's situation, *i.e.*, the rationale that FTCA suits for negligent orders might undermine the "special relationship of the soldier to his superiors" and military "discipline."⁴⁰ This was because Commander Smith, at the time of his death, was under NASA control, and his death was not the result of negligent military orders. Nevertheless, because both other *Feres* rationales seemed to apply (Smith was performing activities "incident to his military service" and his dependents would "continue to receive Veteran's benefits"), the Court felt compelled to apply the doctrine and to rule that it lacked "subject matter jurisdiction" over Smith's FTCA claims against the United States.⁴¹

Under such circumstances, the Court concluded that it had no choice but to dismiss the Smith suit against the Government, barring

³⁶ Smith, 712 F. Supp. at 895.

³⁷ *Parker v. United States*, 611 F.2d 1007 (5th Cir. 1980).

³⁸ Smith, 712 F. Supp. at 898.

³⁹ *Id.*

⁴⁰ Smith, 712 F. Supp. at 899.

⁴¹ *Id.* at 900.

recovery from the Government. Such a result stands in contrast to the substantial settlement which the other military astronaut (Onizuka) had realized from the Government. The rationale for this disparate and seemingly inequitable Government treatment has never been explained. Perhaps Mrs. Smith rejected the same type of Government settlement offer that had been accepted by Lt. Col. Onizuka's representatives. Perhaps the Smith settlement solely with MTI was equivalent in value to the joint settlement which others had attained with both MTI and the Government. In light of the parties' resistance to disclosure of any further specifics regarding these settlements, we can only speculate as to why Onizuka and Smith may have been treated differently.

In terms of the "vitality" of the "*Feres* doctrine" one might also be tempted to speculate as to whether the Supreme Court will continue to apply it as it did in *Johnson* and as it was applied in *Smith*. Significantly, *Johnson* was only decided by the narrowest of margins, with four of the nine Justices in dissent. Perhaps of even greater note is that it was Justice Scalia, who authored the dissenting opinion (in which he was joined by Justices Brennan, Marshall and Stevens). Commenting on the FTCA's waiver of sovereign immunity (under 28 U.S.C. § 1346 (b)), Justice Scalia observed:

Read as it is written, the language renders the United States liable to all persons, including servicemen, injured by the negligence of government employees. Other provisions of the Act set forth a number of exceptions, but none generally precludes FTCA suits brought by servicemen. One, in fact, excludes "[a]ny claim arising out of the *combatant activities* of the military or naval forces, or the Coast Guard, *during time of war*," § 2680(j) (emphasis added), demonstrating that Congress specifically considered, and provided what it thought needful for, the special requirements of the military. There was no proper basis for us to supplement - *i.e.*, revise - that congressional disposition.⁴²

Justice Brennan has recently been replaced by Justice Souter. Like Justice Scalia, Justice Souter is also known as a strict constructionist. As such, he may well adopt the reasoning espoused in the Scalia dissent. Indeed, the introduction of Justice Souter into the Court may even work to create a majority on the Court that favors the imposition of limitations on the "*Feres* doctrine," and other doctrines that have resulted from "judicial legislation."

⁴² Johnson, 481 U.S. at 693 (Scalia, J., dissenting).

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MTI and the "Government Contractor Defense"

MTI is known to have settled claims relating to the deaths of all seven Challenger astronauts: two separately (McNair and Resnik), four together with the Government (Jarvis, Scobee, Onizuka and McAuliffe) and one during the course of litigation (Smith).

It is known that MTI chose not to litigate the merits of any of those claims. It is also known that at the time it achieved a settlement with Mrs. Smith, MTI was preparing to file or had already filed its own motion to dismiss which was based on the so-called "Government contractor defense." Some explanation of just what the defense consists of and how it might have been applied to the Challenger Disaster cases would be in order.

The defense had its origin in a 1940 United States Supreme Court decision, *Yearsley v. W.A. Ross Contracting Co.*,⁴³ in which the Court held that a contractor was acting as the Government's agent when constructing wet dikes on the Missouri River under a Government contract and, accordingly, could not be held liable for erosion to the Plaintiff's waterfront property which those dikes allegedly caused. Subsequent case decisions under which the "Government contractor defense" has evolved, rather than focusing on agency relationships with the Government, began to shield Government contractors from liability in order to preserve intact the FTCA's "discretionary function" exception. As articulated in 1965 by the United States District Court for the District of Connecticut:

To impose liability on the contractor would render the government's immunity for the consequence of acts in the performance of a 'discretionary function' meaningless . . . [i]f the contractor was held liable, contract prices to the government would be increased to cover the contractor's risk of loss from possible harmful effects of complying with decisions of [government] executive officers authorized to make policy judgements.⁴⁴

More recently, however, it seemed that development of the "Government contractor defense" would be limited to cases involving private producers of military equipment and hardware, and injury to only military personnel. Indeed, the Ninth Circuit Court of Appeals in its 1983 *McKay* decision, stated that, as a prerequisite to using the "Government contractor defense," the contractor must establish, among other things, that the Government is

⁴³ *Yearsley v. W.A. Ross Contracting Co.*, 309 U.S. 18 (1940).

