Northern district of California

IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

DEBORAH GETZ, et al.,

Plaintiffs,

No. C 07-06396 CW ORDER GRANTING

DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

v.

THE BOEING COMPANY, et al.,

Defendants.

Defendants Honeywell International, Inc. (Honeywell), The
Boeing Company (Boeing) and Goodrich Pump & Engine Control Systems,
Inc. (Goodrich) have filed separate motions for summary judgment,
arguing that Plaintiffs' claims are barred by the government
contractor defense. Plaintiffs oppose the motions. Having
considered all of the papers filed by the parties and oral argument
on December 10, 2009, the Court grants Defendants' summary judgment

¹Plaintiffs are thirty-three individuals who either were injured in the helicopter crash that gave rise to this case or were the heirs of individuals killed in the crash: Deborah Getz, Rodney Thomas, Mary Duffman, Sophia Duffman, Christine Vaughn, Brad Vaughn, Heather Vaughn, Taylin Vaughn, Jill Garbs, Doug Garbs, Paul Wilkinson, Felicia Wilkinson, Tyffanie Wilkinson, Carson Wilkinson, Robert J. Quinlan, Kathleen T. Quinlan, Julie Quinlan, Keely Quinlan, Madeline Quinlan, Erin Quinlan, Hershel McCants, Sr., Goldie Murphy, Shannon McCants, Trevor McCants, Kylie McCants, Jordan Lanham, Jerry Goldsmith, Ryanne Noss, Timothy Brauch, Chris Trisko, Mark Daniel Houghton, Chuck Isaacson and Brenda Isaacson.

motions.

#### BACKGROUND

On February 17, 2007, a United States Army Special Operations Aviation Regiment (SOAR) MH-47E Chinook helicopter bearing Tail #94-00472 crashed in the Zabul Province of Afghanistan. All twenty-two individuals on board the helicopter were military personnel. Plaintiffs are the survivors of the crash and the heirs of the individuals who were killed in the crash. Defendants are companies that designed, assembled, manufactured, inspected, tested, marketed and sold the helicopter, its component parts and related software and hardware.

The following facts regarding the details of the crash are taken from the Army Regulation 15-6 Report of Proceedings by Investigating Office/Board of Officers (Army Report), attached as Exhibit A to the Brandi Declaration submitted in support of Plaintiffs' opposition to Defendants' motion to dismiss. See Docket No. 80. Included in this report are the findings of the Army's Investigative Office (Investigative Findings), as well as numerous attachments, such as aircraft maintenance reports, autopsy reports, weather forecasting data, voice transcripts of pilot communications, aircrew sworn statements and aircraft manual extracts.

SOAR, the unit operating the helicopter at the time of the crash, specializes in low-level night flying during combat and rescue missions. On the day of the accident, the unit was returning to its base in Bagram, Afghanistan along an "established flight corridor" with two other helicopters after a mission to "drop . . . off personnel to capture/kill someone in the Al-Qaeda

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network" was cancelled. Army Report, Investigative Findings, 3(b); Sworn Witness Statement taken at 11:09, at 1. According to one eyewitness report, when the crew informed their commander that the mission had been cancelled and they were planning to return to base, the commander "agreed that [they] should recover to Bagram." Id., Sworn Statement taken at 14:30, at 1. The helicopter took off after a Performance Planning Card was completed, indicating that the aircraft could perform the mission, and the crew received two favorable weather forecasts. Id., Investigative Findings, 3(c); Sworn Statement taken at 14:30, at 1. Sixty-four minutes into the flight, the aircraft crashed, killing eight and injuring the remaining fourteen people on board. Id., Investigative Findings at 1(a), 2(e).

According to the Army Report, "the preponderance of evidence indicates that the primary cause of the accident was the sudden catastrophic failure of the number two engine." Id. at 1(c). Army Report's Investigative Findings indicate that "the single remaining operational engine could not provide the power required to maintain sustained flight." <u>Id.</u> However, the MH-47E Operator Manual suggests that continued flight may have been possible with only one working engine. Id., MH-47E Operator Manual, section 9-2-7. According to the Army Report's findings, the pilot's decision to enter an "avoid" range of 400 feet, rather than to descend to a lower altitude, may have made continued flight Id., Investigative Findings, at 4(f)(2-3). The Army impossible. Report lists a number of possible reasons why the pilot did not descend to a lower altitude, including the facts that he "lost all primary instrumentation in the last few seconds of flight," that

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the "standby instrument displays [were] poorly located," and that he "had no visual references" because of poor weather conditions. Army Report, Investigative Findings, at 4.

Although the root cause of the helicopter's engine failure has not yet been determined, investigators have ruled out Foreign Object Damage (FOD). Id. at 3(f). Moreover, Army investigators found no evidence of friendly or hostile fire in the "relatively benign . . . valley" over which the helicopter was flying at the time of the crash. <u>Id.</u> at 3(a). Although the Army Report's Investigative Findings rule out icing damage as a possible cause of the accident, the witness reports uniformly mention seeing serious icing on the aircraft right before the crash. Id. at 3(e); Sworn Statement taken at 9:50, at 1 ("I turned my lip light on and discovered icing on the minigun"); Sworn Statement taken at 9:52, at 1 ("I noticed precipitation coming in from the window and trace amounts of icing on the lower FOD screen of the number two engine"); Sworn Statement taken at 10:00, at 6 ("Heavy/severe icing to the point of 'ghost' terrain painted on radar display").

