# **Project 1 Milestone Report 3**

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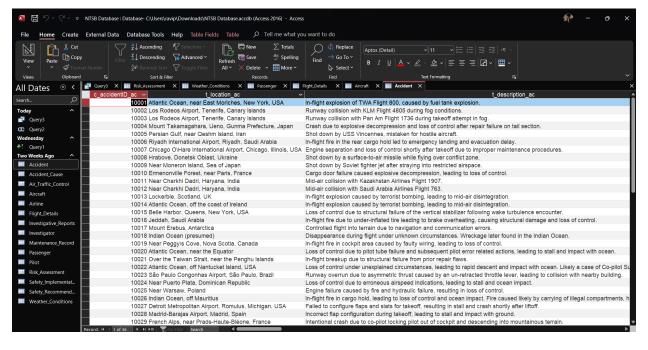
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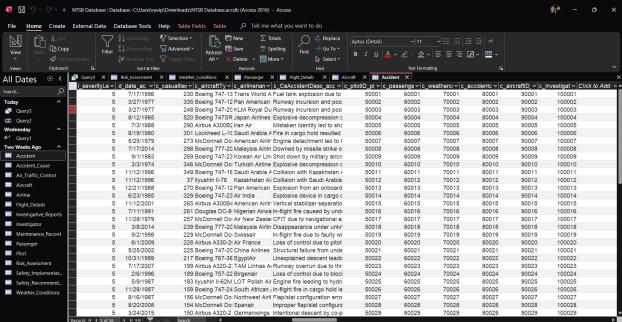
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# **Database Tables:**

AUTHORS NOTE: ALL DATA TABLES HAVE 36 ENTRIES EACH

• Accident

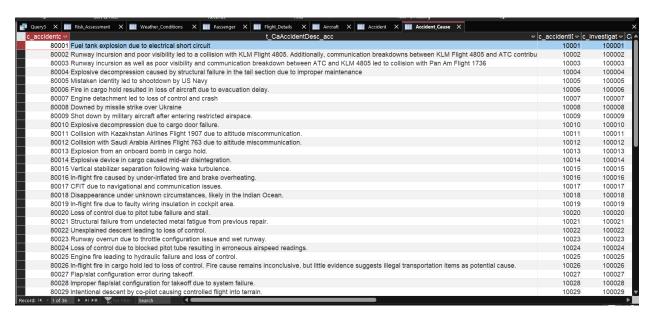




The Accident table serves as the main data source and central hub,
 providing core information like the what, where, and why of each
 accident. This context is critical for generating meaningful reports, as it

allows users to understand the foundational information behind each investigation. The table currently has 36 entries and 15 columns.

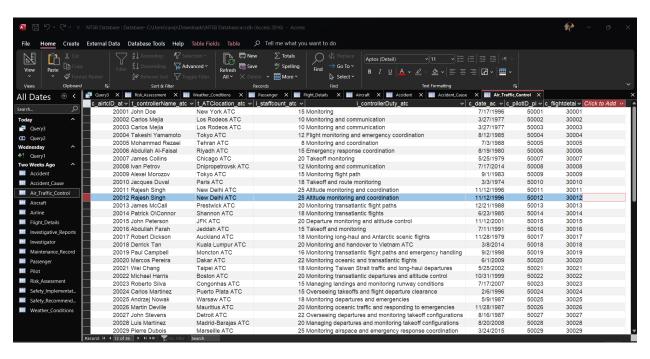
## Accident\_Cause



- This is the accident cause table; this displays the cause of each accident as well as the appropriate ID of the accident its displayed and the investigator associated with. This helps users who wish to make use of the cause of these accidents to assist in their investigation of new or current

investigations as well as measure trends of these accidents to determine any new modern rule changes that need to be made to further improve aviation safety. This entry has 36 entries, 4 rows.

## Air\_Traffic\_Control



- The Air Traffic Control table provides details on the ATC personnel, technology, and actions relevant to each accident. This information aids

investigators in understanding the role of ATC during the accident, the last known route, and the communication that occurred, which helps streamline the investigation process. The table has 36 entries and 8 columns.

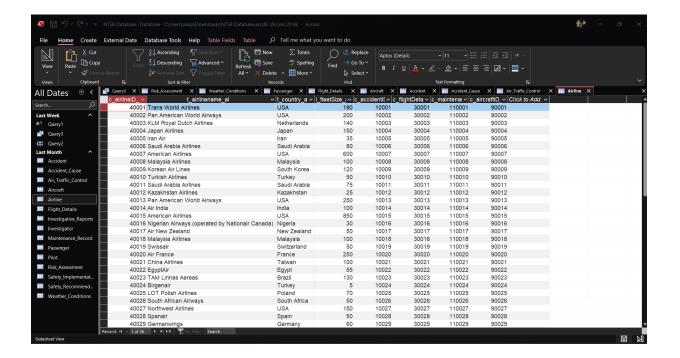
#### • Aircraft



- The Aircraft table captures details on the aircraft type, manufacturer, and specific aircraft involved in each accident. This information helps

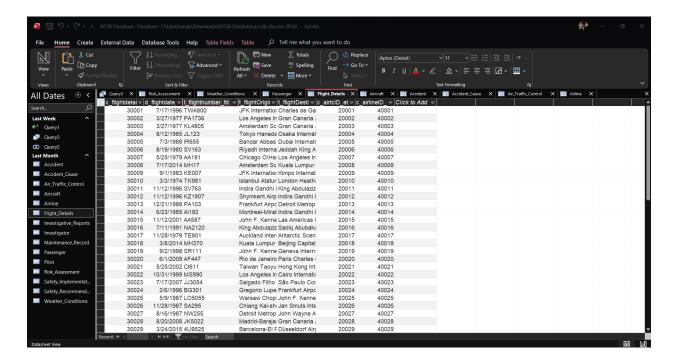
investigators identify trends related to aircraft models, potentially highlighting design issues. It also provides a direct link to the maintenance record for further insights into the aircraft's history. The table has 36 entries and 13 columns.

## • Airline



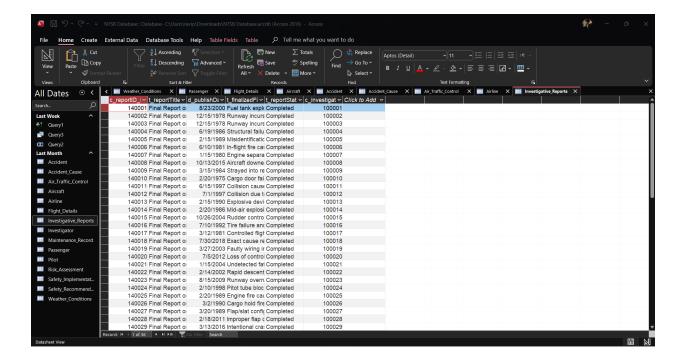
- The Airline table lists airlines involved in accidents, including their country of origin. This helps investigators analyze safety practices across airlines and assess any safety-related bans in specific countries. It also offers insights into factors like country-specific aircraft production standards. The table has 36 entries and 8 columns.

## • Flight\_Details



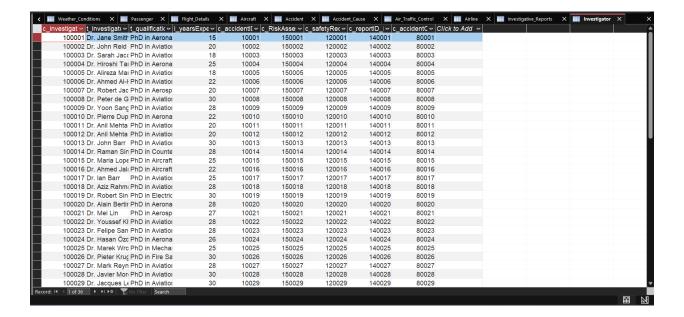
The Flight Details table records the origin and destination of each accident flight, providing essential context for investigators. This information helps pinpoint potential issues in pre-flight operations and identify factors that may have contributed to the incident. The table has 36 entries and 7 columns.

• Investigative Reports



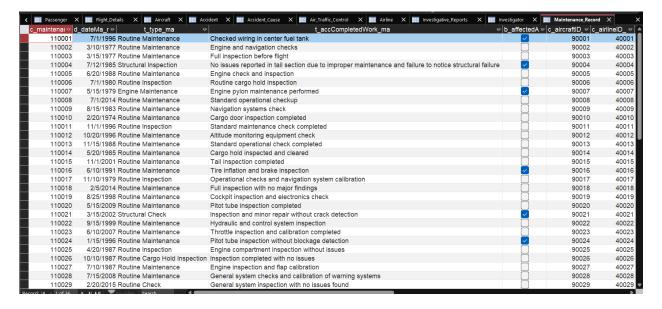
The Investigative Reports table logs final reports for each accident, including titles, publication dates, and completion status. It provides a record of completed investigations, allowing users to access historical findings and see who conducted each investigation and use them as a reference. With 36 entries and 6 columns, it ensures finalized reports are easily accessible for review

#### • Investigator



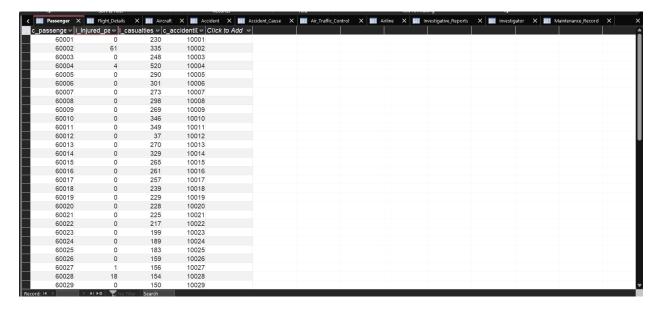
The Investigator table is focused on the investigator charged in investigating these accidents. It highlights to users their names, qualifications and experience. This is useful for users seeking an audience with these specific investigators for relevant information, as well as determining trends to improve investigator selection and qualifications, and so forth. This has 9 rows and 36 entries.

## • Maintenance\_Record

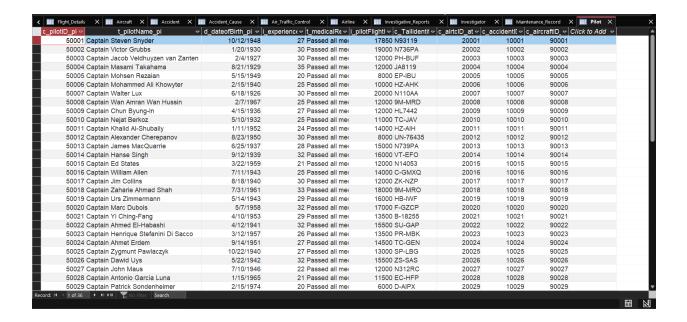


- The Maintenance Record table logs maintenance activities for each accident aircraft before its final flight, including the type of work, completion details, timing, and potential impact on the accident. This helps investigators assess whether maintenance issues contributed to accidents and identify areas for process improvements. The table has 36 entries and 7 columns.

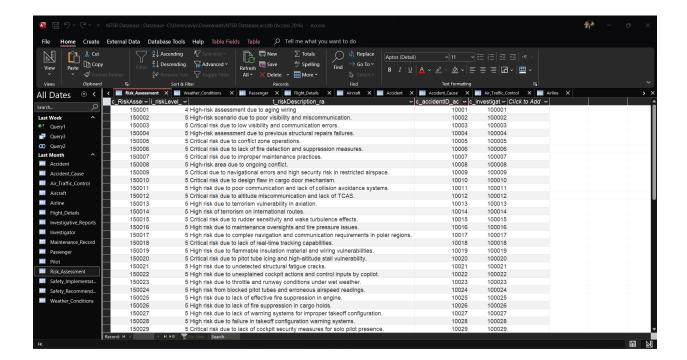
## Passenger



The Passenger table records information on casualties and injuries for each accident, linked to specific accident IDs. This data helps investigators assess the impact of accidents on passengers and supports analyses related to passenger safety trends and other key metrics. This table provides a clear view of the human toll associated with each incident, aiding in comprehensive investigation efforts. It has 4 rows and 36 entries.

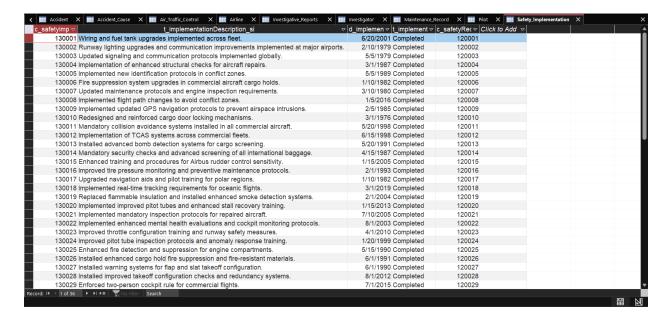


- The Pilot table identifies the pilot involved in each accident, detailing their date of birth, experience, medical records, and flight hours on the aircraft type. This information helps investigators assess if the pilot's experience or history might have influenced the accident or if pilot error was a contributing factor. The table has 36 entries and 10 columns.

