

FOR REFERENCE ONLY

TRANSPORT JET AIRLINES
AQP PILOT
JOB TASK LISTING AND ANALYSIS
(JTL/JTA)
(TEMPLATE DOCUMENT)

Introduction to AQP Job Task List/Job Task Analysis (JTL/JTA)

The JTL/JTA presented here is intended as a model or template to facilitate development of your airline's AQP JTL/JTA document. The aircraft type represented here is not a specific aircraft type, but rather a generic example of a Group II Category aircraft used in air carrier transportation, hence the use of a fictional name, **Twin Jet**.

The Advanced Qualification Program (AQP) provides airlines with a voluntary alternative to traditional FAR 121 Subpart N and O training. The AQP allows an airline an opportunity to customized its' training to meet its' own needs, while training, qualifying and certifying flight crewmembers. One of the first steps in development of an AQP is conducting a Job Task List (JTL) and job task analysis (JTA) of the intended training.

The JTL is the basis for the numerical code that runs through the AQP system. It is also the base document that begins with detailed documentation of specific tasks and subtasks, including identification of associated knowledge and skills. The development of the JTL/JTA is considered the most critical step in the AQP process. It is the basic document that supports the curriculum development and all other documents.

The JTA is initiated with a process that identifies all the major tasks performed by those who carry out a particular duty for the airline. This job task listing includes all duties and major activities required when operating the aircraft in each phase of flight. Since most tasks are quite complex, it is sometimes necessary to further break them down by designating subtasks and in some cases, elements. By dividing each task in this manner, it becomes possible to define a numbered hierarchy of job requirements for each related duty.

Sections one through eight of the JTL are based upon phase of flight operations. Section nine contains special operating procedures such as cold weather operations, CFIT and training maneuvers. Section ten contains the emergency and abnormal procedures. Section eleven is the ground school task listing. Section twelve lists the basis for the CRM task analysis, and this section list tasks that are integrated within all training and evaluations.

Finally, JTL/JTA development involves a comprehensive collaboration between line pilots, check airmen and evaluators that's designed to ensure realistic, line operational training and evaluation for your airline's flight crew.

Purpose of This Document

This document is designed as a template for airlines interested in becoming a part of the FAA's AQP program, which is managed by the Voluntary Safety Programs Branch, AFS 230. It can be used as a guide for defining job task analysis information in an AQP. The document is comprised of two sections:

- *Job Task Listing (JTL) Outline*, which serves as a table of contents for locating information outlined in the second section.
- *Job Task Analysis (JTA)*, which provides an outline of each task and related sub-tasks, delineating the category for each task and sub-task listed. A reference column is also included in this section so that the policy/manual to which the task relates can be easily referenced.

The information and data provided in this document is only sample data, and is not related to any specific organization. Each airline must modify this document to apply its' own unique operational environment.

Job Task Listing (JTL) Outline

The JTL outline works as a table of contents for locating information outlined in the *Flight Crew Task Listing* section of this document. You will notice the **Task Factors Analysis** column is left blank in the JTL outline. This is provided for you to indicate the appropriate treatment of the task as it applies to your company.

Indicate one of the following three values in the **Task Factors Analysis** column, defined as follows:

<u>Value</u>	<u>Definition</u>
Currency	A terminal proficiency or supporting objective for which individuals and/or crews can maintain proficiency by repeated performance of the item in normal line operations. For pilots, most currency items may be validated during line checks, while most non-currency items must be demonstrated during training, validation, or evaluation events in a simulator or flight-training device.
Non-Critical	Indicates that this is a non-critical task, in that if the task is not executed properly the first time, one may repeat the task without risk to life or safety.
Critical	A terminal proficiency or supporting objective for which the substandard task performance would adversely affect safety. The relative need for awareness, care, exactness, accuracy, or correctness during task performance. Critical tasks must be accomplished more frequently in training and evaluation than non-critical tasks.

Section Number	Phase	Task Factors Analysis	
		Critical	Currency
1.0	Pre-Departure, Push Back, and Taxi		
1.1	Flight Preparation Procedures	No	Yes
1.1.1	Crew Reports for Duty	No	Yes
1.1.2	Acquire Flight Planning Information (Dispatch Release)	No	Yes
1.1.3	Perform Aircraft Preflight Inspection	No	Yes
1.2	Perform Before Start Procedures	No	Yes
1.2.1	Complete Flight Compartment Safety Inspection Checklist	No	Yes
1.2.2	Complete Acceptance and/or Turnaround Checklist	No	Yes
1.2.3	Complete Before Starting Engine Checks	No	Yes
1.3	Perform Starting Engines/Pushback Procedures	No	Yes
1.3.1	Acquire Load Planning and Performance Data, and Compute Weight and Balance	No	Yes
1.3.2	Determine V-Speeds and Takeoff Data	No	Yes
1.3.3	Perform Pushback Procedures	No	Yes
1.3.4	Perform Engine Start Procedure	No	Yes
1.3.5	Complete Starting Engines Checklist	No	Yes
1.4	Perform Pre-Departure Procedures	No	Yes
1.4.1	Perform Before Taxi Checks	No	Yes
1.4.2	Perform Taxi Check	No	Yes
1.4.3	Perform Before Takeoff Check	No	Yes
1.4.4	Perform Line-Up Check	No	Yes
2.0	Takeoff		Yes
2.1	Perform Pre-Takeoff Preparations	No	Yes
2.1.1	Perform Takeoff Preparation	No	Yes
2.1.2	Perform Aircraft Systems Monitoring	No	Yes
2.1.3	Assess Environmental Conditions	No	Yes
2.2	Perform Takeoff	No	Yes
2.2.1	Perform Normal Takeoff	No	Yes

Section Number	Phase	Task Factors Analysis	
2.2.2	Perform Crosswind Takeoff	No	Yes
2.2.3	Perform Reduced Visibility Takeoff	Yes	No
2.2.4	Perform Maximum Performance Takeoff	No	No
2.2.5	Perform Rejected Takeoff	Yes	No
2.2.6	Perform Takeoff (With Suspected Windshear)	Yes	No
2.2.7	Perform Takeoff (With Powerplant Failure At V ₁)	Yes	No
3.0	Climb		
3.1	Perform Initial Climb Configuration	No	Yes
3.1.1	Perform Aircraft Configurations	No	Yes
3.1.2	Perform Climb Checks	No	Yes
3.1.3	Perform Noise Abatement Requirements and Departure Procedures	No	Yes
3.2	Establish Final Climb Configuration	No	Yes
3.2.1	Perform 10,000 ft Checks	No	Yes
3.2.2	Perform Transition to Cruise Altitude	No	Yes
4.0	Cruise		
4.1	Perform Cruise Procedures	No	Yes
4.1.1	Establish Cruise Profile	No	Yes
4.1.2	Perform Cruise Checklist	No	Yes
4.2	Perform Cruise Situational Assessment	No	Yes
4.2.1	Assess Environmental Conditions	No	Yes
4.3	Perform Aircraft Systems Monitoring	No	Yes
4.4	Perform Cruise Navigation Procedures	No	Yes
4.4.1	Communicate with ATC	No	Yes
4.4.2	Perform Navigation	No	Yes
5.0	Descent and Hold		
5.1	Perform Descent Procedures	No	Yes
5.1.1	Assess Environmental Conditions	No	Yes
5.1.2	Destination/Alternate Considerations	No	Yes
5.1.3	Perform Aircraft Systems Monitoring	No	Yes
5.2	Perform Descent Initiation	No	Yes

