

FOR REFERENCE ONLY

AQP QUALIFICATION STANDARDS
(Generic Template)

Qualification Standards Prologue

Overview

This document addresses the AQP Qualification Standards for flight crews who operate the following aircraft at Transport Jet Airlines: the “TwinJet”, a generic aircraft intended to be representative of Group II transport category aircraft.

This document satisfies certain AQP requirements described in 14 CFR 121 subpart Y, and AC 120-54 “Advanced Qualification Program”, as amended.

Under an AQP, Qualification Standards define proficiency baselines for all duty positions. In Transport Jet Airline’s AQP, the previous flight crew training standards delineated in 14 CFR Parts 61, 63, 65, and 121, and 135 are now replaced by this Qualification Standards document as the new regulatory requirement for Transport Jet Airline’s flight crew training.

The purpose of this document is to provide the following information pertaining to the Qualification Standards developmental process:

- Development methodologies utilized
- Relationship of the Qualification Standards to the development and validation of the Advanced Qualification Program (AQP) curricula
- Comparison of the AQP to existing training requirements

Task List Audit Trail:

To ensure all required tasks, subtasks, and elements are trained and checked, it is important to have a clear audit trail from the Task List to the Qualification Standards and the Curriculum. From the Task List to the Qualification Standards, the tasks are used to develop the Terminal Proficiency Objectives (TPO), the subtasks are used to develop the Supporting Proficiency Objectives (SPO), and the elements are used to develop the Enabling Objectives (EO). These TPOs, SPOs, and EOs are then used to develop the Curriculum Outline.

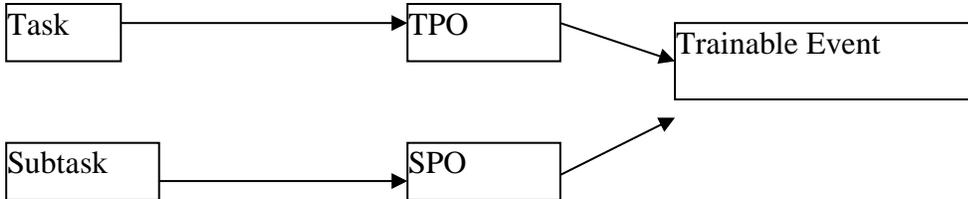
In general, this Qualifications Standards document is written for a generic aircraft, the “TwinJet” series aircraft. The Transport Jet Qualification (QC) and Continuing Qualification (CQ) programs will be based on this document and the corresponding task analysis. This document will help relate the general task analysis to the formation of specific Terminal Proficiency Objectives (TPO), corresponding Supporting Proficiency Objectives (SPO), and Enabling Objectives (EO).

Specific tasks listed in the task analysis are trained and evaluated using the information from the qualifications standards. TPOs and SPOs can be directly correlated numerically with specific tasks so interrelationships can also be determined.

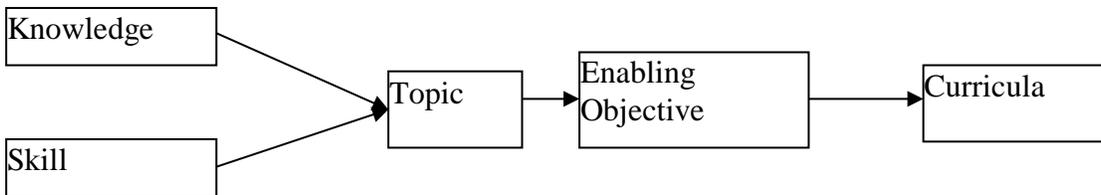
Data collection sheets have been developed to ensure all TPOs and the corresponding SPOs are evaluated in a manner consistent with the pilot's defined evaluation period. Information contained within the task listing can be directly correlated to curricula and ground school development.

The following chart shows a coordinated flow process for flight training and ground training:

Flight Training



Ground Training



The format used for the qualification standards has been modeled from the examples in AC-120-54, as amended.

Phases of Flight:

The Phases of Flight were specified during development of the task analysis. These phases carry through to the Qualification Standards. The first eight phases are flight profile specific. The last two non-profile specific phases were specified for items that cross two or more flight profile phases.

