

WHO'S THE FLAMER?

By Lt. Matt Menza

We were scheduled for another FCLP period at El Centro before our flight-deck certification aboard USS *John C. Stennis* (CVN 74). One of our two Prowlers on det to North Island was down for minor maintenance problems, so we flew three priority pilots in one jet to El Centro for our 1500 Charlie time.

The pilot at the controls was our head LSO, so he bounced first. We landed when he finished, and I climbed into the front seat. My other single-anchor comrade jumped out to join the team in the LSO shack. About 10 minutes after we had full-stopped to let out the LSOs, we took off for my first pass.

As we lifted, ECMO 1 mentioned bird activity to the right of the aircraft, but the birds were no factor. After an uneventful first pass, I saw more low-flying birds around the airfield. As we rolled into the groove, the jet shuddered, and the left engine chugged twice. The vibration was significant, and as ECMO 1 called the ball, I said, "We're full stopping. I'm not sure if we took some birds into the motor, or what."

We rolled to the end of El Centro's long runway; the braking was normal. We called paddles and told them what had happened, and we asked if they had seen any birds on final, or any smoke or flames from the aircraft. Everyone in the LSO shack said they had seen nothing. As we taxied back to the holdshort, I requested the LSOs send out the new guy to give the aircraft a once-over and to look for feathers or air-frame dents. If everything looked good on the outside, we'd do some throttle chops to assess the health of the engine.

Unfortunately, we never got the chance to check the engine.

As we taxied to the holdshort for our inspection, I applied the brakes to slow the jet before turning

onto the next taxiway. The left brake felt unresponsive, so I released the brakes and reapplied pressure. Again, the left brake did not respond to my input, so I pushed harder until I got the response I wanted. The aircraft slowed, but the brake still felt mushy.

We parked in the holdshort, the new guy came out, and then he disappeared under the left wing. He quickly reappeared with a panicky look on his face and gave me a hand-signal that seemed to indicate a numerical distance. I didn't know what he meant. I tried to read his lips, but I was more focused on his hand signals—he was showing a distance that gradually increased.

When he stepped away from the jet, his eyes grew wider, and I knew something wasn't right. Then he began mouthing, "Fire."

I called tower and said, "Tower, paddles says we are on fire. Apparently our left strut or brake is on fire. Could you roll the crash and fire trucks?"

Tower, not knowing who had called, asked, "Who's the flamer?"

I scratched my head, contemplating the radio call, and replied, "500."

A quick "Roger that, sir," followed.

I called the LSO shack and asked if they could see any indications of fire. They said our left brake and strut were on fire. I motioned to our nugget to move away from the aircraft in case the tire exploded. The kicker was, we didn't want to shut down the engines, because excess fuel from the primary manifold would be drained next to the mainmounts. We certainly didn't want to turn a fire into an inferno, but we were sitting in a burning jet.

The new guy moved away, and we sat for what felt like forever in an aircraft with 8,000 pounds of fuel, both engines running, and the left strut on fire. The new guy signaled the fire was growing, indicating a distance of about two feet.

I got impatient after that signal and, with a little more excitement in my voice, asked tower where the fire trucks were. Tower said they were on their way. Then the safety-fuse plug on the left main tire blew. Our new guy hit the deck so fast I thought a mortar round was inbound.

As the aircraft sagged to the left on the flat tire, the fire crew arrived and hosed down the flaming brake. Once the fire was out, they pinned our stores and landing gear and gave me the signal to shut down.

As I climbed out of the cockpit, I got belted with a

stream of water coming from the firetruck turret. I held onto the jet, trying not to be blasted to the deck by the force of the water. The firefighters directed the stream to the re-ignited fire coming from the brake assembly. I scurried off the jet like a wet rat.

After I bravely ran away from the jet, the brake area erupted a third time, in a beautiful orange flame. The fire crew held the water stream on the brakes for several minutes to cool them. Ten minutes of fire-free excitement was long enough for me to work up the courage to inspect the wheel-brake assembly.

The brakes had overheated because they simply couldn't absorb all the energy from two closely spaced, full-stop landings at a higher-than-normal gross weight. Fortunately, the Prowler is sturdy, and the fire caused no other damage.

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Our maintenance crew drove over the "hill" from San Diego and determined the chugs had resulted from a loose engine-intake housing. They spent the night replacing the brake assembly and tightening the intake. Because of their hard work, we flew onto *Stennis* the next day.

As with any aviation-related excitement, several lessons are to be learned. Our new guy was leery of giving us the lazy-eight signal to indicate a fire, fearing we would shut down the engine and drain fuel onto the brake fire. He forgot the signal for hot brakes and made up his own. The difficulty I had understanding his signals delayed our call for the crash crew.

A little ORM applied before the flight might have identified multiple heavy, full-stop landings in warm weather as a hazard. Prowler brake performance is considered marginal, so, at the very least, we should have been more aware of the possibility of hot brakes.

With engine chugs but good cockpit-engine indications, we could have taken it around for a field arrestment. This action would have prevented the possibility of hot brakes because of the previous heavy landing. We could have avoided explaining to the skipper why we left a jet in El Centro with scorched brakes and a blown tire. 

Lt. Menza flies with VAQ-140.