



MARINE TESTING CO.

15224 You Bet Road
Tél (530) 274-7654

Grass Valley, CA 95945
Fax (530) 274-2345

January 31, 2007

Victor S. Haltom, Esq.
428 J Street, Suite 350
Sacramento CA 95814

re: People v. Bismark F. Dinius, Case No. 912639

Dear Mr. Haltom:

On December 4, 2007, I visited the Lake County Sheriff's Office and examined the sail boat "Beats Workin' II" and the navigation lights that had been removed from the vessel in early May, 2006.

The light globes were the center of my attention. I examined the masthead lights, the stern light, and the bow light.

The bow light from the power boat was missing. Presumably, it was lost during the accident. I asked the law enforcement officials who were present during my examination for permission to examine the stern light of the power boat. The law enforcement officials denied my request.

Masthead Lights

The masthead light has two incandescent bulbs with bayonet bases. The entire light fixture exhibited low levels of corrosion. However, there was considerable rust on the base of one of the bulbs. The second bulb was unremarkable. Neither bulb had significant terminal cold flow. (See photos 1 through 8.)

Stern Light

The stern light assembly has been damaged. The lens and part of the base were missing and were not inspected. The light bulb envelope was intact. The filament was broken into three pieces, with one section free to move about within the envelope. The other two sections were attached to the filament support arms.

The stern light was illuminated at the time of the collision that caused the damage

described above. This is apparent, because portions of the filament are stretched, while other portions of the filament are of normal coil. (See photos 9 through 12.). The filament is comprised of tungsten alloy. Such filaments are very resistant to stretching when cold and quite receptive to stretching when hot.

Examination of the vessel "Beats Workin' II" and the stern light reveals that the following sequence of events occurred in connection with the collision in this case: 1) The power boat struck the exterior gunnel of the sail boat. 2) The power boat severed the power cord to the stern light. This power cord is 8 inches inside the exterior of the sail boat. 3) Once the power cord was severed, power/voltage to the stern light was discontinued. However, as evidenced by the aforementioned stretching of the filament, power/voltage had been flowing to the stern light until the cord was severed. 4) The power boat struck the stern light assembly. Mere milliseconds separated the foregoing events.

Bow Light

The bow light assembly was intact, with chip-damage/fracture to a small area. The envelope and the filament were intact. The lens of the bow light is half red and half green. The bulb has a festoon style base. Stretching of the filament is evident near the filament support arms, and the middle portion of the filament is of normal coil. (See photo 13.)

The foregoing findings reveal that the bulb was illuminated at the time of the impact in this case.

DOJ Report

DOJ report number EU-07-000566-001, SR-06-001509, fails to address the foregoing subjects. The report fails to address the subject of filament stretch in any direct and/or meaningful detail, and it does not address corrosion or cold flow at all.

The conclusion in the report concerning the stern light, that there was a "cold... break[,] is inaccurate. As noted above, and as revealed in photos 9 through 12, stretching of portions of the stern light filament is visible. The report contains no discussion concerning this evident stretching. Additionally, the author of the report evaluated the filament by reference to temperature alone, without considering a scenario in which power to the bulb was discontinued milliseconds before impact. The filament of a light that had been illuminated until power was discontinued just milliseconds before the power boat's impact with the light assembly would look quite similar to a filament that had long since been cold.

As discussed above in the section of this report concerning the stern light, the physical evidence reveals that it was illuminated until milliseconds before the power boat's impact with the light assembly.

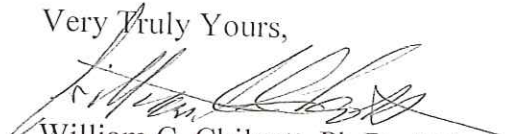
As to the bow light, although it is asserted in the report that the filament in that bulb assembly "exhibited no apparent distortion associated with hot or cold shock[,]” there is no mention made in the report of the evident stretching near the filament arms noted above. This filament stretching reveals that the light had been illuminated before impact.

Conclusion

The visible findings during my examination reveal that the stern and bow lights of the sail boat were illuminated, at least up until a point just milliseconds before the power boat impacted the stern and bow light assemblies.

No obvious fibre reinforced plastic (FRP) repairs to the sail boat were evident during my examination. Thus, there is no evidence of significant structural damage to the sail boat hull residue other than the damage caused to the vessel by the impact in this case. Thus, it is evident that the impact in this case gave rise to the physical findings noted above, which reveal that the stern and bow lights were illuminated immediately before impact.

Very Truly Yours,



William C. Chilcott, Ph.D., P.E.

cc: Luke Olts, Esq.