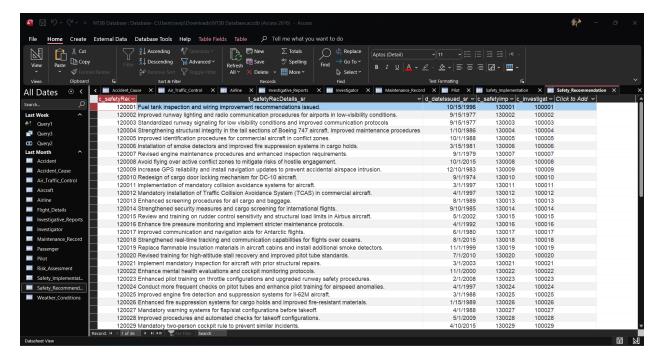


The Risk Assessment table describes the high-risk factors identified in each accident, including risk levels and specific descriptions. This information is crucial for investigators to understand potential hazards or vulnerabilities that may have contributed to an accident. It allows for targeted analysis of high-risk areas, helping to guide improvements in safety protocols and reduce chances of future incidents. The table has 5 rows and 36 entries.

Safety\_Implementation

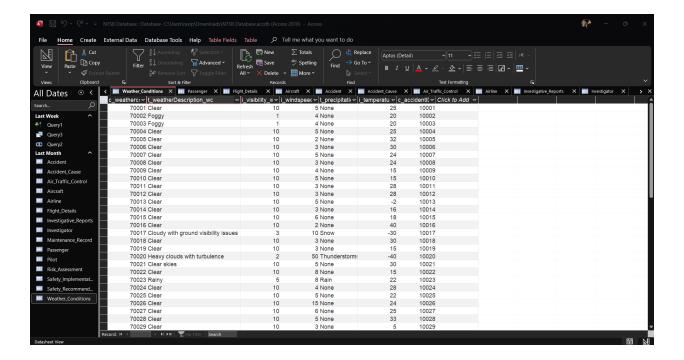


The Safety Implementation table records safety improvements applied in response to specific accident findings, including descriptions, implementation dates, and completion status. This information helps investigators track the actions taken to mitigate identified risks, evaluate the effectiveness of safety protocols as well as compliance with these protocols, and identify areas for further improvement to make integration more seamless. The table has 36 entries and 5 rows.



This is the Safety Recommendation table. This table documents suggested safety measures issued in response to accident investigations, including detailed descriptions, issue dates, and links to relevant safety implementations. This table is essential for tracking recommendations aimed at addressing identified risks and guiding future improvements in aviation safety standards. It allows investigators to review past recommendations, assess their impact, and ensure that newly identified or similar vulnerabilities are addressed proactively. The table has 36 entries and 5 rows.

#### • Weather Conditions



The Weather Conditions table provides detailed records of weather at the time of each accident, including visibility, wind speed, precipitation, temperature, and specific weather descriptions. This data is crucial for investigators to assess how weather factors may have influenced the accident, supporting analyses on environmental impact and aiding in trend identification for accident prevention. The table has 36 entries and 7 columns.

## **SQL DDL Code -Insert Statements**

SQL Inserts:

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10001, 'Atlantic Ocean, near East Moriches, New York, USA', 'In-flight explosion of TWA Flight 800, caused by fuel tank explosion.', 5, '1996-07-17', 230, 'Boeing 747-131', 'Trans World Airlines', 'Fuel tank explosion due to electrical short circuit', 50001, 60001, 70001, 80001, 90001, 100001);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60001, 0, 230, 10001);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20001, 'John Doe', 'New York ATC', 15, 'Monitoring', '1996-07-17', 50001, 30001);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90001, 'Boeing', 1971, 1, 25, 1, 230, 'N93119', 'Boeing 747-131', 40001, 10001, 50001, 110001);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50001, 'Captain Steven Snyder', '1948-10-12', 27, 'Passed all medical checks', 17850, 'N93119', 20001, 10001, 90001);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120001, 'Fuel tank inspection and wiring improvement recommendations issued.', '1996-10-15', 130001, 100001);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140001, 'Final Report on TWA Flight 800 Accident', '2000-08-23', 'Fuel tank explosion caused by electrical short circuit.', 'Completed', 100001);

```
INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
```

VALUES (100001, 'Dr. Jane Smith', 'PhD in Aeronautical Engineering', 15, 10001, 150001, 120001, 140001, 80001);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80001, 'Fuel tank explosion due to electrical short circuit', 10001, 100001);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130001, 'Wiring and fuel tank upgrades implemented across fleet.', '2001-06-20', 'Completed', 120001);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70001, 'Clear', 10, 5, 'None', 25, 10001);

```
INSERT INTO Risk_Assessment (c_RiskAssessmentID_ra, i_riskLevel_ra, t_riskDescription_ra, c_accidentID_ac, c_investigatorID_in)
```

VALUES (150001, 4, 'High-risk assessment due to aging wiring', 10001, 100001);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30001, '1996-07-17', 'TWA800', 'JFK International Airport, New York', 'Charles de Gaulle Airport, Paris', 20001, 40001);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40001, 'Trans World Airlines', 'USA', 190, 10001, 30001, 110001, 90001);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110001, '1996-07-01', 'Routine Maintenance', 'Checked wiring in center fuel tank', TRUE, 90001, 40001);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10002, 'Los Rodeos Airport, Tenerife, Canary Islands', 'Runway collision with KLM Flight 4805 during fog conditions.', 5, '1977-03-27', 335, 'Boeing 747-121', 'Pan American World Airways', 'Runway incursion and poor visibility as well as communication breakdown between KLM Flight 4805 and ATC led to collision with KLM Flight 4805', 50002, 60002, 70002, 80002, 90002, 100002);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60002, 61, 335, 10002);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20002, 'Carlos Mejia', 'Los Rodeos ATC', 10, 'Monitoring and communication', '1977-03-27', 50002, 30002);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90002, 'Boeing', 1970, 2, 20, 1, 335, 'N736PA', 'Boeing 747-121', 40002, 10002, 50002, 110002);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50002, 'Captain Victor Grubbs', '1930-01-20', 30, 'Passed all medical checks', 19000, 'N736PA', 20002, 10002, 90002);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120002, 'Improved runway lighting and radio communication procedures for airports in low-visibility conditions.', '1977-09-15', 130002, 100002);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140002, 'Final Report on Tenerife Disaster - Pan Am Flight 1736', '1978-12-15', 'Runway incursion due to poor visibility and miscommunication with ATC.', 'Completed', 100002);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100002, 'Dr. John Reid', 'PhD in Aviation Safety', 20, 10002, 150002, 120002, 140002, 80002);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80002, 'Runway incursion and poor visibility led to a collision with KLM Flight 4805. Additionally, communication breakdowns between KLM Flight 4805 and ATC contributed.', 10002, 100002);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130002, 'Runway lighting upgrades and communication improvements implemented at major airports.', '1979-02-10', 'Completed', 120002);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70002, 'Foggy', 1, 4, 'None', 20, 10002);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150002, 5, 'High-risk scenario due to poor visibility and miscommunication.', 10002, 100002);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30002, '1977-03-27', 'PA1736', 'Los Angeles International Airport', 'Gran Canaria Airport', 20002, 40002);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40002, 'Pan American World Airways', 'USA', 200, 10002, 30002, 110002, 90002);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110002, '1977-03-10', 'Routine Maintenance', 'Engine and navigation checks', FALSE, 90002, 40002);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10003, 'Los Rodeos Airport, Tenerife, Canary Islands', 'Runway collision with Pan Am Flight 1736 during takeoff attempt in fog.', 5, '1977-03-27', 248, 'Boeing 747-206B', 'KLM Royal Dutch Airlines', 'Runway incursion and poor visibility along with communication breakdown led to collision with Pan Am Flight 1736', 50003, 60003, 70003, 80003, 90003, 100003);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60003, 0, 248, 10003);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20003, 'Carlos Mejia', 'Los Rodeos ATC', 10, 'Monitoring and communication', '1977-03-27', 50003, 30003);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90003, 'Boeing', 1971, 2, 20, 1, 248, 'PH-BUF', 'Boeing 747-206B', 40003, 10003, 50003, 110003);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50003, 'Captain Jacob Veldhuyzen van Zanten', '1927-02-04', 30, 'Passed all medical checks', 12000, 'PH-BUF', 20003, 10003, 90003);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120003, 'Standardized runway signaling for low visibility conditions and improved communication protocols', '1977-09-15', 130003, 100003);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140003, 'Final Report on Tenerife Disaster - KLM Flight 4805', '1978-12-15', 'Runway incursion due to pilot miscommunication and poor visibility.', 'Completed', 100003);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100003, 'Dr. Sarah Jacobs', 'PhD in Aviation Safety', 18, 10003, 150003, 120003, 140003, 80003);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80003, 'Runway incursion as well as poor visibility and communication breakdown between ATC and KLM 4805 led to collision with Pan Am Flight 1736', 10003, 100003);

```
INSERT INTO Safety_Implementation (c_safetyimplementationID_si, t_implementationDescription_si, d_implementationDate_si, t_implementationStatus_si, c_safetyRecID_sr)
```

VALUES (130003, 'Updated signaling and communication protocols implemented globally.', '1979-05-05', 'Completed', 120003);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70003, 'Foggy', 1, 4, 'None', 20, 10003);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150003, 5, 'Critical risk due to low visibility and communication errors.', 10003, 100003);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30003, '1977-03-27', 'KL4805', 'Amsterdam Schiphol Airport', 'Gran Canaria Airport', 20003, 40003);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40003, 'KLM Royal Dutch Airlines', 'Netherlands', 140, 10003, 30003, 110003, 90003);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110003, '1977-03-15', 'Routine Maintenance', 'Full inspection before flight', FALSE, 90003, 40003);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10004, 'Mount Takamagahara, Ueno, Gunma Prefecture, Japan', 'Crash due to explosive decompression and loss of control after repair failure on tail section.', 5, '1985-08-12',

520, 'Boeing 747SR-46', 'Japan Airlines', 'Explosive decompression caused by structural failure in the tail section due to improper maintenance conducted', 50004, 60004, 70004, 80004, 90004, 100004);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60004, 4, 520, 10004);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20004, 'Takeshi Yamamoto', 'Tokyo ATC', 12, 'Flight monitoring and emergency coordination', '1985-08-12', 50004, 30004);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90004, 'Boeing', 1974, 1, 11, 1, 520, 'JA8119', 'Boeing 747SR-46', 40004, 10004, 50004, 110004);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50004, 'Captain Masami Takahama', '1929-08-21', 35, 'Passed all medical checks', 12000, 'JA8119', 20004, 10004, 90004);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120004, 'Strengthening structural integrity in the tail sections of Boeing 747 aircraft. Improved maintenance procedures', '1986-01-10', 130004, 100004);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140004, 'Final Report on Japan Airlines Flight 123 Accident', '1986-06-19', 'Structural failure in the rear pressure bulkhead due to improper repair.', 'Completed', 100004);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100004, 'Dr. Hiroshi Tanaka', 'PhD in Aeronautics', 25, 10004, 150004, 120004, 140004, 80004);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80004, 'Explosive decompression caused by structural failure in the tail section due to improper maintenance', 10004, 100004);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130004, 'Implementation of enhanced structural checks for aircraft repairs.', '1987-03-01', 'Completed', 120004);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70004, 'Clear', 10, 5, 'None', 25, 10004);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150004, 5, 'High-risk assessment due to previous structural repairs failures.', 10004, 100004);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30004, '1985-08-12', 'JL123', 'Tokyo Haneda Airport', 'Osaka International Airport', 20004, 40004);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40004, 'Japan Airlines', 'Japan', 150, 10004, 30004, 110004, 90004);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110004, '1985-07-12', 'Structural Inspection', 'No issues reported in tail section due to improper maintenance and failure to notice structural failure', TRUE, 90004, 40004);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10005, 'Persian Gulf, near Qeshm Island, Iran', 'Shot down by USS Vincennes, mistaken for hostile aircraft.', 5, '1988-07-03', 290, 'Airbus A300B2-203', 'Iran Air', 'Mistaken identity led to shootdown by US Navy', 50005, 60005, 70005, 80005, 90005, 100005);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60005, 0, 290, 10005);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20005, 'Mohammad Rezaei', 'Tehran ATC', 8, 'Monitoring and coordination', '1988-07-03', 50005, 30005);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90005, 'Airbus', 1982, 1, 6, 1, 290, 'EP-IBU', 'Airbus A300B2-203', 40005, 10005, 50005, 110005);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50005, 'Captain Mohsen Rezaian', '1949-05-15', 20, 'Passed all medical checks', 8000, 'EP-IBU', 20005, 10005, 90005);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120005, 'Improved identification procedures for commercial aircraft in conflict zones.', '1988-10-01', 130005, 100005);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140005, 'Final Report on Iran Air Flight 655 Incident', '1989-02-15', 'Misidentification due to equipment and procedural errors.', 'Completed', 100005);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100005, 'Dr. Alireza Mansouri', 'PhD in Aviation Security', 18, 10005, 150005, 120005, 140005, 80005);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80005, 'Mistaken identity led to shootdown by US Navy', 10005, 100005);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130005, 'Implemented new identification protocols in conflict zones.', '1989-05-05', 'Completed', 120005);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70005, 'Clear', 10, 2, 'None', 32, 10005);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150005, 5, 'Critical risk due to conflict zone operations.', 10005, 100005);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30005, '1988-07-03', 'IR655', 'Bandar Abbas International Airport', 'Dubai International Airport', 20005, 40005);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40005, 'Iran Air', 'Iran', 35, 10005, 30005, 110005, 90005);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110005, '1988-06-20', 'Routine Maintenance', 'Engine check and inspection', FALSE, 90005, 40005);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10006, 'Riyadh International Airport, Riyadh, Saudi Arabia', 'In-flight fire in the rear cargo hold led to emergency landing and evacuation delay.', 5, '1980-08-19', 301, 'Lockheed L-1011-200 TriStar', 'Saudi Arabia Airlines', 'Fire in cargo hold resulted in loss of aircraft due to evacuation delay.', 50006, 60006, 70006, 80006, 90006, 100006);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60006, 0, 301, 10006);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20006, 'Abdullah Al-Faisal', 'Riyadh ATC', 15, 'Emergency response coordination', '1980-08-19', 50006, 30006);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90006, 'Lockheed', 1979, 1, 10, 1, 301, 'HZ-AHK', 'Lockheed L-1011-200 TriStar', 40006, 10006, 50006, 110006);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50006, 'Captain Mohammed Ali Khowyter', '1940-02-15', 25, 'Passed all medical checks', 10000, 'HZ-AHK', 20006, 10006, 90006);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120006, 'Installation of smoke detectors and improved fire suppression systems in cargo holds.', '1981-03-15', 130006, 100006);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140006, 'Final Report on Saudi Arabia Airlines Flight 163 Accident', '1981-06-10', 'In-flight fire caused by flammable cargo; delays in evacuation worsened the outcome.', 'Completed', 100006);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100006, 'Dr. Ahmed Al-Harbi', 'PhD in Aviation Safety', 22, 10006, 150006, 120006, 140006, 80006);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80006, 'Fire in cargo hold resulted in loss of aircraft due to evacuation delay.', 10006, 100006);