The Army Report also lists several factors that may have contributed to the severity of the accident, including "a potential component and or system failure of the engine fuel system, poor weather (WX) forecasting and monitoring capabilities in Afghanistan, . . . and improper pilot inputs." <u>Id.</u> at 1(c). Witness Reports focus especially on the failure of the weather forecasting in predicting what one passenger called "the worst weather conditions I have encountered in 20 years." Statement taken at 10:00, at 6. The Army Report's Investigative Findings state that "the unforecast weather requirements were a

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significant contributing factor and had a profound impact on how the PIC [pilot in command] reacted to the situation." Investigative Findings, at 4(b). The Investigative Findings reported no evidence, however, that "the inaccurate weather forecasts and observations were due to human error." Id. at 3(d).

There is no evidence that the mission was poorly planned or that the unit failed to maintain the equipment properly. Id. at 3(b),(g). The engine was only seven months old, and had shown no signs of weakness in any prior flight crew inspection. Id. at 3(g). However, there had been past reports of other engine failures on Chinook aircraft prior to this incident. 4(a)(1).

Plaintiffs allege three separate defect claims relative to the helicopter and its component parts: design defect, manufacturing defect and defect based upon a failure to warn:

the Helicopter and its components parts, including but not limited to, the engines and FADEC, the DECU, and the computer hardware and software related thereto, were defective and unreasonably dangerous as those terms are defined under California law by reason of defects in design and manufacture and failure of the Defendants to give adequate and proper warnings of the dangers existing therein, and adequate instructions regarding the avoidance of such dangers in the use and maintenance of the Helicopter and its component parts.

Amd. Comp. ¶ 85.2 Plaintiffs are seeking monetary damages from Defendants for wrongful death, bodily injuries, and loss of consortium based on the legal theories of negligence, strict product liability, and breach of express and implied warranty.

<sup>&</sup>lt;sup>2</sup>FADEC (Full Authority Digital Engine Control) is a system that controls the engine's fuel flow; DECU (Digital Engine Control Unit) is mounted in the helicopter cabin and is a component of the FADEC system. The "E" in these acronyms is sometimes said to refer to "Electronic."

### LEGAL STANDARD

Summary judgment is properly granted when no genuine and disputed issues of material fact remain, and when, viewing the evidence most favorably to the non-moving party, the movant is clearly entitled to prevail as a matter of law. Fed. R. Civ. P. 56; Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986); Eisenberg v. Ins. Co. of N. Am., 815 F.2d 1285, 1288-89 (9th Cir. 1987).

The moving party bears the burden of showing that there is no material factual dispute. Therefore, the court must regard as true the opposing party's evidence, if supported by affidavits or other evidentiary material. Celotex, 477 U.S. at 324; Eisenberg, 815 F.2d at 1289. The court must draw all reasonable inferences in favor of the party against whom summary judgment is sought.

Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986); Intel Corp. v. Hartford Accident & Indem. Co., 952 F.2d 1551, 1558 (9th Cir. 1991).

Material facts which would preclude entry of summary judgment are those which, under applicable substantive law, may affect the outcome of the case. The substantive law will identify which facts are material. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986).

Where the moving party does not bear the burden of proof on an issue at trial, the moving party may discharge its burden of production by either of two methods:

The moving party may produce evidence negating an essential element of the nonmoving party's case, or, after suitable discovery, the moving party may show that the nonmoving party does not have enough evidence of an essential element of its claim or defense to carry its

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ultimate burden of persuasion at trial.

Nissan Fire & Marine Ins. Co., Ltd., v. Fritz Cos., Inc., 210 F.3d 1099, 1106 (9th Cir. 2000).

If the moving party discharges its burden by showing an absence of evidence to support an essential element of a claim or defense, it is not required to produce evidence showing the absence of a material fact on such issues, or to support its motion with evidence negating the non-moving party's claim. Id.; see also Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 885 (1990); Bhan v. NME Hosps., Inc., 929 F.2d 1404, 1409 (9th Cir. 1991). moving party shows an absence of evidence to support the non-moving party's case, the burden then shifts to the non-moving party to produce "specific evidence, through affidavits or admissible discovery material, to show that the dispute exists." Bhan, 929 F.2d at 1409.

If the moving party discharges its burden by negating an essential element of the non-moving party's claim or defense, it must produce affirmative evidence of such negation. F.3d at 1105. If the moving party produces such evidence, the burden then shifts to the non-moving party to produce specific evidence to show that a dispute of material fact exists.

If the moving party does not meet its initial burden of production by either method, the non-moving party is under no obligation to offer any evidence in support of its opposition. Id. This is true even though the non-moving party bears the ultimate burden of persuasion at trial. Id. at 1107.

Where the moving party bears the burden of proof on an issue at trial, it must, in order to discharge its burden of showing that or the Northern District of Calitornia

no genuine issue of material fact remains, make a <u>prima facie</u> showing in support of its position on that issue. <u>UA Local 343 v. Nor-Cal Plumbing, Inc.</u>, 48 F.3d 1465, 1471 (9th Cir. 1994). That is, the moving party must present evidence that, if uncontroverted at trial, would entitle it to prevail on that issue. <u>Id.</u> Once it has done so, the non-moving party must set forth specific facts controverting the moving party's <u>prima facie</u> case. <u>UA Local 343</u>, 48 F.3d at 1471. The non-moving party's "burden of contradicting [the moving party's] evidence is not negligible." <u>Id.</u> This standard does not change merely because resolution of the relevant issue is "highly fact specific." <u>Id.</u>

#### DISCUSSION

The military contractor defense<sup>3</sup> is an affirmative defense;

Defendants have the burden of establishing it. <u>Snell v. Bell</u>

<u>Helicopter Textron, Inc.</u>, 107 F.3d 744, 746 (9th Cir. 1997). In this summary judgment motion, the issue before the Court is whether Defendants are "entitled to judgment as a matter of law, i.e., whether no reasonable jury could fail to find that the defense had been established." <u>Id.</u>; <u>see Boyle</u>, 487 U.S. at 514.

