

**UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION**

<b>GARY LINFOOT and wife MARY</b>	)	
<b>LYN LINFOOT,</b>	)	
	)	
<b>Plaintiffs,</b>	)	
	)	<b>No. 3:09-cv-00639</b>
<b>v.</b>	)	
	)	<b>Judge Sharp</b>
<b>MCDONNELL DOUGLAS</b>	)	<b>Magistrate Judge Knowles</b>
<b>HELICOPTER COMPANY,</b>	)	
	)	
<b>Defendant.</b>	)	

**MEMORANDUM**

Pending before the Court are several evidentiary motions and motions for summary judgment by Defendant McDonnell Douglas Helicopter Company (“MDHC” or “the Company”), as well as a motion to ascertain the status of the same. (Docket Nos. 223, 267, 268, 276, and 325). Because the court concludes that MDHC is entitled to judgment on Plaintiffs’ only remaining claim, MDHC’s motions for summary judgment will be granted and all remaining motions will be denied as moot.

**I. Factual & Procedural Background<sup>1</sup>**

This case arises from the May 2008 crash of an AH-6M model helicopter piloted by Plaintiff Gary Linfoot during a mission south of Baghdad, Iraq.<sup>2</sup> Mr. Linfoot suffered severe injuries in the crash, which left him permanently paralyzed. Mr. Linfoot’s injuries were aggravated by the failure of the crush box beneath his pilot’s seat to effectively yield and absorb

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<sup>1</sup> Unless stated otherwise, the following facts are taken from MDHC’s statements of undisputed facts (Docket Nos. 238, 299) and Plaintiffs’ Responses thereto (Docket Nos. 225, 277). Additional background can be found in this Court’s prior opinion at Docket No. 202 at 1-5.

<sup>2</sup> Gregory Cooper was also in the helicopter at the time of the crash and was initially a named plaintiff in this case. Mr. Cooper has since abandoned or settled all of his claims, leaving only Mr. Linfoot and his wife, Mari Lyn Linfoot (collectively “the Linfoots” or “Plaintiffs”). Although Plaintiffs initially brought suit against a number of entities, the only remaining claim is against MDHC. (Docket Nos. 190, 198, 202, 320).

the shock of the crash landing. The crush box failed to absorb the impact because it had been filled with avionics equipment during a prior modification of the helicopter.

MDHC's potential liability stems from its involvement with one of these various modifications to the helicopter. Specifically, Plaintiffs seek to hold MDHC liable for failing to warn the Army against installing a voice warning system ("VWS") in the crush box as part of the Army's Mission Enhanced Little Bird ("MELB") reconfiguration program. The VWS that interfered with the crush box functionality was installed in the subject helicopter in 2005 as part of the MELB reconfiguration process, which entailed converting the Army's MD-369FF/D model helicopters into helicopters of an entirely new model, the "M" or MELB configuration. MDHC neither manufactured the VWS in question nor selected its location in the helicopter. Nevertheless, Plaintiffs allege that MDHC is liable for failing to warn the Army that putting anything, including the VWS, inside the crush box would diminish the crush box's efficacy.

MDHC had two contracts with the Army as part of the Company's participation in the MELB reconfiguration: a production contract to supply the Army with MELB "kits" and a testing contract to test the kits' component parts.<sup>3</sup> The Army has never claimed that MDHC breached or violated either of its contracts. The kits encompassed by the first contract did not include all of the parts necessary for the MELB reconfiguration; the Army also redesigned other elements of the helicopters and sourced certain parts from other contractors. Notably, the MELB kits supplied by MDHC did not include a VWS. The second MDHC-Army contract provided for the Army to furnish two aircraft to MDHC on which MDHC was to test the kit components and other aspects of the reconfigured helicopters. The flight test contract imposed some safety requirements on MDHC, including the need to eliminate and/or minimize the risk of hazards.

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<sup>3</sup> MDHC's predecessor company, Hughes Helicopter, manufactured and delivered the original helicopter that Mr. Linfoot was piloting at the time of the crash ("the subject helicopter") in 1981.