⁴⁴ *Dolphin Gardens, Inc. v. United States*, 243 F. Supp. 824, 827 (D. Conn. 1965). See generally, Napoleon, *The Government Contractor Defense: Its Implications in the Wake of Boyle v. United Technologies Corporation*, 23 NAT'L CONT. MGMT. J., Fall 1989, at 65.

itself immune from liability by reason of the "*Feres* doctrine."⁴⁵ The doctrine, as previously explained, applies strictly to FTCA cases involving injury to military personnel sustained while performing activities "incident to" their service.

The Supreme Court, in its landmark decision in *Boyle v. United Technologies Corp.*⁴⁶ (notably authored by Justice Scalia), rejected *McKay's* reasoning in this regard, preferring to found any application of the "Government contractor defense" on the broad language of the FTCA's "discretionary function" exception rather than on the much narrower "*Feres* doctrine." In this sense, *Boyle* represents a return to the rationale of earlier case law revolving around the defense.

There is at least one post-*Boyle* decision that applies the defense to eliminate contractor tort liability for injury to non-military personnel.⁴⁷ Also, there is at least one decision in which the defense has been applied to damage arising from non-military equipment.⁴⁸ Thus, it is plain that the "Government contractor defense" can no longer be regarded as simply a defense contract phenomenon.

According to the Supreme Court in *Boyle*, liability cannot be imposed on a Government contractor, pursuant to state law, if a three-part test is met:

1. The United States approved reasonably precise specifications for the contractor;
2. The contractor's equipment conformed to those specifications; and
3. The supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.⁴⁹

Unlike earlier cases which indicated that the Government must itself "establish" the product specifications,⁵⁰ *Boyle* requires only Government "approval" of specifications, and later cases have interpreted this

⁴⁵ *McKay v. Rockwell Int'l Corp.*, 704 F.2d 444 (9th Cir. 1983).

⁴⁶ *Boyle v. United Technologies Corp.*, 487 U.S. 500 (1988), *cert. denied*, 497 U.S. 994 (1989), *reh'g denied*, 489 U.S. 1047 (1989).

⁴⁷ *Nicholson v. United Technologies Corp.*, 697 F. Supp. 598 (D. Conn. 1988) (defendant not liable for injury to federal Civil Service technician caused by explosion during repair of military helicopter landing gear).

⁴⁸ *Boruski v. United States*, 803 F.2d 1471 (7th Cir. 1986). *See also* *Burgess v. Colorado Serum Co.*, 772 F.2d 844 (11th Cir. 1985).

⁴⁹ *Boyle*, 487 U.S. at 511.

⁵⁰ *In re Agent Orange, Prod. Liab. Litig.*, 534 F. Supp. 1046, 1055 (E.D.N.Y. 1982).

"approval" requirement as including informal procedures encompassing "continuous back and forth" between the parties, as well as more formal expressions of approval.⁵¹

As to contractor proof of "compliance" with the specifications, the United States District Court for the Southern District of New York, in *Zinck v. ITT Corp.*⁵² held that this second *Boyle* prerequisite was satisfied by unrefuted affidavits recounting "in great detail the inspection procedures employed by the Government to assure ITT's compliance with the contract."⁵³ A similar finding could not be made by the Fifth Circuit Court of Appeals in *Garner v. Santoro*,⁵⁴ when a subcontractor did not clearly demonstrate that tests on epoxy paint had been performed to determine compliance with contract requirements. Failure to adequately document performance and results of critical testing can thus be fatal to an assertion of the "Government contractor defense."⁵⁵

Finally, as to the third *Boyle* prerequisite, the "duty to warn," post-*Boyle* decisions make clear that this duty comes into play only when the contractor has actual knowledge of the existence of danger,⁵⁶ and only when the Government itself has no knowledge.⁵⁷ The "duty to warn" may require more than a single warning, especially when the Government adopts measures in an attempt to avoid danger which the contractor knows may not prove effective.⁵⁸

Applying *Boyle's* three-part test to MTI and the Challenger Disaster, it seems likely that the "Government contractor defense" would have been available to MTI had it chosen to assert it in court rather than resolving the above-described claims by means of substantial money settlements. First, even though MTI may have contracted to design the

⁵¹ See, e.g., *Smith v. Xerox Corp.*, 866 F.2d 135 (5th Cir. 1989); *but cf. Trevino v. General Dynamics Corp.*, 876 F.2d 1154 (5th Cir. 1989).

