

This optional guidance tool is available for use in self-assessment of AAM processes and documentation.

Guidance for Data Dictionary for Medical Analysis Tracking System

Purpose This guidance has been written to ensure that aviation accidents and autopsy data supports the meaningful evaluation of airmen's medical certification, autopsy, and toxicology records in an effort to identify aeromedical hazards; and that these data are structured and maintained with standardized quality control mechanisms.

Scope This guidance applies to all fatal and high profile aviation accidents and incidents starting with events as of October 1, 2008. The work guidance helps to establish the five quidelines used for Medical ANalysis TRAcking (MANTRA) for AAM-610.

- a) Database Support Collect data items and information that is necessary to maintain the quality of the database. The data set defined in the work guidance contains all of the necessary elements to operate and maintain a successful
- b) Aeromedical Relevance The data items will improve our understanding of aeromedical hazards present in our certificated airmen.
- c) Collectible Data Ensure the scope of the data elements required to abstract are current and utilize common abstracting resources. The work guidance recognizes the need to balance a data collection scheme that provides maximum information while minimizing the inherent burden associated with expanding the scope of the defined data set.
- d) **Objective Recording** Eliminate data items that are redundant in nature.
- e) Clear Presentation Each field that appears in the work guidance is clearly defined and there is a rational for each field with clear abstraction guidelines that appears in the database.



Approval:

[Title: Guidance for Data Dictionary for Medical Analysis Tracking System]

REVISION HISTORY			
Rev	Description of Change	Effective Date	
0	Original	01/15/2014	
1	Add new fields version 2.0.5 MANTRA	01/05/2015	
2	Add new fields version 3.1.9 MANTRA	03/14/2016	
3	Add new fields version 3.5.5 MANTRA	04/29/2019	
4	Add new fields version 3.6.4	07/21/2020	

Written By: Christy Hileman and Cheryl McNeil 1/15/2014

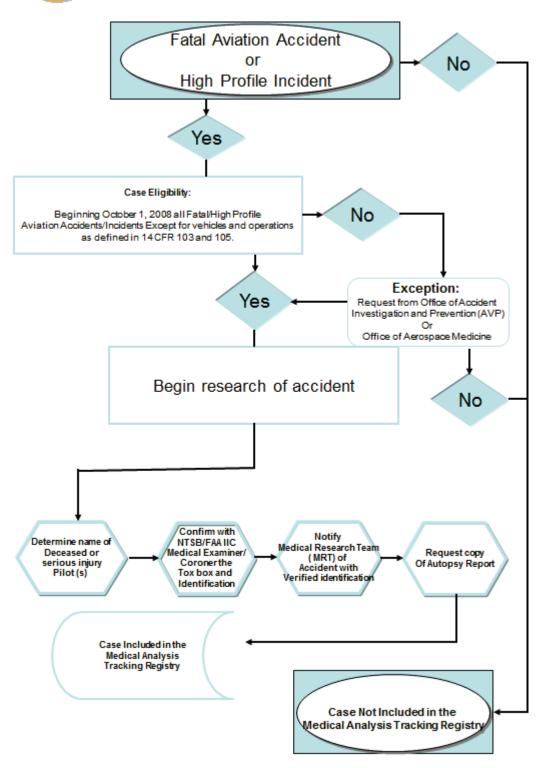
Revised By: Heather Hunn and Christy Hileman 3/14/2016

Revised By: Heather Hunn 04/29/2019

Revised By: Heather Hunn 07/21/2020



Medical ANalysisTRAcking





Case Eligibility

History

- The Medical ANalysis TRAcking (MANTRA) System was established in October 2009. Each of the data items in MANTRA satisfies criteria established by the Autopsy Program and Medical Research Teams within the Civil Aerospace Medical Institute, Oklahoma City, Oklahoma. The data items are necessary to maintain a quality database, using clinically relevant, collectable and objective data.
- The Teams established the database with cases from October 1, 2008 for all fatal and high profile aviation accidents and incidents except for vehicles and operations in the latest versions of 14 CFR 103 and 105 (Ultralights, 1991) (Parachute Operations, 2001).

Case Eligibility

- Case Eligibility includes those aviation cases that have occurred in US, US territories, and abroad that are investigated by the National Transportation Safety Board (NTSB) and/or the Federal Aviation Administration (FAA).
 - Example of case eligibility AC 130 Hercules Aircraft flying under part 135 rules of operation crashes on take off from HIJ Hiroshima, Japan. Person on Board, 2, fatal 2. Both airmen held 2nd class medical certificates from the United States. The National Transportation Safety Board is assisting the Ministry of Land, Infrastructure and Transport of Japan in the investigation.
 - Example of case ineligibility An Australian Gyro homebuilt kit crashed in Sidney, Australia. Person on Board 1, Fatal 1. Airman held a 3rd class medical certificate from the United States. The National Transportation Safety Board is not assisting the Civil Aviation Safety Authority in Australia with the investigation.



Exceptions to the Rule

- Data is gathered from multiple sources using the most recent and complete information available. Over time, the accident record may contain new information such as place of occurrence, names of those identified in the crash and date of the crash.
- Example of exception A Piper Warrior takes off flying under part 91 rules of operation. Pilot crashes shortly after take- off. Person on board 1, with a serious injury. Pilot deceases within 30 days after crash.
- Medical Research or Autopsy Program may be requested to collect information about aviation accidents that do not meet case eligibility. Such requests will be approved by the Medical Research and Autopsy Program.



Accident Identification – CAMI Accident ID (MANTRA – Accident Tab)

Description – Civil Aerospace Medical Institute (CAMI) Accident Number provides a unique identifier for the accident consisting of the date and year in which the accident occurred, the state, territory or country. Also, includes the numerical order/sequence of time the crash occurred in a specific region. The last character defines the aircraft involved in a multiple aircraft accident.

Rationale – The data item allows cases to be identified based on date, place of occurrence/sequence and chronological order within a region.

Format – MMDDYYST01X

• Month – Day – Year – Location – Occurrence – Midair This relates to the date of the accident, where located and whether or not more than one plane/aircraft involvement.

Examples -

- 1 Plane Example: 121009CA01X
- Mid Air involvement: 020309TN01A and 020309TN01B
- Two separate plane crashes in the same state on the same day: 050609OK01X and 050609OK02X
- Use the United State Zip Code Directory for State Abbreviations:

United States Postal Services Zip Code Directory @ http://zip4.usps.com/zip4/welcome.jsp)

State/Possession	Abbreviation
ALASKA	AK
TEXAS	TX
CALIFORNIA	CA
WASHINGTON	WA
WEST VIRGINIA	WV
WISCONSIN	WI
WYOMING	WY
MARSHALL ISLANDS	MH
GUAM	GU

International Organization for Standardization

• Use 3166-1 English Country names for international crashes. If an ISO standard is duplicated in the US postal system, another code will be defined by the Medical Research and/or Autopsy Program Team. The changes in the abbreviated code to ISO 3166-1 will be kept on the server in a folder entitled Recommended Reference for AA-MAD. (International Organization for Standardization – 3166-1 @

http://www.iso.org/iso/english country names and code elements



** This field occurs multiple times in the database. The other tabs in MANTRA with this field are the Aircraft Information Tab, Investigators' Notes Tab and the NTSB Summary tab.



2. Date Created (MANTRA – Accident Tab)

Description – This is an automatic populating field created at the time the CAMI Accident ID is entered.

Rationale – This provides quality assurance for records management.





3. Date of Notification (MANTRA – Accident Tab)

Description — Enter the date the accident notification was sent by the Regional Operation Center (ROC).

Rationale – The information is used for QMS reporting to ensure the autopsy team is meeting the standards that have been set.

Data – Obtained from email notification sent by the Regional Operation Center (ROC).

Date Of Notification 7/17/2020



4. Location City (MANTRA – Accident Tab)

Description - Identifies the name of the city or town nearest to the location where the crash occurred. Initial information is from the Emergency Operations Network (EON). The final location is from the National Transportation Safety Board Preliminary Report.

Rationale – The NTSB is the investigating authority and the place of occurrence should match the place of occurrence on the NTSB report. This field also provides a pattern report and will allow analysis of aircraft accidents in a particular geographic area.

Data – Initially, the information is obtained from the Regional Operation Center (ROC), 8020 – 9, National Transportation Safety Board (NTSB) Report or Safety Investigator. The final location city should match the location as indicated as the NTSB Report.

• **Do not use punctuation, special characters or numbers.** The use of Standard Name feature is preferred. Example: Los Angeles. Upper and lower case may be used in this field.





5. State (MANTRA – Accident Tab)

Description – Identifies the State or Country that the crash occurred.

Rationale – Provides a region in which the crash occurred. Is useful when completing analysis. Also, aids in categorizing accidents by State and Country.

Data – Initially, the information is obtained from the Regional Operation Center (ROC), 8020 – 9, National Transportation Safety Board (NTSB) Report or Safety Investigator. The final location State should match the location as indicated on the NTSB Report.



6. FAA Region (MANTRA – Accident Tab)

Description – Is an auto-population field that identifies the regional site as sectioned by the FAA.

Rationale – Provides a region used for follow-up purposes.

Data – Initially, the information is obtained from the Regional Operation Center (ROC), 8020 – 9, National Transportation Safety Board (NTSB) Report or Safety Investigator.

Examples:

The FAA Regions are:

AAL - Alaska Region

ACE - Central Region

AEA – Eastern Region

AGL – Great Lakes

ANE - New England

ANM – Northwest Mountain

ASO – Southern Region

ASW- Southwest Region

AWP – Western Pacific

OFS – International Office

Use the guidance for the Region @ http://www.faa.gov/about/office_org/headquarters_offices/arc/





7. Latitude (MANTRA – Accident Tab)

Description – Identifies the latitude of the location where the crash occurred.

Rationale – Provides a decimal numerical representation for a precise position on earth's surface. The information is originated from the EON - Daily Report Application in decimal format. MANTRA uses this formatting for consistency.

Data – The information is obtained from the Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator.

- **Definition** Technically, there are different kinds of latitude geographic, astronomical, and geocentric. There are only minor differences between them. In most common references, geographic latitude (the kind used in mapping) is implied. Given in degrees, minutes, and seconds, geographic latitude is the arc subtended by an angle at the centre of the Earth (Encyclopaedia Britannica).
- Example 35*27'39.5892 converts 35.460997

Latitude 28.02194



8. Longitude (MANTRA – Accident Tab)

Description - Identifies the longitude of the location where the crash occurred.

Rationale – Provides a decimal numerical representation for a precise position on earth's surface. The information is originated from the EON - Daily Report Application in decimal format. MANTRA uses this formatting for consistency.

Data – The information is obtained from the Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator.

- Definition Technically, there are different kinds of longitude geographic, astronomical, and geocentric. There are only minor differences between them. In most common references, geographic latitude (the kind used in mapping) is implied. Given in degrees, minutes, and seconds, geographic latitude is the arc subtended by an angle at the centre of the Earth (Encyclopaedia Britannica).
- Example -97*37'7.0727 converts -97.6186313

Longitude -81.73306



9. Aircraft Registration Number N# (MANTRA – Accident Tab)

Description – Provides a unique identifier based on nationality or registration markings of the aircraft consisting of alpha-numeric characters.

Rationale – This unique tracking mechanism identifies the aircraft involved in an accident.

Data - The information is obtained from the 8020 - 9, Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator

Example – N12345 – Use capital letters when using alpha characters.

- Occasionally, aircraft will be unregistered. Examples of aircraft that are not required to be registered are some ultra-light and homebuilt. In this instance, use the alpha characters in upper case. **Example:** UNREG (5 Characters)
- **Definition** Per Federal Aviation Regulation 103-7, an ultra light vehicle is not subject of the Federal aircraft certification and maintenance standards. This means that the costs of purchasing and maintaining an ultra light may be considerably less than the purchase of a certificated aircraft. There is no assurance that a particular ultra light vehicle will have consistent performance, controllability, structural integrity, or maintenance.
- Definition Per Federal Aviation Regulation 21.191
 - Operating amateur-built aircraft Operating an aircraft of which the major portion has been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.
 - Operating primary kit-built aircraft Operating a primary category aircraft that meets the criteria of §21.24(a)(1) that was assembled by a person from a kit manufactured by the holder of a production certificate for that kit, without the supervision and quality control of the production certificate holder under §21.184(a).





FSDO - Flight Standards District Office (MANTRA – Accident Tab)

Description – Identifies the Flight Standard District Office (FSDO) that is conducting and/ or supporting the investigation for the aviation accident.

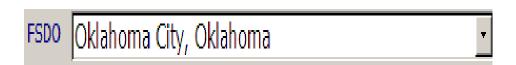
- The Flight Standards Service promotes safe air transportation by setting the standards for certification and oversight of airmen, air operators, air agencies, and designees.
 - o Accomplishing certification, inspection, surveillance, investigation and enforcement.
 - o Setting regulations and standards.
 - o Managing the system for registration of civil aircraft and all airmen records.
- The FAA has divided the United States and territories into district office.

Rationale – The FSDO is part of the accident information data and has multiple uses. Examples: Locate the investigator in charge and analysis of patterns by regions.

