The U.K. Air Accidents Investigation Branch (AAIB) is recommending a review of policies on the continuation of public transport flights after an in-flight engine shutdown.

The recommendation — that the U.K. Civil Aviation Authority (CAA), the U.S. Federal Aviation Administration and other agencies develop "clear guidance" for such flights — follows AAIB’s investigation of the Feb. 20, 2005, flight of a British Airways 747 from Los Angeles to London Heathrow International Airport. The 747’s no. 2 engine began to surge immediately after takeoff, and the flight crew shut down the engine and continued the flight across the continental United States and the North Atlantic, but then diverted to Manchester (England) Airport because of concerns about insufficient fuel reserve remaining if the flight were continued to Heathrow.

The AAIB report said that the crew’s decision to continue the flight — rather than jettison fuel and return to Los Angeles or divert to another airport en route — was in accordance with the operator’s policies. Those policies had been approved by CAA and were similar to policies of some other international airlines that operate four-engine airplanes, the report said.

“No evidence was found to show that the flight continuation posed a significant increase in risk, and the investigation established that the aircraft landed with more than the required minimum fuel reserves,” the report said. “However … there was a variation in operators’ policies … from ‘land at the nearest suitable airfield’ to no policy at all. With the introduction of public transport flights of up to 16 hours duration, it is considered that clear guidance should be provided to operators on the possible consequences of continued operation following an [in-flight engine shutdown], particularly when this occurs early in the flight.”

The European Organisation for the Safety of Air Navigation (Eurocontrol) has begun a series of air-ground safety initiatives intended to address communications issues that contribute to hazardous situations such as runway incursions, level busts (deviations from assigned altitudes), use of standard phraseology, call-sign confusion and other radio problems.

National aviation authorities in Europe are implementing programs to ensure that regular flight crew proficiency checks include air-ground communications safety issues; to improve the reliability of the radio frequency change process; and to ensure compliance with procedures recommended by the International Civil Aviation Organization for standard phraseology, procedures and best practices for flight crews and air traffic controllers. All related safety improvements should be in effect in late 2007, Eurocontrol said.

“Air-ground communications issues are among the key safety risk areas in air traffic management, and for this reason, we are committed to advocating the swift implementation of these actions,” said Tzvetomir Blajev of Eurocontrol.

The initiatives were begun with the cooperation of the International Air Transport Association, the European Cockpit Association, Flight Safety Foundation, the International Federation of Air Traffic Controllers’ Associations and the European Regions Airline Association.
Expanded Safety Margin Sought for Landings on Slippery Runways

The U.S. Federal Aviation Administration (FAA) wants to tighten requirements for turbojet pilots in calculation of runway distances required for landing on snow- and ice-contaminated runways.

FAA said that a 15 percent margin between the actual airplane landing distance and the available landing distance is the “minimum acceptable safety margin.” According to FAA’s plan, by Sept. 1, 2006, turbojet operators will be required to have procedures for ensuring that “a full-stop landing, with at least a 15 percent safety margin beyond the actual landing distance, can be made on the runway to be used, in the conditions existing at the time of arrival and with the deceleration means and airplane configuration that will be used.”

FAA’s action follows a Dec. 8, 2005, accident in which a Southwest Airlines Boeing 737 skidded off a snowy runway at Chicago Midway International Airport, plowed through a barrier fence and finally stopped on a roadway. No one in the airplane was injured, but one person on the ground — a six-year-old boy — was killed and 12 other people were injured (see “Rethinking Overrun Protection,” page 13).

After the accident, FAA reviewed relevant information and found that “approximately 50 percent of the operators surveyed do not have policies in place for assessing whether sufficient landing distance exists at the time of arrival, even when conditions … are different and worse than those planned at the time the flight was released.”

New Findings in N.Z. Helicopter Accident

The New Zealand Transport Accident Investigation Commission (TAIC), which reopened its investigation of a fatal 2001 accident involving a converted military helicopter near Taumarunui, now says that a bent tail-rotor blade pitch link that failed during flight caused the loss of control and in-flight breakup of the Bell UH-1H Iroquois.

TAIC did not determine why the link was bent, but its revised final report on the accident said that the link was damaged earlier in the June 4, 2001, positioning flight and that the damage “allowed it to crack and eventually fail from bending fatigue.”

The helicopter was destroyed in the accident, and all three occupants were killed.

The original accident report, released in February 2002, said that the accident likely had been caused by the tail-rotor pitch-control mechanism coming loose because of incorrect maintenance. In the revised April 27, 2006, accident report, TAIC said that the investigation had been resumed because of “new and material evidence from two other UH-1 accidents that could have affected the conclusions in the original report.”
Pilots Warned Against Ignoring In-Flight Procedures

The head of the Australian Civil Aviation Safety Authority (CASA) says pilots who deliberately deviate from published instrument approach procedures face “strong action” from regulators.

CASA CEO Bruce Byron cited three recent fatal aviation accidents that occurred while pilots appeared to be conducting global navigation satellite system/area navigation (GNSS/RNAV) instrument approach procedures, with significant departures from the published procedures (see Aviation Safety World, July 2006, page 69).

“Barring dire in-flight emergency, there can be no excuse for deviation from published instrument approach procedures,” Byron said in a letter addressed to all Australian pilots.

“CASA will take strong action against pilots who deliberately deviate from these procedures and will take similarly strong action against aircraft operators who, either expressly or impliedly, compel their pilots to deviate from the procedures.”

Report Examines Wire-Strike Accident Trends

Wire strikes remain a significant safety concern for general aviation aircraft — especially those involved in agricultural operations and other aerial work — in Australia, according to a study by the Australian Transport Safety Bureau.

The study examined 117 wire-strike accidents and 98 wire-strike incidents that were reported in Australia between 1994 and 2004. The wire-strike accident rate ranged from a low of 0.1 in 2003 to a high of 0.9 in 1997 and 1998. “The figures suggested a downward trend beginning in 1998, with a return to previous accident rates in 2004,” the report said.

Seventy-five accidents (64 percent) involved agricultural operations.

“The findings reinforce the clear danger to pilots flying at low level because of wires, particularly when conducting aerial agriculture operations and other aerial work,” the report said.

In Other News ...

The United States has upgraded its aviation safety rating of Ecuador after a reassessment by the U.S. Federal Aviation Administration of Ecuador’s civil aviation authority. The Category 1 rating means that the Ecuadorian authority was found to be licensing and overseeing air carriers in accordance with standards of the International Civil Aviation Organization. … U.S. Secretary of Transportation Norman Y. Mineta has resigned after more than five years on the job. … Chris Glaeser, formerly director of flight safety, quality assurance and industry affairs at Northwest Airlines, has joined Alaska Airlines as vice president of safety. … TAG Aviation USA has named Doug Schwartz as vice president of flight operations and standards; he formerly was aviation director for AT&T. … Russ Lawton, formerly director of operations at Wyvern Consulting and a leading U.S. aviation safety specialist, has become director of safety and security for the National Air Transportation Association’s Safety 1st Program.

Uncontained Engine Failure Under Investigation

The U.S. National Transportation Safety Board is investigating the uncontained failure of an engine on an American Airlines Boeing 767 during ground maintenance tests at Los Angeles International Airport on June 2, 2006. During a test run, the no. 1 engine’s high-pressure turbine stage-one disk broke into pieces that penetrated both wing fuel tanks, the fuselage and the no. 2 engine; a fuel-fed fire damaged the left wing and the rear fuselage.

Three maintenance technicians in the airplane were not injured. Preliminary examination of the disk pieces indicated fatigue cracking.