Transportation Security Administration  
Civil Aviation Security  
Dangerous Goods Advisory Bulletin  
Information of Concern to Air Carriers

Subject: Transportation of Batteries and Devices That Contain Batteries

Number: DGAB-02-01  
Date: May 23, 2002

INFORMATION: The Transportation Security Administration has recently become aware of several incidents where heat generated by batteries or devices containing batteries have caused the initiation of a fire. The recent incidents are lead acid nonspillable batteries reported to have been successfully tested in accordance with 49 CFR 173.159(d). These batteries have aviation related applications which may pose a danger to air carriers in several ways. The batteries are used in various configurations as power supplies in some aircraft. Air carriers could be using the batteries in aviation related equipment, shipping the batteries as non-revenue COMAT, or accepting the batteries as revenue cargo. A previous Dangerous Goods Advisory Bulletin alerting air carriers to the dangers of batteries and devices containing batteries generating heat was issued by the FAA on July 2, 1999. The Research and Special Programs Administration (RSPA) published an advisory guidance in the Wednesday, July 7, 1999 edition of the Federal Register under [Docket No. RSA-99-5143 (Notice No. 99-8)] "Advisory Guidance; Transportation of Batteries and Devices That Contain Batteries" warning of the dangers of batteries initiating fires in air transportation. This guidance issued by RSPA included the following advisory:

Even without a short-circuit condition existing, a component in circuitry connected to a battery may become heated to a point where combustion is initiated in the component itself, or in near-by combustible materials, even if the battery or the device in which the battery is installed functions normally. RSPA has become aware of several incidents in which devices that contain batteries, although shipped in compliance with Sec. 173.159, have produced dangerous quantities of heat while in transportation in commerce. RSPA is evaluating the conditions surrounding these incidents.

We urge air carriers accepting batteries and devices containing batteries as cargo to take extra precautions that electrical storage devices or articles that contain batteries are properly prepared and protected from short circuits and other conditions that may create heat, smoke, or fire. Any battery not properly protected is forbidden in air transportation regardless of whether it meets all other regulatory requirements. Airline passengers and other persons offering these devices for transport must take appropriate action to ensure that any battery-powered electrical device in carry-on or checked baggage or cargo is protected from short-circuiting or accidental activation while in transport.

William Wilkening  
Manager, Dangerous Goods and Cargo Security