The flight profile phases are defined as follows:

1. Pre-Departure, Push Back and Taxi - begins when the crew reports for flight duty, and it ends when the aircraft is cleared for takeoff and the Before Takeoff Checklist is complete.
2. Takeoff - begins with the takeoff roll. This phase of flight ends when the After Takeoff Checklist is complete or upon reaching 3,000 ft. AGL, whichever comes later. Includes rejected takeoff (RTO). RTO ends when the aircraft has slowed to a normal taxi speed on the active runway.

3. Climb - begins at completion of the After Takeoff Checklist or reaching 3,000 ft. AGL, whichever comes later, and ends when the airplane levels off at top-of-climb.
4. Cruise - Begins at cruise altitude top-of-climb point, and ends when the aircraft descends below the cruise altitude for arrival at destination.
5. Descent - begins after the aircraft descends below the cruise altitude for arrival at destination. This phase ends when the aircraft arrives at the initial approach fix (IAF), begins receiving radar vectors to the final approach fix (FAF), or when cleared for the visual approach.
6. Approach - begins at the IAF, beginning of radar vectors to the FAF, or when cleared for a visual approach. Ends when the aircraft descends below decision height (DH), minimum descent altitude (MDA), or 200 feet AGL on a visual approach, with the intent of landing (missed approach procedures are included in this phase and will end at the completion of the After Takeoff Checklist.)
7. Landing - begins when the aircraft descends below the DH, MDA, or 200 feet AGL on a visual approach, with the intent of landing. Ends when the airplane reaches a normal taxi speed on the active runway prior to any turns being made.
8. Taxi and Parking - begins when the aircraft reaches normal taxi speed on the active runway prior to any turns being made. This phase ends when the flight crew leaves the aircraft after parking at the gate.

The non-profile specific phases are defined as follows:

9. Special Procedures or Maneuvers - consists of tasks, sub-tasks, and elements regarding non-profile specific emergency procedures and maneuvers.
10. Emergency and/or Abnormal Procedures - consists of tasks, sub-tasks, and elements regarding operation of the aircraft systems during abnormal and emergency operations.

Section 11 of the Task Analysis contains those job tasks related to aircraft subjects trained in an initial or qualification ground school curriculum. These tasks are also contained within the recurrent or continuing qualification curriculum. Since these task listings are aircraft ground training subjects, no Qualification Standards are developed for the Task Analysis, Section 11. The knowledge gained during such ground school subjects training will be evaluated through the administration of Systems Validation, Procedures Validation, Maneuvers Validation and the Line Operational Evaluation (LOE).

Section 12 lists Crew Resource Management (CRM) Non-Phase Specific Tasks. Transport Jet uses these tasks to help define certain related CRM skills that are integrated into all non-phase specific training and evaluation events. These are also used on the data collection forms to accommodate CRM data collection as they relate to technical reason codes.

Position / Function Specific Tasks:

Each task list is analyzed for tasks specific to a crew position or job function. If a task, sub-task, or element is duty specific, then it’s specified on the related qualification standard, which carries forward into the curriculum.

Flight crew duty positions and job functions are defined as follows:

Duty Position:

Captain - designated as the pilot in command (PIC). The captain exercises command over the aircraft and crew, and is the final authority for the safe and efficient operation of the aircraft in accordance with the Airplane Flight Manual, company policy, and the Federal Aviation Regulations (FARs).

First Officer - performs as second in command (SIC), and is responsible to the captain during flight operations, and shall assist the captain in the safe operation of the flight. If the Captain becomes incapacitated, the first officer shall assume all duties and responsibilities of command.

Duty Function:

Pilot Flying (PF) – is the pilot who is flying the aircraft.