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INSERT INTO Safety_Implementation (c_safetyimplementationID_si, t_implementationDescription_si, d_implementationDate_si, t_implementationStatus_si, c_safetyRecID_sr)
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VALUES (130006, 'Fire suppression system upgrades in commercial aircraft cargo holds.', '1982-01-10', 'Completed', 120006);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70006, 'Clear', 10, 3, 'None', 30, 10006);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150006, 5, 'Critical risk due to lack of fire detection and suppression measures.', 10006, 100006);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30006, '1980-08-19', 'SV163', 'Riyadh International Airport', 'Jeddah King Abdulaziz Airport', 20006, 40006);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40006, 'Saudi Arabia Airlines', 'Saudi Arabia', 80, 10006, 30006, 110006, 90006);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110006, '1980-07-01', 'Routine Inspection', 'Routine cargo hold inspection', FALSE, 90006, 40006);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10007, 'Chicago O\Hare International Airport, Chicago, Illinois, USA', 'Engine separation and loss of control shortly after takeoff due to improper maintenance procedures.', 5,

'1979-05-25', 273, 'McDonnell Douglas DC-10-10', 'American Airlines', 'Engine detachment led to loss of control and crash', 50007, 60007, 70007, 80007, 90007, 100007);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60007, 0, 273, 10007);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20007, 'James Collins', 'Chicago ATC', 20, 'Takeoff monitoring', '1979-05-25', 50007, 30007);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90007, 'McDonnell Douglas', 1972, 1, 8, 1, 273, 'N110AA', 'McDonnell Douglas DC-10-10', 40007, 10007, 50007, 110007);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50007, 'Captain Walter Lux', '1926-06-18', 30, 'Passed all medical checks', 20000, 'N110AA', 20007, 10007, 90007);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120007, 'Revised engine maintenance procedures and enhanced inspection requirements.', '1979-09-01', 130007, 100007);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140007, 'Final Report on American Airlines Flight 191 Accident', '1980-01-15', 'Engine separation caused by improper maintenance; inadequate inspection procedures were a contributing factor.', 'Completed', 100007);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

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VALUES (100007, 'Dr. Robert Jackson', 'PhD in Aerospace Engineering', 20, 10007, 150007, 120007, 140007, 80007);
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INSERT INTO Accident_Cause (c_accidentcauseID_acc, t_CaAccidentDesc_acc, c_accidentID_ac, c_investigatorID_in)
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VALUES (80007, 'Engine detachment led to loss of control and crash', 10007, 100007);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130007, 'Updated maintenance protocols and engine inspection requirements.', '1980-03-10', 'Completed', 120007);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70007, 'Clear', 10, 5, 'None', 24, 10007);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150007, 5, 'Critical risk due to improper maintenance practices.', 10007, 100007);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30007, '1979-05-25', 'AA191', 'Chicago O\Hare International Airport', 'Los Angeles International Airport', 20007, 40007);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40007, 'American Airlines', 'USA', 600, 10007, 30007, 110007, 90007);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110007, '1979-05-15', 'Engine Maintenance', 'Engine pylon maintenance performed', TRUE, 90007, 40007);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10008, 'Hrabove, Donetsk Oblast, Ukraine', 'Shot down by a surface-to-air missile while flying over conflict zone.', 5, '2014-07-17', 298, 'Boeing 777-200ER', 'Malaysia Airlines', 'Downed by missile strike over Ukraine', 50008, 60008, 70008, 80008, 90008, 100008);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60008, 0, 298, 10008);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20008, 'Ivan Petrov', 'Dnipropetrovsk ATC', 12, 'Monitoring and communication', '2014-07-17', 50008, 30008);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90008, 'Boeing', 1997, 1, 17, 1, 298, '9M-MRD', 'Boeing 777-200ER', 40008, 10008, 50008, 110008);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50008, 'Captain Wan Amran Wan Hussin', '1967-02-07', 25, 'Passed all medical checks', 12000, '9M-MRD', 20008, 10008, 90008);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120008, 'Avoid flying over active conflict zones to mitigate risks of hostile engagement.', '2015-10-01', 130008, 100008);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140008, 'Final Report on Malaysia Airlines Flight 17 Incident', '2015-10-13', 'Aircraft downed by surface-to-air missile launched from conflict area.', 'Completed', 100008);

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INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
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VALUES (100008, 'Dr. Peter de Groot', 'PhD in Aviation Security', 30, 10008, 150008, 120008, 140008, 80008);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80008, 'Downed by missile strike over Ukraine', 10008, 100008);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130008, 'Implemented flight path changes to avoid conflict zones.', '2016-01-05', 'Completed', 120008);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70008, 'Clear', 10, 3, 'None', 24, 10008);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150008, 5, 'High-risk area due to ongoing conflict.', 10008, 100008);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30008, '2014-07-17', 'MH17', 'Amsterdam Schiphol Airport', 'Kuala Lumpur International Airport', 20008, 40008);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40008, 'Malaysia Airlines', 'Malaysia', 100, 10008, 30008, 110008, 90008);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110008, '2014-07-01', 'Routine Maintenance', 'Standard operational checkup', FALSE, 90008, 40008);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10009, 'Near Moneron Island, Sea of Japan', 'Shot down by Soviet fighter jet after straying into restricted airspace.', 5, '1983-09-01', 269, 'Boeing 747-230B', 'Korean Air Lines', 'Shot down by military aircraft after entering restricted airspace.', 50009, 60009, 70009, 80009, 90009, 100009);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60009, 0, 269, 10009);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20009, 'Alexei Morozov', 'Tokyo ATC', 15, 'Monitoring flight path', '1983-09-01', 50009, 30009);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90009, 'Boeing', 1972, 1, 10, 1, 269, 'HL7442', 'Boeing 747-230B', 40009, 10009, 50009, 110009);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50009, 'Captain Chun Byung-In', '1936-04-15', 27, 'Passed all medical checks', 12000, 'HL7442', 20009, 10009, 90009);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120009, 'Increase GPS reliability and install navigation updates to prevent accidental airspace intrusion.', '1983-12-10', 130009, 100009);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140009, 'Final Report on Korean Airlines Flight 007 Incident', '1984-03-15', 'Strayed into restricted airspace, leading to intercept and engagement by military aircraft.', 'Completed', 100009);

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INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
```

VALUES (100009, 'Dr. Yoon Sang-ho', 'PhD in Aviation Safety', 28, 10009, 150009, 120009, 140009, 80009);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80009, 'Shot down by military aircraft after entering restricted airspace.', 10009, 100009);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130009, 'Implemented updated GPS navigation protocols to prevent airspace intrusions.', '1985-02-05', 'Completed', 120009);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70009, 'Clear', 10, 4, 'None', 15, 10009);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150009, 5, 'Critical due to navigational errors and high security risk in restricted airspace.', 10009, 100009);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30009, '1983-09-01', 'KE007', 'JFK International Airport', 'Kimpo International Airport', 20009, 40009);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40009, 'Korean Air Lines', 'South Korea', 120, 10009, 30009, 110009, 90009);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110009, '1983-08-15', 'Routine Maintenance', 'Navigation systems check', FALSE, 90009, 40009);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10010, 'Ermenonville Forest, near Paris, France', 'Cargo door failure caused explosive decompression, leading to loss of control.', 5, '1974-03-03', 346, 'McDonnell Douglas DC-10-10', 'Turkish Airlines', 'Explosive decompression due to cargo door failure.', 50010, 60010, 70010, 80010, 90010, 100010);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60010, 0, 346, 10010);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20010, 'Jacques Duval', 'Paris ATC', 18, 'Takeoff and route monitoring', '1974-03-03', 50010, 30010);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90010, 'McDonnell Douglas', 1972, 1, 8, 1, 346, 'TC-JAV', 'McDonnell Douglas DC-10-10', 40010, 10010, 50010, 110010);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50010, 'Captain Nejat Berkoz', '1932-05-10', 25, 'Passed all medical checks', 11000, 'TC-JAV', 20010, 10010, 90010);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120010, 'Redesign of cargo door locking mechanism for DC-10 aircraft.', '1974-09-01', 130010, 100010);

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INSERT INTO Investigative_Reports (c_reportID_ir, t_reportTitle_ir, d_publishDate_i, t_finalizedFindings_ir, t_reportStatus_ir, c_investigatorID_in)
```

VALUES (140010, 'Final Report on Turkish Airlines Flight 981 Incident', '1975-02-20', 'Cargo door failure caused by flawed design; led to decompression and loss of control.', 'Completed', 100010);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100010, 'Dr. Pierre Dupont', 'PhD in Aeronautical Engineering', 22, 10010, 150010, 120010, 140010, 80010);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80010, 'Explosive decompression due to cargo door failure.', 10010, 100010);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130010, 'Redesigned and reinforced cargo door locking mechanisms.', '1976-03-01', 'Completed', 120010);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70010, 'Clear', 10, 5, 'None', 15, 10010);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150010, 5, 'Critical risk due to design flaw in cargo door mechanism.', 10010, 100010);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30010, '1974-03-03', 'TK981', 'Istanbul Ataturk Airport', 'London Heathrow Airport', 20010, 40010);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40010, 'Turkish Airlines', 'Turkey', 50, 10010, 30010, 110010, 90010);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110010, '1974-02-20', 'Routine Maintenance', 'Cargo door inspection completed', FALSE, 90010, 40010);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10011, 'Near Charkhi Dadri, Haryana, India', 'Mid-air collision with Kazakhstan Airlines Flight 1907.', 5, '1996-11-12', 349, 'Boeing 747-168B', 'Saudi Arabia Airlines', 'Collision with Kazakhstan Airlines Flight 1907 due to altitude miscommunication.', 50011, 60011, 70011, 80011, 90011, 100011);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60011, 0, 349, 10011);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20011, 'Rajesh Singh', 'New Delhi ATC', 25, 'Altitude monitoring and coordination', '1996-11-12', 50011, 30011);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90011, 'Boeing', 1980, 1, 16, 1, 349, 'HZ-AIH', 'Boeing 747-168B', 40011, 10011, 50011, 110011);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50011, 'Captain Khalid Al-Shubaily', '1952-01-11', 24, 'Passed all medical checks', 14000, 'HZ-AIH', 20011, 10011, 90011);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120011, 'Implementation of mandatory collision avoidance systems for aircraft.', '1997-03-01', 130011, 100011);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140011, 'Final Report on Charkhi Dadri Mid-Air Collision - Saudi Arabia Airlines Flight 763', '1997-06-15', 'Collision caused by altitude miscommunication with Kazakhstan Airlines Flight 1907.', 'Completed', 100011);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100011, 'Dr. Anil Mehta', 'PhD in Aviation Safety', 20, 10011, 150011, 120011, 140011, 80011);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80011, 'Collision with Kazakhstan Airlines Flight 1907 due to altitude miscommunication.', 10011, 100011);

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INSERT INTO Safety_Implementation (c_safetyimplementationID_si, t_implementationDescription_si, d_implementationDate_si, t_implementationStatus_si, c_safetyRecID_sr)
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VALUES (130011, 'Mandatory collision avoidance systems installed in all commercial aircraft.', '1998-05-20', 'Completed', 120011);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70011, 'Clear', 10, 3, 'None', 28, 10011);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150011, 5, 'High risk due to poor communication and lack of collision avoidance systems.', 10011, 100011);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30011, '1996-11-12', 'SV763', 'Indira Gandhi International Airport', 'King Abdulaziz International Airport', 20011, 40011);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40011, 'Saudi Arabia Airlines', 'Saudi Arabia', 75, 10011, 30011, 110011, 90011);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110011, '1996-11-01', 'Routine Inspection', 'Standard maintenance check completed', FALSE, 90011, 40011);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10012, 'Near Charkhi Dadri, Haryana, India', 'Mid-air collision with Saudi Arabia Airlines Flight 763.', 5, '1996-11-12', 37, 'Ilyushin Il-76', 'Kazakhstan Airlines', 'Collision with

