Selected Smoke, Fire and Fumes Events in the United States, November 2011–January 2012

Date	Flight Phase	Airport	Classification	Subclassification	Aircraft	Operator
11/9/2011	Descent	Dallas/Fort Worth (DFW)	Air distribution system	Smoke	Boeing 737	American Airlines
The crew reported an electrical odor and fumes in the aft cabin. An emergency was declared, and the flight landed at DFW without incident. The aircraft was removed from service. Maintenance replaced the right recirculation fan and filter.						
11/11/2011	Climb	Fargo, North Dakota (FAR)	Cabin cooling system	Smoke	McDonnell Douglas DC-9	Delta Air Lines
On a flight from FAR to Minneapolis-St. Paul, the right air conditioning pack began overheating with smoke in the cabin and did not react to "AUTO" selection. The pilots went to manual control and the flight returned to FAR. Maintenance replaced the right coalescer bag, right cabin temperature sensor and right temperature controller.						
11/11/2011	Climb	Dallas/Fort Worth (DFW)	—	Smoke	Embraer EMB-145LR	American Eagle Airlines
During the climb, the crew reported that, after the ice protection test, smoke came into the cabin and cockpit along with a loud humming sound over the wing root area. The crew declared an emergency and returned to DFW. The aircraft was landed without incident. Maintenance removed and replaced the no. 1 air cycle machine (ACM).						
11/17/2011	Descent	Newark, New Jersey (EWR)	Air distribution fan	Smoke	Boeing 737	US Airways
Upon initiating descent from Flight Level (FL) 350, a fairly strong electrical burning odor permeated the entire cabin. The flight crew initiated quick reference handbook procedures. The fumes subsided and the airplane was landed at the nearest suitable airport, EWR. Maintenance operated the right and left recirculation fans and confirmed that the odor was present only when the right recirculation fan was operating. They removed and replaced the fan.						
11/24/2011	Cruise	San Juan, Puerto Rico (SJU)	Air distribution system	Clogged	Boeing 767	US Airways
En route, about 23 minutes into the flight, a flight attendant in the back of the aircraft reported a burning rubber odor. The flight crew evaluated the situation for about three minutes. The burning rubber odor became stronger. The airplane was returned to SJU and was landed without further incident. Maintenance replaced air circulation filters that were found clogged.						
12/1/2011	Landing	—	Air distribution system	Smoke	Boeing 737	Southwest Airlines
A flight attendant detected a burning plastic or rubber odor in the front main cabin. The pilots declared an emergency and continued the landing. Maintenance removed and replaced a recirculation fan.						
12/2/2011	Takeoff	Las Vegas (LAS)	Auxiliary power unit oil system	Dirt/smoke	McDonnell Douglas DC-9	American Airlines
Cabin crew reported smoke after takeoff. The pilots declared an emergency, and the flight was returned to LAS and landed without incident. The aircraft was removed from service. Technicians found excessive residual oil from the auxiliary power unit.						
12/7/2011	Climb	Nashville, Tennessee (BNA)	Cabin cooling system	Smoke	Boeing 737	US Airways
The crew reported an in-flight electric or plastic burning odor, verging on intense, from the aft cabin vent. The crew declared an emergency and returned to BNA without further incident. Maintenance determined that the right pack ACM was the source of the smell and replaced it.						
12/8/2011	Descent	—	Heating system	Smoke	Learjet 45	Charter
Following initial descent from FL 430 and when passing through FL 400, the flight crew noticed fumes and smoke accumulating in the cockpit and cabin. An emergency descent was initiated, and after passing through FL 200, the smoke and fumes rapidly dissipated. A normal landing was made. Maintenance found the cockpit heat temperature excessively high when running in manual mode. Further troubleshooting found the cockpit heat control valve not responding to inputs in manual or auto mode. The cockpit heat temperature control valve was replaced.						
12/21/2011	Climb	—	Auxiliary power unit core engine	Smoke	Bombardier Challenger CL-600	Air Wisconsin Airlines
On departure, smoke accompanied by an acrid odor entered the cockpit. The smoke subsequently cleared. Maintenance inspected the aircraft and found glycol in the auxiliary power unit area. The unit was cleaned and operated with no recurrence of smoke.						
1/7/2012	Cruise	Tampa, Florida (TPA)	Air distribution system	Smoke	Airbus A320	Virgin America
About 3 ½ hours into the flight, the flight crew detected a strong chemical odor while in cruise. They were unable to determine its origin. The flight crew donned oxygen masks and declared an emergency with en route air traffic control, followed by a diversion to TPA. Once on the ground, the crew advised maintenance of the odor in cockpit and cabin areas. No defects or source could be found.						
1/24/2012	Climb	—	Blower motor	Burned	Gulfstream 690B	FARS Part 135 charter
During climbout, the pilot selected windshield defogging. An electrical odor was detected in the cockpit and smoke emerged from behind the instrument panel. The pilot noticed that the defogger blower was not functional. The aircraft was returned to its departure airport. Investigation revealed a windshield blower motor failure. Maintenance replaced the motor.						

Source: Safety Operating Systems and Inflight Warning Systems