Section Number	Phase	Task Factors Analysis	
5.2.1	Perform Descent Profile	No	Yes
5.2.2	Perform Communications Procedures	No	Yes
5.3	Perform Descent Checklist	No	Yes
5.3.1	Transition From Cruise Altitude	No	Yes
5.4	Perform Holding Procedures	No	No
5.4.1	Perform ATC Holding Clearance	No	No
5.4.2	Establish Holding Pattern Entry	No	No
5.4.3	Establish Holding Pattern	No	No
6.0	Approach		
6.1	Perform Approach Preparations	No	Yes
6.1.1	Assess Environmental Conditions	No	Yes
6.1.2	Perform ATC Communications	No	Yes
6.1.3	Perform Aircraft Systems Monitoring	No	Yes
6.1.4	Perform Approach Continuation Factors	No	Yes
6.1.5	Set NAVAIDS	No	Yes
6.1.6	Perform Approach Briefing	No	Yes
6.1.7	Perform Approach Checklist	No	Yes
6.2	Perform Precision Approach Procedures	Yes	No
6.2.1	Perform CAT I Coupled ILS Approach	Yes	No
6.2.2	Perform CAT I Un-Coupled ILS Approach	Yes	No
6.2.3	Perform Coupled ILS CAT II Approach (Two Engine)	Yes	No
6.2.4	Perform Coupled ILS CAT II Approach (Single Engine)	Yes	No
6.2.5	Perform ILS/ PRM Approach	Yes	No
6.2.6	Perform Single Engine ILS Approach	Yes	No
6.2.7	Perform ILS Approach with Flap Malfunction	Yes	No
6.3	Non-Precision Approach Procedures	Yes	No
6.3.1	Perform VOR Approach	Yes	No
6.3.2	Perform NDB Approach	Yes	No
6.3.3	Perform LOC Approach	Yes	No
6.3.4	Perform LOC BC Approach	Yes	No
6.3.5	Perform LDA Approach	Yes	No
6.3.6	Perform LDA/PRM Approach	Yes	No

Section Number	Phase	Task Factors Analysis	
6.3.7	Perform Single Engine Non-Precision Approach	Yes	No
6.3.8	Perform Non-Precision Approach with Flap Malfunction	Yes	No
6.3.9	Perform ASR Approach	Yes	No
6.4	Perform Visual Approach Procedures	No	Yes
6.5	Perform Approach with Windshear	Yes	No
6.6	Perform Missed Approach Procedures	Yes	No
6.6.1	Perform Normal Climb for Missed Approach	No	No
6.6.2	Perform Single Engine Climb for Missed Approach	Yes	No
6.6.3	Perform Published Holding from Missed Approach Procedures	No	No
7.0	Landing		
7.1	Perform Landing Preparations	No	Yes
7.2	Perform Normal Landing	No	Yes
7.3	Perform Crosswind Landing	No	
7.4	Perform Abnormal Landing	Yes	No
7.4.1	Perform Single Engine Landing	Yes	No
7.4.2	Perform No Flap Landing	No	No
7.4.3	Perform Landing with No Ground Spoilers	No	No
7.4.4	Perform Landing with Failed Stab Trim	No	No
7.5	Perform Rejected Landing with Two Engines	No	No
7.6	Perform Rejected Landing with Single Engine	Yes	No
8.0	Taxi/Parking		
8.1	Perform After Landing Preparations	No	No
8.2	Perform Taxi Operation	No	No
8.3	Perform After Landing Checklist	No	No
8.4	Perform Parking Checklist	No	No
8.5	Perform Terminating Checklist	No	No
9.0	Special Operating Procedures and Maneuvers		

Section Number	Phase	Task Factors Analysis	
9.1	Perform Steep Turn	No	No
9.2	Perform Approach to Stall	No	No
9.2.1	Takeoff Configuration	No	No
9.2.2	Perform En Route Configuration	No	No
9.2.3	Perform Landing Configuration	No	No
9.3	Perform Dutch Roll Demonstration (Specific Flight Characteristics)	No	No
9.3.1	Perform High Altitude Dutch Roll Demonstration Characteristic	No	No
9.3.2	Perform Low Speed Demonstration, High Drag Dutch Roll Characteristic	No	No
9.3.3	Perform Upset/Unusual Attitude Recovery	No	No
9.4	Perform Maximum Rate (Emergency) Descent	No	No
9.5	Perform CFIT Escape Maneuver	No	No
9.6	Perform TCAS Procedures	No	No
9.7	International Operations	No	No
10.0	Emergency and/or Abnormal Procedures		
10.1	Respond to Emergency and/or Abnormal Situations	Yes	No
10.1.1	Powerplant Emergencies	Yes	No
10.1.2	Smoke/Fire Emergencies	Yes	No
10.1.3	Pressurization Emergencies	Yes	No
10.1.4	Auto Flight Control System Emergencies	No	No
10.1.5	APU Emergencies	No	No
10.1.6	Bleed Air Emergencies	No	No
10.1.7	Ditching or Forced Landing Emergencies	Yes	No
10.1.8	Passenger Evacuation Emergencies	Yes	No
10.1.9	Electrical Emergencies	No	No
10.1.10	Flight Control Emergencies	Yes	No
10.1.11	Fuel Emergencies	No	No
10.1.12	Ice and Rain Protection Emergencies	No	No
10.1.13	Landing Gear Emergencies	No	No
10.1.14	Door Emergencies	No	No
10.1.15	Aural/Visual Emergencies	No	No

Section Number	Phase	Task Factors Analysis	
10.1.16	Engine Abnormal Conditions	No	No
10.1.17	Air-Conditioning Abnormal Conditions	No	No
10.1.18	Automatic Flight Control System Abnormal Conditions	No	No
10.1.19	APU Abnormal Conditions	No	No
10.1.20	Doors Abnormal Conditions	No	No
10.1.21	Electrical Abnormal Conditions	No	No
10.1.22	Fire Protection Abnormal Conditions	No	No
10.1.23	Flight Control Abnormal Conditions	No	No
10.1.24	Fuel System Abnormal Conditions	No	No
10.1.25	Hydraulics Systems Abnormal Conditions	No	No
10.1.26	Ice And Rain Protection Abnormal Conditions	No	No
10.1.27	Instruments Abnormal Conditions	No	No
10.1.28	Landing Gear Abnormal Conditions	No	No
10.1.29	Miscellaneous Abnormal Conditions	No	No
10.1.30	Aural/Visual Abnormal Conditions	No	No
11.0	Aircraft Systems (Ground School Training)		
11.1	Aircraft Systems		
11.1.1	Aircraft General		
11.1.2	Equipment/Furnishings		
11.1.3	Oxygen and Emergency Equipment		
11.1.4	Engines		
11.1.5	Electrical		
11.1.6	Pneumatic		
11.1.7	Environmental Control Systems (ECS)		
11.1.8	Auxiliary Power Unit (APU)		
11.1.9	Hydraulics		
11.1.10	Landing Gear and Brakes		
11.1.11	Flight Controls/Stall Protection		
11.1.12	Fuel		
11.1.13	Communications Equipment		
11.1.14	Flight Instruments		
11.1.15	Navigation Systems		
11.1.16	Autoflight Control System (AFCS)		