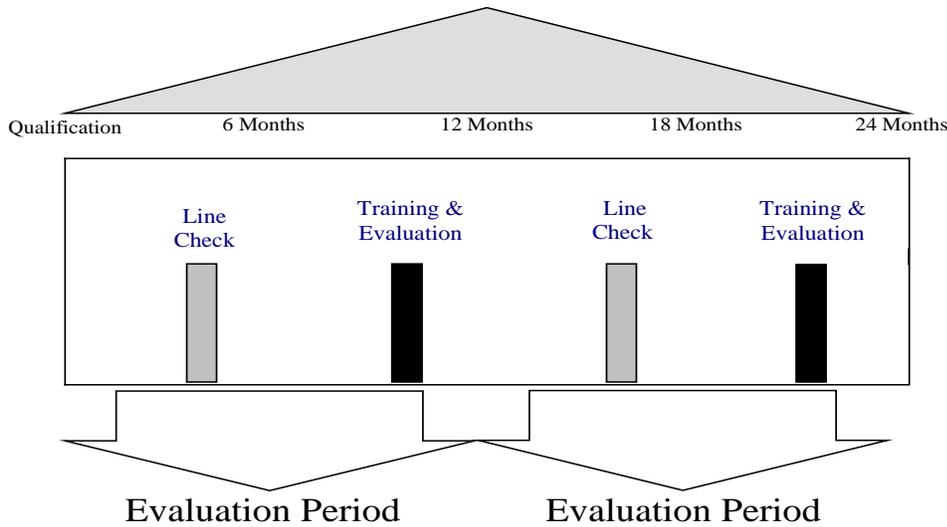
Pilot Monitoring (PM) - actively monitors all aspects of the flight, and will bring any problems or concerns to the attention of the PF. Also, he will perform all immediate action items and checklists when called for by the PF.

Criticality and Currency:

Inherent within the implementation schedule is the evaluation requirements of the AQP. **Criticality** is a determination of the relative impact of substandard task performance on overall safety. This designation indicates an increased need for awareness, care, exactness, accuracy or correctness during task performance. Each task and subtask was assigned a **Criticality** listing and then assigned a critical or non-critical category. Critical tasks must be evaluated during every evaluation period. Under the Transport Jet AQP, this means critical tasks must be evaluated every twelve months, plus or minus one month unless they are designated both critical and currency. Proficiency and evaluation of non-critical tasks must occur within every twenty-four months, plus or minus one month, as described below.

Training Priority	Critical (Y/N)	Currency (Y/N)	Terminal Proficiency Objective/Supporting Proficiency Objective
1	Y	N	Train, validate, or evaluate each evaluation period
2	N	N	Train, validate, or evaluate each Continuing Qualification Cycle
3	Y	Y	Sample at first look/MV/LOE and/or line check each evaluation period
4	N	Y	Sample at first look/MV/LOE and/or line check each Continuing Qualification Cycle

Transport Jet Continuing Qualification Cycle:



Currency items have been analyzed in the same manner as **Criticality** items. Transport Jet Airlines has identified certain currency tasks as events. This is based upon how often or frequent a given flight task and condition occur during line operations. These items have been determined that proficiency can be maintained during normal line operations. The purpose of identifying these currency events is to enable training and evaluation to focus on the areas of greatest need. Proficiency on currency events is addressed during line evaluations, but may also be sampled on simulator events. Certain non-critical/non-currency items may be trained or validated using exams and/or classroom briefings or distributed material.

The following notes identify additional specific justifications to the Transport Jet Airlines training and evaluation AQP:

Note 1: All currency and critical tasks are defined and determined by a panel of highly experienced instructors and evaluators, who are Subject Matter Experts (SME).

Note 2: Critical TPOs and SPOs are trained and evaluated in CQ during each twelve-month evaluation period. Non-critical TPOs and SPOs are trained on a twenty-four month CQ cycle. SPOs may be alternatively sampled over multiple evaluation periods.

Note 3: Specific emergency and abnormal procedures are on a SPO level only. Working knowledge of these procedures will be demonstrated within the QC and CQ training and evaluation program. The TPO for emergency and abnormal procedures is generic and will be trained and evaluated during each evaluation period.

Note 4: Most TPOs include specific maneuver standards. Some may not, depending on the actual task involved.

Note 5: Note: Each pilot will perform two different non-precision approaches during the Maneuvers Validation. All non-precision approaches will be performed as either PF or PM during the CQ cycle.

