

Runaway

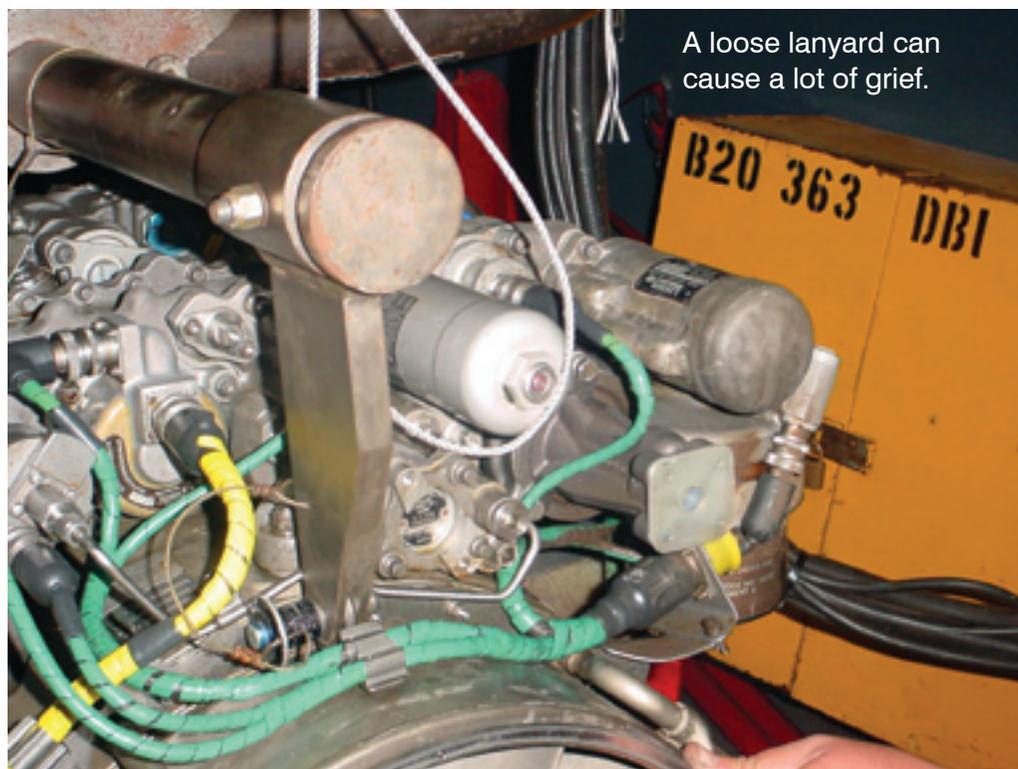
By AD1 (AW) Jody Alford

We were more than two months into a Med cruise, and life was good. Our one SH-60B was flying like a champ, and the detachment had fallen into a comfortable routine: We were fully adjusted to life underway. That attitude should have served as a warning.

Deploying aboard one of the Navy's newest ships (USS *Roosevelt*, DDG 80) has its advantages. Televisions are in every rack, and a pneumatic overhead hoist is in each hangar bay, just to make the mechanics happy. Little did I know that the replacement of the old school, chainfall hoist in favor of the "new and improved" pneumatic hoist soon was going to give me the scare of a lifetime.

We had flown the aircraft into the window for a Phase "C" and had the additional task of changing a No. 1 engine. Space always is an issue when doing major maintenance on a "small boy." With no experience changing an engine on this class of ship, we spent some time deciding on the best way to do the job. We formulated a plan to pull out the engine can, remove the RFI engine, and stage it on an engine stand in the forward part of the hangar. We then would transverse the helo into the hangar, allowing room to place both engines next to each other. This step would make it easy to swap out the QEC gear and to hoist up the new engine, without having to move the helo. I began the engine change that night with two junior mechanics. A quick brief

stressed two points: Keep control of the engine at all times until it is in the stand, and one person has the sole job of operating the hoist while the other two mechs guide out the engine. This approach allows them to watch for anything that might catch on the firewall. The engine removal went smoothly, and we were ready to place it on the stand. We moved the engine just forward of the engine-bay door and lowered it down to about three feet above the deck. We then moved it forward to position the engine over the stand. This step placed us even with the port side of the helo's nose. As we lowered the engine to the stand, the hoist began to move to starboard and toward the aircraft! I frantically started punching controls to stop this movement, and my partners asked me—in less than a calm voice—where the hell I was going.



A loose lanyard can cause a lot of grief.

Engine

Nothing I did with the controls would stop the hoist, and the engine moved closer and closer to the aircraft's nose and its million-dollar FLIR turret. With all three mechs now using brute strength to avoid a collision between engine and airframe, I called out as loud as I could for help. An electrician working on the rescue hoist quickly ran to the front of the hangar and secured the valve supplying air pressure to the hoist. It stopped at the far starboard side of the track, but the 600-pound engine was angled out about 30 degrees and was supported by an airman in a modified-incline, bench-press position, with his back on the FLIR turret.

Once the unit stopped moving and everything was secured, we found the cause of our problem. The looped end of a lanyard dangling from the hoist had

caught on the engine's oil-filter housing. As the engine was lowered, the lanyard had actuated a valve that drove the hoist to its stowed position. Continuing to support the engine and with the lanyard now free of the engine, we opened the air-supply valve, slowly drove the hoist back over the stand, and lowered the engine. We took a break and then reviewed our mistakes.

The engine change was an easy job, and each of us had done that task many times before. Our working environment was new this time, but I had thought adequate precautions were in place. During work-ups, the detachment was trained on hoist operations, and the lanyards were identified as "manual releases." The operating manual states otherwise. We now make sure the lanyards are coiled and taped to themselves high enough to avoid catching on anything. Also, we submitted a hazrep to change the design of the hoist to make this potential hazard more obvious.

My failure to fully understand the proper operation of the hoist nearly cost us a \$1 million FLIR system. Far worse, I could have injured a detachment maintainer.



Petty Officer Alford works in the mech shop at HSL-48.



It took teamwork to prevent a bad situation from turning worse.

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