Saudi Arabia Airlines Flight 763 due to altitude miscommunication.', 50012, 60012, 70012, 80012, 90012, 100012);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60012, 0, 37, 10012);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20012, 'Rajesh Singh', 'New Delhi ATC', 25, 'Altitude monitoring and coordination', '1996-11-12', 50012, 30012);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90012, 'Ilyushin', 1988, 1, 10, 1, 37, 'UN-76435', 'Ilyushin Il-76', 40012, 10012, 50012, 110012);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50012, 'Captain Alexander Cherepanov', '1950-08-23', 30, 'Passed all medical checks', 8000, 'UN-76435', 20012, 10012, 90012);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120012, 'Mandatory installation of Traffic Collision Avoidance System (TCAS) in commercial aircraft.', '1997-04-01', 130012, 100012);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140012, 'Final Report on Charkhi Dadri Mid-Air Collision - Kazakhstan Airlines Flight 1907', '1997-07-01', 'Collision due to altitude miscommunication with Saudi Arabia Airlines Flight 763.', 'Completed', 100012);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100012, 'Dr. Anil Mehta', 'PhD in Aviation Safety', 20, 10012, 150012, 120012, 140012, 80012);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80012, 'Collision with Saudi Arabia Airlines Flight 763 due to altitude miscommunication.', 10012, 100012);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130012, 'Implementation of TCAS systems across commercial fleets.', '1998-06-15', 'Completed', 120012);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac) VALUES (70012, 'Clear', 10, 3, 'None', 28, 10012);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150012, 5, 'Critical risk due to altitude miscommunication and lack of TCAS.', 10012, 100012);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30012, '1996-11-12', 'KZ1907', 'Shymkent Airport', 'Indira Gandhi International Airport', 20012, 40012);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40012, 'Kazakhstan Airlines', 'Kazakhstan', 25, 10012, 30012, 110012, 90012);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110012, '1996-10-20', 'Routine Maintenance', 'Altitude monitoring equipment check', FALSE, 90012, 40012);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10013, 'Lockerbie, Scotland, UK', 'In-flight explosion caused by terrorist bombing, leading to mid-air disintegration.', 5, '1988-12-21', 270, 'Boeing 747-121', 'Pan American World Airways', 'Explosion from an onboard bomb in cargo hold.', 50013, 60013, 70013, 80013, 90013, 100013);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60013, 0, 270, 10013);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20013, 'James McCall', 'Prestwick ATC', 20, 'Monitoring transatlantic flight paths', '1988-12-21', 50013, 30013);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90013, 'Boeing', 1970, 1, 18, 1, 270, 'N739PA', 'Boeing 747-121', 40013, 10013, 50013, 110013);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50013, 'Captain James MacQuarrie', '1937-06-25', 28, 'Passed all medical checks', 15000, 'N739PA', 20013, 10013, 90013);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120013, 'Enhanced screening procedures for all cargo and baggage.', '1989-08-01', 130013, 100013);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140013, 'Final Report on Pan Am Flight 103 Bombing', '1990-02-15', 'Explosive device concealed in checked baggage caused mid-air disintegration.', 'Completed', 100013);

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INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
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VALUES (100013, 'Dr. John Barr', 'PhD in Aviation Security', 30, 10013, 150013, 120013, 140013, 80013);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80013, 'Explosion from an onboard bomb in cargo hold.', 10013, 100013);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130013, 'Installed advanced bomb detection systems for cargo screening.', '1991-05-20', 'Completed', 120013);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70013, 'Clear', 10, 5, 'None', -2, 10013);