 Use the self-populating drop down box to get the information. The FSDO office can be located at: http://www.faa.gov/about/office_org/field_offices/fsdo/

Service area identifies the geographic region served by the FSDO.

Data - The information is obtained from the 8020 - 9, Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator





11. Date of Accident (MANTRA – Accident Tab)

Description – Identifies the date of the accident. This is based on the local date and time of the accident.

Rationale – Useful in analyzing trends of when accidents are occurring.

• **Example** – Identifying the time of year when most accidents occur.

Data - The information is obtained from the 8020 - 9, Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator. The final date of accident should match the date as indicated as the NTSB Probable Cause Report.

Example:

Use the following format: (MM/DD/YYYY)

- 08/17/2010
- Obtain this information from EON. Occasionally, this information has to be clarified with the FSDO in cases of missing aircraft.



12. Local Time of Accident (MANTRA – Accident Tab)

Description – Identifies the local time of the accident for the crash.

Rationale – Useful in sequencing time of events.

Data - The information is obtained from the 8020 - 9, Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator. The final local time of the accident should match the local time as indicated as the NTSB Probable Cause Report.

- Example A Piper PA-38-112 crashed under unknown circumstances at 10:30P in Ojai, California.
- Conversion: 10:30P in California = 22:30 PDT. The local incident time is located under the event DTG of the EON report and is the second entry under the Zulu time.
- Use the following reference ISO 8601: 2004 http://www.iso.org/iso/home.html

Local Time Of Accident 0:18



13. Number of Occupants (MANTRA – Accident Tab)

Description – Identifies the number of occupants on board at the time of the crash.

Rationale – This data item provides a count for individuals in the aircraft at the time of the crash. It may also be useful for identifying trends upward or downward for survivability and mortality rates.

Data – Is gathered from multiple sources using the most recent and complete information available.

- Emergency Operations Network Is a resource network utilized to locate accident information. Use this as a guide for information. https://c3.eon.faa.gov/eon/default.aspx
- **8020 9** Is part of an Executive Order 8020.16 which Aircraft Accident Investigators utilize for the aid in the investigation of an accident. This form is faxed/e-mailed to the Civil Aerospace Medical Institute.
- Regional Operations Center (ROC) Information is received via text, email or verbal notification given the specifics of an aircraft accident.

http://www.faa.gov/about/office org/headquarters offices/arc/ro center/

• Safety Performance Analysis System (SPAS) – This system stores information regarding airworthiness of the aircraft and pilot certification. Data is retrieved by utilizing the tail number (N number) of the aircraft or the pilot name. Look under sections 2.5 (accidents) or 2.6 (NPTRS History) to locate the specific date of the crash in question.

http://home.spas.faa.gov/splash/splash.asp

• National Transportation Safety Board Aviation Accident
Database and Synopses – This is a database containing all aviation
accidents and incidents covering from 1962 – present. Use the N
number of the plane registration to locate the accident in question.
Also, use the date of the crash if it is known.
http://www.ntsb.gov/layouts/ntsb.aviation/index.aspx



- News Story Use preferred search engine to locate crash in a specific region or city.
 - o Example Use Google News to search "Plane crash in Oklahoma".



14. Number of Fatal (MANTRA – Accident Tab)

Description – Identifies the number of fatally injured involved in the accident up to 30 days after the crash. This could include fatally injured occupants in a house or building, in a car, on the sidewalk, etc. if they were fatally injured due to the aircraft accident.

Rationale – FAA Order 8020.11D 05/10/2018 49 CFR Part 830 – Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and preservation of aircraft wreckage, mail, cargo and records. §830.2 Definitions: Fatal Injury – any injury which results in death within 30 days of the accident.

https://www.faa.gov/documentLibrary/media/Order/FAA Order 8020.11D.pdf

Data – Is gathered from multiple sources using the most recent and complete information available.

- **EON** Is a resource network utilized to locate accident information. Use this as a guide for information.
- **8020 9** Is apart of an Executive Order 8020.16 that Aircraft Accident Investigators utilize for the aid in the investigation of an accident. This form is faxed/emailed to the Civil Aerospace Medical Institute
- **ROC** This is a text, email or verbal notification giving the specifics of an aircraft accident.



Note: If a person is fatally injured and was not in the aircraft, this fatal injury would be included in the total number of fatal. Example, a Cessna 182 with 4 Person On Board and 4 fatal hits a house and fatally injuries 2 people. The total number of occupants would be 4 and the total number of fatal would be 6.



15. Type of Accident (MANTRA – Accident Tab)

Description – Identifies the type of accident: fatal, fatal ground – no intent for flight, fatal incident – dies during TAXI for flight, fatal incident – dies in flight, fatal incident – incapacitation in flight – dies in hospital, missing-presumed fatal, missing aircraft, nonfatal accident and non-fatal incident.

Rationale – Allows for classification to determine trends for aviation safety.

Data - Is gathered from multiple sources using the most recent and complete information available.

- **EON** Is a resource network utilized to locate accident information. Use this as a guide for information.
- **8020 9** Is a part of an Executive Order 8020.16 that Aircraft Accident Investigator utilized for the aid in the investigation of an accident. This form is faxed/emailed to the Civil Aerospace Medical Institute
- **ROC** This is a text, email or verbal notification giving the specifics of an aircraft accident.



16. Medical Transport (MANTRA – Accident Tab)

Description – Identifies aircraft accident was being utilized for medical purposes.

Definition - Transportation of a patient or organs through either a liscensed carrier operation per part 135 or repositioning of a medical transport operating under part 91.

Rationale – To determine safety and number of these types of flights.

Data – This information is obtained from the from the 8020 - 9, Emergency Operations Network (EON) Report, NTSB Factual Report and/or the Safety Investigator.

Examples:

- Angel Flight to transport patient from hospital to hospital.
- Care Flight to transport patient for treatment and/or movement of donated organs in preparation for transplant.
- The following is exempt from criteria per the NTSB: Doctors without Borders. There is a field to track this information for our purposes
- Repositioning A flight conducted to reposition the helicopter after completing transportation of the medical personnel, patient, donor organ or human tissue transport.





17. Air Show (MANTRA – Accident Tab)

Description – Identifies an aircraft accident that was involved with airshow practice or performance. Public display of aerobatics for pay or pleasure. Aerobactic practice is practicing not at an airshow. Airshow practice is practicing aerobactics at an airshow prior to the event.

Rationale - To trend the number of airshow accidents.

Data – Collected from 8020-9 and FAA or NTSB Investigators

Examples:

Aerobatic Practice
Air Show Practice
Commercial Balloon Operation
No
Organized Fly-In/Fly-By
Performing Aerobatic Maneuver - for hire
Performing Aerobatic Maneruver - personal
Yes





18. Post-Crash Fire (MANTRA – Accident Tab)

Description – Identifies an aircraft accident that was involved with a post-crash fire. Fires that occur after an aircraft has crash-landed or impacted obstacles.

Rationale— To trend the number of post-crash fires.

Data - Collected from 8020-9, EON Report, FAA or NTSB Investigators





19. In- Flight Fire (MANTRA - Accident Tab)

Description – Identifies an aircraft accident that experiences an in-flight fire.

Rationale— To trend the number of in-flight fires.

Data - Collected from 8020-9, EON Report, FAA or NTSB Investigators





20. Sight Seeing Tour (MANTRA – Accident Tab)

Description – Identifies an aircraft accident that was a sight-seeing tour. An air tour/sightseeing tour is when a pilot is carrying passengers for compensation or hire within a 25 mile radius.

Rationale – To track and trend the number of sight-seeing tours.

Data- Collected from 8020-9, EON Report, FAA or NTSB Investigators

Examples:

Yes

No

N/A

Sight Seeing Tour? YES ▼



21. Agricultural Operation (MANTRA - Accident Tab)

Description - Identifies an aircraft accident that was involved with 14 CFR Part 137 Agricultural Operation.

Definition – Agricultural operations are a paid service where the pilot either works as a contractor for a company or as a company employee using any chemical designed to treat the soil or crops.

Rationale – To trend the number of agricultural operation accidents.

Examples:

Yes

No



22. Agricultural Chemical Type (MANTRA – Accident Tab)

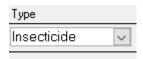
Description - Identifies the type of chemicals utilized on the day of or prior to an aircraft accident that was involved with 14 CFR Part 137 Agricultural Operation.

Rationale – To trend the chemical types utilized for agricultural operation accidents

Data – Information is obtained by contacting the FAA investigator assigned to the accident.

Examples:

Fertilizer Fungicide Herbicide Insecticide Pesticide





23. Agricultural Operation Chemicals (MANTRA – Accident Tab)

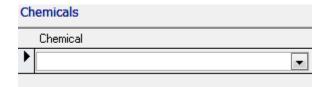
Description - Identifies the chemicals utilized on the day of or prior to an aircraft accident that was involved with 14 CFR Part 137 Agricultural Operation.

Definition - Agricultural operations are a paid service where the pilot either works as a contractor for a company or as a company employee using any chemical designed to treat the soil or crops. The operator often dispenses chemicals from the aircraft intended for plant nourishment, soil treatment, and/ or pest control.

Rationale – To trend the number of chemicals utilized for agricultural operation accidents.

Chemical: Chemical Name (Trade Name)

Use this Website for MSDS information on each Chemical: https://www.agrian.com/labelcenter/results.cfm





24. Agricultural Chemical Type (MANTRA – Accident Tab)

Description - Identifies the type of chemicals utilized on the day of or prior to an aircraft accident that was involved with 14 CFR Part 137 Agricultural Operation. Utilize this field to identify the chemical type when multiple chemicals are being entered.

Rationale – To trend the chemical types utilized for agricultural operation accidents

Data – Information is obtained by contacting the FAA investigator assigned to the accident.

Examples:

Fertilizer Fungicide Herbicide Insecticide Pesticide

25. Agricultural Operation Chemicals Location (MANTRA – Accident Tab)

Description - Identifies the location for the chemicals utilized on the day of or prior to an aircraft accident that was involved with 14 CFR Part 137 Agricultural Operation.

Definition - Agricultural operations are a paid service where the pilot either works as a contractor for a company or as a company employee using any chemical designed to treat the soil or crops. The operator often dispenses chemicals from the aircraft intended for plant nourishment, soil treatment, and/ or pest control. The location tracks when the chemical was utilized

Rationale – To trend the location of chemicals utilized for agricultural operation accidents.

Examples:

- On board: chemical was being sprayed or was on board at time of accident
- **Previous use:** anytime in the days leading up to the accident day



• **Previous use – same day:** chemical was used the day of the accident but before the accident

Location	
	•



26. Event Summary (MANTRA – Accident Tab)

Description – This field captures the event description from the EON report.

Definition – An event description captures important information regarding an aviation accident or incident.

Rationale – To verify the data entered into MANTRA for quality assurance.





27. Accident Review Completed On (MANTRA – Accident Tab)

Description – Date the section is completed.

Rationale – It is important to utilize this field as it closes out the section and will function as a time/date stamp. This also acts as a reminder to ensure all fields are completed before exiting this section.

Accident Review Completed On	1/18/2012
	MM/DD/YYYY - Dbl-Click for Today

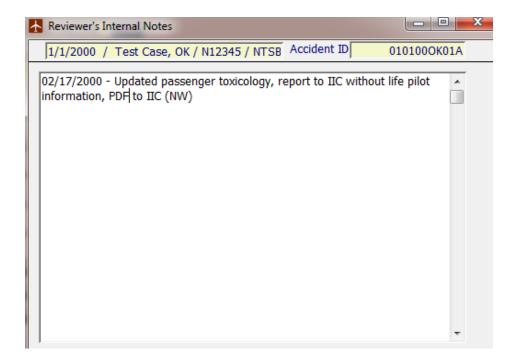


28. Memo (MANTRA – Aircraft Information Tab)

Description – Designated field within the aircraft information tab to enter any descriptors applicable to accident/incident.

Rationale – Allow for additional information pertinent to the case. This field is designed to record reviewer's actions, contacts with investigators, contact with pathologists, and helps record when and what action was taken on the medical case review.

Format – (Date) – Action taken on medical case review (Initials of who took action).



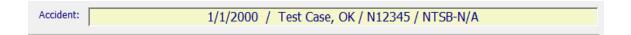
** This field occurs multiple times in the database. The other tabs in MANTRA with this field are the Accident Tab, Investigators' Notes Tab, NTSB Summary Tab, Subject Demographics Tab, Medical Examiner/Coroner Notes Tab, Medical Review and ICD Issues Tab, Investigator Findings Tab, Autopsy Information and Review Tab, Subject Toxicology Review Tab and Recommendations Tab.



29. Accident (MANTRA – Aircraft Information Tab)

Description – An auto-populated field that displays the date, location, tail number and NTSB accident case number.

Rationale – This auto-populated field continues identification of the case for quality assurance.



**This field occurs multiple times in the database. The other tabs in MANTRA with this field are the Investigators' Notes Tab, NTSB Summary Tab, Subject Demographics Tab, Medical Examiner/Coroner Notes Tab, Medical Review and ICD Issues Tab, Investigator Findings Tab, Autopsy Information and Review Tab, Subject Toxicology Review Tab, AIS Coding Tab, Recommendations Tab and Request Log Tab.