Format Examples

The supporting task analysis contains comprehensive training material including tasks, subtasks, knowledge and skills. In the qualifications standards, this translates to TPOs and SPOs with corresponding performance statements, conditions and standards. CRM skills and tasks are imbedded within each performance statement and are continuously trained and evaluated.

The following matrix depicts the format used in the qualification standards development. This matrix was developed for every objective to show where each TPO, and where appropriate, selected SPOs would be trained or evaluated. It assists AQP curriculum developers design relevant instructional/evaluation events by identifying those TPOs/SPOs that have unique condition sets. The matrix also includes the type of media to be used and any specific condition required (example; Level D FFS, Level 6 FTD, 600 RVR, 20K X-wind, single engine operation, etc.)

Curricula	Qualification	Continuing Qualification
Evaluation Strategy (The evaluation point for a particular qualification standard).	Train to Proficiency (TP) Systems Validation (SV), Procedures Validation (PV), Maneuvers Validation (MV) or Line Operational Evaluation (LOE)	Train to Proficiency (TP) Systems Validation (SV), Maneuvers Validation (MV) or Line Operational Evaluation (LOE)
Evaluation Condition	<u>Specific</u> set of conditions and contingencies to be employed in training and/or validating/evaluating a task (Marked with an asterisk).	Selectable menu of conditions and contingencies in which the task may be trained, validated, or evaluated.
Media	<u>Specific</u> media in which the task will receive final evaluation.	Media range in which the task may be trained, validated, or evaluated.

Evaluation Media:

Evaluation media is determined based on the lowest level device that may be used to successfully evaluate a TPO/SPO. However, a media level that is higher than the minimum listed may be used to evaluate a Qualification Standard.

The rank order of media from highest to lowest are:

- Aircraft (AC)
- Simulator (FFS Level C/D)
- Flight Training Device (FTD4/5/6)
- Electronic Exam

- Approved Pictorials
- Briefing/discussion
- Computer Based Training (CBT)
- Door/emergency Equipment Trainer

The criteria for determining these levels are a combination of: FAA tables of qualification events and associated flight training equipment; complexity of the media; and the level of involvement of the flight / ground instructor in the evaluation process.

Performance Statement:

An expanded statement of expected behavior that, when executed, will complete the work required for a specific portion of a job. Specifies precisely what behavior to be exhibited, and will include the knowledge, skill, and CRM issues that comprise the enabling objective supporting that performance.

Crew Resource Management (CRM) and Observable Behaviors – Evaluation of individual pilot and crew CRM proficiency is possible through the inclusion of observable behaviors in the evaluation criteria, and may also be reflected through performance of CRM related task activities. These observable behaviors are defined for both proficiency objectives and the events. Evaluation of CRM skills is possible, therefore, if the event sets used in the evaluation process address such skills, and appropriate observable behaviors are stated within the performance standards.

Conditions:

One of the three primary components of a proficiency objective: performance, condition, and standard. The conditions describe the circumstances under which student performance will be measured and evaluated. Conditions will include natural environment, the operational environment, and operational contingencies such as abnormal situations and emergencies.

- Abnormal Conditions - This area includes any contingencies that may be trained or evaluated.
- Aircraft Configuration - The various airplane limitations such as gross weight, center of gravity, flight controls, thrust settings, instrument and navigation settings.
- Natural Environment - The various meteorological data needed for the specific event. This would include ceiling and visibility, precipitation, wind speed/direction, and various storms, winds, and other appropriate environmental conditions.

Standards:

This includes procedures and references. Each will include observable and measurable parameters of performance with specific tolerances (e.g., course deviation degrees + or -). Identifies the primary references from which performance statements and any associated standards were derived.