Section Number	Phase	Task Factors Analysis	
11.1.17	Warning and Detection Systems		
11.1.18	Fire Protection and Overheat Protection		
11.1.19	Aircraft Performance and Limitations		
11.1.20	MEL/CDL		
11.1.21	Lighting Systems		
11.1.22	Water and Waste Systems		
11.1.23	Ice and Rain Protection		
11.1.24	Aircraft Doors		
12.0	Non-Phase Specific: Crew Resource Management (CRM)	FAA AC 120-51	
12.1	Perform as a Crewmember in the Communication Process	FOM Chap.____	
12.1.2	Perform ATC Communication Procedures	FOM Chap.____	
12.2	Perform as a Crewmember in Teambuilding	FOM Chap.____	
12.3	Exhibit Workload Management Skills	FOM Chap.____	
12.3.1	Exhibit Planning Skills	FOM Chap.____	
12.4	Exhibit Situational Awareness Management Skills	FOM Chap.____	
12.5	Perform as a Crewmember in Decision Making	FOM Chap.____	
12.6	Perform as Crewmember in Threat and Error Management	FOM Chap.____	
12.6.1	Exhibit Threat and Error Management Skills	FOM Chap.____	
12.7	Exhibit Crewmember Duties/Responsibilities for Passenger Comfort	FOM Chap.____	
12.8	Exhibit Crewmember Duties/Responsibilities for Public Relations	FOM Chap.____	
12.9	Exhibit Crewmember Duties/Responsibilities for Schedule	FOM Chap.____	
12.10	Exhibit Crewmember Duties/Responsibilities for Operational Efficiency	FOM Chap.____	

Transport Jet Flight Crew Job Task Analysis (JTA)

This section gives an outline of each task and related sub-tasks, and specifies the category for each. A reference column is also included in this section so that the policy/manual for which the task relates can be easily referenced. Examples of entries can include the title and section of a manual, the policy name/number, or some other reference to different types of documentation, as it applies to the task and your organization.

The Flight Crew JTA shown below contains the function number that corresponds to the JTL outline, the task name, and all sub-tasks that correlate to each task. There is also a **Skill Type** column and a **References** column. The **Skill Type** column allows you to indicate what type of skill is required to execute the task, and the **References** column allows you to specify any reference documentation that relates to the task. There are values in the listing below, however these are examples and may not apply to your environment.

Indicate one of the following three values in the **Skill Type** column:

<u>Value</u>	<u>Definition</u>
K	Knowledge: Specific information required enabling a student to develop the skills and attitudes to effectively recall facts, identify concepts, apply rules or principles, solve problems and think creatively. Because knowledge is covert, students must be assigned overt activities to demonstrate their knowledge base.
CS	Cognitive Skill: Those intellectual skills that is prerequisite to the performance of a task, subtask, element or sub-element. The three primary categories of cognitive skill are discrimination, concept learning and rule using.
MS	Motor Skill: Physical actions required performing a specific task (subtask or element). Students have acquired a motor skill not when they can simply perform a prescribed procedure, but when their movements are smooth, regular and precisely timed. Those hands-on skills are prerequisites to the performance of a task, subtask, element, or sub-element.

User note:

1. **Reference column** – when developing your airline’s Job Task Analysis, annotate this column with your airline’s specific document references.
2. Examples of “skill types” are shown from *1.0 Pre-Departure, Push Back, and Taxi* through *6.2.5 Perform ILS/PRM Approach* to aid in developing your airline’s analysis of the associated skill type(s) for each task. Please continue with this analysis for the remainder of the JTA by applying the skill type definitions to each job task and sub-task listed, and amend any other task skill types, as appropriate, for the Group II aircraft that your airline intends to operate in AQP.

Note: Reference column - annotate with your airline's specific document references.

Task Name	Reference
1.0 Pre-Departure, Push Back, and Taxi	
1.1 Flight Preparation Procedures	
1.1.1 Crew Reports for Duty	Ops Manual Ch __
(K) Know procedures for sign-in, qualification requirements, security procedures and flight and duty time rest requirements.	Ops/Flt.Crew Policies
1.1.2 Acquire Flight Planning Information (Dispatch Release)	FSM Ch__
(K) Acquire flight plan information, including appropriate analyses, assessments, determinations and actions	
(K) Know refuel and defuel options, procedures and limitations.	
1.1.3 Perform Aircraft Preflight Inspection	AOM Ch__
(K) Know preflight inspection requirements	
(MS) Perform preflight inspection	
(CS) Evaluate need for deicing in accordance with clean aircraft concept	
1.2 Perform Before Start Procedures	
1.2.1 Complete Flight Compartment Safety Inspection Checklist	
(K) Know location and purpose of flight compartment safety inspection items, procedures for system checks and inspections requirements	
(K) Know content and purpose of documents involved in, and Procedures for, performing clipboard inspection Know electrical power sources available and procedures for applying power from them to the aircraft	
(K/MS) Know operation of APU Controls, pneumatic air supply, FMS messages and interpretations. Know appropriate power source for the situation; apply power from appropriate power source for the situation.	
(K/MS) Know nosewheel doors function and operate as required. Know what crew documents are required and have them available.	
(M/S) Perform flight compartment safety inspection requirements	
1.2.2 Complete Acceptance and/or Turnaround Checklist	
(K) Know contents of, and procedures for, the Acceptance and Turnaround Checklists, and when they are each performed	
(K) Know purpose, sequencing and procedures for performing captain's and first officer's flows	
(K) Know procedures for systems checks including First Flight of the Day	
(CS) Acquire and assess relative security information	
(K) Know exterior "Walk-Around Inspection" procedures	
(MS) Perform actions required for captain's and first officer's flows	
(CS) Understand requirements and procedures for determining operation within max safe altitude limits	
(MS) Perform Acceptance and/or Turnaround Checklists	
1.2.3 Complete Before Starting Engine Checks	
(K) Know checklist responses	
(K) Know the contents and purpose of the Before Starting Engines Checklist	
(K) Know materials to be briefed, equipment to be used and procedures for	

Task Name**Reference**

briefing the Additional Crew Member (ACM) and flight attendant(s).