30. Type of Aircraft (MANTRA – Aircraft Information Tab)

Description – This fields allows for identifying the different types of aircraft.

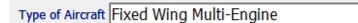
Definition – The type of aircraft as certificated by the FAA's aircraft certification division.

Rationale – Allows for trending or reviewing of the types of aircraft involved in fatal accidents/incidents.

Data – Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

Examples:

Fixed Wing – Multiple Engine
Fixed Wing – Single Engine
Glider
Gyroplane
Market Survey
Powered Parachute
Rotorcraft
Ultralight
Weight – Shift- Control
Balloon





31. Classification (MANTRA – Aircraft Information Tab)

Description - The Airworthiness classification/category according to the latest Application for Airworthiness Certificate, FAA Form 8130-6.

Definition - The classification of aircraft as certificated by the FAA's aircraft certification division.

Rationale - This fields allows for identifying the different classes of aircraft.

Data - Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

Class Types:

Experimental

Light Sport

Limited

Primary

Restricted

Special Flight Permit

Standard

Standard – Canadian

Standard – Foreign

Standard Restricted

Ultralight

Unknown





32. Category (MANTRA – Aircraft Information Tab)

Description – This field is synonymous with *Airworthy*, which means the aircraft conforms to its type design and is in a condition for safe operation. *Product* means an aircraft, aircraft engine, or aircraft propeller with the exception of experimental aircraft. This functions as a sub-classification for field 23.

Definition - The category of aircraft as certificated by the FAA's aircraft certification division.

Rationale - Identify the different types of uses for the airplane/aircraft as it conforms to its type design and functions safely.

Data – Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

Examples of Category Types:

Acrobatic
Agriculture and Pest Control
Amateur Built
Normal
Normal, Utility
Operating Light Sport – 8A
Weight-Shift-Control





33. Make (MANTRA – Aircraft Information Tab)

Description – The make is the manufacture for the airplane/aircraft.

Definition - The make of aircraft as certificated by the FAA's aircraft certification division

Rationale – To record the different makes for airplane/aircraft for trends.

Data - Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

Examples:

Cessna Beech Jimmy Smith Piper

Make Beech

34. Model (MANTRA – Aircraft Information Tab)

Description – The model is the sub-classification of the make.

Definition - The model of aircraft as certificated by the FAA's aircraft certification division

Rationale - To record the different models for airplane/aircraft for trends.

Data – Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

Examples:

AA-1B C310

Model 58



35. Manufacture Year (MANTRA – Aircraft Information Tab)

Description – The year the airplane/aircraft is constructed.

Rationale – To determine if the age of the airplane/aircraft would be a possible contributing factor to probable cause of the accident.

Data – Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page.

MFR Year	1986

36. Meets Definition of Float Plane (MANTRA – Aircraft Information Tab)

Description – A field to determine if airplane/aircraft has the capability of landing on water. This airplane/aircraft has been specifically manufactured or modified to land on water.

Definition – An aircraft that is originally built with floats or one that has been modified to land/take-off on water ("Seaplane, skiplane, and float/ski," 2004).

Rationale – To capture information regarding the number of float planes involved in accidents. Can also be used to track modifications in airplane/aircraft.

Data - Data is obtained from the aircraft registration in the safety performance analysis system (SPAS) or aircraft registry home page, FAA or NTSB investigations, or the NTSB Probable Cause report.

Meets Definition of Float Plane?	NO	¥
Meets Definition of Float Flane:	INO [



37. Take-off or Landing on Water (MANTRA – Aircraft Information Tab)

Description – A field to determine if the aircraft accident occurred while a float plane was taking off or landing on water.

Rationale - To capture information regarding the number of float planes. Taking off or landing on water involved in accidents.

Data - Information obtained from FAA or NTSB Investigators

Examples:

Yes- occurred on take-off or landing on water No – did not occur on take-off or landing on water N/A – used when an aircraft is not considered a float plane

Float Plane Accident Occurred on take-off or landing on water? N/A

38. Meets Definition of Light Sport Aircraft (LSA) (MANTRA – Aircraft Information Tab)

Description – A field to determine if airplane/aircraft meets the definition of light sport aircraft.

Rationale - To capture information regarding the number of light sport aircraft/airplanes involved in accidents.

Data - This information is collected from aircraft registry or SPAS airworthiness certificate.

Definition – The light sport airplane/aircraft is defined in 14CFR 21.190. LSA Means:

- Aircraft other than a helicopter or powered lift that, since its original certification, has continued to meet the following:
 - o Max takeoff weight of not more than
 - 1320 pounds (600 kilograms) for all land aircraft
 - 1430 pounds (650 kilograms) for aircraft intended for operation on water
 - o Max speed (Vh) -120 knots (138 mph); Glider Vne -120 knots
 - Max stall speed not more than 45 knots (52mph)
 - 2 seats max; non-pressurized; single reciprocating engine
 - Fixed or ground adjustable propellar; auto-feather for glider
 - Fixed landing gear, except for an aircraft intended for operation on water or glider (retractable gear allowed)

Reference: Smith, K., & Buchanan, L. Department of Transportation, Federal Aviation Administration. (2008). Light sport aviation overview





39. Aircraft Review Completed On (MANTRA – Aircraft Information Tab)

Description – Date the section is completed.

Rationale – It is important to utilize this field as it closes out the section and will function as a time/date stamp. This also acts as a reminder to ensure all fields are completed before exiting this section.

Aircraft Review Completed On 1/18/2012

MM/DD/YYYY - Dbl-Click for Today



40. Find Investigator (MANTRA – Investigator Notes Tab)

Description – This is a display field that show the investigator name once all of the demographic fields for the investigator have been completed.

Rationale – This is a tool to view the investigator name.





41. Add Investigator (MANTRA – Investigator Notes Tab)

Description – Button to add a new investigator to the accident.

Rationale – This is helpful in keeping the investigators contact information with each accident.





42. Investigator- Last Name (MANTRA – Investigator Notes Tab)

Description – This field identifies the investigator last name for the NTSB and FAA investigator.

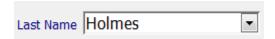
Rationale – To continue identification of the investigator.

Data – Obtained from the 8020 - 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center.

Information

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO Office

1-202-314-6290 - NTSB COM Center





43. Investigator - First Name (MANTRA – Investigator Notes Tab)

Description - This field identifies the investigator first name for the NTSB and FAA investigator.

Rationale - To continue identification of the investigator.

Data - Obtained from the 8020 - 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center.

Information

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO Office

1-202-314-6290 - NTSB COM Center

First	Sherlock	



44. Investigator - Agency (MANTRA – Investigator Notes Tab)

Description – This field indicates the agency which the inspector is affiliated with.

Rationale – To continue the identification of the inspector.

Data - Obtained from the 8020 - 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center.

Information

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO

1-202-314-6290 - NTSB COM Center

Agency FAA AVP-100



45. Investigator - Phone (MANTRA – Investigator Notes Tab)

Description – This field displays office contact information for the inspector.

Rationale – To provide an avenue of communication with the inspector.

Data – Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory.

Information

https://employees.faa.gov/employee directory/?Open

1-202-314-6290 - NTSB COM Center

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO

Phone (555) 555-1234 ex:

46. Investigator - Cell Phone (MANTRA – Investigator Notes Tab)

Description – This field displays additional contact information for the inspector.

Rationale – To provide an avenue of communication with the inspector.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory.

Information

https://employees.faa.gov/employee directory/?Open

1-202-314-6290 - NTSB COM Center

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO

Cell (123) 456-7890



47. Investigator - Fax (MANTRA – Investigator Notes Tab)

Description - This field displays additional contact information for the inspector.

Rationale – To provide an avenue of communication with the inspector.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory.

Information

https://employees.faa.gov/employee directory/?Open

1-202-314-6290 - NTSB COM Center

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO

Fax (587) 125-8443

48. Investigator - E-Mail (MANTRA – Investigator Notes Tab)

Description - This field displays additional contact information for the inspector.

Rationale – To provide an avenue of communication with the inspector.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory.

Information

https://employees.faa.gov/employee_directory/?Open

1-202-314-6290 - NTSB COM Center

http://www.faa.gov/about/office org/field offices/fsdo/ - FSDO

Email sherlock.holmes@MI5.test



49. Update Investigator (MANTRA – Investigator Notes Tab)

Description – Function button that saves new or updates to the investigator information.

Rationale – Allows new or updated investigator information to be saved within the database.

Update Investigator



50. Investigator Notes – Date Contacted (MANTRA – Investigator Notes Tab)

Description – A field that transcribes the date of communication with the investigator.

Rationale – Document the date of communication for quality assurance.

]	Investigator's Notes			
	Date Contacted			



51. Investigator Notes – By (MANTRA – Investigator Notes Tab)

Description – This field contains the name of the person who contacted the investigator.

Rationale - Document the identity of communicator with the investigator for quality assurance.





52. Investigator Notes – Trash Can Icon (MANTRA – Investigator Notes Tab)

Description – This icon is a functional button to delete the entry.

Rationale – To allow deletion of the entry per discretion of the user who has made the entry.



53. Investigator Notes – Comment (MANTRA – Investigator Notes Tab)

Description - A text field to store pertainent information regarding the case.

Rationale – An area in which notes from the investigator that are relevant to the investigation.





54. Investigator's Notes – Delete Investigator (MANTRA – Investigators' Notes Tab)

Description – Is a delete key to remove the investigators contact information and any notes entered.

Rationale – This key is used to remove investigators that may have been inadvertently placed on the wrong accident. When utilizing this function, you will need to verify that you want to clear or delete the investigator.





55. NTSB Number (MANTRA – NTSB Summary Tab)

Description – This number is provided by the NTSB for accident identification purposes.

Rationale – Allows for accident identification from the NTSB to keep documentation consistent with their database.

Data – The number is obtained from the NTSB investigator or the accident database and synopsis website.

http://www.ntsb.gov/ layouts/ntsb.aviation/index.aspx

NTSB#	



56. Type of Operation (MANTRA – NTSB Summary Tab)

Description – The rules of operation that the pilot is functioning under for that aircraft/airplane.

Rationale – To classify the different rules of operation.

Data – Is collected from multiple sources including but not limited to EON, NTSB, 8020 - 9, Investigator, and media outlet.

Examples:

Part 91 – General Aviation

Part 91 – General Aviation - Public Use

Part 135 – Air Taxi

Part 121 – Air Carrier

Part 103 – Ultalight

Part 125 - 20 + passengers, 6000 + pounds

Part 133 – Rotocraft External Load

Part 135 – Air Taxi

Part 137 – Agricultural

Part 141 – Pilot School

Personal Flight – Canadian Aviation Regulations

Military

Out of Jurisdiction – Outside USA

Type Of Operation Part 91: General Aviation

▼

57. Scheduled/Unscheduled (MANTRA – NTSB Summary Tab)

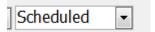
Description – Classifies whether the flight was scheduled or unscheduled.

Rationale - Collection of this information allows trending of the data to determine if the flight was for pay or not.

Data – Is collected from multiple sources including but not limited to EON, NTSB, 8020 – 9, Investigator, and media outlet.

Example:

Scheduled Unscheduled





58. Possible Causal Factors: Subject (MANTRA – NTSB Summary Tab)

Description – Defines the subject/person for analysis of causal factors for the accident/incident. This is completed for pilot and pilot-rated passengers (if the pilot rated passenger(s) had access to the controls or if the NTSB orders an autopsy).

Rationale – To define the subject/person for review.

Data – Drop box with subject/person to be selected in relation to the accident/incident.





59. Possible Causal Factors: Possible Impairment (MANTRA – NTSB Summary Tab)

Description – Defines the possible impairment of the airman for the accident/incident. This is completed for pilot and pilot-rated passengers (if the pilot rated passenger(s) had access to the controls or if the NTSB orders an autopsy).

Rationale – To define if any airman were impaired.

Data – Drop down menu that includes: None, Possible, Certain.



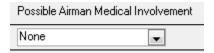


60. Possible Causal Factors: Possible Airman Medical Involvement (MANTRA – NTSB Summary Tab)

Description – Defines the possibility of airman medical involvement for the accident/incident. This is completed for pilot and pilot-rated passengers (if the pilot rated passenger(s) had access to the controls or if the NTSB orders an autopsy).

Rationale – To define if airman medical involvement was an issue with the accident.

Data – Drop down menu that includes: None, Possible, Certain.





61. NTSB Findings (MANTRA – NTSB Summary Tab)

Description – Button to view NTSB probable cause and causal factors for coding the CAMI Probable Cause and the CAMI Causal Factors.

Rationale – To trend the number of probable cause factors and causal factors contributing to fatal aviation accidents.

Data – This information/determination is obtained from the NTSB review.

NTSB Findings - Probable Cause and Causal Factors

62. CAMI Probable Causes (MANTRA – NTSB Summary Tab)

Description – Defines the probable cause of the accident as defined by the NTSB.

Rationale – To help trend the number of probable cause factors contributing to fatal aviation accidents.

Data – This information/determination is obtained from the NTSB review.