Evaluation Strategies:

This section describes the point in the curriculum when a test, validation, or evaluation will be applied. The evaluation point for which a particular qualification standard includes:

- **Train To Proficiency** - Training to a performance level that meets or exceeds a qualification standard. This strategy will include enough repetition and practice to ensure that each individual can perform at the qualification standard level over the entire evaluation period or continuing qualification cycle.
- **Systems/Knowledge Validation (SV)** - This is an assessment of an individual's technical systems knowledge. The intent of the systems knowledge validation session is to ensure an individual's systems knowledge is at an appropriate level before progressing into the next phase. During this event data is collected on the individual's performance on specific objectives.
- **Procedures Validation (PV) (only used in QC)** - This is an assessment of an individual's systems integration knowledge and skill. This validation addresses the individual's ability to assimilate system and procedural knowledge into the appropriate execution of procedures. During this event data is collected on the individual's performance on specific objectives. The PV is accomplished in a Level 5 FTD under Transport Jet's AQP.
- **First Look (FL) (CQ only)** - First-look performance items are graded objectives performed for the first time since the previous evaluation period. First-look grades are analyzed to determine trends of degraded proficiency due to numerous factors, including the length of the training interval. To maintain the validity of the performance proficiency data obtained from the performance of the first-look activities, Transport Jet will not be brief the maneuver before the first execution. During first look data is collected on the individual's performance.
- **Maneuvers Validation (MV)** – Level C simulator event that precedes the LOE. This validation addresses an individual's proficiency in the execution of maneuvers. During this event data is collected on the individual's performance on specific objectives. The Transport Jet AQP requires that the MV must be completed successfully to enter the LOE.
- **Line Operational Evaluation (LOE)** - an LOE is the primary proficiency evaluation. This evaluation addresses the use of both technical and CRM skills appropriate to successfully accomplish the requirements of a scenario-based evaluation. During an LOE, graded data is collected for individual performance on specific objectives and observable behaviors. The LOE shall be conducted in a Level C or D simulator under Transport Jet's AQP.
- **Line Check** – an evaluator conducts the QC and CQ PIC line check during actual revenue flight operations. It also may be conducted during an operationally oriented flight such as a ferry flight or a proving flight. Captains receiving this evaluation are assessed for their proficiency in the duty position. Successful completion of a line check verifies that each individual is adequately trained, and he is capable of performing the duties and

responsibilities of pilot-in-command (PIC). During a Continuing Qualification line check, each person who performs duties as a flight crewmember will be individually evaluated. During this event, data will be collected on this individual's performance for specific objectives.

Strategy Application:

The steps used to determine the specific evaluation strategy for TPOs and SPOs are:

- Identify the evaluation media options for each Qualification and Continuing Qualification Curriculum
- For Qualification curriculum: specify validation/evaluation gate and evaluation media for each TPO / SPO
- For Continuing Qualification curriculum: specify validation / evaluation gate for TPOs and SPOs based on the Currency and **Criticality** analysis
- Compare these strategies with the current part 121 curriculum
- Revise the evaluation strategies
- Perform a final review and revise, as necessary

Note: For a Qualification curriculum, all TPOs and SPOs are evaluated and for a Continuing Qualification curriculum, all TPOs and selected SPOs are evaluated.

Grading Criteria:

GRADE		CRITERIA
1	Unsatisfactory	Major deviations from the prescribed qualification standards occur that are not recognized or corrected. Individual or crew performance could result in hull loss or loss of life. CRM skills are not effective.
2	Below Standard	Deviations from the prescribed qualification standards occur that are not recognized or corrected. Individual or crew performance is safe but would be unsatisfactory if diminished by any amount. CRM skills are not completely effective.
3	Standard with debrief	Deviations occur from the prescribed qualification standards that are recognized and most corrected. Individual or crew performance meets expectations. CRM skills are effective.
4	Standard	Minor deviations occur from the prescribed qualification standards that are recognized and corrected in a timely manner. Individual or crew performance meets expectations. CRM skills are clearly effective.
5	Excellent	Performance remains well within the prescribed qualification standards. Individual or crew performance, management and CRM skills are exemplary.

Success and Remediation Criteria:

An airman receiving an unsatisfactory grade on any required segment of AQP during the eligibility period will be re-trained, and he must successfully complete re-validation/evaluation, if appropriate, prior to performing flight duties. However, not all cases of training deficiencies are clear-cut. Therefore, evaluators and instructors are encouraged to bring such cases to the attention of the fleet manager upon any demonstration of insufficient progress by a crewmember. The fleet manager has the authority to determine the nature and type of remediation appropriate.