(MS) Perform ACM and crewmember briefing to include security issues

(K) Know information required to brief flight attendants

(K) Know materials to be briefed, automation to be used, environmental conditions to consider and all specific takeoff briefing procedure requirements and limitations

(MS) Conduct takeoff briefing

(K/MS) Know how to operate and program navigational equipment for departure, en route and arrival phases

(CS/MS) Complete appropriate navigational equipment data entry for departure, en route and arrival phases of flight

(CS/MS) Perform the "Before Starting Engines" checklist

(MS) Conduct flight attendant(s) crew briefing, including security issues

1.3 Perform Starting Engines/Pushback Procedures**1.3.1 Acquire Load Planning and Performance Data, and Compute Weight and Balance**

(K) Know requirements and procedures for preparing weight and balance and HAZMAT concerns

(MS) Perform weight analysis

(K) Know requirements and procedures for preparing performance data

(MS) Complete performance data for aircraft weight

(K) Know Fuel System check items to include First Flight of the Day

(MS) Perform Fuel Systems checks and First Flight of the Day requirements

1.3.2 Determine V-Speeds and Takeoff Data

(K) Know materials and procedures for acquiring aircraft V-Speeds and takeoff data including thrust settings

(CS/MS) Understand the purpose of and how to display V-Speeds Takeoff Data for the appropriate weight

1.3.3 Perform Pushback Procedures

(K) Know content and purpose of "Pushback" procedure

(K) Know how to obtain clearance for pushback

(MS) Perform actions required for pushback, including requesting clearance, initiating pushback, operating brakes and other controls

(CS) Understand flight deck door closing protocols

1.3.4 Perform Engine Start Procedure

(CS) Understand when to request clearance to initiate engine start and procedures for making the request

(K) Know content and procedures for starting engines

(K) Know starting systems components, "Normal Engine Starting"

Task Name**Reference**

procedures (APU ON), limitations and malfunctions

(K) Know description, functions, applicable performance data and operation of the engine

(K) Know different types of starts available; and when to use each type including: APU, cross-bleed, external air and battery start

(K) Know conditions for an abort start

(MS) Perform actions required for different engine starts and abort "Engine Start" procedures

(CS) Understand Engine Systems and "Starting" procedures

1.3.5 Complete Starting Engines Checklist

(K) Know checklist items and correct responses

(MS) Perform actions required for Starting Engines Checklist

1.4 Perform Pre-Departure Procedures

(K) Analyze weather for adverse conditions along departure track

(K) Know operation of Auxiliary Power Unit Controls, components, AC generation, pneumatic air supply, FMS displays and limitations

Know purpose, operation and limitations of continuous ignition and when it should be used.

(K) Know setting of packs and bleeds with regard to availability of APU

(K) Know functions and limitations of weather radar

1.4.1 Perform Before Taxi Checks

(K) Know procedures for completing before taxi checks Know when to apply "Single Engine or Two-Engine Taxi" procedures.

(CS/MS) Perform "Low Visibility Taxi" procedures including SMGCS, when applicable

(MS) Perform actions required before Taxi Checks may be initiated

(K) Understand how to obtain taxi clearance. Captain - Brief anticipated or cleared route, and ensure crew understands taxi clearance

(CS/MS) Perform Taxi Check

(K) Know content of, and procedures for, completing taxi checks to include First Flight of the Day items.

(K) Understand effects of contaminated airport surfaces.

1.4.3 Perform Before Takeoff Check

(K) Know content of, and procedures for, completing before takeoff checks to include First Flight of the Day items.

(CS/MS) Know interpretation of relevant FMS messages Perform procedures for checking and clearing FMS messages.

(K/CS/MS) Perform actions required for before takeoff Perform second engine start as required Know impact of "Icing" and "Removal" procedures Use holdover charts properly Understand requirements and procedures for

Task Name**Reference**

pre-takeoff announcement.

(K/CS/MS) Know purpose, operation and limitations of continuous ignition, and when it should be used. Utilize continuous ignition, as required. Understand procedures for flight attendant(s) coordination indicating cabin is ready for takeoff.

1.4.4 Perform Line-Up Check

(K) Understand requirements and procedures for performing the Lineup Checklist

(MS) Correctly configure Bleed-air and Anti-ice Systems for previously briefed takeoff situation

(K) Know availability of APU bleed air

2.0 Takeoff**2.1 Perform Pre-Takeoff Preparations****2.1.1 Perform Takeoff Preparation**

(K) Know Autoflight Control Systems, Flight Control Panel and flight directors operations and limitations

(MS) Ensure flight directors are set correctly

(CS) Ensure takeoff clearance is received and departure clearance is understood

2.1.2 Perform Aircraft Systems Monitoring

(K) Know when and what aircraft systems are to be monitored, and the procedures to be followed

2.1.3 Assess Environmental Conditions

(K) Know what environmental conditions to assess/consider including visibility and wind limitations

(CS/MS) Perform actions required for assessing environmental conditions

2.2 Perform Takeoff

(CS) Understand environmental conditions and select correct takeoff procedure

(K) Know normal gear operation, "Landing Gear Control Panel" operational procedures and FMS indications

(K) Know Flight Control Panel and modes of operation

(K) Know "Autopilot" operational procedures and limitations

(CS/MS) Perform actions required for a selected takeoff

(K/CS) Understand takeoff roll and how to make standard calls

(MS) Ensure aircraft is aligned on runway centerline, as close as possible to the takeoff end of the runway

(K) Understand brake usage for normal, performance, reduced visibility and rejected takeoff

(K) Understand engine thrust setting criteria

Task Name	Reference
(MS) Complete appropriate setting of takeoff thrust	
(MS) Properly utilize rudder pedals for steering; avoid use of tiller steering on takeoff roll	
(CS) Understand pitch attitude and rotation to be achieved for takeoff event	
(MS) Perform smooth aircraft rotation of approximately 3° per second to initial required pitch attitude	
(CS) Monitor critical aircraft systems	
2.2.1 Perform Normal Takeoff	
(MS) Perform actions required for Normal Takeoff	
2.2.2 Perform Crosswind Takeoff	
(MS) Perform actions required for Crosswind Takeoff	
2.2.3 Perform Reduced Visibility Takeoff	
(MS) Perform actions required for Reduced Visibility Takeoff	
2.2.4 Perform Performance Takeoff	
(MS) Perform actions required for Performance Takeoff	
2.2.5 Perform Rejected Takeoff (RTO)	
(K) Know when to perform an RTO and the procedures to be followed	
(CS/MS) Perform rejected takeoff following applicable “Normal”, “Abnormal” and/or “Emergency” procedures	
(CS) Evaluate emergency condition and decide if emergency evacuation is required	
(K) Understand procedures for communications with ATC and flight attendant(s)	
(CS/MS) If required, perform “Emergency Evacuation” procedures and coordinate with Flight Attendant(s)	
2.2.6 Perform Takeoff (With Suspected Windshear)	
(K) Know the conditions that present potential for a takeoff with suspected windshear	
(K) Know flight directors operations and limitations during windshear conditions	
(CS) Determine if takeoff is feasible under the current and forecast conditions, and which type of takeoff procedure should be followed	
(CS/MS) Perform actions required for a takeoff with suspected windshear	
2.2.7 Perform Takeoff (With Powerplant Failure At V1)	
(CS/MS) Perform actions for a takeoff with powerplant failure at V1	
Perform Engine Failure after V1 Profile	
(K) Know aircraft configuration and operational procedures and FMS indications	
(K) Know Flight Control Panel modes of operation and operating	