The contract also required that all flight tests by MDHC be pre-approved by the Army, and Army representatives supervised all MDHC flight tests. Moreover, the Army expressly limited the role of MDHC in testing the airworthiness of the aircraft and voiced a desire not “to set a precedence of having the contractor review and approve the design and analysis of all Government militarized modifications.” (Docket No. 224-3).<sup>4</sup>

Although MDHC did not provide the Army with a VWS in the MELB kit, the Company did correspond with the Army about the importance of including a VWS in the MELB configuration. (Docket No. 298-3, Boeing Letter of July 10, 1998). Plaintiffs rely on this correspondence to argue that MDHC is responsible for the Army’s decision to put a VWS in the MELB configuration. The record indicates otherwise: including a VWS was independently required based on the type of engine included in the MELB configuration. (Docket No. 223-C, Soteropoulos Dep. Tr. at 103:4-6, 104:16-24, 106:2-11). The Army acquired a VWS for the MELB configuration from Specialty Enterprises, Ltd. (“SEL”) and the Army’s Special Operations Aviations Regiment (“SOAR”) selected the installation location of the VWS in the MELB helicopters. The Army encouraged SEL to meet with MDHC about the VWS installation (Docket No. 298-5, Keane Email from Apr. 29, 1999), although it’s not clear from the record whether any such meeting actually took place. MDHC mechanic Gary A. Craig did, however, answer some of the Army’s questions regarding the integration of the VWS into the MELB configuration. (Docket No. 298-4, Craig Email from May 13, 1999). MDHC also tested the VWS in the MELB configuration as part of the flight test contract. That testing was, however, limited to the functionality of the VWS; the contract did not task MDHC with reviewing the VWS location. (Docket No. 298-7, Craig Dep. Tr. at 173:16-174:14).

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<sup>4</sup> Plaintiffs assert that the VWS was not covered by this limitation because it does not qualify as a “militarized modification” yet fail to provide any support whatsoever for this conclusion.

Mr. Craig, the MDHC engineer who corresponded with the Army about the VWS, observed the VWS in the crush box during a pre-test helicopter inspection with Army representatives from the Blue Grass Army Depot. Although MDHC did not officially determine that the Army's installation location was "hazardous," Mr. Craig's undisputed testimony is that an MDHC representative verbally recommended against installing the VWS in the crush box. (Docket No. 298-7, Craig Dep. Tr. at 152:14-153:18). This recommendation did not inspire change or further conversation, as the Army ultimately kept the VWS in the crush box.

After MDHC completed all of its contractual obligations and returned the test aircraft to the Army, the Army converted a number of helicopters, including the subject helicopter, into the MELB configuration. As part of this conversation, the Army contracted with former Defendant L-3 Communications to install a SEL-produced VWS inside the subject helicopter's crush box. Plaintiffs now argue that MDHC is liable for failing to adequately warn the Army against installing any VWS in the crush box.

This Court previously decided that Kentucky substantive law applies to this dispute. (Docket No. 202). The only substantive issue that remains is Plaintiffs' claim that MDHC breached its duty of reasonable care to Plaintiffs with respect to the "design, manufacture, assembly, inspection, distribution, . . . modification, [and] overhaul . . . of the subject helicopter and its component parts, including . . . the pilot's seat and component parts, and equipment under or about the pilot's seat" and that this breach was a proximate cause of Mr. Linfoot's injuries. (Docket No. 138 at ¶¶ 22-25). MDHC argues that summary judgment is appropriate because Plaintiffs have not presented sufficient evidence that the Company's involvement with the MELB reconfiguration proximately caused Mr. Linfoot's injuries. (Docket No. 223). MDHC also asserts that Plaintiffs' claims are non-justiciable and/or are preempted by the combatant

activities exception to the Federal Torts Claims Act. Id. In a separate motion for summary judgment, MDHC contends that regardless of any duty to warn, the government contractor defense shields them from liability. (Docket No. 276). Because Plaintiffs' evidence on causation is wholly lacking and because the Court agrees that the government contractor defense applies, summary judgment is appropriate here.