Examples

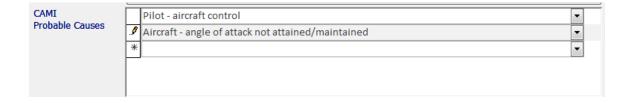
Aircraft Fuel/Fluid Levels

Pilot – Lack of Action

Pilot – Decision Making

Note: This data is populated from the findings table of the NTSB Probable Cause. In the legend of the NTSB Probable Cause Report, this would be elements tha have the letter "C" for the cause after the factor.

http://www.ntsb.gov/ layouts/ntsb.aviation/index.aspx



63. CAMI Causal Factors (MANTRA – NTSB Summary Tab)

Description – Defines the causal factors contributing to the probable cause of the accident as defined by the NTSB.

Rationale - To trend the causal factors contributing to fatal aviation accidents.

Data - This information/determination is obtained from the NTSB review.

Examples:

Aircraft Fuel/Fluid Levels Pilot – Lack of Action Pilot – Decision Making

Note: This data is populated from the findings table of the NTSB Probable Cause. In the legend of the NTSB Probable Cause Report, this would be elements that have the Letter "F" for factor contributing to the cause

http://www.ntsb.gov/_layouts/ntsb.aviation/index.aspx





64. Physiological Event (MANTRA – NTSB Summary Tab)

Description – Defines any physiological events associated with the pilot playing a role in the accident.

Rationale - To trend the physiological events contributing to fatal aviation accidents.

Data - This information/determination is obtained from the NTSB review.

Examples:

Georgraphic Disorientation (lost)

Hypoxia

Loss of Consciousness

None

Perception/orientation

Situational Awareness

Spatial Disorientation

Unknown

Vestibular function/Illusion

Visual Illusion

Visual Illusion/Disorientation





65. Summary (MANTRA – NTSB Summary Tab)

Description – A text box for summarizing the safety recommendations made by the NTSB. This box is also used to summarize medical issues noted in the NTSB probable cause report.

Rationale – To reference the NTSB safety recommendations and note medical issues.

Data – Obtained from the NTSB Recommendations and Advocacy Website as well as NTSB probable cause report.

http://www.ntsb.gov/safety/safety-recs/ layouts/ntsb.recsearch/RecTabs.aspx

Recommendation Summary:

tox detected diphenhydramine autopsy-coronary artery disease



66. NTSB Identified Medical Issue (MANTRA – NTSB Summary Tab)

Description – Determine if medical issue identified in NTSB probable cause.

Rationale - Trend factors that contributed to the cause of accidents/incidents.

Data - This information/determination is obtained from the NTSB review.

Examples:

Causal Factor – used for medical findings with (C) Contributory Factor – used for medical findings with (F) None

Noted – when a medical finding is mentioned but not a cause or factor Physiological Event – no medical findings but a physiological finding was mentioned





67. NTSB Summary Completed Date (MANTRA – NTSB Summary Tab)

Description - Date the section is completed.

Rationale — It is important to utilize this field as it closes out the section and will function as a time/date stamp. This also acts as a reminder to ensure all fields are completed before exiting this section.

NTSB Summary Completed Date	
Wisb summary completed bate	



68. NTSB Status (MANTRA – NTSB Summary Tab)

Description – To track the NTSB summary status.

Rationale – To determine if the probable cause of the accident has been completed or is not required due to no investigation by NTSB.

Data – The status is obtained from the NTSB aviation query page.



69. Factual Report Text Box (MANTRA – NTSB Summary Tab)

Description – This is a text box that allows for the preliminary NTSB report to be imported from ToxFlo.

Rationale – The NTSB preliminary report is a synoposis of post crash findings published about two weeks after the accident/incident.

Data – Is obtained from ToxFlo and the NTSB database.

Factual		
Not Available		



70. Probable Cause Text Box (MANTRA – NTSB Summary Tab)

Description - This is a text box that allows for the Probable Cause NTSB report to be imported from ToxFlo.

Rationale – The NTSB Probable Report is a synoposis for probable cause for the accident published about a year or greater after the accident/incident.

Data – Is obtained from ToxFlo and the NTSB database.



71. Final Report Text Box (MANTRA – NTSB Summary Tab)

Description - This is a text box that allows for the Factual NTSB report to be imported from ToxFlo.

Rationale – The NTSB Factual Report is a synoposis of factual information for post crash findings published about a month or two after the accident/incident.

Data – Is obtained from ToxFlo and the NTSB database.

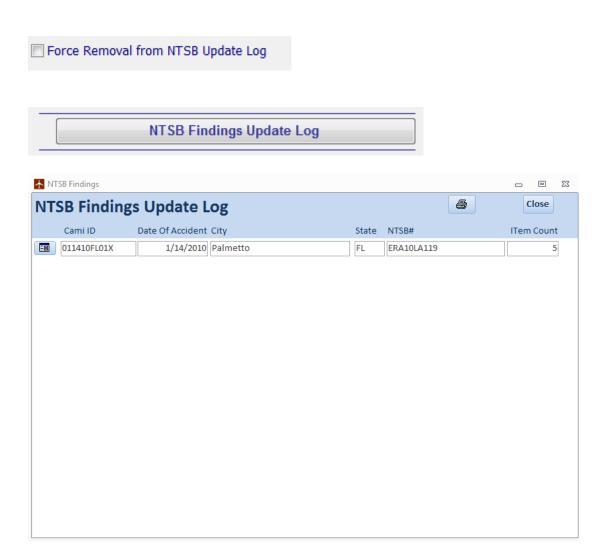
Final
Not Available



72. Force Removal From NTSB Update Log (MANTRA – NTSB Summary Tab)

Description – This is a check box that when selected will force the case selected off of the NTSB Findings Update Log.

Rationale – Occasionally, the team will have a case that will not close out of the NTSB Findings Update Log due to workflow. This button allows the user to force the case to close out off the log.





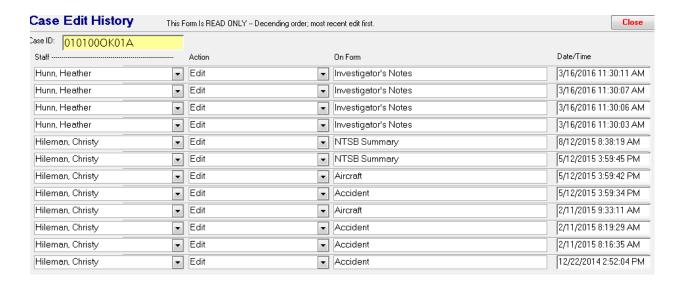
73. Edit Log (MANTRA –Edit Tab)

Description – A button to provide an audit log for change history per case.

Definition - A record of data entries that a person has performed out on a specific date.

Rationale – Keeps track of changes made to the database throughout time.







74. New Input Button (MANTRA –Home Page)

Description - This icon is a functional button to add a subject to the case.

Rationale – To allow a new subject to be added to the case.

New

75. CAMI Subject ID (MANTRA – Subject Demographics Tab)

Description - Civil Aerospace Medical Institute (CAMI) Subject ID provides a unique identifier for the accident consisting of the date and year in which the accident occurred, the state, territory or country. Also, includes the numerical order/sequence of time the crash occurred in a specific region. The last character identifies the role of the subject in the accident.

Rationale – This is a display field which is auto-populated provides a continuance of subject identification.

CAMI Subject ID 081611AK01X001

**This field occurs multiple times in the database. The other tabs in MANTRA with this field are the Medical Examiner/Coroner Notes Tab, Medical Review and ICD Issues Tab, Investigator Findings Tab, Autopsy Information and Review Tab, Subject Toxicology Review Tab, AIS Coding Tab, Recommendations Tab and Request Log Tab.



76. Last Name (MANTRA – Subject Demographics Tab)

Description – A field to collect last name as part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data – Is obtained from the Regional Operation Center (ROC), FAA investigator incharge, NTSB investigator in-charge or media sources.

Last:	
Name: Moriarty	



77. First Name (MANTRA – Subject Demographics Tab)

Description - A field to collect first name as part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data – Is obtained from the Regional Operation Center (ROC), FAA investigator in- charge, NTSB investigator in-charge or media sources.

First:	
Professor	James

78. Middle Name (MANTRA – Subject Demographics Tab)

Description - A field to collect middle name as part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data – Is obtained from the Regional Operation Center (ROC), FAA investigator in- charge, NTSB investigator in-charge or media sources.

Middle:	
Lee	



79. Date of Birth (MANTRA – Subject Demographics Tab)

Description – A field to collect date of birth as a part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data - Is obtained from the Regional Operation Center (ROC), FAA investigator incharge, NTSB investigator in-charge or media sources.

DOB: 00/00/0000



80. Social Security Number (SSN) (MANTRA – Subject Demographics Tab)

Description - A field to collect social security number as a part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data - Is obtained from the Regional Operation Center (ROC), FAA investigator incharge, NTSB investigator in-charge or media sources.

PII security – This information is stored on the ToxFlo server in the Bioaeronautical Research Lab

SSN: 999-99-9999



81. Pseudo Social Security Number (SSN) (MANTRA – Subject Demographics Tab)

Description - A field to collect a pseudo social security number as a part of identification of the pilot, pilot-rated passenger or NTSB passenger requested autopsy. A pseudo social security number begins with 999.

Rationale - For identification of the subject(s) involved in the accident/incident.

Data - Is obtained from the Regional Operation Center (ROC), FAA investigator incharge, NTSB investigator in-charge or media sources.

PII security – This information is stored on the ToxFlo server in the Bioaeronautical Research Lab.

Note: A pilot may elect to use this identification number instead of the Nationally issued Social Security Number.

Pseudo SSN: 999-00-0000

82. Encrypt/Save Privacy Information Button (MANTRA – Subject Demographics Tab)

Description – Is button that allows the privacy information to be saved and encrypted on the ToxFlo server in the Bioaeronautical Research Lab.

Rationale – To encyrpt and save the privacy information.

Encrypt/Save PI

83. Pilot Certification Number (MANTRA – Subject Demographics Tab)

Description – This is the certificate number which identifies the pilot.

Rationale – Provides additional identification of the pilot for quality assurance, research, and prevention of privacy disclosure.

Data – This information is obtained from Safety Performance Analysis System (SPAS).

http://home.spas.faa.gov/splash/splash.asp

·	
Pilot Certification #	1234567
	123 1307



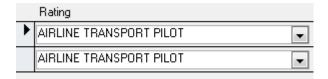
84. Pilot Certificate Detail – Rating (MANTRA – Subject Demographics Tab)

Description – The certificate rating describes what function the pilot or person holding their certificate may perform.

Rationale – Track the specific ratings to determine if the pilot or person holding the certificate is authorized to perform said function.

Data – This informtion is obtained from the safety performance analysis system (SPAS).

http://home.spas.faa.gov/splash/splash.asp





85. Pilot Certificate Detail – Description (MANTRA – Subject Demographics Tab)

Description - This field describes the function of the rating for the pilot or the person holding the certificate.

Rationale – To match the function of the description with the rating.

Data - This informtion is obtained from the safety performance analysis system (SPAS).

http://home.spas.faa.gov/splash/splash.asp





86. Role (MANTRA – Subject Demographics Tab)

Description – A field to collect the role of the individual in the accident/incident.

Rationale – To track the different roles of the individual in the accident/incident.

Data – This information is obtained from the 8020 - 9, FAA/NTSB investigators, media outlets.

Examples:

Pilot

Co-pilot

Passenger

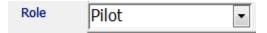
Ground Crew

Second Officer

Flight Instructor

Pilot – Student

Pilot-Rated Passenger





87. Age at Accident (MANTRA – Subject Demographics Tab)

Description – This field collects the age of the individual at the time of the accident/incident.

Rationale – To track the age of the individual for quality assurance purposes. Is useful in tracking age at last medical issuance versus age at the time of accident/incident.

Data – This information is calculated from date of accident and date of birth.

Age At Accident 61



88. Last Exam Date (MANTRA – Subject Demographics Tab)

Description – A field to track the last date of medical exam that was submitted on the lastest 8500-8 medical application in Document Imaging Workflow System (DIWS).

Rationale – To determine the validity of the medical issuance in relation to DIWS class code. This field is also used quality assurance.

Data – This information is obtained from Document Imaging Workflow System (DIWS).

Last Exam Date 8/2/2011



89. Age At Last Exam (MANTRA – Subject Demographics Tab)

Description - This field collects the age of the individual at the time of the last medical exam prior to the accident/incident.

Rationale – To track the age of the individual for quality assurance purposes. Is useful in tracking age at last medical issuance versus age at the time of accident/incident.

Data – This information is calculated from date of last exam and date of birth.

Age At Last Exam 61



90. Pilot MID Number (MANTRA – Subject Demographics Tab)

Description – This field contains the medical identification number for the individual who is applying for a new or renewal medical certificate through medical certification.

Rationale – Additional identification of the individual regarding medical certification. Queries done for quality assurance purposes/research are de-identified by using the MID number for identification purposes.

Pilot Mid #	123456789
-------------	-----------



91. Flight Time Total (MANTRA – Subject Demographics Tab)

Description – This field contains the total number of flight hours logged by the individual on the latest 8500-8 application in the Document Imaging Workflow System (DIWS). If the latest application does not have the flight time, use the previous application with the listed flight time.