Task Name**Reference**

procedures

(K) Know flight directors and autopilot operations and limitations

3.0 Climb**3.1 Perform Initial Climb Configuration**

(K) Know when and what aircraft systems are to be monitored and the procedures to be followed including engine instruments

(CS) Monitor aircraft systems

(MS) Adjust thrust levers to proper thrust settings

(CS/MS) Complete standard callouts as required

(K) Know what environmental conditions to assess/consider and procedures to follow

(K) Know descriptions, functions and operating procedures for weather radar, anti-icing equipment and Ignition System

(MS) Perform weather analysis, and operate weather radar, anti-icing equipment and continuous ignition

(K) Know ATC standard departures, specific clearance and modifications and procedures for establishing communications with ATC

(K) Know the features, operation and limitations of the Navigation Systems and Navigation Displays

(MS) Accomplish communications with ATC and comply with clearances

(CS/MS) Use Navigation Systems in compliance with ATC clearance

3.1.1 Perform Aircraft Configurations

(K) Understand proper flap restriction schedule including minimum airspeeds

(MS) Demonstrate proper airspeed control and flap restrictions

3.1.2 Perform Climb Checks

(K) Know Flight Control Panel modes of operation and operating procedures

(K) Know content of, and procedures for, climb checks

(CS/MS) Perform Climb Checklists and accomplish ATC communications as required

3.1.3 Perform Noise Abatement Requirements And Departure Procedures

(CS) Understand noise abatement requirements and departure procedures

(CS) Comply with assigned departure profile

3.2 Establish Final Climb Configuration**3.2.1 Perform 10,000 ft Checks**

(K) Understand climb profiles

(CS/MS) Accomplish 10,000 ft/climbing checks

(MS) Communicate/coordinate with flight attendant(s) of "Sterile Cockpit" procedures

Task Name**Reference****3.2.2 Perform Transition to Cruise Altitude**

(MS) Set altimeters upon passing transition altitude

(CS/MS) Establish proper climb speed and thrust setting

(CS) Ensure selected cruise altitude is within aircraft performance capability

4.0 Cruise**4.1 Perform Cruise Procedures****4.1.1 Establish Cruise Profile**

(K) Know Dispatch Release cruise information including planned altitudes

(CS/MS) Verify engine indications for selected cruise profile and adjust thrust

(CS/MS) Make all standard call outs

4.1.2 Perform Cruise Checklist

(CS/MS) Perform actions required for Cruise Checklist

(MS) Perform "Fuel Monitoring" procedures during cruise flight

4.2 Perform Cruise Situational Assessment**4.2.1 Assess Environmental Conditions**

(CS) Monitor actual fuel burn vs. Dispatch Release

(CS) Analyze en route weather

(K) Know descriptions, functions and operating procedures for weather radar, anti-icing equipment and Ignition System

(CS) Coordinate with flight attendant(s) as necessary regarding actual/suspected turbulence or other factors

4.3 Perform Aircraft Systems Monitoring

(CS/MS) Monitor aircraft systems and respond to FMS messages

(CS/MS) Monitor engine instruments and adjust thrust settings as necessary

4.4 Perform Cruise Navigation Procedures**4.4.1 Communicate with ATC**

(K) Know requirements and procedures for en route flight following

(CS/MS) Accomplish communications with ATC and comply with clearances

4.4.2 Perform Navigation

(K) Understand operation of Navigation Systems and Navigation Displays

(CS/MS) Monitor navigation progress

(MS) Change course to alternate or out-of-sequence waypoint as necessary

5.0 Descent and Hold**5.1 Perform Descent Procedures****5.1.1 Assess Environmental Conditions**

(CS/MS) Perform weather analysis and operate appropriate aircraft systems

5.1.2 Destination/Alternate Considerations

Task Name**Reference**

- (K) Determine destination weather to consider need for an alternate
- (K) Know when to consider diverting to an alternate
- (CS/MS) Understand the weather, fuel status, delays, NOTAMs and aircraft mechanical status when considering
- (CS/MS) Obtain weather reports including ATIS and runway conditions

5.1.3 Perform Aircraft Systems Monitoring

- (K) Monitor aircraft systems and know the procedures to be followed
- (K) Know relative FMS messages and their interpretations
- (CS/MS) Interpret and clear FMS messages and monitor aircraft systems
- (MS) Perform Descent Initiation
- (K) Know the features and operation of Navigation Systems and Navigation Displays
- (MS) Perform initial descent communications
- (K) Know descent initiation procedures
- (CS/MS) Perform actions required for descent initiation

5.2.1 Perform Descent Profile

- (K) Know planned descent profile, when to establish it and procedures to be followed
- (CS/MS) Demonstrate descent profile
- (CS/MS) Monitor automation for initiation of descent
- (MS) Initiate descent
- Monitor flight path angle using altitude range prediction
- (MS) Adjust thrust levers for descent
- (CS) Maintain position and terrain awareness

5.2.2 Perform Communications Procedures

- (CS/MS) Accomplish required communications and comply with ATC descent clearance and modifications
- (K) Know descent communications/ATC procedures
- (K) Know required in-range Company communication

5.3 Perform Descent Checklist

- (K) Read/Respond to Descent Checklist
- (CS/MS) Perform Descent Checklist actions (18,000 ft)
- (MS) Communicate with flight attendant(s) using proper procedure for descent and “Sterile Cockpit”
- (MS) Demonstrate standard callouts as required

5.3.1 (MS) Transition from Cruise Altitude

- (MS) Know operation of Auxiliary Power Unit Controls, components, AC generation, pneumatic air supply, FMS Displays and limitations
- (MS) Know procedures for transition from cruise altitude, including

Task Name**Reference**

requirements for resetting and crosschecking altimeters (FL180)

(MS) Set altimeters to current setting and cross-check all altimeters

(MS) Determine APU availability and obtain bleeds data for setting go-around N1

(MS) Perform actions required for setting landing/weight data

5.4 (MS) Perform Holding Procedures**5.4.1 (MS) Perform ATC Holding Clearance**

(MS) Perform actions required for descent holding clearance

(MS) Understand holding instructions from ATC and ensure all parts of holding clearances are received

(MS) Review and plan entry into holding pattern

5.4.2 (MS) Establish Holding Pattern Entry

(MS) Know proper entry procedures

(MS) Know appropriate airspeed for holding

(MS) Know when and what activities are to be accomplished while entering holding and procedures to be followed

(MS) Perform holding pattern entry

(MS) Recognize arrival at holding fix and accomplish communications with ATC

(MS) Fly proper entry procedure

5.4.3 (MS) Establish Holding Pattern

(MS) Know when and what activities are to be accomplished while in holding

(MS) Perform holding pattern procedures

(MS) Make appropriate corrections to leg timing

(CS/MS) Know how to obtain all-engine/one engine-out holding performances

(CS/MS) Perform ATC communications

6.0 Approach**6.1 Perform Approach Preparations****6.1.1 Assess Environmental Conditions**

(K) Understand environmental conditions and procedures to be followed

(K) Understand operating procedures for weather radar, anti-icing equipment and ignition system