The Supreme Court established the government contractor defense in <u>Boyle v. United Technologies Corporation</u>, 487 U.S. 500, 512 (1988). In <u>Boyle</u>, a Marine helicopter pilot's survivors sued the government-contracted manufacturer of the helicopter, alleging defects in the escape hatch mechanism. <u>Id.</u> at 502-03. The Court

<sup>&</sup>lt;sup>3</sup>The defense is also known as the "government contractor defense." In the Ninth Circuit, however, it is only available to contractors who design and manufacture military equipment. <u>See Nielsen v. George Diamond Vogel Paint Co.</u>, 892 F.2d 1450 (9th Cir. 1990). For purposes of this order, the Court uses the phrases interchangeably.

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design defects in military equipment does in some circumstances 3 present a 'significant conflict' with federal policy and must be 4 displaced." Id. The Court described one such circumstance as 5 "when (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those 6 7 specifications; and (3) the supplier warned the United States about 8 the dangers in the use of the equipment that were known to the 9 supplier but not the United States." Id. When these requirements 10 are met a government contractor cannot be held liable under state 11 Id. "The first two elements of the defense are intended to 12 insure that it is indeed a discretionary decision on the part of 13 the government that is being immunized." Butler v. Ingalls 14 Shipbuilding, Inc., 89 F.3d 582, 584 (9th Cir. 1996) (citing Boyle, 15 487 U.S. at 512). "The third is intended to ensure that the 16 contractor has fully conveyed all information necessary to allow 17 the government to make a fully informed decision." Id. (citing 18 Boyle, 487 U.S. at 512-13).

held that "state law which holds Government contractors liable for

The rationale for the Boyle Court's decision was as follows:

We think that the selection of the appropriate design for military equipment to be used by our Armed Forces is assuredly a discretionary function within the meaning of [the Federal Tort Claims Act]. It often involves not merely engineering analysis but judgment as to the balancing of many technical, military, and even social considerations, including specifically the trade-off between greater safety and greater combat effectiveness. And we are further of the view that permitting "second-guessing" of these judgments through state tort suits against contractors would produce the same effect sought to be avoided by the FTCA exemption. The financial burden of judgments against the contractors would ultimately be passed through, substantially if not totally, to the United States itself, since defense contractors will predictably raise their prices to cover, or to insure against, contingent liability for the Government-ordered designs. To put the point differently:

For the Northern District

It makes little sense to insulate the Government against financial liability for the judgment that a particular feature of military equipment is necessary when the Government produces the equipment itself, but not when it contracts for the production.

<u>Id.</u> at 511-12 (internal citation omitted).

The Ninth Circuit has summarized the rationale of the government contractor defense as follows:

Stripped to its essentials, the military contractor's defense under <u>Boyle</u> is to claim, 'The Government made me do it.' <u>Boyle</u> displaces state law only when the Government, making a discretionary, safety-related military procurement decision contrary to the requirements of state law, incorporates this decision into a military contractor's contractual obligations, thereby limiting the contractor's ability to accommodate safety in a different fashion.

<u>In re Hawaii Fed. Asbestos Cases</u>, 960 F.2d 806, 813 (9th Cir. 1992) (internal citations and quotations omitted).

In the present case, each Defendant is alleged to be responsible for manufacturing and designing different components of the subject helicopter. Therefore, the Court will address the government contractor defense for each Defendant separately.

## II. Defendant Honeywell

Plaintiffs seek to hold Defendant Honeywell liable under state tort law for its role in designing, manufacturing and failing to provide adequate warnings with respect to the T55-GA-714A engines on board the subject helicopter. The Court concludes that the government contractor defense applies to these claims and, therefore, these claims are preempted.

A. Approval of Reasonably Precise Specifications

The first prong of <u>Boyle</u> requires the existence of two factors: reasonably precise specifications and governmental approval of them. <u>Snell</u>, 107 F.3d at 747; <u>Gray v. Lockheed</u>

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Aeronautical Sys. Co., 125 F.3d 1371, 1377 (11th Cir. 1997). "Where government approval of reasonably precise specifications has been found as a matter of law, the evidence established exercise of judgment by the government in the design of the particular feature Snell, 107 F.3d at 747. Yet, if "the government at issue." contractor exercised the actual discretion over the defective feature of the design, then the contractor will not escape liability via the government contractor defense . . . . " Id. at 748 (internal quotations and citations omitted).

Simply approving or "rubber stamping" a design will not satisfy the first Boyle prong. Butler v. Ingalls Shipbuilding, <u>Inc.</u>, 89 F.3d 582, 585 (9th Cir. 1996); <u>Snell</u>, 107 F.3d at 748 ("The mere signature of a government employee on the 'approval line' of a contractor's working drawings, without more, does not establish the government contractor defense."). "'When the Government merely accepts, without any substantive review or evaluation, decisions made by a government contractor, then the contractor, not the government, is exercising discretion." Butler, 89 F.3d at 585 (quoting Trevino v. General Dynamics Corp., 865 F.2d 1474 (5th Cir. 1989), cert. denied, 493 U.S. 935 (1989); see also McKay v. Rockwell Int'l Corp., 704 F.2d 444, 450 (9th Cir. 1983) ("When only minimal or very general requirements are set for the contractor by the United States the rule is inapplicable. The situation is different where the United States reviewed and approved a detailed set of specifications."). The government itself need not prepare the specifications. Boyle, 487 U.S. at 513 ("The design ultimately selected may well reflect a significant policy judgment by Government officials whether or not the

contractor rather than those officials developed the design.").