Rationale – Provides statistical information for the number of flight hours at the time of the accident/incident. This helps determine if the experience of the pilot is a contributing factor in the accident/incident.

Data - Is obtained from Document Imaging Workflow System (DIWS).

Flight Time Total 10000.0



92. Flight Time – 6 Months (MANTRA – Subject Demographics Tab)

Description - This field contains the total number of flight hours for the last 6 months logged by the individual on the latest 8500-8 application in the Document Imaging Workflow System (DIWS).

Rationale – Provides statistical information for the number of flight hours for the last 6 months at the time of the accident/incident. This helps determine if the experience of the pilot is a contributing factor in the accident/incident.

Flight Time 6 mos	160.0
-------------------	-------



93. Home State (MANTRA – Subject Demographics Tab)

Description - This field contains the home state residence as indicated by the airman on the last 8500-8 application in DIWS.

Rationale — This provides a last known address for the airman. This field can be used as a quality assurance tool for the last utilized airman medical examiner.





94. Home Region (MANTRA – Subject Demographics Tab)

Description - This field contains the three letter code region that home state residence is located in per the FAA Regional Flight Surgeon boundaries.

Rationale — This information provides a reference to locate the correct Regional Flight Surgeon and allows for tracking and quality assurance for the airman medical examiner.

Data – This field is populated based on the home state selected.





95. Gender (MANTRA – Subject Demographics Tab)

Description - This field contains the gender of the person. Pilot, Co-Pilot or Passenger who may have had access to the control. This is legal gender description.

Rationale – This information is used for research studies and trending analysis.





96. Height (MANTRA – Subject Demographics Tab)

Description - This field contains the height of the person. Pilot, Co-Pilot or Passenger who may have had access to the control.

Rationale – This information is used for research studies and trending analysis.

Height	71 inches
--------	-----------



97. Weight (MANTRA – Subject Demographics Tab)

Description - This field contains the weight of the person. Pilot, Co-Pilot or Passenger who may have had access to the control.

Rationale – This information is used for research studies and trending analysis.



98. Body Mass Index (MANTRA – Subject Demographics Tab)

Description - This is a auto-calculated field contains the body mass index (BMI) of the person. Pilot, Co-Pilot or Passenger who may have had access to the control.

Rationale – This information is used for research studies and trending analysis.

Data - Is obtained calculated by MANTRA using the formula : weight (lb) / [height (in)]² x 703

Table 2

Classification of O	Classification of Overweight and Obesity by BMI, Waist Circumference, and Associated Disease Risk*			
	BMI (kg/m2)	Obesity Class	Disease Risk* (Relative to Normal Weight and Waist Circumference)	
			Men ≤40 in (≤ 102 cm) Women ≤ 35 in (≤ 88 cm)	> 40 in (> 102 cm) > 35 in (> 88 cm)
Underweight	< 18.5		_	-
Normal†	18.5-24.9		-	-
Overweight	25.0-29.9		Increased	High
Obesity	30.0–34.9 35.0–39.9	I II	High Very High	Very High Very High
Extreme Obesity	≥ 40	III	Extremely High	Extremely High

Disease risk for type 2 diabetes, hypertension, and CVD.

BMI 33.5

[†] Increased waist circumference can also be a marker for increased risk even in persons of normal weight.

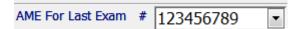
Adapted from "Preventing and Managing the Global Epidemic of Obesity. Report of the World Health Organization Consultation of Obesity." WHO, Geneva, June 1997.



99. AME for last exam # (MANTRA – Subject Demographics Tab)

Description - This field contains number that is assigned by Airman Education to the Airman Medical Examiner.

Rationale — This information is used for quality assurance and as additional identification of the AME.



100. Last Name (MANTRA – Subject Demographics Tab)

Description - This field contains the last name of the Airman Medical Examiner (AME).

Rationale – This information is used for quality assurance and as identification of the AME.

Last Name	Duck

101. First Name (MANTRA – Subject Demographics Tab)

Description - This field contains the first name of the Airman Medical Examiner (AME).

Rationale – This information is used for quality assurance and as identification of the AME.

First Name	Daffy	



102. AME Count (MANTRA – Subject Demographics Tab)

Description - This field auto-populates the number of pilots who have been certified by an AME that have been in an accident.

Rationale – This information is used for quality assurance of the AME.

Data – This field is a calculation performed by counting occurences that the AME number is recorded in MANTRA.

AME count:	1
------------	---



103. (AME) State (MANTRA – Subject Demographics Tab)

Description - This field collects the state where the AME is located.

Rationale – This information is used for quality assurance of the AME.

Data - Is obtained from Document Imaging Workflow System (DIWS).





104. (AME) Region (MANTRA – Subject Demographics Tab)

Description - This field collects the region where the AME is located.

Rationale – This field contains the three letter code region of the home state residence for the AME as assigned per the FAA Regional Flight Surgeon boundaries.

Data - Is calculated by MANTRA by cross referencing AME state against look up table.

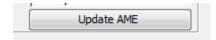




105. Update AME Button (MANTRA – Subject Demographics Tab)

Description - This button saves the AME information in MANTRA.

Rationale – Save or update AME information.





106. DIWS Class Code (MANTRA – Subject Demographics Tab)

Description - This field collects the DIWS class code as assigned per medical certification. The code is numerical as well as being displayed grammatically.

Rationale — This field identifies the code demonstrating restrictions for the certificate under which the pilot is allowed to operate.

Data - Is obtained from Document Imaging Workflow System (DIWS).

		_	
DIWS Class Code	22	▼	Class 2, Limited



107. Night Vision Goggles Used (MANTRA – Subject Demographics Tab)

Description - This field collects whether or not pilot was using night vision goggles at he time of the accident.

Rationale — This allows us to specifically study if night vision goggles were or were not used in certain accidents.

Data - Is obtained from FAA IIC or NTSB IIC.





108. Night Vision Goggles on Board (MANTRA – Subject Demographics Tab)

Description - This field collects whether or not night vision goggles were on board the aircraft at the time of the accident.

Rationale — This field allows us to trend the aircraft that have the availbility of night vision goggles on board.

Data - Is obtained from FAA IIC or NTSB IIC.



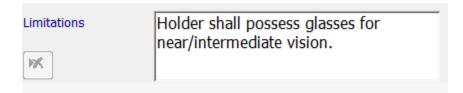


109. Limitations (MANTRA – Subject Demographics Tab)

Description - This a text field that allows for describing the limitations of the airman's medical certificate.

Rationale – This field allows for quality assurance and a review for the medical review officer.

Data - Is obtained from Document Imaging Workflow System (DIWS).



110. Injury Status (MANTRA – Subject Demographics Tab)

Description - This field allows for tracking of the injury status of a pilot, co-pilot or passenger.

Rationale — This field allows for classification and tracking of individuals involved in an aviation accident.

Data - Is obtained from the FAA/NTSB investigator, ROC, 8020 -9, news media outlets.

Examples:

Fatal

Minor

Serious

Missing

Missing Presumed (MP) Fatal

None

Injury Status	Serious	•



111. Date of Death (MANTRA – Subject Demographics Tab)

Description - This field allows for tracking of the date of death.

Rationale – Important in determining if the death is within 30 days of the accident. If death occurs within 30 days of the accident it would be considered a fatal accident.

Data - Is obtained from the EON, 8020 -9 or ROC Notification.

Date Of Death 5/12/2015



112. Initial ME/Coroner Contact (MANTRA – Subject Demographics Tab)

Description - This field allows for tracking of the date the autopsy team contact the Medical Examiner or Coroner regarding an autopsy.

Rationale – The information is used for QMS reporting to ensure the autopsy team is meeting the standards that have been set.

Initial ME/Coroner Contact	7/17/2020
,	



113. Subject Demographics Completed Date (MANTRA – Subject Demographics Tab)

Description – Date the section is completed.

Rationale – It is important to utilize this field as it closes out the section and will function as a time/date stamp. This also acts as a reminder to ensure all fields are completed before exiting this section.

Subject	1/18/2012
Demographics '	MM/DD/YYYY - Dbl-Click for Today

114. Subject Name (MANTRA – Medical Examiner/Coroner Notes Tab)

Description – Name of the subject related to this specific accident.

Rationale – It is important to always be able to see the subject's name that data is being entered for so that the appropriate information for that subject is input correctly. This field is auto-populated from the information entered when the subject is created in the database.

Subject Name: Moriarty, Professor James

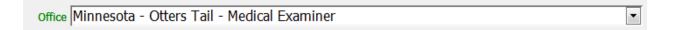
**This field occurs multiple times in the database. The other tabs in MANTRA with this field are the Medical Review and ICD Issues Tab, Investigator Findings Tab, Autopsy Information and Review Tab, Subject Toxicology Review Tab, AIS Coding Tab, Recommendations Tab and Request Log Tab



115. Medical Examiner or Coroner - Office (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the name of the medical examiner or coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).





116. Medical Examiner or Coroner – Address 1 (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the address of the medical examiner or coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

Address 1	P.O. Box 8500



117. Medical Examiner or Coroner – Address 2 (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the address of the medical examiner or coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

Address 2	
-----------	--



118. Medical Examiner or Coroner – City (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the city location of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).



119. Medical Examiner or Coroner – State (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the state location of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).





120. Medical Examiner or Coroner –County (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the county name of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

County	



121. Medical Examiner or Coroner –Zip Code (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the zip code location of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

Zip	30034
-----	-------



122. Medical Examiner or Coroner – Phone (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the phone number of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

Data - Is obtained from the FAA and/or NTSB investigator or by searching the internet for the appropriate medical examiner or coroner with jurisdiction in the area of the accident.

Phone (404) 244-2600



123. Medical Examiner or Coroner – Cell Phone (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the cell phone number of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

|--|



124. Medical Examiner or Coroner – Fax Number (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the fax number of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

Data - Is obtained from the FAA and/or NTSB investigator or by searching the internet for the appropriate medical examiner or coroner with jurisdiction in the area of the accident.

Fax (404) 270-8529



125. Medical Examiner or Coroner – E-Mail (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – A field to display the e-mail address of the medical examiner or Coroner that has jurisdiction over the accident. This is the person or entity that performs or is responsible for the autopsy and/or autopsy report(s).

Rationale – This field provides contact information to request final autopsy report(s).

- 4	
Email	
LIIIGII	



126. Medical Examiner or Coroner – Projected Cost of Autopsy (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a field to collect the projected cost of the autopsy and/or tox box.

Rationale – To track and manage the operational budget for payment of autopsies and/or tox-box in areas where the state or county charges for the service of performing an autopsy.

Data - Is collected from surveying the medical examiner or coroner regarding the cost of fees (submitted bill or by telephone/e-mail).

Projected Cost of Autopsy:	\$800.00

127. Medical Examiner or Coroner – Notes (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a field to collect notes in relation to the medical examiner or Coroner. This note will populate every time the medical examiner or coroner is selected for a case.

Rationale – To track and manage the notes and information about the Medical Examiner or Coroner.

Data - Is collected from surveying the medical examiner or coroner.

Example:

Note stating that the ABC Pathologist Company performs the autopsy for the XYZ County Coroner. This note can include contact name, telephone number or any additional information pertinent to the medical examiner or coroner.

The note also contains the date the Autopsy Program Team Pamphlet was mailed to the Medical Examiner or Coroner.

Notes					



128. Medical Examiner or Coroner – Update ME/Coroner LUT (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – Is a button that allows the medical examiner/coroner information to be saved to MANTRA.

Rationale – To save the information so it does not have to be re-populated for every fatal crash.

Update ME/Coroner LUT

129. Medical Examiner or Coroner Notes – Received ToxBox (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a field to collect whether the medical examiner/coroner received a tox box from an FAA official.

Rationale – To track and manage the dissemination of tox boxes.

Data - Is collected from surveying the medical examiner or coroner. This information may come from the FAA official who delivers the tox box.





130. Medical Examiner or Coroner Notes – Date Contacted (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a field to collect the date the Medical Examiner/Coroner was contacted.

Rationale – To track and manage the notes and information about the Medical Examiner or Coroner.

Data - Is collected from surveying the medical examiner or coroner.

ME/Coroner's Notes
Date Contacted



131. Medical Examiner or Coroner Notes – (Contacted) By (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a field to collect the name of the person who contacted the Medical Examiner or Coroner.

Rationale – To document who makes contact with the Medical Examiner or Coroner.



132. Medical Examiner or Coroner Notes – Trash Can (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This is a button that deletes the entry.

Rationale – Allows for deleting of an incorrect note before saving the document.



133. Medical Examiner or Coroner Notes – Comment (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – This field is for making notes about the contact with the Medical Examiner or Coroner.

Rationale – To document conversations or contacts with the Medical Examiner or Coroner regarding the autopsy and/or tox box.

Data - Is collected from surveying the medical examiner or coroner.

Comment	



134. Medical Examiner or Coroner Notes – Record Number (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description – Record number for the Medical Examiner or Coroner notes field. There are an unlimited number of notes that can be added.

Rationale – To keep track of the number of notes indicating contact with Medical Examiner or Coroner.

Data - Is collected from surveying the medical examiner or coroner.