## **II. Summary Judgment Standard**

A party may obtain summary judgment if the evidence establishes there are no genuine issues of material fact for trial and the moving party is entitled to judgment as a matter of law. See FED. R. CIV. P. 56(c); Covington v. Knox County Sch. Sys., 205 F.3d 912, 914 (6th Cir. 2000). A genuine issue exists "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, 477 U.S. 242, 248 (1986). The Court must construe the evidence in the light most favorable to the nonmoving party, drawing all justifiable inferences in his or her favor. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986). However, the nonmoving party must rely on more than "[c]onclusory assertions, supported only by Plaintiff's own opinions." Arendale v. City of Memphis, 519 F.3d 587, 605 (6th Cir. 2008). Rather, Plaintiffs must "set out specific facts showing a genuine issue for trial." Harvey v. Campbell County, Tenn., 453 Fed. Appx. 557, 561 (6th Cir. 2011).

## **III. Legal Analysis**

### **A. Failure to Warn**

In order to prevail on a claim for failure to warn under Kentucky tort law, Plaintiffs must provide evidence that MDHC had a duty to warn; that the warnings MDHC gave were inadequate; and that the inadequate warnings were the proximate cause of Mr. Linfoot's injury. Stewart v. Gen. Motors Corp., 102 F. App'x 961, 964 (6th Cir. 2004) (citing Morales v. Am.

Honda Motor Co., Inc., 71 F.3d 531, 537 (6th Cir. 1995)). Even if the Court assumes that MDHC had and breached a duty to warn, Plaintiffs' failure to put forth any evidence on causation dooms their claim.

Plaintiffs are not arguing that MDHC should have included a warning to the product users, the helicopter pilots. They instead assert that MDHC's involvement with the MELB reconfiguration—supplying the kits and testing the component parts—gave rise to a duty to warn the Army that the Army's own design was unsafe. Even so, Plaintiffs must show that MDHC's failure to warn the Army about the dangers of installing a VWS in the crush box was the proximate cause of Mr. Linfoot's injuries. Put another way, Plaintiffs must show that if MDHC had provided an adequate warning to the Army, the Army would have relocated the VWS, thereby preventing or minimizing Mr. Linfoot's injuries. The failure to warn claim can only survive summary judgment with "proof linking the failure to warn causally with the injury." Demaree v. Toyota Motor Corp., 37 F. Supp. 2d 959, 968 (W.D. Ky. 1999).

Plaintiffs only proof of causation is that after Mr. Linfoot's May 2008 helicopter crash, the Army changed the positioning of the VWS. This single piece of information does not alone prove that a pre-crash warning from MDHC would have brought about that same redesign. On the other side of the ledger, MDHC has proffered substantial evidence to counter Plaintiffs' conclusory causation argument. There is undisputed testimony that a mechanic did, in fact, warn the Army about the dangers of putting something in the crush box during the MDHC testing phase of the reconfiguration. Plaintiffs take issue with the fact that this warning was not written and that MDHC did not formally classify the VWS location as a hazard, yet there does not seem to be a warning protocol for an observation outside the scope of the testing for which MDHC

was hired to perform. While the form of this warning may not have been ideal, it was a warning all the same.

MDHC also highlights that common sense weighed against putting anything in the crush box: the very purpose of a crush box is to take up space, a function that is obviously undermined by putting objects inside it. Indeed, Plaintiffs' own expert confirmed that the "function of the crush box and its critical role is [sic] safety is well known to those knowledgeable in the field of rotary wing aircraft design." (Docket No. 126-18, Muzzy Aff. at ¶14). This statement indicates that the Army should not have needed a warning to know not to install anything, including a VWS, in the crush box. Even putting aside the mechanic's warning or the fact that the Army should have known not to interfere with the space in the crush box, MDHC has also put forth proof that a warning would not have brought about design changes, namely, the Army's express limitation on the scope of MDHC's testing. Finally, MDHC notes that the Army's rigorous design and approval process, as described at some length by Army engineer Edwin Soteropoulos, provided little room for MDHC to suggest design changes or, if a formal suggestion or warning was made, for the Army to incorporate any such suggestions. (Docket No. 298-1, Soteropoulos Dep. Tr., at 160:9-174:12).