Additionally, mere performance standards, as opposed to design specifications, do not constitute "reasonably precise specifications." <a href="Hawaii">Hawaii</a>, 960 F.2d at 813 (specifications must require more than "just a certain level of performance").

Compliance with performance standards is not necessarily incompatible with state law. Thus, there is no conflict between state products liability and a contractor's duties under its government contract and no displacement of state law.

If, for example, the United States contracts for the purchase and installation of an air conditioning-unit, specifying the cooling capacity but not the precise manner of construction, a state law imposing upon the manufacturer of such units a duty of care to include a certain safety feature would not be a duty identical to anything promised the Government, but neither would it be contrary. The contractor could comply with both its contractual obligations and the state-prescribed duty of care. No one suggests that state law would generally be pre-empted in this context.

Boyle, 487 U.S. at 509.

Plaintiffs argue that the Honeywell T55-GA-714A engine is simply a "stock" or "off the shelf" product. Opp. at 15. The evidence does not support this characterization. The T55-GA-714A engine was "developed on the basis of involved judgments made by the military [and not] in response to the broader needs and desires of end-users in the private sector." <a href="Hawaii">Hawaii</a>, 960 F.2d at 811. Simply because the T55-GA-714A derives from a "common core" that also has commercial application does not remove the engine from the government contractor defense. <a href="See In re "Agent Orange" Prod.">See In re "Agent Orange" Prod.</a>
Liab. Litig., 517 F.3d 76, 90 (2d Cir. 2008) (Agent Orange not a "stock" product because finished product resulted from governmental discretion, even though commercially available component chemicals

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were not originally developed for military use). Even when commercial and military products are similar, highly relevant differences can exist that would support a finding that the government had direct and detailed control over the military version.

In May, 1984, Honeywell's predecessor, Lycoming, and the Army began working together to build the T55-L-713 helicopter engine model. With the addition of the Full Authority Digital Engine Control (FADEC), the engine was designated the T55-L-714. evidence shows that the Army and Lycoming continuously communicated back and forth during the development of the T55-L-714 specifications. DiGiovanni Decl. at ¶ 5. Nothing was included in the T55-L-714 engine that was not approved by the Army.  $\underline{\text{Id.}}$  at ¶ 407. The Army provided Lycoming with clear specifications as to the requirements to build a turbine engine -- Military Specification AV-E-8593D entitled, "Specifications: Engines, Aircraft, Turboshaft and Turboprop." Morgan Decl. at ¶ 9, Exh. 4. The T55-GA-714A Engine Prime Item Development Specification (PIDS) was prepared in January, 1999 by Allied Signal<sup>4</sup> to comply with, and was drafted based on, Military Specification AV-E-8593D. ¶ 9.

Through its Aviation Engineering Directorate (AED), the Army determined and developed the design and qualification requirements for the T55-GA-714A. Powelson Decl. at ¶ 5. During the AED qualification process for the engine, AED reviewed contractor submittals, evaluated design analyses and reports and attended many

 $<sup>^4</sup>$ Allied Signal owned the turbine engine division of Lycoming.

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formal and informal design review and technical interchange meetings aimed at meeting the design and qualification requirements for the engine. <u>Id.</u> at ¶¶ 6-7. In July, 1999, once the PIDS was drafted, Allied Signal completed the T55-GA-714A Qualification Substantiation Report. Morgan Decl. at ¶ 11. The report describes the numerous tests that were undertaken to ensure compliance with the PIDS. Morgan Decl., Exh. 5. The report also notes all of the tests that were furnished to the government throughout the testing process. Id. In December, 1999, Allied Signal merged with Honeywell and took the name Honeywell International, Inc. In July, 2002, after the report concluded that the T55-GA-714A engine satisfactorily complied with the tests, the Army directly certified that Honeywell had "successfully completed the applicable design analysis and test requirement" of the PIDS. Morgan Decl. at ¶¶ 11-The Army also granted a Qualification Rating to Honeywell for the T55-GA-714A engine line, which demonstrates the government's involvement in the development and qualification process for the Id. Further, the Army did extensive flight testing as part of the qualification for the T55-GA-714A engine. Habchy Dep. 92:12-93:4.

In sum, the T55-GA-714A engine was not merely "rubber stamped" by the government. The Army was heavily involved throughout the qualification process of the T55-GA-714A engine. Its involvement continued through the entirety of the development process including This is precisely the type of "back and testing and installation. forth dialogue culminating in approval," and "continuous exchange between the contractor and the government" required to satisfy Boyle's first condition. Butler, 89 F.3d at 585. The undisputed

evidence establishes that the government approved reasonably precise specifications for Honeywell's T55-GA0714A engine. Therefore, Honeywell has proved that, as a matter law, it satisfies the first prong of <a href="Boyle">Boyle</a>.

B. Conform to Specifications

The second prong of <u>Boyle</u> requires that the equipment conformed to the specifications approved by the government. <u>Boyle</u>, 487 U.S. at 512. This prong is satisfied if the government is involved in the design and development of a particular product and accepts the product. <u>See Butler</u>, 89 F.3d at 585-86; <u>Kerstetter v. Pac. Scientific Co.</u>, 210 F.3d 431, 435-36 (5th Cir. 2000) ("Extensive government involvement in the design, review, development and testing of a product, as well as extensive acceptance and use of the product following production, is evidence that the product line generally conformed with the government-approved specifications."). A mere allegation that the product is defective does not create a triable issue as to whether the product failed to conform to specifications. <u>See Oliver v. Oshkosh Truck Corp.</u>, 96 F.3d 992, 1000-01 (7th Cir. 1996).