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INSERT INTO Risk_Assessment (c_RiskAssessmentID_ra, i_riskLevel_ra, t_riskDescription_ra, c_accidentID_ac, c_investigatorID_in)
```

VALUES (150013, 5, 'High risk due to terrorism vulnerability in aviation.', 10013, 100013);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30013, '1988-12-21', 'PA103', 'Frankfurt Airport', 'Detroit Metropolitan Airport', 20013, 40013);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40013, 'Pan American World Airways', 'USA', 250, 10013, 30013, 110013, 90013);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110013, '1988-11-15', 'Routine Maintenance', 'Standard operational check completed', FALSE, 90013, 40013);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10014, 'Atlantic Ocean, off the coast of Ireland', 'In-flight explosion caused by terrorist bombing, leading to mid-air disintegration.', 5, '1985-06-23', 329, 'Boeing 747-237B', 'Air India', 'Explosive device in cargo caused mid-air disintegration.', 50014, 60014, 70014, 80014, 90014, 100014);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60014, 0, 329, 10014);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20014, 'Patrick O\'Connor', 'Shannon ATC', 18, 'Monitoring transatlantic flights', '1985-06-23', 50014, 30014);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90014, 'Boeing', 1978, 1, 12, 1, 329, 'VT-EFO', 'Boeing 747-237B', 40014, 10014, 50014, 110014);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50014, 'Captain Hanse Singh', '1939-09-12', 32, 'Passed all medical checks', 16000, 'VT-EFO', 20014, 10014, 90014);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120014, 'Strengthened security measures and cargo screening for international flights.', '1985-09-10', 130014, 100014);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140014, 'Final Report on Air India Flight 182 Bombing', '1986-02-20', 'Mid-air explosion caused by a bomb concealed in checked baggage.', 'Completed', 100014);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100014, 'Dr. Raman Singh', 'PhD in Counterterrorism Studies', 28, 10014, 150014, 120014, 140014, 80014);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80014, 'Explosive device in cargo caused mid-air disintegration.', 10014, 100014);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130014, 'Mandatory security checks and advanced screening of all international baggage.', '1987-04-15', 'Completed', 120014);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70014, 'Clear', 10, 3, 'None', 16, 10014);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150014, 5, 'High risk of terrorism on international routes.', 10014, 100014);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30014, '1985-06-23', 'AI182', 'Montreal-Mirabel International Airport', 'Indira Gandhi International Airport', 20014, 40014);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40014, 'Air India', 'India', 100, 10014, 30014, 110014, 90014);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110014, '1985-05-20', 'Routine Maintenance', 'Cargo hold inspected and cleared', FALSE, 90014, 40014);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10015, 'Belle Harbor, Queens, New York, USA', 'Loss of control due to structural failure of the vertical stabilizer following wake turbulence encounter.', 5, '2001-11-12', 265, 'Airbus A300B4-605R', 'American Airlines', 'Vertical stabilizer separation following wake turbulence.', 50015, 60015, 70015, 80015, 90015, 100015);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60015, 0, 265, 10015);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20015, 'John Peterson', 'JFK ATC', 20, 'Departure monitoring and altitude control', '2001-11-12', 50015, 30015);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90015, 'Airbus', 1988, 1, 13, 1, 265, 'N14053', 'Airbus A300B4-605R', 40015, 10015, 50015, 110015);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50015, 'Captain Ed States', '1959-03-22', 21, 'Passed all medical checks', 12000, 'N14053', 20015, 10015, 90015);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120015, 'Review and training on rudder control sensitivity and structural load limits in Airbus aircraft.', '2002-05-01', 130015, 100015);

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INSERT INTO Investigative_Reports (c_reportID_ir, t_reportTitle_ir, d_publishDate_i, t_finalizedFindings_ir, t_reportStatus_ir, c_investigatorID_in)
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VALUES (140015, 'Final Report on American Airlines Flight 587 Accident', '2004-10-26', 'Rudder control inputs led to structural overload and vertical stabilizer separation.', 'Completed', 100015);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100015, 'Dr. Maria Lopez', 'PhD in Aircraft Structural Engineering', 25, 10015, 150015, 120015, 140015, 80015);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80015, 'Vertical stabilizer separation following wake turbulence.', 10015, 100015);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130015, 'Enhanced training and procedures for Airbus rudder control sensitivity.', '2005-01-15', 'Completed', 120015);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70015, 'Clear', 10, 6, 'None', 18, 10015);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150015, 5, 'Critical risk due to rudder sensitivity and wake turbulence effects.', 10015, 100015);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30015, '2001-11-12', 'AA587', 'John F. Kennedy International Airport', 'Las Américas International Airport', 20015, 40015);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40015, 'American Airlines', 'USA', 850, 10015, 30015, 110015, 90015);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110015, '2001-11-01', 'Routine Maintenance', 'Tail inspection completed', FALSE, 90015, 40015);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10016, 'Jeddah, Saudi Arabia', 'In-flight fire due to under-inflated tire leading to brake overheating, causing structural damage and loss of control.', 5, '1991-07-11', 261, 'Douglas DC-8-61', 'Nigerian Airways (operated by Nationair Canada)', 'In-flight fire caused by under-inflated tire and brake overheating due to improper maintenance practices.', 50016, 60016, 70016, 80016, 90016, 100016);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60016, 0, 261, 10016);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i staffcount atc, i controllerDuty atc, c date ac, c pilotID pi, c flightdetailsID fd)

VALUES (20016, 'Abdullah Farah', 'Jeddah ATC', 15, 'Takeoff and monitoring', '1991-07-11', 50016, 30016);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90016, 'McDonnell Douglas', 1969, 1, 10, 1, 261, 'C-GMXQ', 'Douglas DC-8-61', 40016, 10016, 50016, 110016);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50016, 'Captain William Allen', '1943-07-11', 25, 'Passed all medical checks', 14000, 'C-GMXQ', 20016, 10016, 90016);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120016, 'Enhance tire pressure monitoring and implement stricter maintenance protocols.', '1992-04-01', 130016, 100016);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140016, 'Final Report on Nigerian Airways Flight 2120 Fire Incident', '1992-07-10', 'Tire failure and brake overheating caused an in-flight fire and loss of control.', 'Completed', 100016);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100016, 'Dr. Ahmed Jalal', 'PhD in Aircraft Safety Systems', 22, 10016, 150016, 120016, 140016, 80016);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80016, 'In-flight fire caused by under-inflated tire and brake overheating.', 10016, 100016);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130016, 'Improved tire pressure monitoring and preventive maintenance protocols.', '1993-02-01', 'Completed', 120016);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70016, 'Clear', 10, 2, 'None', 40, 10016);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150016, 5, 'High risk due to maintenance oversights and tire pressure issues.', 10016, 100016);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30016, '1991-07-11', 'NA2120', 'King Abdulaziz International Airport', 'Sadiq Abubakar III International Airport', 20016, 40016);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c accidentID ac, c flightDetailsID fd, c maintenanceID ma, c aircraftID ai)

VALUES (40016, 'Nigerian Airways (operated by Nationair Canada)', 'Nigeria', 30, 10016, 30016, 110016, 90016);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110016, '1991-06-10', 'Routine Maintenance', 'Tire inflation and brake inspection', TRUE, 90016, 40016);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10017, 'Mount Erebus, Antarctica', 'Controlled flight into terrain due to navigation and communication errors.', 5, '1979-11-28', 257, 'McDonnell Douglas DC-10-30', 'Air New Zealand', 'CFIT due to navigational and communication issues.', 50017, 60017, 70017, 80017, 90017, 100017);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60017, 0, 257, 10017);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20017, 'Robert Dickson', 'Auckland ATC', 18, 'Monitoring long-haul and Antarctic scenic flights', '1979-11-28', 50017, 30017);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90017, 'McDonnell Douglas', 1974, 1, 10, 1, 257, 'ZK-NZP', 'McDonnell Douglas DC-10-30', 40017, 10017, 50017, 110017);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50017, 'Captain Jim Collins', '1940-08-18', 30, 'Passed all medical checks', 12000, 'ZK-NZP', 20017, 10017, 90017);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120017, 'Improved communication and navigation aids for Antarctic flights.', '1980-06-01', 130017, 100017);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140017, 'Final Report on Air New Zealand Flight 901 Accident', '1981-03-12', 'Controlled flight into terrain caused by navigation and communication errors.', 'Completed', 100017);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100017, 'Dr. Ian Barr', 'PhD in Aviation Safety and Accident Investigation', 25, 10017, 150017, 120017, 140017, 80017);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80017, 'CFIT due to navigational and communication issues.', 10017, 100017);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130017, 'Upgraded navigation aids and pilot training for polar regions.', '1982-01-10', 'Completed', 120017);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70017, 'Cloudy with ground visibility issues', 3, 10, 'Snow', -30, 10017);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150017, 5, 'High risk due to complex navigation and communication requirements in polar regions.', 10017, 100017);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30017, '1979-11-28', 'TE901', 'Auckland International Airport', 'Antarctic Scenic Flight', 20017, 40017);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40017, 'Air New Zealand', 'New Zealand', 50, 10017, 30017, 110017, 90017);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110017, '1979-11-10', 'Routine Inspection', 'Operational checks and navigation system calibration', FALSE, 90017, 40017);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10018, 'Indian Ocean (presumed)', 'Disappearance during flight under unknown circumstances. Wreckage later found in the Indian Ocean.', 5, '2014-03-08', 239, 'Boeing 777-

200ER', 'Malaysia Airlines', 'Disappearance under unknown circumstances, likely in the Indian Ocean.', 50018, 60018, 70018, 80018, 90018, 100018);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60018, 0, 239, 10018);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20018, 'Derrick Tan', 'Kuala Lumpur ATC', 20, 'Monitoring and handover to Vietnam

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

ATC', '2014-03-08', 50018, 30018);

VALUES (90018, 'Boeing', 2002, 1, 12, 1, 239, '9M-MRO', 'Boeing 777-200ER', 40018, 10018, 50018, 110018);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50018, 'Captain Zaharie Ahmad Shah', '1961-07-31', 33, 'Passed all medical checks', 18000, '9M-MRO', 20018, 10018, 90018);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120018, 'Strengthened real-time tracking and communication capabilities for flights over oceans.', '2015-08-01', 130018, 100018);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140018, 'Final Report on Malaysia Airlines Flight 370 Disappearance', '2018-07-30', 'Exact cause remains unknown, but loss of control over the Indian Ocean is suspected.', 'Completed', 100018);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100018, 'Dr. Aziz Rahman', 'PhD in Aviation and Communication Systems', 28, 10018, 150018, 120018, 140018, 80018);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80018, 'Disappearance under unknown circumstances, likely in the Indian Ocean.', 10018, 100018);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130018, 'Implemented real-time tracking requirements for oceanic flights.', '2019-03-01', 'Completed', 120018);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac) VALUES (70018, 'Clear', 10, 3, 'None', 30, 10018);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150018, 5, 'Critical risk due to lack of real-time tracking capabilities.', 10018, 100018);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30018, '2014-03-08', 'MH370', 'Kuala Lumpur International Airport', 'Beijing Capital International Airport', 20018, 40018);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40018, 'Malaysia Airlines', 'Malaysia', 100, 10018, 30018, 110018, 90018);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110018, '2014-02-05', 'Routine Maintenance', 'Full inspection with no major findings', FALSE, 90018, 40018);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10019, 'Near Peggy\s Cove, Nova Scotia, Canada', 'In-flight fire in cockpit area caused by faulty wiring, leading to loss of control.', 5, '1998-09-02', 229, 'McDonnell Douglas MD-11', 'Swissair', 'In-flight fire due to faulty wiring insulation in cockpit area.', 50019, 60019, 70019, 80019, 90019, 100019);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60019, 0, 229, 10019);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20019, 'Paul Campbell', 'Moncton ATC', 16, 'Monitoring transatlantic flight paths and emergency handling', '1998-09-02', 50019, 30019);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90019, 'McDonnell Douglas', 1991, 1, 10, 1, 229, 'HB-IWF', 'McDonnell Douglas MD-11', 40019, 10019, 50019, 110019);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50019, 'Captain Urs Zimmermann', '1943-05-14', 29, 'Passed all medical checks', 16000, 'HB-IWF', 20019, 10019, 90019);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120019, 'Replace flammable insulation materials in aircraft cabins and install additional smoke detectors.', '1999-11-01', 130019, 100019);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140019, 'Final Report on Swissair Flight 111 Fire Incident', '2003-03-27', 'Faulty wiring insulation led to in-flight fire, causing loss of control.', 'Completed', 100019);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100019, 'Dr. Robert Sinclair', 'PhD in Electrical and Fire Safety Engineering', 30, 10019, 150019, 120019, 140019, 80019);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80019, 'In-flight fire due to faulty wiring insulation in cockpit area.', 10019, 100019);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130019, 'Replaced flammable insulation and installed enhanced smoke detection systems.', '2004-02-01', 'Completed', 120019);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac) VALUES (70019, 'Clear', 10, 3, 'None', 15, 10019);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150019, 5, 'High risk due to flammable insulation material and wiring vulnerabilities.', 10019, 100019);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30019, '1998-09-02', 'SR111', 'John F. Kennedy International Airport', 'Geneva International Airport', 20019, 40019);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40019, 'Swissair', 'Switzerland', 50, 10019, 30019, 110019, 90019);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110019, '1998-08-25', 'Routine Maintenance', 'Cockpit inspection and electronics check', FALSE, 90019, 40019);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10020, 'Atlantic Ocean, near the Equator', 'Loss of control due to pitot tube failure and subsequent pilot error related actions, leading to stall and impact with ocean.', 5, '2009-06-01', 228, 'Airbus A330-203', 'Air France', 'Loss of control due to pitot tube failure and stall.', 50020, 60020, 70020, 80020, 90020, 100020);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60020, 0, 228, 10020);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20020, 'Marcos Pereira', 'Dakar ATC', 22, 'Monitoring oceanic and transatlantic flights', '2009-06-01', 50020, 30020);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90020, 'Airbus', 2005, 1, 14, 1, 228, 'F-GZCP', 'Airbus A330-203', 40020, 10020, 50020, 110020);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50020, 'Captain Marc Dubois', '1958-05-07', 32, 'Passed all medical checks', 17000, 'F-GZCP', 20020, 10020, 90020);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120020, 'Revised training for high-altitude stall recovery and improved pitot tube standards.', '2010-07-01', 130020, 100020);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140020, 'Final Report on Air France Flight 447 Accident', '2012-07-05', 'Loss of control following pitot tube failure and subsequent pilot actions, leading to high-altitude stall.', 'Completed', 100020);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100020, 'Dr. Alain Bertin', 'PhD in Aeronautics and Aviation Safety', 28, 10020, 150020, 120020, 140020, 80020);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80020, 'Loss of control due to pitot tube failure and stall.', 10020, 100020);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130020, 'Implemented improved pitot tubes and enhanced stall recovery training.', '2013-01-15', 'Completed', 120020);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70020, 'Heavy clouds with turbulence', 2, 50, 'Thunderstorms', -40, 10020);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150020, 5, 'Critical risk due to pitot tube icing and high-altitude stall vulnerability.', 10020, 100020);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30020, '2009-06-01', 'AF447', 'Rio de Janeiro-Galeão International Airport', 'Paris Charles de Gaulle Airport', 20020, 40020);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40020, 'Air France', 'France', 250, 10020, 30020, 110020, 90020);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110020, '2009-05-15', 'Routine Maintenance', 'Pitot tube inspection completed', FALSE, 90020, 40020);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10021, 'Over the Taiwan Strait, near the Penghu Islands', 'In-flight breakup due to structural failure from prior repair flaws.', 5, '2002-05-25', 225, 'Boeing 747-209B', 'China

Airlines', 'Structural failure from undetected metal fatigue from previous repair.', 50021, 60021, 70021, 80021, 90021, 100021);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60021, 0, 225, 10021);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20021, 'Wei Chang', 'Taipei ATC', 18, 'Monitoring Taiwan Strait traffic and long-haul departures', '2002-05-25', 50021, 30021);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90021, 'Boeing', 1979, 1, 20, 1, 225, 'B-18255', 'Boeing 747-209B', 40021, 10021, 50021, 110021);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50021, 'Captain Yi Ching-Fang', '1953-04-10', 29, 'Passed all medical checks', 13500, 'B-18255', 20021, 10021, 90021);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120021, 'Implement mandatory inspection for aircraft with prior structural repairs.', '2003-03-01', 130021, 100021);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140021, 'Final Report on China Airlines Flight 611 Structural Failure', '2004-01-15', 'Undetected fatigue cracks from previous repair led to mid-air breakup.', 'Completed', 100021);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100021, 'Dr. Mei Lin', 'PhD in Aerospace Engineering', 27, 10021, 150021, 120021, 140021, 80021);

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INSERT INTO Accident_Cause (c_accidentcauseID_acc, t_CaAccidentDesc_acc, c_accidentID_ac, c_investigatorID_in)
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VALUES (80021, 'Structural failure from undetected metal fatigue from previous repair.', 10021, 100021);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130021, 'Implemented mandatory inspection protocols for repaired aircraft.', '2005-07-10', 'Completed', 120021);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70021, 'Clear skies', 10, 5, 'None', 30, 10021);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150021, 5, 'High risk due to undetected structural fatigue cracks.', 10021, 100021);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30021, '2002-05-25', 'CI611', 'Taiwan Taoyuan International Airport', 'Hong Kong International Airport', 20021, 40021);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40021, 'China Airlines', 'Taiwan', 100, 10021, 30021, 110021, 90021);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110021, '2002-03-15', 'Structural Check', 'Inspection and minor repair without crack detection', TRUE, 90021, 40021);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10022, 'Atlantic Ocean, off Nantucket Island, USA', 'Loss of control under unexplained circumstances, leading to rapid descent and impact with ocean. Likely a case of Copilot Suicide.', 5, '1999-10-31', 217, 'Boeing 767-366ER', 'EgyptAir', 'Unexplained descent leading to loss of control. Likely due to copilot actions, leading to potential case of pilot suicide.', 50022, 60022, 70022, 80022, 90022, 100022);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60022, 0, 217, 10022);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20022, 'Michael Harris', 'Boston ATC', 20, 'Monitoring transatlantic departures and altitude control', '1999-10-31', 50022, 30022);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90022, 'Boeing', 1989, 1, 15, 1, 217, 'SU-GAP', 'Boeing 767-366ER', 40022, 10022, 50022, 110022);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50022, 'Captain Ahmed El-Habashi', '1941-04-12', 32, 'Passed all medical checks', 15500, 'SU-GAP', 20022, 10022, 90022);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120022, 'Enhance mental health evaluations and cockpit monitoring protocols.', '2000-11-01', 130022, 100022);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140022, 'Final Report on EgyptAir Flight 990 Descent', '2002-02-14', 'Rapid descent due to unexplained control inputs by copilot, resulting in impact with ocean.', 'Completed', 100022);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100022, 'Dr. Youssef Khalil', 'PhD in Aviation Safety and Human Factors', 28, 10022, 150022, 120022, 140022, 80022);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80022, 'Unexplained descent leading to loss of control.', 10022, 100022);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130022, 'Implemented enhanced mental health evaluations and cockpit monitoring protocols.', '2003-08-01', 'Completed', 120022);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70022, 'Clear', 10, 8, 'None', 15, 10022);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150022, 5, 'High risk due to unexplained cockpit actions and control inputs by copilot.', 10022, 100022);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30022, '1999-10-31', 'MS990', 'Los Angeles International Airport', 'Cairo International Airport', 20022, 40022);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40022, 'EgyptAir', 'Egypt', 55, 10022, 30022, 110022, 90022);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110022, '1999-09-15', 'Routine Maintenance', 'Hydraulic and control system inspection', FALSE, 90022, 40022);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10023, 'São Paulo Congonhas Airport, São Paulo, Brazil', 'Runway overrun due to asymmetric thrust caused by an un-retracted throttle lever, leading to collision with nearby building.', 5, '2007-07-17', 199, 'Airbus A320-233', 'TAM Linhas Aereas', 'Runway overrun due to throttle configuration issue and wet runway.', 50023, 60023, 70023, 80023, 90023, 100023);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60023, 0, 199, 10023);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20023, 'Roberto Silva', 'Congonhas ATC', 15, 'Managing landings and monitoring runway conditions', '2007-07-17', 50023, 30023);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai,

t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90023, 'Airbus', 1998, 1, 12, 1, 199, 'PR-MBK', 'Airbus A320-233', 40023, 10023, 50023, 110023);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50023, 'Captain Henrique Stefanini Di Sacco', '1957-03-12', 26, 'Passed all medical checks', 13500, 'PR-MBK', 20023, 10023, 90023);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120023, 'Enhanced pilot training on throttle configurations and upgraded runway safety procedures.', '2008-02-01', 130023, 100023);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140023, 'Final Report on TAM Flight 3054 Runway Overrun', '2009-08-15', 'Runway overrun due to throttle configuration issue and wet runway conditions.', 'Completed', 100023);

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INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
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VALUES (100023, 'Dr. Felipe Santos', 'PhD in Aviation Safety and Human Factors', 28, 10023, 150023, 120023, 140023, 80023);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80023, 'Runway overrun due to throttle configuration issue and wet runway.', 10023, 100023);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130023, 'Improved throttle configuration training and runway safety measures.', '2010-04-01', 'Completed', 120023);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70023, 'Rainy', 5, 8, 'Rain', 22, 10023);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150023, 5, 'High risk due to throttle and runway conditions under wet weather.', 10023, 100023);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30023, '2007-07-17', 'JJ3054', 'Salgado Filho International Airport', 'São Paulo Congonhas Airport', 20023, 40023);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40023, 'TAM Linhas Aereas', 'Brazil', 130, 10023, 30023, 110023, 90023);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110023, '2007-06-10', 'Routine Maintenance', 'Throttle inspection and calibration completed', FALSE, 90023, 40023);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10024, 'Near Puerto Plata, Dominican Republic', 'Loss of control due to erroneous airspeed indications, leading to stall and ocean impact.', 5, '1996-02-06', 189, 'Boeing 757-225', 'Birgenair', 'Loss of control due to blocked pitot tube resulting in erroneous airspeed readings.', 50024, 60024, 70024, 80024, 90024, 100024);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60024, 0, 189, 10024);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20024, 'Carlos Martinez', 'Puerto Plata ATC', 15, 'Overseeing takeoffs and flight departure clearance', '1996-02-06', 50024, 30024);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90024, 'Boeing', 1985, 1, 12, 1, 189, 'TC-GEN', 'Boeing 757-225', 40024, 10024, 50024, 110024);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50024, 'Captain Ahmet Erdem', '1951-09-14', 27, 'Passed all medical checks', 14500, 'TC-GEN', 20024, 10024, 90024);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120024, 'Conduct more frequent checks on pitot tubes and enhance pilot training for airspeed anomalies.', '1997-04-01', 130024, 100024);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140024, 'Final Report on Birgenair Flight 301 Airspeed Anomaly Incident', '1998-02-10', 'Pitot tube blockage led to erroneous airspeed data, resulting in stall.', 'Completed', 100024);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100024, 'Dr. Hasan Özdemir', 'PhD in Aeronautics and Flight Safety', 26, 10024, 150024, 120024, 140024, 80024);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80024, 'Loss of control due to blocked pitot tube resulting in erroneous airspeed readings.', 10024, 100024);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130024, 'Improved pitot tube inspection protocols and anomaly response training.', '1999-01-20', 'Completed', 120024);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70024, 'Clear', 10, 4, 'None', 28, 10024);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150024, 5, 'High risk from blocked pitot tubes and erroneous airspeed readings.', 10024, 100024);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30024, '1996-02-06', 'BG301', 'Gregorio Luperón International Airport', 'Frankfurt Airport', 20024, 40024);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40024, 'Birgenair', 'Turkey', 5, 10024, 30024, 110024, 90024);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110024, '1996-01-15', 'Routine Maintenance', 'Pitot tube inspection without blockage detection', TRUE, 90024, 40024);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10025, 'Near Warsaw, Poland', 'Engine failure caused by fire and hydraulic failure, resulting in loss of control.', 5, '1987-05-09', 183, 'Ilyushin Il-62M', 'LOT Polish Airlines', 'Engine fire leading to hydraulic failure and loss of control.', 50025, 60025, 70025, 80025, 90025, 100025);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60025, 0, 183, 10025);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20025, 'Andrzej Nowak', 'Warsaw ATC', 18, 'Monitoring departures and emergencies', '1987-05-09', 50025, 30025);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90025, 'Ilyushin', 1983, 1, 10, 1, 183, 'SP-LBG', 'Ilyushin Il-62M', 40025, 10025, 50025, 110025);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50025, 'Captain Zygmunt Pawlaczyk', '1940-10-22', 27, 'Passed all medical checks', 13000, 'SP-LBG', 20025, 10025, 90025);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120025, 'Improved engine fire detection and suppression systems for Il-62M aircraft.', '1988-03-01', 130025, 100025);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140025, 'Final Report on LOT Flight 5055 Engine Fire Incident', '1989-02-20', 'Engine fire caused by overheating led to hydraulic failure and loss of control.', 'Completed', 100025);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100025, 'Dr. Marek Wronski', 'PhD in Mechanical Engineering', 25, 10025, 150025, 120025, 140025, 80025);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80025, 'Engine fire leading to hydraulic failure and loss of control.', 10025, 100025);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130025, 'Enhanced fire detection and suppression for engine compartments.', '1990-05-15', 'Completed', 120025);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70025, 'Clear', 10, 5, 'None', 22, 10025);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150025, 5, 'High risk due to lack of effective fire suppression in engine.', 10025, 100025);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30025, '1987-05-09', 'LO5055', 'Warsaw Chopin Airport', 'John F. Kennedy International Airport', 20025, 40025);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40025, 'LOT Polish Airlines', 'Poland', 70, 10025, 30025, 110025, 90025);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110025, '1987-04-20', 'Routine Inspection', 'Engine compartment inspection without issues', FALSE, 90025, 40025);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d date ac, c casualties pa, c aircraftType ai, c airlinename al, c CaAccidentDesc acc,

c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10026, 'Indian Ocean, off Mauritius', 'In-flight fire in cargo hold, leading to loss of control and ocean impact. Fire caused likely by carrying of illegal compartments, however substantial evidence needed.', 5, '1987-11-28', 159, 'Boeing 747-244B Combi', 'South African Airways', 'In-flight fire in cargo hold led to loss of control.', 50026, 60026, 70026, 80026, 90026, 100026);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60026, 0, 159, 10026);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20026, 'Martin Deville', 'Mauritius ATC', 20, 'Monitoring oceanic traffic and responding to emergencies', '1987-11-28', 50026, 30026);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90026, 'Boeing', 1980, 1, 12, 1, 159, 'ZS-SAS', 'Boeing 747-244B Combi', 40026, 10026, 50026, 110026);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50026, 'Captain Dawid Uys', '1942-05-22', 32, 'Passed all medical checks', 15500, 'ZS-SAS', 20026, 10026, 90026);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120026, 'Enhanced fire suppression systems for cargo holds and improved fire-resistant materials.', '1989-01-15', 130026, 100026);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140026, 'Final Report on South African Airways Flight 295 Fire Incident', '1990-03-02', 'Cargo hold fire resulted in catastrophic loss of control. Fire cause remains inconclusive, but little evidence suggests illegal transportation items as potential cause.', 'Completed', 100026);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100026, 'Dr. Pieter Kruger', 'PhD in Fire Safety Engineering', 30, 10026, 150026, 120026, 140026, 80026);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80026, 'In-flight fire in cargo hold led to loss of control. Fire cause remains inconclusive, but little evidence suggests illegal transportation items as potential cause.', 10026, 100026);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130026, 'Installed enhanced cargo hold fire suppression and fire-resistant materials.', '1991-06-01', 'Completed', 120026);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70026, 'Clear', 10, 15, 'None', 24, 10026);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150026, 5, 'High risk due to lack of fire suppression in cargo holds.', 10026, 100026);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30026, '1987-11-28', 'SA295', 'Chiang Kai-shek International Airport', 'Jan Smuts International Airport', 20026, 40026);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40026, 'South African Airways', 'South Africa', 50, 10026, 30026, 110026, 90026);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110026, '1987-10-10', 'Routine Cargo Hold Inspection', 'Inspection completed with no issues', FALSE, 90026, 40026);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10027, 'Detroit Metropolitan Airport, Romulus, Michigan, USA', 'Failed to configure flaps and slats for takeoff, resulting in stall and crash shortly after liftoff.', 5, '1987-08-16', 156, 'McDonnell Douglas MD-82', 'Northwest Airlines', 'Flap/slat configuration error during takeoff.', 50027, 60027, 70027, 80027, 90027, 100027);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60027, 1, 156, 10027);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20027, 'John Stevens', 'Detroit ATC', 22, 'Overseeing departures and monitoring takeoff configurations', '1987-08-16', 50027, 30027);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90027, 'McDonnell Douglas', 1981, 1, 12, 1, 156, 'N312RC', 'McDonnell Douglas' MD-82', 40027, 10027, 50027, 110027);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50027, 'Captain John Maus', '1946-07-10', 22, 'Passed all medical checks', 12000, 'N312RC', 20027, 10027, 90027);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120027, 'Mandatory warning systems for flap/slat configurations before takeoff.', '1988-04-01', 130027, 100027);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140027, 'Final Report on Northwest Airlines Flight 255 Takeoff Incident', '1989-03-20', 'Flap/slat configuration error due to improper checklist adherence caused takeoff stall.', 'Completed', 100027);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100027, 'Dr. Mark Reynolds', 'PhD in Aviation Safety Systems', 28, 10027, 150027, 120027, 140027, 80027);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80027, 'Flap/slat configuration error during takeoff.', 10027, 100027);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130027, 'Installed warning systems for flap and slat takeoff configuration.', '1990-06-01', 'Completed', 120027);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70027, 'Clear', 10, 6, 'None', 25, 10027);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150027, 5, 'High risk due to lack of warning systems for improper takeoff configuration.', 10027, 100027);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30027, '1987-08-16', 'NW255', 'Detroit Metropolitan Airport', 'John Wayne Airport', 20027, 40027);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40027, 'Northwest Airlines', 'USA', 150, 10027, 30027, 110027, 90027);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110027, '1987-07-10', 'Routine Maintenance', 'Engine inspection and flap calibration', FALSE, 90027, 40027);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10028, 'Madrid-Barajas Airport, Madrid, Spain', 'Incorrect flap configuration during takeoff, leading to stall and impact with ground.', 5, '2008-08-20', 154, 'McDonnell Douglas MD-82', 'Spanair', 'Improper flap/slat configuration for takeoff due to system failure.', 50028, 60028, 70028, 80028, 90028, 100028);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60028, 18, 154, 10028);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20028, 'Luis Martínez', 'Madrid-Barajas ATC', 20, 'Managing departures and monitoring takeoff configurations', '2008-08-20', 50028, 30028);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90028, 'McDonnell Douglas', 1983, 1, 10, 1, 154, 'EC-HFP', 'McDonnell Douglas MD-82', 40028, 10028, 50028, 110028);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50028, 'Captain Antonio Garcia Luna', '1965-01-15', 21, 'Passed all medical checks', 11500, 'EC-HFP', 20028, 10028, 90028);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120028, 'Improved procedures and automated checks for takeoff configurations.', '2009-05-01', 130028, 100028);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140028, 'Final Report on Spanair Flight 5022 Takeoff Incident', '2011-02-18', 'Improper flap configuration due to system failure led to takeoff stall.', 'Completed', 100028);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100028, 'Dr. Javier Moreno', 'PhD in Aviation Safety Engineering', 30, 10028, 150028, 120028, 140028, 80028);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80028, 'Improper flap/slat configuration for takeoff due to system failure.', 10028, 100028);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130028, 'Installed improved takeoff configuration checks and redundancy systems.', '2012-08-01', 'Completed', 120028);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70028, 'Clear', 10, 5, 'None', 33, 10028);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150028, 5, 'High risk due to failure in takeoff configuration warning systems.', 10028, 100028);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30028, '2008-08-20', 'JK5022', 'Madrid-Barajas Airport', 'Gran Canaria Airport', 20028, 40028);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40028, 'Spanair', 'Spain', 50, 10028, 30028, 110028, 90028);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110028, '2008-07-15', 'Routine Maintenance', 'General system checks and calibration of warning systems', FALSE, 90028, 40028);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10029, 'French Alps, near Prads-Haute-Bléone, France', 'Intentional crash due to copilot locking pilot out of cockpit and descending into mountainous terrain.', 5, '2015-03-24', 150,

'Airbus A320-211', 'Germanwings', 'Intentional descent by co-pilot causing controlled flight into terrain.', 50029, 60029, 70029, 80029, 90029, 100029);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60029, 0, 150, 10029);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20029, 'Pierre Dubois', 'Marseille ATC', 25, 'Monitoring airspace and emergency response coordination', '2015-03-24', 50029, 30029);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90029, 'Airbus', 1990, 1, 15, 1, 150, 'D-AIPX', 'Airbus A320-211', 40029, 10029, 50029, 110029);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50029, 'Captain Patrick Sondenheimer', '1974-02-15', 20, 'Passed all medical checks', 6000, 'D-AIPX', 20029, 10029, 90029);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120029, 'Mandatory two-person cockpit rule to prevent similar incidents.', '2015-04-10', 130029, 100029);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140029, 'Final Report on Germanwings Flight 9525 Incident', '2016-03-13', 'Intentional crash due to co-pilot locking pilot out and descending into terrain.', 'Completed', 100029);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100029, 'Dr. Jacques Lemoine', 'PhD in Aviation Psychology and Safety', 30, 10029, 150029, 120029, 140029, 80029);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80029, 'Intentional descent by co-pilot causing controlled flight into terrain.', 10029, 100029);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130029, 'Enforced two-person cockpit rule for commercial flights.', '2015-07-01', 'Completed', 120029);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac) VALUES (70029, 'Clear', 10, 3, 'None', 5, 10029);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150029, 5, 'Critical risk due to lack of cockpit security measures for solo pilot presence.', 10029, 100029);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30029, '2015-03-24', '4U9525', 'Barcelona-El Prat Airport', 'Düsseldorf Airport', 20029, 40029);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40029, 'Germanwings', 'Germany', 60, 10029, 30029, 110029, 90029);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110029, '2015-02-20', 'Routine Check', 'General system inspection with no issues found', FALSE, 90029, 40029);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10030, 'Staten Island, New York, USA', 'Mid-air collision with TWA Flight 266 due to navigational error in adverse weather, resulting in crash.', 5, '1960-12-16', 84, 'Douglas DC-8-11', 'United Airlines', 'Mid-air collision with TWA Flight 266 in controlled airspace.', 50030, 60030, 70030, 80030, 90030, 100030);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60030, 0, 84, 10030);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20030, 'James Andrews', 'New York ATC', 30, 'Managing high-traffic airspace in inclement weather', '1960-12-16', 50030, 30030);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai,

t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90030, 'Douglas Aircraft Company', 1959, 1, 5, 1, 84, 'N8033U', 'Douglas DC-8-11', 40030, 10030, 50030, 110030);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50030, 'Captain Robert Sawyer', '1923-05-14', 25, 'Passed all medical checks', 12000, 'N8033U', 20030, 10030, 90030);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120030, 'Installation of improved air traffic control radars and altitude alerts for collision prevention.', '1961-06-01', 130030, 100030);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140030, 'Final Report on United Airlines Flight 826 Mid-Air Collision', '1962-04-18', 'Collision due to navigational error and limited radar capabilities under adverse weather.', 'Completed', 100030);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100030, 'Dr. Harold Thomas', 'PhD in Aviation Safety and Radar Systems', 28, 10030, 150030, 120030, 140030, 80030);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80030, 'Mid-air collision with TWA Flight 266 in controlled airspace.', 10030, 100030);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130030, 'Enhanced radar systems and altitude alerts installed at major ATC locations.', '1963-08-01', 'Completed', 120030);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i visibility wc, i windspeed wc, t precipitationType wc, i temperature wc, c accidentID ac)

VALUES (70030, 'Low visibility with snow', 2, 10, 'Snow', -5, 10030);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150030, 5, 'High risk due to lack of radar capabilities, primitive navigation technology and poor weather conditions.', 10030, 100030);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin fd, t\_flightDestination fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30030, '1960-12-16', 'UA826', 'O\'Hare International Airport', 'Idlewild Airport (now JFK)', 20030, 40030);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40030, 'United Airlines', 'USA', 150, 10030, 30030, 110030, 90030);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110030, '1960-11-15', 'Routine Inspection', 'Engine and navigation systems inspected without issues', FALSE, 90030, 40030);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10031, 'Staten Island, New York, USA', 'Mid-air collision with United Airlines Flight 826 due to navigational error in adverse weather, resulting in crash.', 5, '1960-12-16', 44, 'Lockheed L-1049 Super Constellation', 'Trans World Airlines', 'Mid-air collision with United Airlines Flight 826 in controlled airspace.', 50031, 60031, 70031, 80031, 90031, 100031);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60031, 0, 44, 10031);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20031, 'James Andrews', 'New York ATC', 30, 'Managing high-traffic airspace in inclement weather', '1960-12-16', 50031, 30031);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90031, 'Lockheed Corporation', 1957, 1, 7, 1, 44, 'N6907C', 'Lockheed L-1049 Super Constellation', 40031, 10031, 50031, 110031);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50031, 'Captain David Wood', '1925-04-21', 20, 'Passed all medical checks', 10500, 'N6907C', 20031, 10031, 90031);

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INSERT INTO Safety_Recommendation (c_safetyRecID_sr, t_safetyRecDetails_sr, d_dateIssued_sr, c_safetyimplementationID_si, c_investigatorID_in)
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VALUES (120031, 'Enhanced navigational aids and coordination protocols for air traffic control.', '1961-06-01', 130031, 100031);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140031, 'Final Report on TWA Flight 266 Mid-Air Collision', '1962-04-18', 'Collision due to navigational error and limited radar capabilities under adverse weather.', 'Completed', 100031);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100031, 'Dr. Harold Thomas', 'PhD in Aviation Safety and Radar Systems', 28, 10031, 150031, 120031, 140031, 80031);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80031, 'Mid-air collision with United Airlines Flight 826 in controlled airspace.', 10031, 100031);

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INSERT INTO Safety_Implementation (c_safetyimplementationID_si, t_implementationDescription_si, d_implementationDate_si, t_implementationStatus_si, c_safetyRecID_sr)
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VALUES (130031, 'Improved navigational aids and ATC protocols for collision prevention.', '1963-08-01', 'Completed', 120031);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70031, 'Low visibility with snow', 2, 10, 'Snow', -5, 10031);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150031, 5, 'High risk due to lack of radar capabilities and poor weather conditions.', 10031, 100031);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30031, '1960-12-16', 'TW266', 'Dayton International Airport', 'LaGuardia Airport', 20031, 40031);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40031, 'Trans World Airlines', 'USA', 100, 10031, 30031, 110031, 90031);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t accCompletedWork ma, b affectedAcc ma, c aircraftID ai, c airlineID al)

VALUES (110031, '1960-11-20', 'Routine Inspection', 'Navigation systems and engines checked with no issues', FALSE, 90031, 40031);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10032, 'Off the coast of the Comoros, Indian Ocean', 'Hijacking and subsequent fuel exhaustion, leading to ditching in the ocean.', 5, '1996-11-23', 125, 'Boeing 767-260ER', 'Ethiopian Airlines', 'Hijacking and fuel exhaustion led to forced ditching.', 50032, 60032, 70032, 80032, 90032, 100032);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60032, 50, 125, 10032);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i staffcount atc, i controllerDuty atc, c date ac, c pilotID pi, c flightdetailsID fd)

VALUES (20032, 'Ahmed Rasheed', 'Comoros ATC', 10, 'Monitoring emergency situation and relaying information to nearby aircraft', '1996-11-23', 50032, 30032);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90032, 'Boeing', 1987, 1, 14, 1, 125, 'ET-AIZ', 'Boeing 767-260ER', 40032, 10032, 50032, 110032);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50032, 'Captain Leul Abate', '1955-08-10', 18, 'Passed all medical checks', 8000, 'ET-AIZ', 20032, 10032, 90032);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120032, 'Improved cockpit security to prevent unauthorized access and fuel management training for emergency situations.', '1997-05-01', 130032, 100032);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140032, 'Final Report on Ethiopian Airlines Flight 961 Hijacking Incident', '1998-01-15', 'Fuel exhaustion due to hijacking led to forced ditching in the ocean.', 'Completed', 100032);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100032, 'Dr. Abdi Omar', 'PhD in Aviation Safety and Crisis Management', 20, 10032, 150032, 120032, 140032, 80032);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c accidentID ac, c investigatorID in)

VALUES (80032, 'Hijacking and fuel exhaustion led to forced ditching.', 10032, 100032);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130032, 'Enhanced cockpit security and emergency fuel management protocols.', '1999-06-01', 'Completed', 120032);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70032, 'Clear skies', 10, 5, 'None', 28, 10032);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150032, 5, 'High risk from hijacking and lack of cockpit security measures.', 10032, 100032);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30032, '1996-11-23', 'ET961', 'Addis Ababa Bole International Airport', 'Nairobi Jomo Kenyatta International Airport', 20032, 40032);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40032, 'Ethiopian Airlines', 'Ethiopia', 60, 10032, 30032, 110032, 90032);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110032, '1996-10-15', 'Routine Check', 'Inspection completed with no issues', FALSE, 90032, 40032);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10033, 'Grammatiko, Greece', 'Loss of cabin pressure led to hypoxia, incapacitating crew and passengers. Aircraft continued on autopilot until fuel exhaustion caused it to crash.', 5, '2005-08-14', 121, 'Boeing 737-31S', 'Helios Airways', 'Uncontrolled flight due to hypoxia following cabin pressure loss. Setting of cabin pressure configuration not set to appropriate measure', 50033, 60033, 70033, 80033, 90033, 100033);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60033, 0, 121, 10033);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20033, 'Georgios Papadopoulos', 'Athens ATC', 25, 'Monitoring unresponsive aircraft and coordinating interception', '2005-08-14', 50033, 30033);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90033, 'Boeing', 1998, 1, 7, 1, 121, '5B-DBY', 'Boeing 737-31S', 40033, 10033, 50033, 110033);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50033, 'Captain Hans-Jürgen Merten', '1955-06-10', 20, 'Passed all medical checks', 12000, '5B-DBY', 20033, 10033, 90033);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120033, 'Mandatory cabin pressure checks and improved crew training on pressurization anomalies.', '2006-04-10', 130033, 100033);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140033, 'Final Report on Helios Airways Flight 522 Cabin Pressure Loss Incident', '2007-02-20', 'Loss of cabin pressure caused hypoxia, leading to loss of control and fuel exhaustion crash.', 'Completed', 100033);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100033, 'Dr. Andreas Dimitriou', 'PhD in Aerospace Medicine', 32, 10033, 150033, 120033, 140033, 80033);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80033, 'Uncontrolled flight due to hypoxia following cabin pressure loss.', 10033, 100033);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130033, 'Enforced cabin pressure checks and enhanced training for crew.', '2007-08-01', 'Completed', 120033);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70033, 'Clear skies', 10, 2, 'None', 30, 10033);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150033, 5, 'High risk due to lack of cabin pressure monitoring protocols.', 10033, 100033);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30033, '2005-08-14', 'ZU522', 'Larnaca International Airport', 'Athens International Airport', 20033, 40033);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40033, 'Helios Airways', 'Cyprus', 15, 10033, 30033, 110033, 90033);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110033, '2005-07-15', 'Routine Check', 'Cabin pressure system inspected, no issues found', TRUE, 90033, 40033);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d\_date\_ac, c\_casualties\_pa, c\_aircraftType\_ai, c\_airlinename\_al, c\_CaAccidentDesc\_acc, c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10034, 'Everglades, near Miami, Florida, USA', 'Crew became distracted with a landing gear indicator light and failed to monitor altitude, leading to controlled flight into terrain.', 5, '1972-12-29', 101, 'Lockheed L-1011-1 Tristar', 'Eastern Airlines', 'Controlled flight into terrain due to crew distraction.', 50034, 60034, 70034, 80034, 90034, 100034);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60034, 75, 101, 10034);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20034, 'Daniel Perez', 'Miami ATC', 20, 'Monitoring approach and managing emergencies', '1972-12-29', 50034, 30034);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90034, 'Lockheed', 1971, 1, 8, 1, 101, 'N310EA', 'Lockheed L-1011-1 Tristar', 40034, 10034, 50034, 110034);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50034, 'Captain Robert Loft', '1920-01-12', 30, 'Passed all medical checks', 29000, 'N310EA', 20034, 10034, 90034);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120034, 'Implemented policies to prevent crew distraction and emphasize situational awareness in critical phases of flight.', '1973-04-01', 130034, 100034);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140034, 'Final Report on Eastern Airlines Flight 401 Crash', '1974-02-10', 'Controlled flight into terrain due to crew distraction over landing gear indicator.', 'Completed', 100034);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100034, 'Dr. William Hart', 'PhD in Human Factors and Aviation Safety', 25, 10034, 150034, 120034, 140034, 80034);

