

Data dictionary for processed NTSB summary data

The following data dictionary is used for the file created by the AirSafe.com program that transform the output from the NTSB's Aviation Accident Database & Synopses database, which is accesible from http://www.nts.gov/_layouts/nts.aviation/index.aspx

From that same location, users can download part or all of the database for display online, or in a downloadable text or XML file.

The data dictionary for this NTSB database is located at http://www.nts.gov/_layouts/nts.aviation/AviationDownloadDataDictionary.aspx

The data dictionary below is based on the NTSB data dictionary and includes variables added to the NTSB database by AirSafe.com.

Note on variable names

AirSafe.com created a process that transforms the downloadable file into a form that can be used for analysis by the R statistical computing software package or downloaded as a CSV file for processing by other software packages.

In the transformation process, R changes variable names into a form suitable for R. In the case of the NTSB data, variable names with two or more words were transformed by replacing the spaces with periods. The data dictionary below uses an R-compatible variable naming format of a single character string with no spaces. The variables used by the NTSB had their spaces changed to periods, and all the new variables followed the same format.

For example, in the NSTB variable name "Event Date" became "Event.Date"

Note: This data dictionary accompanies the two R programs mentioned in the report "Converting NTSB database downloads" that can be found at <http://www.airsafe.com/analyze/nts.database.html>.

Data dictionary

Each column name is associated with the the name of a database variable. Any additions or clarifications made by AirSafe (other than the additions of the periods in the original NTSB variable names) will be noted in bold.

Column (variable) Name	Short description	Meaning
Event.Id	Unique Identification for Each Event	Each event is assigned a unique 14-character alphanumeric code in the database. This code, used in conjunction with other primary keys (if applicable), are used to reference all database records. All database queries using a relational database (e.g., MS Access) should link tables using the ev_id variable.
Investigation.Type	Type of Event	Refers to a regulatory definition of the event severity. The severity of a general aviation accident or incident is classified as the combination of the highest level of injury sustained by the personnel involved (that is, fatal, serious, minor, or none) and level of damage to the aircraft involved (that is, destroyed, substantial, minor, or none).
Accident.Number	NTSB Number	Each accident/incident is assigned a unique case number by the NTSB. This number is used as a reference in all documents referring to the event. The first 3 characters are a letter abbreviation of the NTSB office that filed the report. The next 2 numbers represent the fiscal year in which the accident occurred. The next two letters indicate the investigation category (Major, Limited, etc) and mode (Aviation, Marine, etc). The next three digits indicate the chronological sequence in which the case was created within the given fiscal year. And a final letter (A, B, C, etc) may exist if the event involved multiple aircraft.
Event.Date	Event Date	The date of the event. Dates are be entered in the format: MM/DD/YYYY, but transformed by AirSafe.com to , but transformed by AirSafe.com to YYYY-MM-DD format format.
Year	Event year	Year of the event in the format YYYY
Month	Event month	Month of the event in the format MM

Day	Event day	Day of the event in the format DD
Weekday	Event day of the week	Day of the week of the occurrence in the abbreviated three-character day format (eg Tue)
Location	Event Location Nearest City	The city or place location closest to the site of the event. May include state information if event were in US territory or adjacent large body of water (including the Gulf of Mexico, Atlantic Ocean, and Pacific Ocean).
City	City portion of Location variable	For events that have “United States” as the identifier in the Country variable, this field will include city portion of the location variable if the Location variable includes a two-letter abbreviation for a US state, US territory, or body of water adjacent to the US.
State.code	Two-letter state abbreviation	Two-letter US Postal Service abbreviation for US state or territory, plus the code “GM” for events in the Gulf of Mexico, “AO” for the Atlantic Ocean, and “PO” for the Pacific Ocean.
State	State or territory name	Values include the name of US state, territory, or adjacent body of water.
Country	Event Country	The country in which the event took place.
Airport.Code	Event Location Nearest Airport ID	Airport code if the event took place within 3 miles of an airport, or the involved aircraft was taking off from, or on approach to, an airport.
Airport.Name	Event Location Airport	Airport name if the event took place within 3 miles of an airport, or the involved aircraft was taking off from, or on approach to, an airport.
Latitude	Event Location Latitude	Latitude and longitude are entered for the event site in degrees and decimal degrees. If the event occurred on an airport, the published coordinates for that airport can be entered. If the event was not on an airport, position coordinates may be obtained using Global Positioning System equipment or nearest known reading.
Longitude	Event Location Longitude	