Here, Honeywell satisfies this prong. The government executed a DD Form 250, which certifies that each article delivered was inspected and conformed to the specifications and standards established by the Army. Morgan Decl. ¶¶ 22-23, Exh. 10-11. In relevant part, the DD Form 250 states:

WE CERTIFY that all articles delivered under this shipper have been inspected and found to conform in all respects, except for authorized deviations, to all applicable blueprints, specifications, and standards, and that evidence of this determination, including chemical and physical test reports as required, is on file and subject to examination

Id., Exh. 10. Before a DD Form 250 is signed, a government representative extensively inspects the engine and reviews the documentation concerning the operation of the engine. Morgan Dep. 40:14-41:15. This evidence establishes that the Honeywell engine conformed to the specifications approved by the government. Miller v. Diamond Shamrock Co., 275 F.3d 414, 420 (5th Cir. 2001) ("[T]he government's issuance of a DD Form 250, Material Inspection and Receiving Report, further establishes the item's conformity.")

Plaintiffs assert that Honeywell, as well as all Defendants, have failed to meet this prong because, during the investigation after the crash, the Army wrote to Defendants as follows:

[A] FADEC/DECU Electrical Interface Control Document was apparently never written during the design, development, and testing of the FADEC system. Action Item 33/34 directly requested that Boeing and Honeywell provide the Aircraft to DECU and the Engine to DECU I/O, respectively, contractually required to be delivered back in 1988. We are still waiting for the a [sic] copy of the data delivered by either company that met that specific contractual obligation.

Malloy Decl. Exh. O, TBC 144343. Plaintiffs argue that this letter is evidence that Defendants failed to meet a contractual obligation and, therefore, cannot prove as a matter of law that their equipment conformed to the specifications approved by the government. Plaintiffs fail to provide any context for this letter. It is not clear whether the letter pertains to any issues relevant to the case. Plaintiffs do not put forth any evidence that the "contractually required" document concerns the validity of the government-approved acceptance test procedure, which the DECU passed twice. Nor does this letter address whether the DECU conformed to design specifications. Moreover, Plaintiffs have not presented any evidence that Honeywell designed or manufactured the

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FADEC or DECU. Thus, no reasonable jury could infer from this letter that Honeywell equipment did not conform to the specifications approved by the government.

Dangers Known To Contractor But Not the Government The third prong of Boyle requires that the contractor have warned the government about dangers in the use of the product that were known to the contractor, but not to the government. Boyle, 487 U.S. at 512. Boyle does not require the contractor to warn the government of every possible danger, only those actually known to it and not the government. Id.

Plaintiffs argue that the T55-FA-714A engine may have failed due to excessive water ingestion and that Honeywell did not warn the Army about such a danger. This type of engine failure is called flame out. Honeywell argues that it did not need to warn the Army about the dangers of the engine flaming out when it ingested water because the Army already knew of this danger. See Oliver, 96 F.3d at 1001 ("We are unable to conclude that Oshkosh was aware of any danger associated with the configuration of the fuel tanks and exhaust system that the Marine Corps was not. is no indication that Oshkosh possessed any greater knowledge than the Marine Corps concerning the likelihood of an exhaust-ignited fuel tank fire."). The Court agrees. In a general sense, the Army had long known that certain events, such as flying in icing conditions, may cause a turbine engine to flame out. Herman Decl., Exh. 8, 9. Further, since its publication in 1995, the Army had possessed a report produced by the Advisory Group for Aerospace Research & Development of the North Atlantic Treaty Organization, which found that water ingestion can cause an engine flameout.

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Id., Exh. 10. Army representatives from the Aviation Engineering Directorate also testified that certain weather conditions could cause a T55-GA-714A engine to shut down. McCall Dep. at 146:19-147:7; 158:10-18. The Army knew that it could have requested that an auto relight system be added to the T55-GA-714A engine, to prevent engine flameout, because the Army had added that feature to other helicopters within its fleet. 5 Herman Decl., Exh. 13, 45:5-19; McCall Dep. 45:12-17. Further, the Army also knew that it could have requested that a continuous ignition be included in the specifications for the T44-GA-714A engine. 6 Herman Decl., Exh. 5, 17:9-12; Powelson Decl. at  $\P$  11.

Moreover, Plaintiffs have not presented any evidence that Honeywell had received, and did not disclose to the Army, customer complaints of (1) any engine malfunction based on weather, (2) performance issues related to weather or (3) engine flameout as a result of ingestion of snow, rain, slush or ice. Rossi Dep. 52:16-21; 60:9-12; 63:23-64:8. To Honeywell's knowledge, "there's never been an incident of a flameout reported on this engine" until this accident. Id. at 61:15-16. Therefore, the Court concludes that Honeywell knew of no danger with respect to flameout of the T44-GA-714A engine due to water ingestion that was not known by the Army. Accordingly, the third prong of Boyle is met. Because Honeywell has proved, as a matter of law, all three prongs of

<sup>&</sup>lt;sup>5</sup>An auto relight system senses when the flame of an engine has gone out and automatically rekindles the flame without pilot input.

<sup>&</sup>lt;sup>6</sup>A continuous ignition system is a pilot-activated switch which causes the engine's ignition system to run continuously, thereby rekindling the flame in an engine should it extinguish for any reason.

Boyle, the government contractor defense applies to the tort claims against it arising from the manufacture and design of the T44-GA-714A engine.