```
INSERT INTO Accident_Cause (c_accidentcauseID_acc, t_CaAccidentDesc_acc, c_accidentID_ac, c_investigatorID_in)
```

VALUES (80034, 'Controlled flight into terrain due to crew distraction.', 10034, 100034);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130034, 'Crew training on situational awareness and preventing distraction.', '1975-08-01', 'Completed', 120034);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70034, 'Clear night', 10, 3, 'None', 22, 10034);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150034, 4, 'Risk due to crew distraction from critical tasks during approach.', 10034, 100034);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30034, '1972-12-29', 'EA401', 'John F. Kennedy International Airport', 'Miami International Airport', 20034, 40034);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40034, 'Eastern Airlines', 'USA', 150, 10034, 30034, 110034, 90034);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110034, '1972-11-15', 'Routine Check', 'Landing gear and other systems inspected', FALSE, 90034, 40034);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d date ac, c casualties pa, c aircraftType ai, c airlinename al, c CaAccidentDesc acc,

c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10035, 'Everglades, near Miami, Florida, USA', 'Uncontrolled in-flight fire in cargo hold led to loss of control and crash.', 5, '1996-05-11', 110, 'McDonnell Douglas DC-9-32', 'ValuJet', 'In-flight fire due to improperly stored oxygen generators.', 50035, 60035, 70035, 80035, 90035, 100035);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)

VALUES (60035, 0, 110, 10035);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20035, 'Robert Thomas', 'Miami ATC', 20, 'Monitoring flight departures and handling emergencies', '1996-05-11', 50035, 30035);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90035, 'McDonnell Douglas', 1975, 1, 17, 1, 110, 'N904VJ', 'McDonnell Douglas DC-9-32', 40035, 10035, 50035, 110035);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50035, 'Captain Candi Kubeck', '1961-06-10', 17, 'Passed all medical checks', 11000, 'N904VJ', 20035, 10035, 90035);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120035, 'Improved fire containment systems in cargo hold and stricter regulations for hazardous materials.', '1997-03-01', 130035, 100035);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140035, 'Final Report on ValuJet Flight 592 Cargo Fire Incident', '1998-02-12', 'Uncontrolled fire due to improperly stored oxygen generators in the cargo hold.', 'Completed', 100035);

INSERT INTO Investigator (c\_investigatorID\_in, t\_Investigatorname\_in, t\_qualification\_in, i\_yearsExperience\_in, c\_accidentID\_ac, c\_RiskAssessmentID\_ra, c\_safetyRecID\_sr, c\_reportID\_ir, c\_accidentCauseID\_acc)

VALUES (100035, 'Dr. Sarah Miller', 'PhD in Aviation Hazardous Materials', 26, 10035, 150035, 120035, 140035, 80035);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80035, 'In-flight fire due to improperly stored oxygen generators.', 10035, 100035);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130035, 'Stricter regulations on hazardous cargo and enhanced fire containment systems.', '1999-06-01', 'Completed', 120035);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac) VALUES (70035, 'Clear', 10, 2, 'None', 30, 10035);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150035, 5, 'High risk due to improper handling and storage of hazardous materials.', 10035, 100035);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30035, '1996-05-11', 'VJ592', 'Miami International Airport', 'Hartsfield-Jackson Atlanta International Airport', 20035, 40035);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40035, 'ValuJet', 'USA', 30, 10035, 30035, 110035, 90035);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110035, '1996-04-01', 'Routine Check', 'General inspection completed with no issues', TRUE, 90035, 40035);

INSERT INTO Accident (c\_accidentID\_ac, t\_location\_ac, t\_description\_ac, i\_severityLevel\_ac, d date ac, c casualties pa, c aircraftType ai, c airlinename al, c CaAccidentDesc acc,

c\_pilotID\_pi, c\_passengersID\_pa, c\_weatherconditionID\_wc, c\_accidentcauseID\_acc, c\_aircraftID\_ai, c\_investigatorID\_in)

VALUES (10036, 'Gonesse, near Paris Charles de Gaulle Airport, France', 'Aircraft struck a piece of metal on the runway, leading to tire burst and subsequent fuel tank rupture. The resulting fire led to a crash shortly after takeoff.', 5, '2000-07-25', 113, 'Aérospatiale-BAC Concorde', 'Air France', 'Tire burst caused fuel tank rupture and fire, resulting in loss of control.', 50036, 60036, 70036, 80036, 90036, 100036);

INSERT INTO Passenger (c\_passengersID\_pa, i\_Injured\_pa, i\_casualties\_pa, c\_accidentID\_ac)
VALUES (60036, 0, 113, 10036);

INSERT INTO Air\_Traffic\_Control (c\_airtcID\_atc, t\_controllerName\_atc, t\_ATClocation\_atc, i\_staffcount\_atc, i\_controllerDuty\_atc, c\_date\_ac, c\_pilotID\_pi, c\_flightdetailsID\_fd)

VALUES (20036, 'François Leclerc', 'Paris Charles de Gaulle ATC', 30, 'Monitoring takeoff and emergency coordination', '2000-07-25', 50036, 30036);

INSERT INTO Aircraft (c\_aircraftID\_ai, t\_manufacturer\_ai, i\_yearacAircBuilt\_ai, i\_numUnitsBuilt\_ai, i\_yearsinProduction\_ai, i\_numCrashes\_ai, i\_totalFatalities\_ai, t\_Tailidentification\_ai, t\_aircraftType\_ai, c\_airlineID\_al, c\_accidentID\_ac, c\_pilotID\_pi, c\_maintenanceID\_ma)

VALUES (90036, 'Aérospatiale-BAC', 1975, 1, 25, 1, 113, 'F-BTSC', 'Concorde', 40036, 10036, 50036, 110036);

INSERT INTO Pilot (c\_pilotID\_pi, t\_pilotName\_pi, d\_dateofBirth\_pi, i\_experienceyears\_pi, t\_medicalRecord\_pi, i\_pilotFlightHoursinacair\_pi, c\_TailidentificationNum\_ai, c\_airtcID\_atc, c\_accidentID\_ac, c\_aircraftID\_ai)

VALUES (50036, 'Captain Christian Marty', '1946-03-05', 29, 'Passed all medical checks', 13000, 'F-BTSC', 20036, 10036, 90036);

INSERT INTO Safety\_Recommendation (c\_safetyRecID\_sr, t\_safetyRecDetails\_sr, d\_dateIssued\_sr, c\_safetyimplementationID\_si, c\_investigatorID\_in)

VALUES (120036, 'Enhanced runway inspections to remove foreign objects and retrofitting of Concorde fuel tanks for added protection.', '2001-03-01', 130036, 100036);

INSERT INTO Investigative\_Reports (c\_reportID\_ir, t\_reportTitle\_ir, d\_publishDate\_i, t\_finalizedFindings\_ir, t\_reportStatus\_ir, c\_investigatorID\_in)

VALUES (140036, 'Final Report on Air France Flight 4590 Runway Debris Accident', '2002-01-15', 'Crash caused by runway debris leading to tire burst, fuel tank rupture, and in-flight fire.', 'Completed', 100036);

