UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

RONALD W. COOKE,	§	
	§	
Plaintiff,	§	
	§	
vs.	§	CIVIL ACTION NO. H-04-3921
	§	
COBB INTERNATIONAL, INC. D/B/A	§	
ROTORWAY INTERNATIONAL,	§	
	§	
Defendant.	§	

FINDINGS OF FACT AND CONCLUSIONS OF LAW

This case arose out of a helicopter crash in Lake Conroe, Texas on May 19, 2004. Plaintiff and pilot Ronald W. Cooke had built the helicopter himself from a kit purchased from defendant Cobb International, Inc. d/b/a RotorWay International ("RotorWay"). Cooke brought suit in the District Court of Montgomery County, Texas (Cause No. 04-08-06471) against RotorWay for negligence, breach of warranty, and violation of the Texas Deceptive Trade Practices-Consumer Protection Act ("DTPA") in connection with repairs to the helicopter engine allegedly leading to the crash. RotorWay timely removed the case to this court on diversity grounds (Dkt.1).

With the consent of the parties (Dkt. 21), the case was tried to this magistrate judge on June 19, 2006. Having considered the evidence in light of the joint pretrial

order and the post-trial briefs, the court now renders its findings of fact and conclusions of law. Any finding of fact more properly designated a conclusion of law is so designated, and vice versa.

I. FINDINGS OF FACT

A. Background

1. Cooke, a resident of Montgomery County, Texas, is an experienced pilot and former Naval Aviator with over 3,500 hours flying airplanes and 1,100 hours flying helicopters. He also received a bachelor's and master's degree in aeronautical engineering from the University of Michigan in 1954.

2. Cooke was also trained as an aircraft mechanic by the Navy in 1948, and worked on Navy fighter aircraft engines before becoming a pilot himself. At the time of the accident, Cooke had been working on and/or flying aircraft for over 50 years.

3. Defendant is incorporated and has its principal place of business in the state of Arizona. Its business includes designing and supplying parts for "home-built" helicopters which are sold in kit form to aviation hobbyists.

4. The cost of a new Rotorway 162F kit helicopter is $67,750.00. This price does not include avionics, paint, freight, helipac cargo container, navigation lights, tub scoops, storage compartment or altitude compensation induction system. The cost of a kit aircraft is much less than a certified factory-built aircraft.

5. A Rotorway 162F kit helicopter takes 300 man hours to assemble. This assembly time does not include the time necessary to assemble/install avionics, paint, freight, helipac cargo container, navigation lights, tub scoops, storage compartment or altitude compensation induction system.

6. The builder of a kit aircraft is considered by the FAA to be the actual manufacturer of an experimental aircraft. *See* 14 C.F.R. § 21.191. Upon completion of a satisfactory test period, the FAA issues a permanent airworthiness certificate to the builder. The builder also receives a repairman certificate authorizing the builder to perform annual inspection and maintenance on the craft, rather than having to pay a certified A&P mechanic as owners of factory-built aircraft are required to do.

B. Purchase and Modifications to Aircraft

7. Cooke purchased a helicopter kit from RotorWay in 1983. From the kit, Cooke built the helicopter in question and had it licensed for operation in July 1985.

8. Cooke made numerous alterations to his aircraft prior to 2000, such as adding a second fuel pump, re-wiring the entire electrical system, adding a new fuse panel, replacing the cooling fan, changing the pulley, and inverting the oil cooler. RotorWay did not complete any of the prior modifications for Cooke.

9. In 2000, after having flown the helicopter for approximately 100 hours, Cooke decided to upgrade his helicopter engine from a single ignition to a dual

ignition system. Cooke discussed this engine upgrade with Rotorway's representative, Tom Smith.

10. Cooke solicited a bid from Rotorway to perform the dual ignition conversion. Cooke decided he could complete the conversion cheaper himself, so he decided not to hire RotorWay for the job.

11. After purchasing the necessary parts for the conversion, Cooke hired a rebuild shop in Humble, Texas, completely unrelated to Rotorway, to assemble the modified engine. Cooke completed the final assembly of the newly modified engine.

C. Forced Landing and Subsequent Repair

12. Cooke flew the helicopter for approximately 25 flight hours after reassembling the engine and setting the valve lash clearances.