### II. Goodrich

Plaintiffs seek to hold Defendant Goodrich Pump & Engine
Control Systems, Inc. liable on state tort claims for its role in
designing, manufacturing and failing to provide adequate warnings
with respect to the Full Authority Digital Electronic Control
system (FADEC), which controls the engine's fuel flow and includes
the Digital Electronic Control Unit (DECU). The Court concludes
that the government contractor defense applies to these claims and,
therefore, these claims are preempted.

A. Approval of Reasonably Precise Specifications

Plaintiffs argue that the Army had absolutely no in

Plaintiffs argue that the Army had absolutely no involvement with the <u>initial</u> design of the FADEC and DECU, the products Goodrich allegedly designed. Perks Decl. ¶¶ 7, 25-29, 37-38; McCall Dep. at 124:12-125:5. Defendants do not disagree. The initial FADEC and DECU designs to which Plaintiffs refer were for a similar FADEC-equipped engine, which was procured by the United Kingdom for Royal Airforce Chinook helicopters. However, the FADEC and DECU at issue in this case were not the Royal Airforce versions, but models specifically developed for and approved by the U.S. Army.

In 1987, the Army began developing requirements for its Special Operations Forces FADEC- and DECU-equipped engine to be operated on the MH-47E Chinook helicopter. Gentile Decl. ¶ 6. The army awarded a development and qualification contract to Honeywell's predecessor, Lycoming, which was the primary military

contractor of the development of the engine. <u>Id.</u> at ¶ 7. Subcontractors in the program included Goodrich's predecessor (Chandler Evans), which was subcontracted for the development of the FADEC. <u>Id.</u> Goodrich manufactured one component of the FADEC, the hydromechanical assembly, which was mounted on the engine; and Goodrich subcontracted with Hawker Siddeley (which is now ATEC)<sup>7</sup> for development and manufacture of another component of the FADEC, the DECU. <u>Id.</u>

The Army's AED underwent lengthy back-and-forth discussions with these contractors to evaluate the engine and its components, including the FADEC and DECU, during its development. Powelson Decl. ¶¶ 5-7; Gentile Decl. ¶¶ 14-24. The AED also reviewed and evaluated all the design analyses, reports, and test plans that the military contractors submitted to the Army pursuant to contract requirements. Id. The AED attended numerous formal and informal design review and technical interchange meetings with the military contractors to discuss whether the engine, including the FADEC and DECU components, complied with the Army's specifications, design standards and requirements. Powelson Decl. ¶ 7; Gentile Decl. ¶¶ 15, 21, 22, 24.

Goodrich's specific tasks in the development of the FADEC for the U.S. Army's Special Operations Forces engine development program were outlined in a statement of work. Gentile Decl. ¶ 8, Exh. H. This statement of work, approved by the Army AED, details the contractually required tasks, and associated costs, for

<sup>&</sup>lt;sup>7</sup>The claims against Defendant ATEC were dismissed based on a lack of personal jurisdiction. March 10, 2009 Order, Docket No. 156.

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designing and producing the FADEC, including development of specifications, qualification tests, manufacturing of hardware and a description of the data and reports required during this phase of the development program. Id. The Army required that the failure modes and effect of the FADEC be analyzed as part of the qualification process. This analysis was provided to and approved by the Army. Gentile Decl.  $\P\P$  32-33. The AED ultimately approved the specifications for the FADEC-equipped engine and determined that it complied with the Army's design and performance criteria. Powelson Decl. ¶ 8; Gentile Decl. ¶¶ 17, 27.

In 2001, the Army decided to procure the FADEC directly from Goodrich, rather than subcontracting through Honeywell. Decl. ¶ 28; Powelson Decl. ¶ 9. Before being shipped, the FADEC had to pass government-required Acceptance Test Procedures, which were verified by government representatives stationed at Goodrich's facility. Gentile Decl.  $\P\P$  27-30; Powelson Decl.  $\P$  9.

No evidence supports Plaintiffs' theory that the Army simply adopted the design of the FADEC and DECU used by the United Kingdom for Royal Airforce Chinook helicopters. The evidence shows that, before the Army contracted for the FADEC- and DECU-equipped engine, its representatives reviewed all hardware and software qualification reports, data and specifications; and, in fact, the Army rejected an initial draft of the FADEC Specification 111613, citing several technical concerns. In sum, Goodrich has proved that the Army was substantially involved in the design process of the relevant components and that it approved of reasonably precise specifications as required under the first prong of Boyle.

# B. Conform to Specifications

For the same reasons that Honeywell has provided, Goodrich satisfies the second prong of Boyle. Goodrich's products were subjected to, and passed, government approved and required tests, both before they were delivered to the Army, and again after the accident. Gentile Decl. ¶¶ 29, 31, Exh. GG, LL. Additionally, government representatives stationed at Goodrich's facility also verified that the equipment conformed to contract requirements and signed Material Inspection and Receiving Report DD Form 250 for the FADECs before the products were shipped to the Army. Gentile Decl. ¶ 30, Exhs. H, II and JJ; see Miller, 275 F.3d at 420. Moreover, as noted above, the Army letter cited by Plaintiffs as evidence that Goodrich failed to meet a contractual obligation to furnish particular data to the Army does not create a triable issue of fact as to whether its equipment conformed to the specifications approved by the government. Malloy Decl., Exh. O.