Injury.Severity	Event Highest Injury	Indicate the highest level of injury among all injuries sustained as a result of the event.
Aircraft.Damage	Damage	Indicate the severity of damage to the accident aircraft. For the purposes of this variable, aircraft damage categories are defined in 49 CFR 830.2.
Aircraft.Category	Aircraft Category	The category of the involved aircraft. In this case, the definition of aircraft category is the same as that used with respect to the certification, ratings, privileges, and limitations of airmen. Also note that there is some overlap of category and class in the available choices.
Registration.Number	Aircraft Registration Number	The full registration (tail) number of the involved aircraft, including the International Civil Aviation Organization (ICAO) country prefix. Note: the prefix for US registered aircraft is "N."
Make	Aircraft Manufacturer's Full Name	Name of the manufacturer of the involved aircraft.
Model	Aircraft Model	The full alphanumeric aircraft model code, including any applicable series or derivative identifiers. For example, a 200 series Boeing 737 is entered as 737-200.
Amateur.Built	Aircraft is a homebuilt (Y/N).	
Number.of.Engines	Number of Engines	The total number of engines on the accident aircraft.
Engine.Type	Engine Type	Type of engine(s) on the involved aircraft.
FAR.Description	Federal Aviation Reg. Part	The applicable regulation part (14 CFR) or authority the aircraft was operating under at the time of the accident.
Schedule	Indicates whether an air carrier operation was scheduled or not	If the accident aircraft was conducting air carrier operations under 14 CFR 121, 125, 129, or 135, indicate whether it was operating as a "scheduled or commuter" air carrier or as a "non-scheduled or air taxi" carrier.
Purpose.of.Flight	Type of Flying (Per_Bus / Primary)	FAA regulations (e.g. 14 CFR part 91, 121, or 129) under which the aircraft was operating.
Air.Carrier	Operator Name &	The full name of the operator of the accident aircraft.

	Operator Is Doing Business As	This typically refers to an organization or group (e.g., airline or corporation) rather than the pilot; contaminated with the carrier, business, or code share name if the accident aircraft was operated by a business, air carrier, or as part of a code share agreement.
Total.Fatal.Injuries	Injury Total Fatal	The total number of fatal injuries from an event.
Total.Serious.Injuries	Injury Total Serious	The total number of serious injuries from an event.
Total.Minor.Injuries	Injury Total Minor	The total number of minor injuries from an event.
Total.Injured	Sum of minor and serious injuries	Sum of values from Total.Serious.Injuries and Total.Minor.Injuries variables.
Total.Uninjured	Non-Injury Total	The total number of non-injuries from an event.
Total.Involved	Sum of all levels of injuries	Sum of values from Total.Fatal.Injuries, Total.Serious.Injuries, Total.Minor.Injuries, and Total.Uninjured variables.
Max.Injury	Maximum level of Injury	Highest magnitude of injury, with levels Fatal, Injury, and None.
Weather.Condition	Basic weather conditions	The basic weather conditions at the time of the event.
Broad.Phase.of.Flight	Phase of Flight	All occurrences include information about the phase of flight in which the occurrence took place. Phase of flight refers to the point in the aircraft operation profile in which the event occurred.
Report.Status	Latest Report Level	The furthest level to which a report has been completed
Publication.Date	Publication data of the Latest Report Level	The date on which the previous column was published to the web. Originally in MM/DD/YYYY format, but transformed by AirSafe.com to YYYY-MM-DD format