13. During a flight over Lake Conroe with his daughter on July 26, 2001, the aircraft experienced difficulty maintaining altitude, and Cooke made a forced landing in the lake on pontoons then attached to the aircraft. Cooke determined that this partial engine failure occurred due to a failure in the No. 1 intake valve caused by a broken valve rocker post. The valve assembly involved in this first engine failure is the same valve assembly involved in the subsequent crash.

14. Following the replacement of the broken valve rocker post, and based on his consultations with Tom Smith of Rotorway, Cooke decided to have the

engine's valves ground by Rotorway on the basis of a failed compression test and Rotorway's recommendations that Rotorway would grind the valves correctly.

15. RotorWay ground the valves and sent them back to Cooke. He tested the valves again and determined that they still would not hold pressure.

16. Cooke sent the valves back to RotorWay to be ground a second time. Cooke built a device that could be attached to the valves to run a pressure test. After the second grinding, the valves passed the pressure test devised by Cooke.

17. RotorWay returned the heads to Cooke after they passed his pressure test. Cooke then installed the heads to the engine block and completed the final assembly. RotorWay played no role in the final assembly of Cooke's engine.

18. RotorWay completed all the work requested by Cooke in a good and workmanlike manner.

19. Cooke ran the engine for a short period of time, and then inspected and checked the valve train assembly and clearances. Cooke repeated the process of running the engine and checking the valve train assembly at least three times during the first ten hours of operation after he completed the final assembly. He made minor adjustments to the valve clearances as a result of those three inspections.

20. After testing the helicopter, Cooke observed a rotor blade vibration and decided to balance the helicopter's rotors. During the balancing of the rotors, Cooke

logged 10 hours of flight time.

21. After balancing the rotors, Cooke observed that the helicopter's gauges were registering low oil pressure. Cooke consulted with Rotorway about his observations and purchased new oil pressure regulator parts based on Rotorway's advice. The gauge still registered low readings, but the addition of a mechanical gauge solved the problem. Thereafter, the new gauge did not register low oil pressure readings.

D. The Crash and Its Cause

22. Cooke made a fourth inspection of the valve clearances and valve train assembly after the new oil pressure gauge was installed. Cooke then operated his helicopter for approximately two flight hours before the engine failed, causing the helicopter to crash onto Cooke's dock near his home at Lake Conroe on May 19, 2004.

23. The aircraft was a total loss. Cooke suffered some bruises, but was not seriously injured and did not seek medical treatment.

24. Cooke presented Rotorway with notice of his claims of negligence, breach of warranty and DTPA violations in writing on June 3, 2004.

25. The engine failed because of a problem with the engine's valve train unrelated to oil pressure or any other defect or event.

26. The immediate cause of the engine failure is undisputed: insufficient clearances between the engine's rocker arms and valve spring retainers resulted in systemic damage to the retainers, eventually causing the spring retainer for intake valve number one to come apart and allow the valve to sink into the cylinder head. This cylinder lost power, and without full power the helicopter could not maintain flight and crashed.

27. The retainers installed on Cooke's engine were undamaged when they were inspected by RotorWay during the two occasions that it worked on the valve train assembly. RotorWay did not change the retainers the Cooke had previously installed on the engine, nor did RotorWay change the geometry of the retainers before returning the valve train assembly to Cooke.

28. RotorWay was never in a position to inspect the final valve clearance, as RotorWay never observed the valve train assembly installed on the block. RotorWay never observed the rocker arms on the valve train assembly, because Cooke did not include the rocker arms on either occasion when he sent the valve train assembly to RotorWay.

29. The valve spring retainers in Cooke's engine at the time of the crash were silver in color, rather than the black or gold retainers RotorWay currently provides with newer model helicopter kits. Although of slightly different dimensions,

the silver retainers were appropriate for use in Cooke's aircraft. RotorWay's failure to advise or recommend the installation of black or gold retainers was not a contributing cause of the crash.

30. RotorWay was not responsible for the insufficient valve clearances that caused the crash.

31. Cooke checked all valve clearances after he installed the heads on the engine. The amount of damage sustained by the retainers indicates that the clearances on all of the valves were set incorrectly by Cooke himself.

II. CONCLUSIONS OF LAW

A. Negligence

1. To prevail on a negligence cause of action in Texas, a plaintiff must establish the existence of a duty to the plaintiff, a breach of that duty, and damages proximately caused by the breach. *W. Inv., Inc. v. Urena,* 162 S.W. 3d 547, 550 (Tex. 2005).