The following section describes the Transport Jet Airlines validation/evaluation, remediation, and special tracking procedures:

1. Qualification Curriculum -

Systems Validation (SV) - A minimum score of 80% is required to pass the System Validation. An overall grade of less than 80% or less than 80% in more than three systems will be considered a failure. Training to be administered following a System Validation is outlined as follows:

A. Debrief - With an overall passing grade of 80% or higher, “Debrief” all questions missed.

B. Remediate - With an overall passing grade of 80% or higher, remediation can be completed on no more than three modules where the individual system score was less than 80%. The instructor will train and evaluate any systems/questions that were missed. If remediation is unsuccessful, the individual will be retrained as described in paragraph C.

C. Retrain - With an overall grade below 80% or with individual system grades of less than 80% on four or more systems, or in the event that remediation is unsuccessful, the pilot will receive training on all systems with emphasis on the primary systems causing the failure. The individual will receive another complete SV.

Procedures Validation (PV) - PV is accomplished when it is verified that the individual is trained to proficiency.

Maneuvers Validation (MV) - Two repeats of any one maneuver or one repeat of any two maneuvers is allowed. A debriefing about the reason why the maneuver(s) was unsatisfactory is allowed, but any repeated maneuver must occur without further training, practice, or coaching. In addition, if a flight crewmember fails to demonstrate proficiency within the time constraints of the simulator session, the session is considered as unsatisfactory.

For technical and CRM items being validated during a QC MV:

- A 1 or 2 on any item is unsatisfactory and requires a repeat. It is Transport Jet’s philosophy to ensure, during training, that pilots perform at a score of 3 or higher to progress through the MV to the LOE. No training will be provided prior to repeating the item. The first grade will be reported to AFS-230 and used for trending purposes. If unable to accomplish the repeats, or there are three or more 2s and/or 1s, additional training event is required prior to

re-validation. After the additional training event, the individual need only repeat the maneuvers that were unsatisfactory.

Line Operational Evaluation (LOE) - LOE is considered a jeopardy event and a failure is reported to the FAA. If the LOE is to result in certification, a failure will result in the issuance of FAA Form 8060-5. Grading an LOE is at the event set level. LOE success criteria listed below:

- An LOE with more than 25 percent of the event sets graded unsuccessful would constitute a failure of the LOE and will require remedial training and another LOE.
- For LOEs with 25 percent of the event sets or fewer graded unsuccessful, repeats will be administered at the end of the LOE session, if time permits. The Evaluator will recreate the conditions similar to the original event set for the repeat. For example, if an LOE has five, six, or seven event sets, only one set may be repeated. If an LOE has between 8 and 11 event sets, two may be repeated. No event set can be repeated more than once.

Note: Regardless of the number of events sets, any unsafe individual or crew performance that could result in significant damage, hull loss or loss of life (e.g., crash) during an LOE constitutes failure of the LOE.

For technical and CRM items being evaluated during the LOE, the following rules apply:

- An event set score of 1 is unsatisfactory. No repeats or retraining takes place during the LOE session. A meeting is scheduled with the Fleet Manager or designee to determine appropriate action: retraining and checking, or other appropriate action.
- An event set score of 2 is considered below standard and will be repeated. Transport Jet philosophy is to ensure that a pilot individually perform at a score of 3 or higher overall to pass the LOE. No event set can be repeated more than once. A debriefing of why the event set(s) is unsatisfactory is allowed, but the repeat will occur with no training, practice, or coaching. If any repeated event is unsatisfactory, remedial training and another complete LOE is required.

Line Check - For line checks, individual TPOs and SPOs are graded. At the conclusion of the line check, an overall score is given. For those items being scored during the line check the following rules apply:

- A score of 1 or 2 anywhere in the line check is unsatisfactory. The unsatisfactory pilot is removed from the line. A meeting is scheduled with the Chief Pilot and/or Fleet Manager to determine appropriate action: retraining and checking, or other appropriate action.