It is tragic that the Army did not protect the space in the crush box until after the accident in which Mr. Linfoot was injured. However, without more, the Army's subsequent remedial measure does not prove that a warning from MDHC, which did not manufacture the VWS, select its location, or install it in the subject helicopter, would have prevented Mr. Linfoot's injuries.<sup>5</sup> Accordingly, Plaintiffs cannot make out a prima facie failure to warn claim and MDHC is entitled to summary judgment.

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<sup>5</sup> Because this evidence is insufficient to prove causation, the Court does not address whether the evidence would even be admissible at trial under Federal Rule of Evidence 407.

## B. The Government Contractor Defense

Even if Plaintiffs could somehow prove causation, the Court also agrees with MDHC that the Company is shielded by the government contractor defense as articulated in Boyle v. United Technologies Corp., 487 U.S. 500 (1988). Government contractor immunity is derived from the government's immunity from suit where the performance of a discretionary function is at issue. See Boyle, 487 U.S. at 511. The Supreme Court has noted that "the selection of the appropriate design for military equipment to be used by our Armed Forces is assuredly a discretionary function." Id. The policy rationale undergirding governmental immunity has been extended to apply to contractors that supply goods to the government. "The imposition of liability on Government contractors will directly affect the terms of Government contracts: either the contractor will decline to manufacture the design specified by the Government, or it will raise its price. Either way, the interests of the United States will be directly affected." Id. at 507. Thus, a government contractor may assert immunity when the government approved "reasonably precise" specifications; the equipment conformed to those specifications; and the supplier/contractor warned of those equipment dangers that were known to the supplier/contractor, but not to the government. Id. at 512.

A slightly different analysis generally applies to defendants invoking the government contract defense against failure to warn claims, as opposed to design defect claims. However, the traditional Boyle analysis seems most appropriate here. Failure to warn claims in the context of government contractor disputes typically relate to whether the contractor should be liable for inadequate warnings *intended for the equipment users*. See Tate v. Boeing, 55 F.3d 1150 (6th Cir. 1995). In those situations, the government contractor defense applies only when the government exercised discretion in approving the content of the warning to users; the contractor



provided warnings that conformed to the government-approved warnings; and the contractor warned the government of the dangers in the equipment's use about which the contractor knew but the government did not. Id. Here, Plaintiffs' allegations do not concern the contents of warnings to the pilots of the MELB helicopters.<sup>6</sup> Plaintiffs instead seek to hold MDHC liable for failing to adequately warn *the Army* that the crush box was rendered unsafe by the addition of the VWS as part of the MELB reconfiguration. (Docket No. 297 at 19). This failure to warn claim therefore bears a greater logical resemblance to a design defect claim. For that reason, the Court applies the government contractor defense articulated in Boyle rather than the augmented version set forth in Tate.

The first two Boyle factors are readily met here. The design specification at issue, the location of the VWS, was not merely approved by the government, but actually generated by the government. The Army's representative stated multiple times in his deposition that MDHC (at the time, Boeing) did not have anything to do with the location selection of the VWS. (Docket No. 298-1, Soteropoulos Dep. Tr., at 34:7-24, 82:3-7). Plaintiffs respond to this fact by saying that MDHC encouraged the inclusion of a VWS. Whatever encouragement for the VWS MDHC provided, nothing on the record indicates that MDHC was remotely involved with selecting the location of the VWS, which is the issue here. As to the second factor, no one disputes that the VWS was installed in accordance with the Army's design by another contractor.

The third Boyle factor requires a government contractor to warn the government about those equipment dangers that were known to the contractor, but not to the government. Courts have noted that where the government already knows of a danger, no duty to warn arises under Boyle. See, e.g., Crespo v Unisys Corp., No. 94-2339 (WGB), 1996 WL 875565, at \*12 (D.N.J.

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<sup>6</sup> And indeed, the inclusion of any such warnings to the pilots would not have made a difference: the problem here lies in the location of the VWS, which was not something the pilots could have fixed.