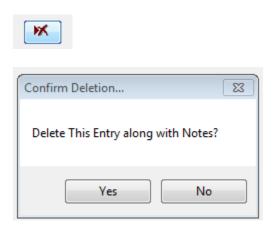




135. Medical Examiner or Coroner Notes - Delete Entry (MANTRA – Medical Examiner/Coroner's Notes Tab)

Description –Button to delete the Medical Examiner or Coroner note.

Rationale – Button is necessary in the event that you have entered the note on the incorrect accident.



136. Medical Certification Status (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is to track the medical certification status of the airman's medical certificate.

Rationale – To determine if the airman is flying with a valid medical certificate.

Data - Is collected following evaluation of the DIWS and 8500-8 medical certificate and decision is made and entered ny the medical case review physician. The medical case review physician selects options from a drop down table and edits table as needed

Examples:

Current

Denied Medical Certificate - Operating an aircraft that meets the definition of Light Sport

Denied Medical Certificate - Operating an aircraft that requires a Medical Certificate

N/A

No Medical Certificate - Operating a Glider - self certified Out of Date - Operating an aircraft that meets the definition of Light Sport Out of Date - Operating an aircraft that requires a Medical Certificate



137. Certificate Valid (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is to track the validity of the medical certificate for the type of operation the pilot was flying.

Rationale – To determine for quality assurance purposes if the medical certificate was valid for operation.

Data - This is an evaluation by the medical case review physician that determines whether or not the medical certificate was valid for the type of operations flown.

Example: if pilot was Captain of a 121 operation and he was over 40-years-old and his medical certificate was issued 11 months ago the answer would be "NO". If the pilot / Captain was 39-years-old and the medical certificate was issued 11 moths ago; the answer would be yes.

Example:

Yes

No

Unknown

N/A





135. Certificate Adequate (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is to track the adequacy of the medical certificate issued by the AME.

Rationale – This field is used as a quality assurance to ensure that the certificate was issued appropriately.

Data - Is an assessment of whether or not the certificate was issued appropriately and the options selected from a drop down table.

Example:

Appropriate by AMCD Appropriate by AME Cannot determine - old Inappropriate by AMCD Incomplete by AMCD Incomplete by AME





136. Reason if inadequate (MANTRA – Medical Review and ICD Issues Tab)

Description – This field describes the reason if the medical certificate issued by the AME is inadequate.

Rationale – This field is used as a quality assurance to track the reason for the inadequately issued certificate.

Data - Is collected from 8500-8 medical certificate and status reports as entered into DIWS based on the medical review officer opinion.

Reason, if Inadequate	•



137. Was AME comment appropriate in block 60 (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies if the block 60 comment in the 8500-8 in DIWS is appropriate or not.

Rationale – This is a quality assurance tool for review of the AME documentation as applicable.

Data - Is collected from 8500-8 medical certificate and status reports as entered into DIWS based on the medical review officer opinion.

Examples:

Yes

No

Not applicable

Was AME Comment Appropriate in Block 60? Yes
▼



138. Basic Med - Course Date (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the date that the BasicMed online assessment course was completed by the airman.

Rationale – This field is used to indicate the date that the BasicMed online assessment course was completed. We track both the online assessment and the CMEC date because those are generally completed on different dates.

Data - This data comes from the Airmen Registry Branch via their Airmen Inquiry tool.

Airmen Inquiry Tool: https://amsrvs.registry.faa.gov/airmeninquiry/

CourseDate 5/13/2017



139. Basic Med - CMEC Date (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the date that the BasicMed Comprehensive Medical Exam (CMEC) was completed by a physician.

Rationale – This field is used to indicate the date that the CMEC was completed. We track both the online assessment and the CMEC date because those are generally completed on different dates.

Data - This data comes from the Airmen Registry Branch via their Airmen Inquiry tool.

Airmen Inquiry Tool: https://amsrvs.registry.faa.gov/airmeninquiry/

CMEC Date 5/8/2017



140. Basic Med - Applied For (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is used to determine if an airman has applied for BasicMed. If this field is null the record was created before BasicMed became effective on May 1, 2017.

Rationale – This field was created to avoid having null values and to verify that the MANTRA user checked to see if the airman applied for BasicMed since not all pilots apply.

Data - This data comes from the Airmen Registry Branch via their Airmen Inquiry tool.

Airmen Inquiry Tool: https://amsrvs.registry.faa.gov/airmeninquiry/

More Information about BasicMed:

https://www.faa.gov/licenses certificates/airmen certification/basic med/





141. Reported Medications – Drug (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies medications the airman has disclosed to the FAA on the 8500-8 form.

Rationale – This is a field to capture all medications disclosed to the FAA to determine if the medications are a potential hazard to aviation safety.

Data - Is collected from 8500-8 medical certificate in DIWS as well as review of records in DIWS this field may include additional medications not identified by the airman on his 8500-.8.





142. Reported Medications – Dose (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the dosage of the medication(s) the airman has disclosed to the FAA on the 8500-8 form.

Rationale – This is a field to capture the dosage of medication(s) disclosed to the FAA to determine if the medications are a potential hazard to aviation safety.

Data - Is collected from 8500-8 medical certificate in DIWS. This field is often not populated since it is rarely filled out by the pilot or AME

Dose	



143. Reported Medications – Frequency (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the frequency of the medication(s) the airman has disclosed to the FAA on the 8500-8 form.

Rationale – This is a field to capture the frequency of medication(s) disclosed to the FAA to determine if the medications are a potential hazard to aviation safety.

Data - Is collected from 8500-8 medical certificate in DIWS. This field is often not populated since it is rarely filled out by the pilot or AME.

Frequency	



144. ICD Medical Codes- Date Completed (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the date that ICD coding was complete from the airman's FAA medical records located in DIWS

Rationale – This field is used for quality assurance for cases with completed ICD medical coding.

ICD	Medical	Codes	Date Completed:	

145. ICD Medical Codes – Coder's Name (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review coders work.

Coder's Name:	Ţ	
coder 3 Nume.	_	



146. ICD Medical Codes (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the International Classification of Diseases –10th Revision, Clinical Modification (USA) (ICD-10-CM) medical code(s), which is based on 2017 edition for the nomenclature. The information coded is based on the disease processes noted by the AME in DIWS. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale – Capturing the disease processes will allow greater identification of potential hazards to aviation safety. This field can also be utilized for quality assurance purposes in regards to documentation by the AME. The use of ICD-10-CM codes categorizes airman with the same disease processes without having to develop other method(s) of classification.

Data - Is collected from 8500-8 medical certificate in DIWS.

ICD N	Medical Codes	
IC	D Code	Description
▶ I	10.000	Hypertension Essential (primary)



147. Procedure Code – Date Completed (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identified the date that CPT coding was complete from the airman's FAA medical records located in DIWS.

Rationale – This field is used for quality assurance for cases with completed CPT procedure coding.

Procedure Codes	Date Completed:	
-----------------	-----------------	--

148. Procedure Codes- Coder's Name (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review the coder's work.

Coder's Name:	Ţ.	
Coder 5 Name.		



149. Procedure Codes (MANTRA – Medical Review and ICD Issues Tab)

Description – This field identifies the Current Procedural Terminology (CPT) procedure codes previously notated in DIWS. This is based on the 2017 Version of CPT codes. After the code and description are initially entered into MANTRA, the selection is autopopulating.

Rationale – Capturing the previous procedures will allow greater identification of potential hazards to aviation safety. This field can also be utilized for quality assurance purposes in regards to documentation by the AME. The use of CPT codes categorizes airman with the same procedures without having to develop other method(s) of classification.

Data - Is collected from 8500-8 medical certificate in DIWS.

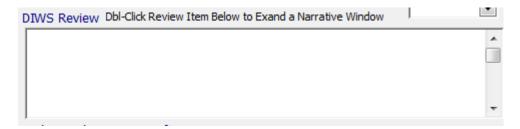
	13100 Repair, complex, trunk; 1.1 cm to 2.5 cm
ø	20250 Biopsy, vertebral body, open; thoracic

150. DIWS Review (MANTRA – Medical Review and ICD Issues Tab)

Description – This field tracks the Medical Review Physician's factual summary of all information about the airman that is maintained in DIWS. This field does not include opinion.

Rationale – To provide a synopsis of information that is maintained in DIWS.

Data - Is collected from 8500-8 medical certificate in DIWS.



151. Quality Analysis Review of DIWS (MANTRA – Medical Review and ICD Issues Tab)

Description – This field tracks the Medical Review Physician's factual summary of quality analysis issues identified by the reviewing physician for the information about the airman that is maintained in DIWS.

Rationale – To provide a synopsis of information that is maintained in DIWS.

Data - Is collected from 8500-8 medical certificate in DIWS.

Qı	QualityAnalysisReviewofDIWS								

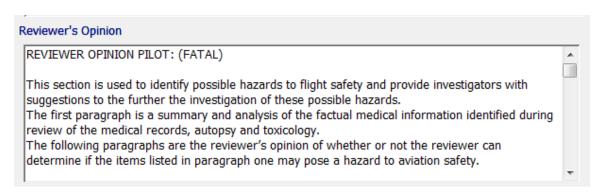


152. Reviewer's Opinion (MANTRA – Medical Review and ICD Issues Tab)

Description – This field tracks the Medical Review Physician's opinion of medication or disease process in DIWS or medical records submitted to DIWS that may/may not pose a hazard to aviation safety. It is updated each time the record is reviewed and contains the reviewer opinion of findings following review of the Medical records in DIWS, the toxicology results, the autopsy findings, and investigator provided information.

Rationale – To collect information identify potential hazards to aviation safety and provide investigators with suggestions to the further the investigation of these possible hazards.

Data - Is collected from 8500-8 medical certificate in DIWS, autopsy, toxicology and investigator provided information.



153. Reviewer's Recommendations (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is the Medical Review Officer's recommendations to accident investigators to assist in obtaining additional clarifying information about hazards or issues identified during the review of DIWS, the autopsy, toxicology or investigator provided information.

Rationale – To provide recommendations for gathering additional information to help with the investigation.

Data - Is collected from overall review of medical records in DIWS, autopsy, toxicology and investigator provided information.

Reviewer's Recommendations							

154. Potential Hazard to Aviation Safety (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is used to assess and classify the risk of the medical findings and the potential impact to aviation safety. The overall information is evaluated according to a Likert scale. Note: When the hazard number is assigned, the description is autopopulated.

Rationale –The assignment of the rating allows for review based on the number assigned to quantify certain risk of the airman to aviation safety.

Data - Is collected from overall review of medical records in DIWS.

Hazard Scale Examples:

- 0 = None
- 1 = Slight Hazard
- 2 = Low Probability of a Hazard
- 3 = Moderate Hazard
- 4 = Increased Hazard
- 5 = Significant Hazard
- 6 = Certain or serious Hazard
- 99.0 = Autopsy was not performed
- 99.1= Autopsy performed but documentation available is insufficient to determine hazard
- 99.2= Autopsy performed, medical condition(s) described but unable to determine hazard



155. Potential Hazard Comment (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is used for comments about the assignment of the potential hazard scale number.

Rationale – Provides a review as to why the hazard number was chosen.

Data - Is obtained from the Medical Review Officer's assessment.

P	Potential Hazard Comment:								

156. Pose Hazard to Public Safety (MANTRA – Medical Review and ICD Issues Tab)

Description – This field is based on the results of the hazard assessment to determine if there is a risk to public safety.

Rationale – To track incidents that could pose a hazard to public safety.

Data - Is obtained from the Medical Review Officer's assessment.

Exam	nl	Δ.
cxam	րլ	e.

Yes

No

Cannot determine

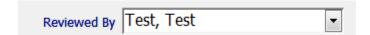




157. Reviewed By (MANTRA – Medical Review and ICD Issues Tab)

Description – A field to track the medical review officer who provides the initial medical case review.

Rationale – A way to provide quality assurance.





158. Review Completed Date (MANTRA – Medical Review and ICD Issues Tab)

Description – This tracks the date the Medical Review and ICD Issues page is completed.

Rationale – A way to provide quality assurance.

Review Completed Date 7/23/2010



159. Identified Medications - Drug (MANTRA – Investigator Findings Tab)

Description – This field tracks the medications that the investigator identifies and reports to the autopsy program team or medical review officer during the course of the investigation.

Rationale – To track medications found by the investigator during the investigation.

Data - Is obtained from the FAA/NTSB investigator-in-charge (IIC) or other investigator.



160. Identified Medications – Dose (MANTRA – Investigator Findings Tab)

Description – This field tracks the medication dose that the investigator has physically located at the accident site or family members have disclosed to the investigator. This field is not often filled out.

Rationale – To track the medication dose found by the investigator during the investigation.

Data - Is obtained from the FAA/NTSB investigator-in-charge (IIC).

Dose		



161. Identified Medications – Frequency (MANTRA – Investigator Findings Tab)

Description – This field tracks the frequency of the medication dose that the investigator has physically located at the accident site or family members have disclosed to the investigator. This field is often left blank.

Rationale – To track the medication frequency found by the investigator during the investigation.

Data - Is obtained from the FAA/NTSB investigator-in-charge (IIC).

Frequency	

162. Reviewer's Opinion (MANTRA – Investigator Findings Tab)

Description – This button brings up space for the reviewer to enter their opinions and their recommendations.