2. Proximate cause consists of cause in fact and foreseeability. *Sw. Key Program, Inc. v. Gil-Perez,* 81 S.W.3d 269, 274 (Tex. 2002). Cause in fact and foreseeability cannot be satisfied by mere conjecture, guess, or speculation. *IHS Cedars Treatment Ctr. v. Mason,* 143 S.W.3d 794, 798-99 (Tex. 2003). The test for cause in fact is whether the negligent act was a substantial factor in bringing about

the injury without which the harm would not have occurred. *Sw. Key Program,* 81 S.W.3d at 274. Cause in fact is not shown if the defendant's negligence merely provided a condition that made the injury possible. *Doe v. Boys Clubs of Greater Dallas, Inc.,* 907 S.W.2d 472, 477 (Tex. 1995).

3. RotorWay breached no duty of care to Cooke with respect to the valve retainers selected for use in his aircraft.

4. RotorWay breached no duty of care to Cooke in connection with servicing, inspecting, selecting, replacing, or installing the engine cylinder heads and valve train components in Cooke's aircraft.

5. Any damages from the engine failure and helicopter crash were not proximately caused by any negligence of RotorWay.

B. Breach of warranty

6. To bring a cause of action for breach of implied warranty of fitness for a particular purpose, a plaintiff must show: (1) the defendant sold or leased goods to the plaintiff; (2) the defendant knew the plaintiff was (a) buying or leasing the goods for a particular purpose, and (b) relying on the defendant's skill or judgment to select goods fit for that purpose; (3) the goods delivered were unfit for the plaintiff's particular purpose; (4) the plaintiff notified the defendant of the breach; and (5) the plaintiff suffered injury. TEX. BUS. & COM. CODE ANN. § 2.314 cmt. 13 (Vernon

2002) (elements 3, 5), § 2.607(c)(1) (element 4); *Nobility Homes, Inc. v. Shivers,* 557 S.W.2d 77, 82-83 (Tex. 1977) (elements 1, 2).

7. The implied warranty of good and workmanlike performance of services is a common law warranty, first recognized in *Melody Home Mfg. Co. v. Barnes,* 741 S.W.2d 349, 354 (Tex. 1987). A cause of action for breach of this implied warranty requires proof that (1) the defendant sold services to the plaintiff; (2) the defendant's services consisted of repair or modification of plaintiff's existing tangible goods or property; (3) the defendant did not perform the services in a good and workmanlike manner; and (4) the plaintiff suffered injury. *Parkway Co. v. Woodruff,* 901 S.W.2d 434, 439 & n.3 (Tex. 1995) (elements 1-3); *Hyundai Motor Co. v. Rodriguez,* 995 S.W.2d 661, 667-68 (Tex. 1999) (element 4).

8. RotorWay did not deliver goods that were unfit for the plaintiff's particular purpose, and therefore did not breach any warranty of fitness for a particular purpose.

9. RotorWay performed its services in a good and workmanlike manner, and therefore did not breach any such warranty to Cooke.

C. Texas Deceptive Trade Practices Act

10. To recover under the DTPA, a plaintiff must establish that (1) the plaintiff was a consumer; (2) the defendant can be sued under the DTPA; (3) the

defendant committed a false, misleading, or deceptive act or practice; and (4) that act or practice was a producing cause of plaintiff's damages. *See* TEX. BUS. & COM. CODE ANN. §§ 17.41-17.63 (Vernon 2002 & Supp. 2005); *Amstadt v. U.S. Brass Corp.,* 919 S.W.2d 644, 649 (Tex. 1996). The consumer must show that he was taken advantage of to a grossly unfair degree, which is determined by examining the entire transaction. *See Chastain v. Koonce,* 700 S.W.2d 579, 583 (Tex. 1985).

11. Cooke is a consumer for purposes of the DTPA.

12. RotorWay committed no false, misleading, or deceptive act or practice that was a producing cause of Cooke's damages.

III. CONCLUSION

For the reasons stated above, the court concludes that Cooke is entitled to take nothing from RotorWay as a result of his suit, and judgment will be rendered accordingly.

Signed at Houston, Texas on September 25, 2006.

Stephen Wm Smith
United States Magistrate Judge