```
INSERT INTO Investigator (c_investigatorID_in, t_Investigatorname_in, t_qualification_in, i_yearsExperience_in, c_accidentID_ac, c_RiskAssessmentID_ra, c_safetyRecID_sr, c_reportID_ir, c_accidentCauseID_acc)
```

VALUES (100036, 'Dr. Jean Dupont', 'PhD in Aeronautical Engineering and Safety', 32, 10036, 150036, 120036, 140036, 80036);

INSERT INTO Accident\_Cause (c\_accidentcauseID\_acc, t\_CaAccidentDesc\_acc, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (80036, 'Tire burst caused fuel tank rupture and fire, leading to loss of control.', 10036, 100036);

INSERT INTO Safety\_Implementation (c\_safetyimplementationID\_si, t\_implementationDescription\_si, d\_implementationDate\_si, t\_implementationStatus\_si, c\_safetyRecID\_sr)

VALUES (130036, 'Runway inspection protocols and Concorde fuel tank retrofitting.', '2003-08-01', 'Completed', 120036);

INSERT INTO Weather\_Conditions (c\_weatherconditionID\_wc, t\_weatherDescription\_wc, i\_visibility\_wc, i\_windspeed\_wc, t\_precipitationType\_wc, i\_temperature\_wc, c\_accidentID\_ac)

VALUES (70036, 'Clear', 10, 4, 'None', 27, 10036);

INSERT INTO Risk\_Assessment (c\_RiskAssessmentID\_ra, i\_riskLevel\_ra, t\_riskDescription\_ra, c\_accidentID\_ac, c\_investigatorID\_in)

VALUES (150036, 5, 'High risk due to vulnerability of fuel tanks to damage from debris.', 10036, 100036);

INSERT INTO Flight\_Details (c\_flightdetailsID\_fd, d\_flightdate\_fd, t\_flightnumber\_fd, t\_flightOrigin\_fd, t\_flightDestination\_fd, c\_airtcID\_atc, c\_airlineID\_al)

VALUES (30036, '2000-07-25', 'AF4590', 'Paris Charles de Gaulle Airport', 'John F. Kennedy International Airport', 20036, 40036);

INSERT INTO Airline (c\_airlineID\_al, t\_airlinename\_al, t\_country\_al, i\_fleetSize\_al, c\_accidentID\_ac, c\_flightDetailsID\_fd, c\_maintenanceID\_ma, c\_aircraftID\_ai)

VALUES (40036, 'Air France', 'France', 250, 10036, 30036, 110036, 90036);

INSERT INTO Maintenance\_Record (c\_maintenanceID\_ma, d\_dateMa\_ma, t\_type\_ma, t\_accCompletedWork\_ma, b\_affectedAcc\_ma, c\_aircraftID\_ai, c\_airlineID\_al)

VALUES (110036, '2000-06-15', 'Routine Maintenance', 'No significant issues detected; routine checks completed.', 1, 90036, 40036);

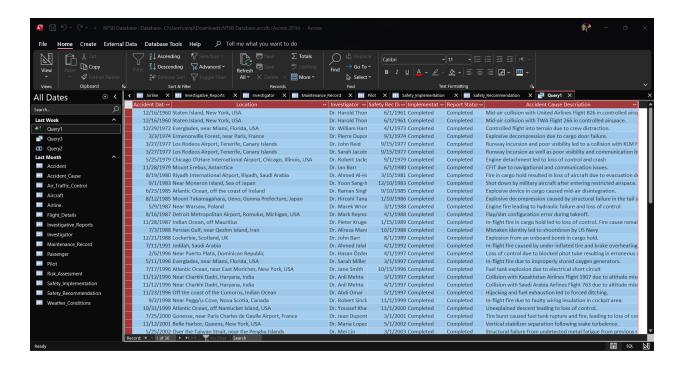
# **SQL Queries and Results**

## • Accident Investigation Summary Report (P5.11C):