⁵² *Zinck v. ITT Corp.*, 690 F. Supp. 1331 (S.D.N.Y. 1988).

⁵³ *Id.* at 1337.

⁵⁴ *Garner v. Santoro*, 865 F.2d 629 (5th Cir. 1989).

⁵⁵ See *Dempsey & Barsy, Government Contractor Liability for Design Defects After Boyle*, 19 PUB. CONT. L.J. 405, 420 (1990). See also, *Dembling & Hiestand, Public Exposure To Uncompensated Injury or Damage Arising Out of Government Procurement of Goods and Services*, PROGRAM MANAGER (Journal of the Defense Systems Management College) 9, 10, 11 (Mar.-Apr. 1989).

⁵⁶ *Trevino v. General Dynamics Corp.*, 865 F.2d 1474, 1487 (5th Cir. 1989).

⁵⁷ *Ramey v. Martin-Baker Aircraft Co., Ltd.*, 847 F.2d 946, 951 n.10 (4th Cir. 1989).

⁵⁸ See *Schwindt v. Cessna Aircraft Co.*, No. CV 485-472 (N.D. Ga. Aug. 31, 1988) (LEXIS 9886); *Dempsey & Barsy, supra* note 55, at 417-18. See also *Hiestand, The Boyle Rule: What Does It Mean?*, PUB. CONT. NEWSL., Fall 1990, at 3, which reviews how the *Boyle* rule has been construed in 19 subsequent cases by types of claims: design versus manufacturing defects, approval of specifications, failure to warn, "stock" products, supplier and subcontractor claims, performance contractor, military versus non-military products, civilian injuries, and catastrophic event.

SRMs and the ill-fated O-ring, there can be no doubt that its designs were thoroughly reviewed by NASA and that "approval" could have been established by reference to the intensive "back and forth" between contractor and Government representatives that invariably occurs in NASA procurements.

Similarly, with NASA contracts, it is rare that inspection, testing and evaluation is not scrupulously documented both by the contractor, as well as by NASA contracting personnel. Thus, establishment of "compliance" with specifications (the second *Boyle* prerequisite) should have proven to be no problem whatsoever for MTI.

Third, and finally, as evidenced by the Rogers Commission Report itself, MTI fully discharged any duty it may have had to warn the Government. Regardless of whether the Government itself had knowledge of the likely failure of the SRM joint, MTI engineers issued strong and repeated warnings of the dangers inherent in cold weather launches, and although the MTI management had retracted its initial recommendation to delay launch of the Challenger until temperatures were more favorable, that retraction was found to have been made by MTI only under pressure from the Government.⁵⁹

Final Observations

The "*Feres* doctrine" and the "Government contractor defense" are generally thought of in the context of accidental deaths and injuries caused by faulty operation of defense-related equipment (*i.e.*, tanks, airplanes, ships, *etc.*) on land, sea and air. The Challenger Disaster, however, and the claims that emanated from it demonstrate that such legal theories may extend as well to incidents involving manned or unmanned vehicles or satellites while operating in or on the way to or from outer space. The fact that both the Government and MTI chose to settle Challenger-related claims for millions of dollars rather than to rely on those theories may well have been a function of the spectacular nature of the Challenger Disaster and of their desire not to appear inhumane while under such close and widespread scrutiny.

Certainly, if those involved in settling the Challenger claims were questioned about the hundreds of armed service personnel and others who are injured or who die annually, and whose claims are routinely denied based on *Feres*, *Boyle*, and their progeny,⁶⁰ they could not provide a convincing rationale for their disparate treatment of the Challenger Disaster victims.

Perhaps the resolution of this dilemma can only be achieved by re-evaluating the legal bases and policy considerations underlying both the

⁵⁹ See Boisjoly, 706 F. Supp. at 799.

⁶⁰ See Gusman, *Rethinking Boyle v. United Technologies Corp. Government Contractor Defense: Judicial Preemption of the Doctrine of Separation of Powers?* 39 AM. U.L. REV. 391 (1990).

"*Feres* doctrine" and the "Government contractor defense." To that task, we commend the Supreme Court and its newest Justice. Whether those theories will eventually be overturned or in any way significantly modified has yet to be seen.