Rationale – Sent to investigators in the medical case review so they have a medical doctor's opinion and recommendation of the subject's health history.



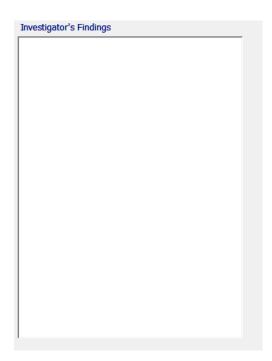
Opinions:		Recommendations:
Based on available history and physical examinations, this pilot had no known medical conditions that could pose a hazard to flight safety.	^	If impairment or incapacitation is a concern in this accident, investigators should contact family and private health care professionals and discuss medical history, any health concerns, and recent physician visits.
	+	

163. Investigator Findings (MANTRA – Investigator Findings Tab)

Description – This field tracks the investigator provided information and can include witness statement, interviews from the family about the medical history of the pilot or medications located at the scene.

Rationale – To track information gathered by the investigator from the scene.

Data - Is obtained from the FAA/NTSB IIC or other investigative agencies.





164. Identified Medical Conditions – Date Completed (MANTRA – Investigator Findings Tab)

Description – This field identifies the date that ICD coding was complete from the based on information provided from the Investigator.

Rationale – This field is used for quality assurance for cases with completed ICD medical coding.

'		
Identified Medical Conditions	Date Completed:	

165. Identified Medical Conditions – Coder's Name (MANTRA – Investigator Findings Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review coders work.

Coder's Name:	Ţ.	

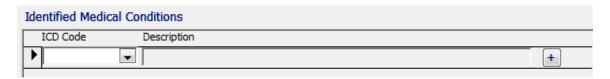


166. Identified Medical Conditions - ICD Code (MANTRA – Investigator Findings Tab)

Description – This field identifies the International Classification of Diseases –10th Revision, Clinical Modification (USA) (ICD-10-CM) medical code(s), which is based on the 2017 edition for the nomenclature. The information coded is based on the disease processes noted by the AME in DIWS. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale – Capturing the disease processes will allow greater identification of potential hazards to aviation safety. This field can also be utilized for quality assurance purposes in regards to documentation by the AME. The use of ICD-10-CM codes categorizes airman with the same disease processes without having to develop other method(s) of classification.

Data - Is collected from FAA or NTSB Investigators.





167. Procedure Codes – Date Completed (MANTRA – Investigator Findings Tab)

Description – This field identified the date that CPT coding was complete from the airman's FAA medical records located in DIWS.

Rationale – This field is used for quality assurance for cases with completed CPT procedure coding.

Procedure Codes	Date Completed:	
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168. Procedure Codes – Coder's Name (MANTRA – Investigator Findings Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review the coder's work.

Coder's Name:	Ţ.	
Coder 5 Name.		



169. Procedure Code and Description (MANTRA – Investigator Findings Tab)

Description – This field identifies the Current Procedural Terminology (CPT) procedure codes previously notated in DIWS. This is based on the 2017 Version of CPT codes. After the code and description are initially entered into MANTRA, the selection is autopopulating.

Rationale – Capturing the previous procedures will allow greater identification of potential hazards to aviation safety. This field can also be utilized for quality assurance purposes in regards to documentation by the AME. The use of CPT codes categorizes airman with the same procedures without having to develop other method(s) of classification.

Data – Is collected from FAA or NTSB Investigators.

13100 Repair, complex, trunk; 1.1 cm to 2.5 cm	
Biopsy, vertebral body, open; thoracic	

170. Potential Hazard to Aviation Safety (MANTRA – Investigator Findings Tab)

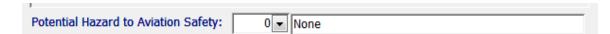
Description – This field is used to assess and classify the risk of the medical findings and the potential impact to aviation safety. The overall information is evaluated according to a Likert scale. Note: When the hazard number is assigned, the description is autopopulated.

Rationale –The assignment of the rating allows for review based on the number assigned to quantify certain risk of the airman to aviation safety.

Data - Is obtained from the investigator findings (i.e., private medical records, medications found at the scene or interview with family).

Hazard Scale Examples:

- 0 = None
- 1 = Slight Hazard
- 2 = Low Probability of a Hazard
- 3 = Moderate Hazard
- 4 = Increased Hazard
- 5 = Significant Hazard
- 6 = Certain or serious Hazard
- 99.0 = Autopsy was not performed
- 99.1= Autopsy performed but documentation available is insufficient to determine hazard
- 99.2= Autopsy performed, medical condition(s) described but unable to determine hazard



171. Potential Hazard Comment (MANTRA – Investigator Findings Tab)

Description – This field is used for comments about the assignment of the potential hazard scale number.

Rationale – Provides a review as to why the hazard number was chosen.

Data - Is obtained from the Medical Review Officer's assessment.

Potential Hazard Comment	:



172. Autopsy Performed (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to track if an autopsy is performed. We obtain this information the investigators assigned to the case.

Rationale – This field is used for quality assurance for tracking of autopsy reports.

Note: Only the NTSB investigator or the FAA investigator has the authority or subpoena power to order an autopsy.





173. Autopsy Request Date (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to track the date an autopsy report is requested from the appropriate medical examiner/coroner.

Rationale – This field is to track the turnaround time for receipt of autopsy report.

Autopsy Request Date 4/2/2013



174. Autopsy Received Date (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to track the date an autopsy report is received from the appropriate Medical Examiner/Coroner.

Rationale – This field is to track the turnaround time for receipt of autopsy report.

Autopsy Received Date	



175. Autopsy Date of Service (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to track/record the date of the autopsy.

Rationale – This field shows the date of autopsy to calculate how long it took from date of autopsy to receipt of autopsy report.

	Autopsy Date Of Service	
--	-------------------------	--



176. Cost of Autopsy (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to track/record the cost of the autopsy.

Rationale – This field shows the cost of autopsy to assist the program management staff with funding.

Cost Of Autopsy \$0.00



177. Payment Sent Date (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to record the date payment was sent to the program management staff.

Rationale – This date is utilized for tracking when the payment was sent for approval.



178. Notes (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to input notes pertinent to the autopsy.

Rationale – This allows for information such as passenger information or why an autopsy was not performed. Also, used to track notes for autopsy payment sent to the program management office.

Notes	

179. Autopsy Review – Type of Report (MANTRA – Autopsy Information and Review Tab)

Description – This is used to notate the type of report received from the coroner/medical examiner.

Rationale – Not all cases have a full autopsy so this is used to track if it was a full autopsy, external exam, limited autopsy, etc.

Data – Information is input by the coder based on the content of the report received from the Medical Examiner or coroner.

Examples:

Full Autopsy External Exam No Autopsy Report Incomplete Report





180. Autopsy Review – Manner of Death (MANTRA – Autopsy Information and Review Tab)

Description – This field tracks the manner of death as classified by the Medical Examiner or Coroner.

Rationale – This field allows for classification of the manner of death for the pilot population.

Data- Is obtained from the autopsy or investigative report from the Medical Examiner or Coroner.

Example:

Accident

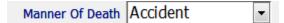
Homicide

Natural

None Specified

Suicide

Undetermined





181. Autopsy Review – Stated Cause of Death (MANTRA – Autopsy Information and Review Tab)

Description – This field tracks the autopsy cause of death as classified by the Medical Examiner or Coroner.

Rationale – This field allows for classification of the specific cause of death in the pilot population.

Data - Is obtained from the autopsy or investigative report from the Medical Examiner or Coroner.





182. Autopsy Review – Main Cause of Death (MANTRA – Autopsy Information and Review Tab)

Description – This field tracks the autopsy main cause of death.

Rationale – This field allows for classification of the main cause of death in the pilot population. This classification is more broad then the stated cause of death.





183. ICD Medical Codes – Date Completed (MANTRA – Autopsy Information and Review Tab)

Description – This field identifies the date that ICD coding was complete from the airman's autopsy report provided by the coroner/medical examiner.

Rationale – This field is used for quality assurance for cases with completed coding.

ICD Medical Codes Date	Completed:
------------------------	------------



184. ICD Medical Codes – Coder's Name (MANTRA – Autopsy Information and Review Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review coders work.

Coder's Name:	Ţ.	
Coder 5 Name.	_	



185. ICD Medical Codes (MANTRA – Autopsy Information and Review Tab)

Description – This field identifies the International Classification of Diseases –10th Revision, Clinical Modification (USA) (ICD-10-CM) medical code(s), which is based on 2017 edition for the nomenclature. The information coded is based on the disease processes noted in the autopsy report by the coroner/medical examiner. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale – Capturing the disease processes will allow greater identification of potential hazards to aviation safety. The use of ICD-10-CM codes categorizes airman with the same disease processes without having to develop other method(s) of classification.

Data - Is collected from the autopsy report.



186. Procedure Codes – Date Completed Code (MANTRA – Autopsy Information and Review Tab)

Description – This field identified the date that CPT coding was complete from the autopsy report provided by the coroner/medical examiner.

Rationale – This field is used for quality assurance for cases with completed coding.

187. Procedure Codes – Coder's Name (MANTRA – Autopsy Information and Review Tab)

Description – This field identifies the autopsy team staff that coded the record.

Rationale – This field is used for quality assurance to review the coder's work.

Coder's Name:	▼.



188. Procedure Codes (MANTRA – Autopsy Information and Review Tab)

Description – This field identifies the Current Procedural Terminology (CPT) procedure codes notated in the autopsy report provided by the coroner/medical examiner. This is based on the 2017 Version of CPT codes. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale – Capturing the previous procedures will allow greater identification of potential hazards to aviation safety. The use of CPT codes categorizes airman with the same procedures without having to develop other method(s) of classification.

Data - Is collected from the autopsy report.



189. Reviewer's Comments (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to collect information from the autopsy. This is a summary of the autopsy and includes pertinent positive and negative autopsy factual findings.

Rationale – This field is used to record factual information to help the reviewer determine if pre-existing medical conditions were present in the accident victim.

Data – Is gathered from the autopsy report from the medical examiner or coroner.



190. Potential Hazard to Aviation Safety (MANTRA – Autopsy Information and Review Tab)

Description – This field is used to assess and classify the risk of the autopsy findings and the potential impact to aviation safety. The overall information is evaluated according to a Likert scale. Note: When the hazard number is assigned, the description is autopopulated.

Rationale –The assignment of the rating allows for review based on the number assigned to quantify certain risk of the airman to aviation safety. Identified diagnoses on autopsy but not previously disclosed on the 8500-8 that would have posed a potential hazard to aviation safety.

Data - Is obtained from the autopsy findings or medical examiner/coroner report(s).

Hazard Scale Examples:

- 0 = None
- 1 = Slight Hazard
- 2 = Low Probability of a Hazard
- 3 = Moderate Hazard
- 4 = Increased Hazard
- 5 = Significant Hazard
- 6 = Certain or serious Hazard
- 99.0 = Autopsy was not performed
- 99.1= Autopsy performed but documentation available is insufficient to determine hazard
- 99.2= Autopsy performed, medical condition(s) described but unable to determine hazard





191. Potential Hazard Comment (MANTRA – Autopsy Information and Review Tab)

Description – This is a field to collect comments for the assessment to the Potential Hazard Scale.

Rationale – These are the Medical Review Officer's comments in regards to why a particular hazard number was chosen.

Based on autopsy examination; due to severe trauma the brain was not available for examination and this reviewer is
unable to determine if this pilot had any pre-existing



192. Reviewed By (MANTRA – Autopsy Information and Review Tab)

Description – This tracks who the performed the Autopsy review.

Rationale – A way to provide quality assurance.

Reviewed By	•



193. Autopsy Review Completed Date (MANTRA – Autopsy Information and Review Tab)

Description – This tracks the date the Autopsy Information Review page is completed.

Rationale – A way to provide quality assurance.

Autopsy Review Completed Date

4/2/2013



194. Tox Flo Case # (MANTRA –Subject Toxicology Review Tab)

Description – Is a display field that provides the **c**ase number that is generated from Toxicology – ToxFlo Database.

Rationale – Provides a numerical identifier which acts as an accession number from toxicology.

ToxFLO Case # 201200017001



195. Find Tox Flo Case # (MANTRA –Subject Toxicology Review Tab)

Description – Is a search field that locates by name (pilot/passenger) the **c**ase number that is generated from Toxicology – ToxFlo Database. The pilot/passenger is selected using the arrow button. This information locates the case number which is then displayed in the Tox Flo Case # field.

Rationale – Provides a look-up table to select the pilot/passenger to generate the Tox-Flo accession #. The use of an accession number helps to protect data privacy and is used for quality assurance in the toxicology lab.

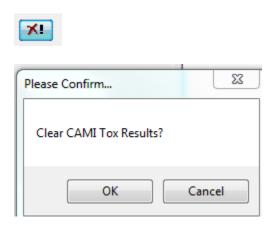
Find ToxFLO Case#



196. Delete CAMI Tox Results (MANTRA –Subject Toxicology Review Tab)

Description – Is a delete key to remove the CAMI Tox Results.

Rationale —This key is used to remove toxicology results that may have been inadvertently placed on the wrong pilot/passenger. When utilizing this function, you will need to verify that you want to clear or delete the results.