```
a. Code
   SELECT
     a.d date ac AS [Accident Date],
     a.t location ac AS [Location],
     i.t Investigatorname in AS [Investigator],
     s.d dateIssued sr AS [Safety Rec Date Issued],
     si.t implementationStatus si AS [Implementation Status],
     ir.t reportStatus ir AS [Report Status],
     ac.t CaAccidentDesc acc AS [Accident Cause Description]
   FROM
     ((((Accident AS a
     INNER JOIN Investigator AS i ON a.c investigatorID in = i.c investigatorID in)
     INNER JOIN Safety Recommendation AS s ON i.c safetyRecID sr =
   s.c safetyRecID sr)
     INNER JOIN Safety_Implementation AS si ON s.c_safetyRecID_sr =
   si.c_safetyRecID_sr)
     INNER JOIN Investigative Reports AS ir ON i.c reportID ir = ir.c reportID ir)
   INNER JOIN
     Accident Cause AS ac ON a.c accidentcauseID acc = ac.c accidentcauseID acc
   WHERE
     ir.t reportStatus ir = 'Completed'
```

#### ORDER BY

a.d\_date\_ac;



## • Accident Summary with Fatalities Count (By Year Range)

### a. Code

PARAMETERS [Enter Start Year] Long, [Enter End Year] Long;

#### **SELECT**

a.c\_accidentID\_ac AS [Accident ID],

a.d date ac AS [Accident Date],

a.t location ac AS [Accident Location],

ac.t CaAccidentDesc acc AS [Accident Cause],

```
p.i casualties pa AS [Fatalities]
FROM
  ((Accident AS a
  INNER JOIN Accident Cause AS ac ON a.c accidentcauseID acc =
ac.c_accidentcauseID_acc)
  INNER JOIN Passenger AS p ON a.c accidentID ac = p.c accidentID ac)
WHERE
  Year(a.d date ac) BETWEEN [Enter Start Year] AND [Enter End Year]
ORDER BY
  a.d date ac
UNION ALL
SELECT
  NULL AS [Accident ID],
  NULL AS [Accident Date],
  "Total Fatalities:" AS [Accident Location],
  NULL AS [Accident Cause],
  SUM(p.i casualties pa) AS [Fatalities]
FROM
  ((Accident AS a
  INNER JOIN Accident Cause AS ac ON a.c accidentcauseID acc =
ac.c accidentcauseID acc)
```

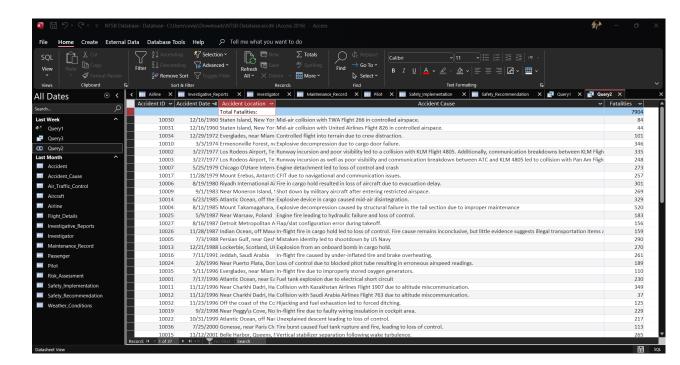
INNER JOIN Passenger AS p ON a.c accidentID ac = p.c accidentID ac)

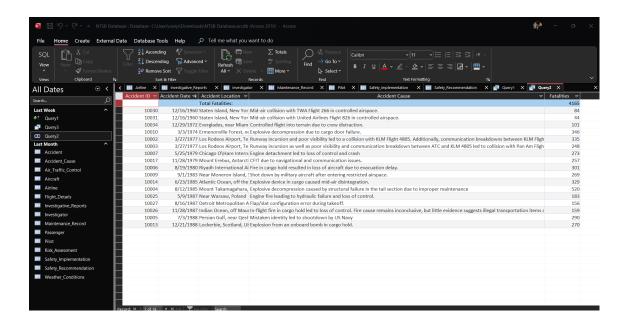
## WHERE

Year(a.d date ac) BETWEEN [Enter Start Year] AND [Enter End Year]

## ORDER BY

[Accident Date] ASC;





# • Detailed Accident Report by Aircraft Manufacturer

## a. Code

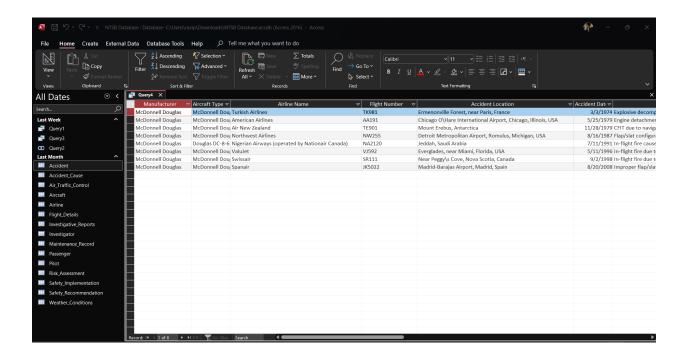
PARAMETERS [Enter Manufacturer Name] Text;

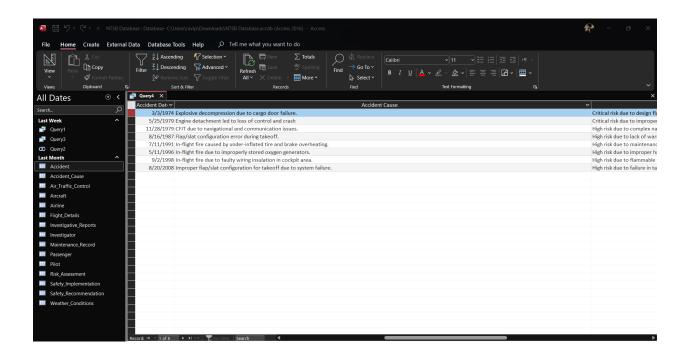
### **SELECT**

```
air.t_manufacturer_ai AS [Manufacturer],
air.t_aircraftType_ai AS [Aircraft Type],
al.t_airlinename_al AS [Airline Name],
fd.t_flightnumber_fd AS [Flight Number],
a.t_location_ac AS [Accident Location],
a.d_date_ac AS [Accident Date],
ac.t_CaAccidentDesc_acc AS [Accident Cause],
ra.t_riskDescription_ra AS [Risk Description],
wc.t_weatherDescription_wc AS [Weather Description],
```

```
we.i visibility we AS [Visibility],
  wc.i temperature wc AS [Temperature],
  p.i Injured pa AS [Injuries],
  p.i casualties pa AS [Fatalities]
FROM
  (((((Aircraft AS air
  INNER JOIN Accident AS a ON air.c aircraftID ai = a.c aircraftID ai)
  INNER JOIN Airline AS al ON al.c airlineID al = air.c airlineID al)
  INNER JOIN Flight Details AS fd ON fd.c flightdetailsID fd =
al.c flightDetailsID fd)
  INNER JOIN Accident Cause AS ac ON ac.c accidentcauseID acc =
a.c accidentcauseID acc)
  LEFT JOIN Passenger AS p ON p.c accidentID ac = a.c accidentID ac)
  LEFT JOIN Risk Assessment AS ra ON ra.c accidentID ac = a.c accidentID ac)
  LEFT JOIN Weather Conditions AS wc ON wc.c accidentID ac =
a.c_accidentID_ac
WHERE
  air.t manufacturer ai = [Enter Manufacturer Name]
ORDER BY
  a.d date ac;
```

#### Milestone Report Aviation 179





## Milestone Report Aviation 180