C. Dangers Known To Contractor But Not the Government Goodrich, including its predecessor, Chandler Evans, disclosed to the Army all dangers relating the use of the FADEC that were known to them. Gentile Decl. ¶ 32. The Army required that Goodrich perform an analysis of the failure modes, effects and criticality (FMECA) of the FADEC. Gentile Decl. ¶ 33. The purpose of this analysis is to verify design integrity, identify and quantify failure modes and document the reliability risks. Id. The Army reviewed and approved of the FMECA that Goodrich conducted on the FADEC system. Id. The Army process for tracking deficiencies in military equipment is through the issuance of the Airworthiness Impact Statement. Powelson Decl., ¶ 5. That no such

statement was ever issued for the subject FADEC is further evidence that Goodrich did not know of any specific deficiencies concerning the FADEC, let alone that Goodrich failed to disclose these deficiencies.

Plaintiffs argue that Goodrich generally knew more about the FADEC than the Army. Perks Decl. ¶¶ 5-38. Even if this were true, it would not contradict the fact that Goodrich disclosed all of the risks known to it. Plaintiffs also fault Goodrich for not incorporating an auto-relight function into the engine, given the engine's susceptibility to flameout as a result of water ingestion. However, as the Court noted above, the Army was aware of the availability of an auto-relight option, but specifically chose not to include it on the Special Operations Aviation Regiment Chinook helicopters. Powelson Decl. ¶ 11.

For the foregoing reasons, the government contractor defense applies to the tort claims against Goodrich arising from its role in designing and manufacturing the FADEC and DECU systems.

## III. Boeing

Plaintiffs also seek to hold Defendant The Boeing Company liable under state tort law for its role in designing, manufacturing and failing to provide adequate warnings with respect to the MH-47E subject helicopter. The Court concludes that the government contractor defense applies to these claims and, therefore, Plaintiffs' claims are preempted.

A. Approval of Reasonably Precise Specifications
In Plaintiffs' opposition to Boeing's summary judgment motion,
Plaintiffs repeat the same arguments that they make in their
opposition to Honeywell's and Goodrich's summary judgment motions.

These arguments fail against Boeing in much the same way as they did against Honeywell and Goodrich.

Plaintiffs argue that the Army merely rubber-stamped the Boeing design and that the PIDS issued with respect to the helicopter was a performance specification and not a design specification. Plaintiffs do not rebut Boeing's evidence that the PIDS issued for the helicopter, and the documents incorporated within the PIDS describe "every single design detail for the Accident Aircraft." Gionta Decl. ¶ 15; see also id., Exh. 1. Further, Plaintiffs have not produced any evidence that the PIDS was a performance rather than a design specification. In fact, Plaintiffs' primary supporting declarant, Malcolm Perks, does not even specifically refer to the Boeing aircraft PIDS, and instead focuses on the Honeywell engine PIDS. Moreover, Plaintiffs' reliance on deposition testimony is misplaced because it also relates only to the engine PIDS, not the aircraft PIDS. Malloy Decl., Exh. J; Morgan Dep. 54:8-9.

Further, the engines, FADEC and DECU installed on the accident helicopter were not the ones installed when Boeing delivered the aircraft to the Army. They were not even the same model of engines, FADECs or DECUs. Plaintiffs claim that this doesn't matter because the MH-47E PIDS "expressly authorized the use of new and redesigned parts," thereby incorporating within the terms of the PIDS any parts that might be used on the aircraft later.

Opposition at 23:38-24:1. However, the "Interchangeability and Replacement" section of the PIDS upon which Plaintiffs rely applies to the CH-47D aircraft, not the MH-47E.

Plaintiffs incorrectly claim that the subject MH-47E aircraft

was originally manufactured for the Shah of Iran, not for the U.S. Army. Opposition at 1, 4. As stated in the aircraft's DD Form 250, the subject MH-47E was delivered in 1994, fifteen years after the Shah was deposed. Gionta Decl. ¶ 16. The subject helicopter was re-manufactured from a used CH-47C, which had been intended for the Shah, into a MH-47E in 1992. Id. at ¶ 5.

Plaintiffs also argue that "the MH-47E is essentially a stock product" and, as such, could not have been approved as the result of reasonably precise specifications. Although Boeing makes many commercial aircraft, it has never produced a commercial version of the MH-47E. The uncontroverted evidence provided by Boeing proves that it worked with the Army for many years to develop the MH-47E. In sum, Plaintiffs have not raised a triable issue of fact that would counter Boeing's evidence that the government approved reasonably precise specifications for the MH-47E. See Gionta Decl., Exh. 4; Gionta Supp. Decl. ¶ 16.

## B. Conform to Specifications

Like Honeywell's and Goodrich's, Boeing's contract with the government required that the Army execute a DD Form 250 "Material Inspection and Receiving Report" for each aircraft in order to document conformance to the Army's specifications. Executing a DD Form 250 is not just a "rubber stamp" of approval of Boeing's product. It is the culmination of a process that occurs over an extended period of time, which includes constant Army oversight during production and Army access to manufacturing facilities, records, test documents, inspection reports, material certifications, engineering reports and the aircraft. The Army then conducts a final inspection of the aircraft and performs a

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paperwork audit to ensure that all inspections and certifications are valid. After the final inspection, the aircraft undergoes a test flight. Once all of these steps are taken, the Army executes a Form DD 250. Here, the Army signed this form for the accident aircraft on November 15, 1994.

Further, Plaintiffs have not presented evidence that the aircraft was defectively manufactured or that the government inspectors failed to detect the defect. The government accepted the helicopter and used it for thirteen years following delivery. During that period of time, the Army never informed Boeing that the subject aircraft failed to conform to applicable specifications. Kaplan Decl. ¶ 14.