(CS/MS) Perform weather analysis and operate applicable equipment

(CS/MS) Understand and maintain position and terrain awareness through chart documents and NAVAIDS

(CS) Analyze weather along approach track

(K) Understand environmental conditions that are associated with windshear

Task Name**Reference****6.1.2 Perform ATC Communications**

- (K) Know approach procedures, specific approach clearance and modifications, and procedures for establishing communications with ATC
- (CS/MS) Accomplish communications with ATC and comply with approach clearance and modifications

6.1.3 Perform Aircraft Systems Monitoring

- (CS) Monitor aircraft systems

6.1.4 Perform Approach Continuation Factors

- (CS) Consider weather minimums in decision to continue an approach
- (K) Know and consider fuel status and delays in decision to continue an approach
- (CS) Consider mechanical condition of aircraft in decision to continue an approach
- (CS/MS) Ascertain and consider success of prior aircraft on approach in decision to continue an approach
- (CS/MS) Monitor braking reports and wind advisories as appropriate
- (CS/MS) Assess wake turbulence possibilities

6.1.5 Set NAVAIDS

- (K) Know procedures for using appropriate NAVAIDS
- (CS/MS) Set and identify NAVAIDS for approach, and set DH/MDA on PFDs
- (K) Know procedures and limitations of available NAVAIDS function number and name

6.1.6 Perform Approach Briefing

- (CS/MS) Perform approach briefing
- (K) Understand navigation modes to be used and levels of automation
- (MS) Brief level of automation to be used for approach
- (CS/MS) Execute all standard callouts
- (CS/MS) Captain - Brief anticipated taxi clearance

6.1.7 Perform Approach Checklist

- (K) Know content of approach checks and procedures to be followed
- (MS) Perform Approach Checklist
- (CS/MS) Communicate with flight attendant(s) using proper protocols regarding landing expectations
- (K) Know flight directors operations and limitations
- (K) Know "Flight Control Panel" operating procedures and FMA Functions and Displays
- (K) Know auto-pilot components, modes of operation, operating procedures and limitations
- (CS/MS) Obtain approach clearance and set up FCP

Task Name	Reference
(CS/MS) Verify FCP settings on FMA	
(CS/MS) Monitor intercept of localizer	
(MS) Conduct Stabilized Approach concept	
(CS/MS) Make standard callouts	
Perform Before Landing Checklist	
(CS) Understand required visual cues for determining the Landing or Missed Approach decision (FAR121.651)	
(MS) Perform transition to Visual Landing	
(MS) Understand and performs correct callouts during visual transition	
6.2.1 Perform CAT I Coupled ILS Approach	
(K) Know description of CAT I Precision Approach, when to perform it and procedures to be followed	
(CS/MS) Perform actions required for a CAT I Coupled ILS Precision Approach	
6.2.2 Perform CAT I Un-Coupled ILS Approach	
(K) Know description of CAT I Precision Approach, when to perform it and procedures to be followed	
(CS/MS) Perform actions required for a CAT I Un-Coupled ILS Precision Approach	
6.2.3 Perform Coupled ILS CAT II Approach (Two Engine)	
(K) Know description of CAT II Precision Approach, when to perform it and procedures to be followed	
(CS/MS) Perform actions required for a Coupled ILS CAT II Precision Approach (Two Engine)	
6.2.4 Perform Coupled ILS CAT II Approach (Single Engine)	
(K) Know description of CAT II Precision Approach, when to perform it and procedures to be followed	
(CS/MS) Perform actions required for a Coupled ILS CAT II Precision Approach (Single Engine)	
6.2.5 Perform ILS/PRM Approach	
(K) Know description of ILS/PRM Precision Approach, when to perform it and procedures to be followed	
(CS/MS) Perform actions required for an ILS/PRM Precision Approach	
(K) Understand breakout maneuvers	
(CS/MS) Know and perform PRM briefing requirements	
(K) Tune #2 radio to PRM final monitor frequency	
6.2.6 Perform Single Engine ILS Approach	
Know Single Engine CAT I ILS Precision Approach profile and procedures	
Perform actions required for a CAT I Single Engine ILS Precision Approach	

Task Name**Reference****6.2.7 Perform ILS Approach with Flap Malfunction**

Know CAT I ILS Precision Approach with Flap Malfunction profile and procedures

Perform actions required for a CAT I ILS Precision Approach with Flap Malfunction

6.3 Non-Precision Approach Procedures

Perform procedure turn and maintain required altitude

Level off at MDA maintaining appropriate altitude and airspeed

Make standard calls appropriate to Non-(MS) Precision Approach

Understand procedures for continuing the approach or performing Missed Approach

Perform Before Landing Checklist

Demonstrate procedures for leaving MDA

Perform transition to Visual Landing

Understand ground proximity alerts and warnings and take appropriate actions

6.3.1 Perform VOR Approach

Know VOR Non-Precision Approach profile and procedures

Perform actions required for a VOR Approach

6.3.2 Perform NDB Approach

Know NDB Non-Precision Approach profile and procedures

Perform actions required for an NDB Approach

6.3.3 Perform LOC Approach

Know LOC Non-Precision Approach profile and procedures

Perform actions required for a LOC Approach

6.3.4 Perform LOC BC Approach

Know LOC BC Non-Precision Approach profile and procedures

Perform actions required for a LOC BC Approach

6.3.5 Perform LDA Approach

Know LDA Non-Precision Approach profile and procedures

Perform actions required for a Non-Precision Approach

6.3.6 Perform LDA/PRM Approach

Know LDA/PRM Non-Precision Approach profile and procedures

Perform actions required for a LDA/PRM Approach

Understand breakout maneuvers

Know and perform PRM briefing requirements

Tune #2 radio to PRM final monitor frequency

Task Name**Reference****6.3.7 Perform Single Engine Non-Precision Approach**

Know Single Engine Non-Precision Approach profile and procedures

Perform actions required for a Single Engine Non-Precision Approach

6.3.8 Perform Non-Precision Approach with Flap Malfunction

Know Non-Precision Approach with Flap Malfunctions profile and procedures

6.3.9 Perform ASR Approach

Know ASR Non-Precision Approach profile and procedures

Perform actions required for a ASR Non-Precision Approach

6.4 Perform Visual Approach Procedures

Know Visual Approach profile and procedures

Know autopilot limitations

Perform actions required for a Visual Approach

Monitor electronic and visual approach aids

Conduct approach in accordance with stabilized approach concept and place aircraft in position from which to execute a Normal Landing

Understand effects of crosswinds on approach and appropriate corrections

Perform Before Landing Checklist

Perform actions required for a Visual Approach with a crosswind

Understand and apply appropriate airspeed correction for gusts factors

Understand and use crosswind correction techniques on Final Approach

6.5 Perform Approach with Windshear

Know Flight Control Panel and flight directors operations and limitations

Understand engine thrust management during windshear escape

Know environmental conditions that favor possibility of windshear

Know “Windshear Avoidance” and “Escape” procedures including both genetic and use of automation