197. Refresh From Tox Case# (MANTRA –Subject Toxicology Review Tab)

Description – Is a key to refresh the CAMI Tox Results.

Rationale – This key is used to refresh toxicology results for the subject of the accident.

Refresh From Tox Case#



198. Result Count (MANTRA –Subject Toxicology Review Tab)

Description – Is a display field that shows the total number of results of toxicology testing.

Rationale –Displays the total number of toxicology results.

Result Count:	
recourt country	



199. CAMI Tox Results (MANTRA –Subject Toxicology Review Tab)

Description – A display field that lists all results from specimens analyzed on pilot/passengers.

Rationale – Provides a way to look at toxicology results without having to return to the sole source document.

Data – Is obtained from the Tox-Flo Database.

CAMI Tox Results		



200. CAMI Tox Comments (MANTRA -Subject Toxicology Review Tab)

Description – A comment field for the medical review officer to provide analysis for the toxicology assessment. This field contains the reviewing physician's toxicology factual summary from the report sent to the Investigator

Rationale – A summary box that details tests and quality of specimens.

Data – Information is obtained from the toxicology report.



201. Tox Data Summary (MANTRA –Subject Toxicology Review Tab)

Description – This is a field that provides a summary of the total toxicology report.

Rationale – To summarize the findings of the toxicology report.

Examples:

Not Collected

Negative

Positive Alcohol

Positive Acceptable Prescription Medication

Postive Unacceptable Prescription Medication

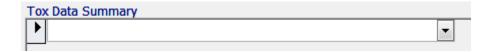
Positive for Acceptable Over the Counter Medication

Positive for Unacceptable Over the Counter Medication

Positive for Illicit Drug

Positive Alcohol some or all of the ethanol may be from sources other than ingestion.

Positive Alcohol most likely from sources other than ingestion



202. Reviewer's Opinion (MANTRA -Subject Toxicology Review Tab)

Description – This is a text field for the Medical Review Officer to enter opinions and recommendations regarding toxicology. This reopens the fields found on the medical review page so opinions regarding the entire case can be updated.

Rationale – A way to provide a summary of the medical case review regarding toxicology and any recommendations to the investigator(s).

Data – The information is obtained from the medical case review document.







203. Has External Tox (MANTRA –Subject Toxicology Review Tab)

Description – This is a yes or no field to indicated that external toxicology was performed.

Rationale – A way to verify that external toxicology was performed.





204. External Tox Results Drug (MANTRA -Subject Toxicology Review Tab)

Description – This field is populated from the drug look-up table based on the results of the outside toxicology report.

Rationale – A way to classify the results of the external toxicology report.



205. External Tox Results Units (MANTRA –Subject Toxicology Review Tab)

Description – This field is populated from the drug look-up table based on the results of the outside toxicology report indicating the measurements/units used in testing for the drugs.

Rationale – A way to classify the results of the external toxicology report.

Units	



206. External Tox Results Quantity Found (MANTRA –Subject Toxicology Review Tab)

Description – This field is manually entered from the external toxicology results and is only a positive result. If the field is a zero, then no quantitation was performed.

Rationale – A way to classify the results of the external toxicology report.

Qty Foun	d
	0



207. External Tox Results Specimen (MANTRA –Subject Toxicology Review Tab)

Description – This field delineates the specimen from which the sample from which the toxicology was obtained.

Rationale – A way to track the type of specimens submitted for toxicology.

Data – The information is obtained from external toxicology reports which may have been performed at the time of autopsy.

Specimen	

208. External Tox Summary (MANTRA –Subject Toxicology Review Tab)

Description – A comment field for the medical review officer to provide analysis for the toxicology assessment.

Rationale – A summary box that details tests and quality of specimens.

Data – The information is obtained from external toxicology reports which may have been performed at the time of autopsy.



209. Potential Hazard to Aviation Safety (MANTRA –Subject Toxicology Review Tab)

Description – This field is used to assess and classify the risk of the toxicology findings of the CAMI and/or external toxicology report and the potential impact to aviation safety. The overall information is evaluated according to a Likert scale. Note: When the hazard number is assigned, the description is auto-populated.

Rationale –The assignment of the rating allows for a review based on the number assigned to quantify certain risk of the airman to aviation safety. Identified findings on toxicology reports may or may not pose a hazard to aviation safety. The evaluation is based on the medical review officer's opinion.

Data - Is obtained from the toxicology findings from the CAMI and/or external toxicology report(s)

Hazard Scale Examples:

- 0 = None
- 1 = Slight Hazard
- 2 = Low Probability of a Hazard
- 3 = Moderate Hazard
- 4 = Increased Hazard
- 5 = Significant Hazard
- 6 = Certain or serious Hazard
- 99.0 = Autopsy was not performed
- 99.1= Autopsy performed but documentation available is insufficient to determine hazard
- 99.2= Autopsy performed, medical condition(s) described but unable to determine hazard





210. Potential Hazard Comment (MANTRA –Subject Toxicology Review Tab)

Description – This is a field to collect comments for the assessment to the Potential Hazard Scale.

Rationale – These are the Medical Review Officer's comments in regards to why a particular hazard number was chosen.

	,,
Potential Hazard Comment:	
rotenda nazara comment.	



211. Reviewed By (MANTRA – Subject Toxicology Review Tab)

Description – This tracks who the performed the toxicology review.

Rationale – A way to provide quality assurance.

Reviewed By	T

212. Tox Review Completed Date (MANTRA –Subject Toxicology Review Tab)

Description – This tracks the date the Subject Toxicology Review page is completed.

Rationale – A way to provide quality assurance.

Tox Review Completed Date	



213. AIS Version (MANTRA – AIS Coding Tab)

Description – This field identifies the Abbreviated Injury Scaling (AIS) coding system version designed by the Association for the Advancement of Automotive Medicine (AAAM).

Rationale – This is to inform MANTRA users which version of AIS codes are being used in the database.





214. ISS Score (MANTRA – AIS Coding Tab)

Description - This field identifies a calculated way to evaluate the severity of injury in cases where more than one injury pattern are noted using the Abbreviated Injury Scaling (AIS) coding system designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The information coded is based on the autopsy reports provided by medical examiners and coroners. This value takes into account the summation of the squares of the highest three injury score values of the ISS Body Regions for calculation (A2+B2+C2=ISS Score). This calculation is manually calculated and entered.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.

ISS score



215. MAIS Score (MANTRA – AIS Coding Tab)

Description - This field identifies the highest overall severity of injury where more than one injury pattern is noted using the Abbreviated Injury Scaling (AIS) coding system designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The information coded is based on the autopsy reports provided by medical examiners and coroners. This value is manually determined and entered.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.

MAIS score



216. AIS Code & Description (MANTRA – AIS Coding Tab)

Description - This field identifies the Abbreviated Injury Scaling (AIS) coding system designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The Information coded is based on the autopsy reports provided by medical examiners and coroners. This coding method looks at injury patterns to determine survivability based on the individual injury. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.

AIS Code:	AIS D	Description:
▶ 010010.5	→ Hypot	thermia (primary injury, environmental, not treatment-related or sequela), <28 degrees C (<82 degrees F)



217. Localizer 1 & Description (MANTRA – AIS Coding Tab)

Description - This field helps to provide further specificity of the location of injury using the Abbreviated Injury Scaling (AIS) coding system designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The information coded is based on the autopsy reports provided by medical examiners and coroners. This coding method looks at injury patterns to determine survivability based on the individual injury. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.





218. Localizer 2 & Description (MANTRA – AIS Coding Tab)

Description - This field helps to provide further specificity of the location of injury using the Abbreviated Injury Scaling (AIS) coding system designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The information coded is based on the autopsy reports provided by medical examiners and coroners. This coding method looks at injury patterns to determine survivability based on the individual injury. After the code and description are initially entered into MANTRA, the selection is auto-populating.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.

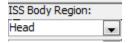




219. ISS Body Region (MANTRA – AIS Coding Tab)

Description - This field identifies six different grouped body regions for ISS scoring system using the Abbreviated Injury Scaling (AIS) coding designed by the Association for the Advancement of Automotive Medicine (AAAM) which is based on the 2015 updated edition for the nomenclature. The information coded is based on the autopsy reports provided by medical examiners and coroners. This system classifies codes into the following six body regions: head and neck, face, chest, abdominal and pelvic contents, extremities and pelvic girdle, and external. The highest three regions are used for the ISS Score.

Rationale - Capturing the injury patterns will allow greater identification of potential hazards to aviation safety.





220. AIS Completed On (MANTRA – AIS Coding Tab)

Description – Date the section is completed.

Rationale – It is important to utilize this field as it closes out the section and will function as a time/date stamp. This also acts as a reminder to ensure all fields are completed before exiting this section.

AIS Completed On	
AIS Completed On	



221. Completed By (MANTRA – AIS Coding Tab)

Description – This field identifies the autopsy team staff that completed the AIS section of the record.

Rationale – This field is used for quality assurance to review the coder's work.





222. Recommendations (MANTRA – Recommendations Tab)

Description – A text field to include information about the initial Q/A of the accident and subject demographics.

Rationale – A way to indicate the initial Q/A process has been completed





223. QA Completed Date (MANTRA – Recommendations Tab)

Description – This tracks the date the final QA is completed.

Rationale – A way to provide quality assurance.

QA Completed On	
,	(Dbl-dick for today)

224. QA Completed By (MANTRA – Recommendations Tab)

Description – This tracks the person that completed the final QA.

Rationale – A way to provide quality assurance.



225. Reviewer's Opinion (MANTRA – Recommendations Tab)

Description – This is a text field for the Medical Review Officer to enter opinions and recommendations regarding toxicology.

Rationale – A way to provide a summary of the medical case review regarding toxicology and any recommendations to the investigator(s).

Data – The information is based on the researcher's opionion and recommendations.



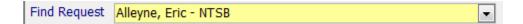
Opinions:	Recommendations:
_	



226. Find Request (MANTRA – Request Log Tab)

Description – This is a display field that shows the investigator/requestor name once all of the demographic fields for the investigator have been completed.

Rationale – This is a tool to view the investigator name.



227. Date Requested (MANTRA – Request Log Tab)

Description – This field identifies the date of request for release of information regarding outside autopsy and/or toxicology findings.

Rationale – To create an audit trail for release of information which is the date the request is created for outside autopsy and/or toxicology findings.

Note: See work guidance addendum for release of autopsy reports.

Date Requested



228. Add Record (MANTRA – Request Log Tab)

Description – Button to add new record to the request log.

Rationale – To keep track of all requests and data sent according to request.





229. Last Name (MANTRA –Request Log Tab)

Description – This field identifies the investigator and/ or staff last name that requests a copy of the autopsy and/or toxicology findings.

Rationale – To create an audit trail for release of information.

Data – Obtained from the 8020 – 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center, and from staff contact information.



230. Log First Name (MANTRA – Request Log Tab)

Description – This field identifies the investigator and/ or staff first name that requests a copy of the autopsy and/or toxicology findings.

Rationale – To create an audit trail for release of information.

Data – Obtained from the 8020 – 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center, and from staff contact information.

First	

231. Organization (MANTRA – Request Log Tab)

Description – This field indicates the agency which the inspector or staff member is affiliated with.

Rationale – To continue the identification of the inspector or staff member.

Data - Obtained from the 8020 - 9, Regional Operation Center (ROC) and by contacting the FSDO or the NTSB COM Center, and from staff contact information.

Organization	

232. Phone (MANTRA – Request Log Tab)

Description – This field displays office contact information for the Inspector and/or staff member.

Rationale – To provide an avenue of communication with the inspector and/or staff member.

Data – Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory, and from staff contact information.

Phone

233. Cell Phone (MANTRA – Request Log Tab)

Description – This field displays additional contact information for the Inspector and/or staff member.

Rationale – To provide an avenue of communication with the inspector and/or staff member.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory and from staff contact information.

Cell	

234. Fax (MANTRA – Request Log Tab)

Description - This field displays additional contact information for the Inspector and/or staff member.

Rationale – To provide an avenue of communication with the inspector and/or staff member.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory and from staff contact information.

_	
Fax	

235. E-Mail (MANTRA – Request Log Tab)

Description - This field displays additional contact information for the inspector.

Rationale – To provide an avenue of communication with the inspector.

Data - Obtained from the NTSB COM Center, FSDO and the FAA internal employee directory and from staff contact information.

Email	
LIIIGII	



236. Update LUT(look-up table) (MANTRA – Request Log Tab)

Description - This button adds the contact information to the look-up table in the database.

Rationale – Updates information to the database.

Update LUT



237. Notes (MANTRA –Request Log Tab)

Description - This field is free text to add notes regarding the release of information.

Rationale – To make notes regarding the type(s) of information released.

Notes			
	1		

238. Date Sent (MANTRA – Request Log Tab)

Description - This field is the date the report(s) are sent to the appropriate requestor.

Rationale – To provide an audit trail for the information released and to close the information request log page.

Date Sent	



239. By Whom (MANTRA – Request Log Tab)

Description - This field is the staff member that completes the release of information.

Rationale — To provide an audit trail for the information released and to close the information request log page.

By Whom	Hunn, Heather	•



References -

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