June 21, 1996); Stone v. FWD Corp., 822 F. Supp. 1211, 1212 (D. Md.1993). Indeed, courts will sometimes look to the knowledge differential between the government and the contractor in order to determine what sort of warning, if any, was due. See Russek v. Unisys Corp., 921 F. Supp. 1277, 1291 (D.N.J. 1996) (The third prong “requires disclosure where a manufacturer knows more than a purchasing governmental agency . . . but does not require a manufacturer to continually evaluate the purchaser’s level of knowledge.”).

MDHC has submitted expert evidence from Dr. Dennis Shanahan, former Commander of the U.S. Army Aeromedical Research Laboratory, that the importance of protecting the space in the crush box was well known within the Army at the time of the MELB reconfiguration, when the Army selected the location of the VWS. Dr. Shanahan’s report states “[i]t is well known within the Army engineering community that the placement of any items in areas designed to yield during an accident can compromise crashworthiness.” (Docket No. 279-9 at 4). Dr. Shanahan points to the Army’s Aircraft Crash Survival Guide, to which he contributed, which emphasizes the need to allow twelve inches of buffer space below seats “to absorb residual energy associated with the vertical design pulse.” (Docket No. 280-1 at 91). The Army first published this report in 1989 and published the latest version in 1998, meaning it was circulating within the Army for almost a decade leading up to the MELB reconfiguration. The necessity of adequate yield space below helicopter seats was also highlighted in another paper published by Dr. Shanahan and widely distributed in the Army’s design and engineering community: Basic Principles of Helicopter Crashworthiness. (Docket No. 280-2). According to Dr. Shanahan, the danger of putting equipment in a crush box “is a basic concept of crash survivability that was well known in the Army years before these publications.” (Docket No. 279-9 at 4).


Dr. Shanahan’s testimony indicates that the sanctity of the crush box was as well-known to the Army as it was to MDHC at the time of the MELB reconfiguration. Plaintiffs do not dispute MDHC’s expert testimony or even present any of their own evidence regarding the Army’s knowledge of the importance of the crush box. Instead, as they did when arguing the merits of their failure to warn claim, they focus on the inadequacy of the warning given by MDHC’s mechanic. The Court finds MDHC’s evidence sufficient to show that the Army was likely already aware that it is inadvisable to interfere with the crush box. See, e.g., Getz v. Boeing Co., 690 F. Supp. 2d 982, 995 (N.D. Cal. 2010) aff’d, 654 F.3d 852 (9th Cir. 2011).

Moreover, as MDHC points, the policy rationale for the third prong that the Supreme Court articulated in Boyle does not even apply here. The purpose of this element is to avoid the “incentive for the manufacturer to withhold knowledge of risks, since [absent this element] conveying that knowledge might disrupt the contract but withholding it would produce no liability.” See Boyle, 487 U.S. at 512. MDHC did not design the VWS, select its location, or install it. The Company merely engaged in functionality testing and had nothing to gain from withholding information about the dangers of installing the VWS in the crush box. Shielding MDHC, a third party contractor, from liability does not translate into incentivizing manufacturers to hide information that might deter the government from signing a contract in the first place. All things considered—the mechanic’s verbal warning, the widespread knowledge regarding the importance of the crush box, and the policy implications—the Court finds the third prong of the Boyle analysis is satisfied. MDHC is insulated from liability by the government contractor defense.

**IV. Conclusion**

Two separate bases for summary judgment exist. First, Plaintiffs have presented insufficient evidence that the Army would have moved the VWS if MDHC had provided a more formal warning against locating it in the crush box. In contrast, MDHC has submitted evidence both that MDHC gave the Army a verbal warning and that a more formal warning would not have prevented Mr. Linfoot's injuries. Second, even if Plaintiffs could establish causation, MDHC has satisfied the elements of the government contractor defense. Accordingly, MDHC is entitled to summary judgment on Plaintiffs' failure to warn claim.

A separate order will enter.

  
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KEVIN H. SHARP  
UNITED STATES DISTRICT JUDGE