Know flight path cues upon encountering windshear

Know interpretations of PFD indications for windshear alerts and warnings including fly out guidance

Perform “Windshear Escape” procedure

6.6 Perform Missed Approach Procedures

Know description of initiating a Missed Approach, when to perform it and procedures to be followed

Perform actions required for a Missed Approach/Rejected Landing

Perform actions required for a Non-Precision Approach with Flap Malfunctions

6.6.1 Perform Normal Climb for Missed Approach

Know description of the climb portion of Missed Approach, when to

Task Name**Reference**

perform it and procedures to be followed

Know autopilot components, modes of operation, Flight Control Panel, operating procedures and limitations

Perform actions required for the climb portion of a Missed Approach/Rejected Landing

6.6.2 Perform Single Engine Climb for Missed Approach

Know description of the climb portion (single-engine) of a Missed Approach, when to perform it and procedures to be followed

Perform actions required for the climb portion (single-engine) of a Missed Approach

6.6.3 Perform Published Holding from Missed Approach Procedures

Know description of the departure portion of a Missed Approach, when to perform it and procedures to be followed

Demonstrate awareness of obstacle clearance and terrain

Perform actions required for the departure portion of a Missed Approach

Know ATC communications requirements during Missed Approach

Comply with appropriate guidance regarding departure procedures if applicable and adhere to ATC clearance or Missed Approach procedure

7.0 Landing**7.1 Perform Landing Preparations**

Know Thrust Reversing System components and operational procedures

Pilot-Flying - Correct for crosswind conditions with smooth, positive aileron and rudder control inputs

Assess wind conditions for limitations

Captain - Use proper crew coordination to assume control of aircraft

After touchdown, PF - Apply smooth, positive rudder pedal inputs to maintain runway centerline

Demonstrate the use of standard calls as required

Consider special requirements for adverse weather

After main landing gear touchdown, achieve smooth nose wheel touchdown

Maintain deceleration rate until stopped or desired taxi speed is achieved

7.2 Perform Normal Landing

Know description of Normal Landing, when to perform it and procedures to be followed

Perform actions required for Normal Landing

7.3 Perform Crosswind Landing

Know description of Crosswind Landing, when to perform it, and procedures to be followed

Perform actions required for Crosswind Landing

7.4 Perform Abnormal Landing

Task Name	Reference
Know description of Abnormal Landing, when to perform it and procedures to be followed	
Perform actions required for Abnormal Landing	
7.4.1 Perform Single Engine Landing	
Know description of Single Engine Landing, when to perform it and procedures to be followed	
Perform actions required for Single Engine Landing	
7.4.2 Perform No Flap Landing	
Know description of No Flap Landing, when to perform it and procedures to be followed	
Perform actions required for No Flap Landing	
7.4.3 Perform Landing With No Ground Lift Dumping (GLD)	
Know and understand “No GLD Landing” procedures	
Perform actions required for landing with GLD malfunction	
7.4.4 Perform Landing With Failed Stab Trim	
Know and understand “Landing With Stab Trim Failed” procedures	
Perform actions required for landing with a failed stab trim	
7.5 Perform Rejected Landing with Two Engines	
Know and understand “Rejected Landing” procedures	
Perform actions required for a Rejected Landing	
7.6 Perform Rejected Landing with Single Engine	
Know and understand “Rejected Landing” procedures	
Perform actions required for a Rejected Landing with single engine	
8.0 Taxi/Parking	
8.1 Perform After Landing Preparations	
Obtain and understand taxi clearance	
Captain - Brief and ensure crew understands taxi clearance	
Consider special requirements for adverse weather Communicate with company as required	
Know operation of Auxiliary Power Unit Controls, components, AC generation, pneumatic air supply, FMS, Displays and limitations	
Know when and what to consider regarding bleed air for after landing taxi in and procedures to be followed	
Consider APU availability and perform actions required for bleeds open taxi in	
8.2 Perform Taxi Operation	
Perform actions required for taxiing with both or single engines	
Know description of taxiing with both or single engines, when to perform them and procedures to be followed	

Task Name**Reference**

Observe engine cool down limitation

8.3 Perform After Landing Checklist

Know description of after landing checks, when to perform them and procedures to be followed

Perform actions required for after landing checks

8.4 Perform Parking Checklist

Know description of parking checks, when to perform them and procedures to be followed

Perform actions required for parking checks

8.5 Perform Terminating Checklist

Know description of terminating checks, when to perform them and procedures to be followed

Perform actions required for terminating checks

9.0 Special Operating Procedures and Maneuvers**9.1 Perform Steep Turn**

Know steep turns and factors associated with performance, wing loading, angle of bank, stall speed, pitch and power requirements and over banking tendencies

Know description of steep turn proficiency maneuver, when to perform it and procedures to be followed

Perform actions for a steep turn proficiency maneuver

9.2 Perform Approach to Stall

Know factors that influence a stall and the proper procedures for resuming normal flight after an approach to a stall

Know description of approach to stall proficiency maneuvers, how to recognize them and procedures to be followed

Know Autoflight Control System, including AFCS components, FMA, flight directors, modes of operation, Flight Control Panel, autopilot and limitations

Know Landing Gear System, specifically: main and nose landing gear, Landing Gear Control Panel, FMS indications, normal gear extension and retraction (all gear)

Perform actions required for approach to stall proficiency maneuvers

9.2.1 Takeoff Configuration Stall

Perform actions required for takeoff configuration stall

9.2.2 Perform En Route Configuration Stall

Perform actions required for en route configuration stall

9.2.3 Perform Landing Configuration Stall

Perform actions required for landing configuration stall

9.3 Perform Dutch Roll Demonstration (Specific Flight Characteristics)

Know description of Dutch roll specific flight characteristics, how to

Task Name	Reference
recognize them, factors that influence Dutch roll characteristics and the procedures for resuming normal flight	
Know Autoflight Control System, components and autopilot/yaw damper/trim	
9.3.1 Perform High Altitude Dutch Roll Demonstration Characteristic	
Perform actions required for high altitude Dutch roll flight characteristics demonstration	
9.3.2 Perform Low Speed Demonstration, High Drag Dutch Roll Characteristic	
Know Landing Gear System, specifically: main and nose landing gear, Landing Gear Control Panel, FMS indications, normal gear extension and retraction (all gear)	
9.3.3 Perform Upset/Unusual Altitude Recovery	
Perform actions required for aircraft recovery	
9.4 Perform Maximum Rate (Emergency) Descent	
Know description of maximum rate (emergency) descent, when to perform it and procedures to be followed	
Perform actions required for maximum rate (emergency) descent	
9.5 Perform CFIT Escape Maneuvers	
Understand Ground Proximity Displays, Controls and Functions	
Understand ground proximity alerts and warnings	
Understand correct escape maneuver	
9.6 Perform TCAS Procedures	
Understand TCAS displays, Controls and Functions	
Understand TCAS procedures	
Understand deviation from ATC clearance to comply with resolution advisory (RA) command	
Comply with TCAS generated RA	
9.7 International Operations	
Know rules and procedures for international operations, as applicable	
Comply with rules and procedures for international operations, as applicable	
Understand and perform proper flight preparations and planning	
Know international weather minimums including alternate airports	
Know Bahamian/Canadian/Mexican airspace and airspeed limits including holding patterns	
Know altimeter setting procedure in foreign airspace	
Know international document procedures	
10 Emergency and Abnormal Procedures	
10.1 Respond to Emergency and/or Abnormal Situations	