Moreover, as noted above, the Army letter cited by Plaintiffs as evidence that Boeing failed to meet a contractual obligation to furnish particular data to the Army does not create a triable issue of fact as to whether its equipment conformed to the specifications approved by the government. Malloy Decl., Exh. O. Plaintiffs have not pointed to any requirement, in the Army's contract with Boeing or in the MH-47E specifications, that Boeing furnish this data to the Army. For all of these reasons, Boeing has satisfied the second prong of Boyle.

Dangers Known To Contractor But Not the Government C. Plaintiffs argue that Boeing was required to warn the Army of dangers known to it about the engine as well as about the aircraft. However, the third prong in Boyle requires the "manufacturer" of a product sold to the Army to warn of hazards in the use of the product it manufactured. Because Boeing manufactured the aircraft and not the engine, its only obligation under Boyle was to inform

the Army of the hazards in the use of the aircraft, not in the use of its engines.

Further, as noted above, it is not enough for Plaintiffs to argue that Boeing generally had greater knowledge about the aircraft than the Army. Superior knowledge alone will not defeat the third prong under <u>Boyle</u>. The uncontroverted evidence establishes that both Boeing and the Army knew that the engine on the MH-47E could flame out from water ingestion, and that the Army was aware of any hazards of the MH-47E known by Boeing. Therefore, Boeing satisfies the third prong of <u>Boyle</u>.

For the foregoing reasons, the government contractor defense applies to the tort claims against Boeing arising from its role in designing and manufacturing the MH-47E helicopter.

### IV. Failure to Warn Claim

The complaint, when read broadly, includes a separate failure to warn claim against all Defendants. Plaintiffs generally allege that Defendants' products were defective because of Defendants' failure to include adequate warnings and instructions as to the dangers of their products. See Amd. Comp. at ¶¶ 85, 90, 103. However, Plaintiffs never specifically state the warnings that Defendants should have provided.

The government contractor defense applies to failure to warn claims where a defendant, in making its decision whether to provide a warning, acted "in compliance with reasonably precise specifications imposed on it by the United States." <u>Snell</u>, 107

F.3d at 749 (internal quotations and citations omitted). The issue here is whether Defendants' obligations under their contracts with the government were in conflict with their performance of whatever

duty state law might have imposed on them. See id.

If the government did not require Honeywell "to do anything with respect to the placement of warnings" on its product, the government contractor defense does not apply. <u>Hawaii</u>, 960 F.2d at 813. However, a conflict exists where the government imposes requirements regarding the placement of warnings, "'thereby limiting the contractor's ability to accommodate safety in a different fashion.'" Id.

Here, Defendants have shown that "the government considered the appropriate warnings, if any, that should accompany the product," Tate v. Boeing Helicopters, 55 F.3d 1150, 1156 (6th Cir. 1995), and that it "approved reasonably precise specifications" constraining Defendants' ability to comply with whatever duty to warn they may have had. See Butler, 89 F.3d at 586.

The Army was solely responsible for creating an operator's manual for each aircraft and that manual is the exclusive means of communicating procedures and limitations to the aircrew. The MH-47E PIDS provides, "3.26.3.2 Flight and Maintenance Instructions.

'A copy of an operators manual[,] a pilots checklist and an AVUM maintenance manual shall be provided (by the government) for each production aircraft.'" Gionta Decl., Exh. 4 at TBC 01150. The manual states, "This manual contains the complete operating instructions for the MH-47E helicopter. . . . The observance of limitations, performance, and weight and balance data provided is mandatory." Supp. Bell Decl., Exh. 1 at TBC 01237. Moreover, as noted above, Defendants have shown that they knew of no danger from their products that was not known by the Army.

Because the manual is the exclusive source of instructions,

procedures and limitations for the MH-47E helicopter and because the manual is created by the Army itself, there is a conflict between the Army specifications and Plaintiffs' failure to warn claim. As stated above, Defendants acted in accordance with the mandatory PIDS requirements when they manufactured and delivered their products to the Army. Any alleged defects in the manual regarding a failure to warn are the result of the Army's actions, not Defendants'. Thus, Plaintiffs' failure to warn claim is also barred by the government contractor defense.

### V. Rule 56(f)

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Rule 56(f) of the Federal Rules of Civil Procedure provides that the court may deny or continue a motion for summary judgment "[i]f a party opposing the motion shows by affidavit that, for specified reasons, it cannot present facts essential to justify its opposition." The requesting party must show (1) it has set forth in affidavit form the specific facts it hopes to elicit from further discovery, (2) the facts sought exist and (3) the soughtafter facts are essential to oppose summary judgment. Family Home and Finance Center, Inc. v. Federal Home Loan Mortgage Corp., 525 F.3d 822, 827 (9th Cir. 2008). Plaintiffs request a continuance of these motions pursuant to Federal Rule of Civil Procedure 56(f) in order to depose Robert DiGiovanni, Dennis Powelson and Ronald Gionta. Plaintiffs argue that they have not had the opportunity to question these people about their declarations. Plaintiffs' supporting declaration does not identify any specific facts they would elicit during depositions of these witnesses. Plaintiffs merely speculate that deposing these individuals would uncover facts that contradict those relied upon in Defendants' motions.

Accordingly, the Court denies this request.

#### CONCLUSION

For the foregoing reasons, the Court grants Defendants' motions for summary judgment. Docket Nos. 186, 188, 195. clerk shall enter judgment and the parties shall bear their own costs.

IT IS SO ORDERED.

Dated: 01/21/10

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CLAUDIA WILKEN United States District Judge

<sup>8</sup>To the extent that the Court relied upon evidence to which the parties objected, the objections are overruled. The Court did not rely on any inadmissible evidence in reaching its decision. the extent the Court did not rely on evidence to which the parties objected, the objections are overruled as moot.