Task Name**Reference**

Know emergency memory items as applicable

Perform memory items with the associated emergency procedures

PF - Maintain primary responsibility of flying the aircraft

Assess system status and select appropriate QRH procedure

Understand and establish priorities in dealing with multiple failures

Understand procedures for communication with ATC and flight attendant(s)

Properly manage ECS System

Properly evaluate degraded systems and resultant aircraft capabilities

Understand and demonstrate challenge and response method for actions related to movement of any thrust lever, generator, engine or APU fire push switch light and fire bottles

Crew coordination is essential and the procedure should be performed in a manner which keeps the PF aware of the situation

10.1.1 Engine Emergencies**10.1.2 Smoke/Fire Emergencies****10.1.3 Pressurization Emergencies****10.1.4 Automatic Flight Control System Emergencies****10.1.5 APU Emergencies****10.1.6 Bleed Air Emergencies****10.1.7 Ditching or Forced Landing Emergencies****10.1.8 Passenger Evacuation Emergencies****10.1.9 Electrical Emergencies****10.1.10 Flight Control Emergencies****10.1.11 Fuel Emergencies****10.1.12 Ice and Rain Protection Emergencies****10.1.13 Landing Gear Emergencies****10.1.14 Door Emergencies****10.1.15 Aural/Visual Emergencies****10.1.16 Powerplant Abnormal Conditions****10.1.17 Air-Conditioning Abnormal Conditions****10.1.18 Automatic Flight Control System Abnormal Conditions****10.1.19 APU Abnormal Conditions****10.1.20 Doors Abnormal Conditions****10.1.21 Electrical Abnormal Conditions****10.1.22 Fire Protection Abnormal Conditions****10.1.23 Flight Control Abnormal Conditions****10.1.24 Fuel System Abnormal Conditions****10.1.25 Hydraulics Systems Abnormal Conditions****10.1.26 Ice and Rain Protection Abnormal Conditions****10.1.27 Instruments Abnormal Conditions****10.1.28 Landing Gear Abnormal Conditions****10.1.29 Miscellaneous Abnormal Conditions****11.0 Aircraft Subjects – “Twin Jet” series aircraft****11.1 Aircraft Systems**

Know and describe the main features and components of the “Twin Jet” aircraft

Know and describe components, features, functions and operations of the aircraft’s systems

Know and describe the main features, components, location and operation of the various installed equipment and furnishings onboard the “Twin Jet”

Task Name	Reference
<p>aircraft</p> <p>Interpret FMS aural and visual messages relating to the aircraft's systems</p> <p>Know and demonstrate an understanding of aircraft performance to include high altitude, takeoff and landings, contaminated runways, Visual Approaches (day and night) of the Transport Jet</p> <p>Know and demonstrate an understanding of the Minimum Equipment List and the Configuration Deviation List and their utilization procedures</p> <p>11.1.1 Aircraft General</p> <p>11.1.2 Equipment/Furnishings</p> <p>11.1.3 Oxygen and Emergency Equipment</p> <p>11.1.4 Powerplant</p> <p>11.1.5 Electrical</p> <p>11.1.6 Pneumatic</p> <p>11.1.7 Environmental Control Systems (ECS)</p> <p>11.1.8 Auxiliary Power Unit (APU)</p> <p>11.1.9 Hydraulics</p> <p>11.1.10 Landing Gear and Brakes</p> <p>11.1.11 Flight Controls/Stall Protection</p> <p>11.1.12 Fuel</p> <p>11.1.13 Communications Equipment</p> <p>11.1.14 Flight Instruments</p> <p>11.1.15 Navigation Systems</p> <p>11.1.16 Autoflight Control System (AFCS)</p> <p>11.1.17 Warning and Detection Systems</p> <p>11.1.18 Fire Protection and Overheat Protection</p> <p>11.1.19 Aircraft Performance and Limitations</p> <p>11.1.20 MEL/CDL</p> <p>11.1.21 Lighting Systems</p> <p>11.1.22 Water and Waste Systems</p> <p>11.1.23 Ice and Rain Protection</p> <p>11.1.24 Aircraft Doors</p> <p>12.0 Non-Phase Specific: Crew Resource Management (CRM)</p> <p>12.1 Perform as a Crewmember in the Communication Process</p> <p>Use briefings to reaffirm established SOPs</p> <p>Review pertinent safety and security issues</p> <p>Encourage interactive participation in a timely manner</p> <p>Clearly verbalize initial and changed entries to automated Systems.</p> <p>Use crew self critique to debrief when appropriate</p> <p>12.1.2 Perform ATC Communications Procedures</p> <p>12.2 Perform as a Crewmember in the Teambuilding Process</p> <p>(CS/MS) Maintain an effective balance between respecting authority and practicing assertiveness</p> <p>(CS/MS) Demonstrate sensitivity to other crewmembers personalities and styles</p> <p>(CS/MS) Identify potential problems and establish "team concept"</p> <p>(CS/MS) Adapt to crew interpersonal differences</p> <p>(CS/MS) Recognize effects of stress and fatigue on performance</p> <p>12.3 Exhibit Workload Management Skills</p> <p>(CS/MS) Distribute tasks to maximize efficiency</p> <p>(CS/MS) Prioritize tasks for effective management</p>	<p><i>FAA AC 120-51</i></p>

Task Name	Reference
(CS/MS) Respond to new information and prepare in advance for required activities	
(CS/MS) Maintain vigilance and anticipate contingencies	
Monitor for tunnel vision caused by stress	
12.3.1 Exhibit Planning Skills	
12.4 Exhibit Situational Awareness Management Skills	
(CS/MS) Maintain awareness of operational environment and anticipate contingencies	
(CS/MS) Use effective crew monitoring when accomplishing required tasks	
(CS/MS) Identify programming demand that reduces Situational Awareness, create work overload and reduce the automation appropriately.	
(CS/MS) Ensure all crewmembers are in the planning process	
(CS/MS) Share relevant and timely information with the entire crew	
12.5 Perform as a Crewmember in Decision Making	
(CS/MS) Use effective techniques for involving crew/resources and evaluating information	
(CS/MS) Determine and implement the best course of action	
(CS/MS) Effectively use collaborative team decision skills	
12.6 Perform as a Crewmember in Threat and Error Management	
(CS/MS) Use an organized and planned approach to monitor errors	
(CS/MS) Effectively use error management skills and procedures	
12.6.1 Exhibit Threat and Error Management Skills	
12.7 Exhibit Crewmember Duties/Responsibilities for Passenger Comfort	
12.8 Exhibit Crewmember Duties/Responsibilities for Public Relations	
12.9 Exhibit Crewmember Duties/Responsibilities for Flight Schedules	
12.10 Exhibit Crewmember Duties/Responsibilities for Operations Efficiency	