2. Continuing Qualification -

First-Look (FL) - An evaluator will accomplish FL using the standard Transport Jet grade scale. First-look maneuver proficiency assessment is considered a no-jeopardy event, subject to the requirement that any maneuvers unsuccessfully accomplished (grade of 1 or 2) be trained to

proficiency prior to the LOE. First-Look maneuvers are not briefed in advance. Proficiency data is collected before the repeated execution of any such FL item during training. FL grades are analyzed to determine trends of degraded proficiency. It is important to remember that FL testing is not as much an assessment of an individual's skills, as it is a measure of the collective retention of proficiency by flight crews.

Maneuver Validation (MV) - The CQ Curriculum, maneuvers validation may be trained to proficiency within the time limits of the standard Transport Jet scheduled simulator session (two hours per crew member/ four hours total) or the MV is considered unsatisfactory. An additional training period and re-validation of the unsatisfactory maneuvers is required.

Line Operational Evaluation (LOE) – refer to QC success criteria

Line Check – refer to QC success criteria

Remediation:

3. Qualification Curriculum -

The remediation process applies to both technical and CRM items.

* Validation Gates: During the (system/procedure/maneuver), if an individual is unsatisfactory the individual will receive another training session and validation (the unsatisfactory items are trained and re-validated). If the individual passes, s/he is routed back into the syllabus training. If the evaluator (I/E) determines that progress is being made during the 1st retraining session, but not enough for a re-validation, s/he may elect to continue the remediation training. If the evaluator determines that the individual is not progressing during the retraining, a second I/E evaluates the individual. If the second I/E determines a lack of progress, the individual is referred to the Fleet Manager, where an appropriate course of action will be determined. The Fleet Manager will notify the POI.

* LOE: During the LOE, if an individual is unsatisfactory s/he is referred to the Fleet Manager. The Fleet Manager will notify the POI. The individual will receive additional training and a recheck LOE. A second failure of the LOE constitutes a failure to qualify and the individual will be referred to the Transport Jet training board.

* Line Check: During the line check, if an individual is unsatisfactory s/he is removed from the line and is referred to the Chief Pilot and/or Fleet Manager. The Chief Pilot and/or Fleet Manager will notify the POI.

4. Continuing Qualification Curriculum -

The remediation process applies to both technical and CRM items.

* MV: During the MV, if an individual is unsatisfactory the individual will receive another training session and validation (the unsatisfactory items are trained and rechecked). If the individual passes,

s/he is routed back into the syllabus training. If the evaluator (I/E) determines that progress is being made during the 1st retraining session, but not enough for a re-validation, s/he may elect to continue the remediation training. If the I/E determines that the individual is not progressing during the retraining, a second I/E evaluates the individual. If the second I/E determines a lack of progress, the individual is referred to the Fleet Manager, where an appropriate course of action will be determined. The Fleet Manager will notify the POI.

* LOE: If any pilot is unsatisfactory during an LOE, s/he shall be referred to the Fleet Manager. The Fleet Manager will notify the POI. The individual will receive additional training and a recheck LOE. A second failure of an LOE constitutes a failure to qualify, and the individual will be referred to the Transport Jet Airline's flight training board.

* Line Check: If a line check is unsatisfactory, the pilot shall be removed from further flight operations, and s/he will be referred to the Chief Pilot and/or Fleet Manager. The Chief Pilot and/or Fleet Manager will notify the POI.

Note: An airman receiving an unsatisfactory grade on any required validation/evaluation during the eligibility period will be re-trained, and s/he must successfully complete re-validation/evaluation prior to performing flight operations.

Special Tracking:

This program monitors the proficiency of an individual pilot at scheduled intervals. It is applied to any pilot who has failed to demonstrate satisfactory proficiency during an evaluation event (LOE or Line Check). The original base month is not reset.

* LOE - Pilots who are unsatisfactory on a QC or CQ LOE will receive a four (4) hour LOE period six (6) months after the unsatisfactory event. If this LOE event is satisfactory, then the individual will be removed from the special tracking program. If the evaluation event is unsatisfactory or the evaluator recommends continuation, the individual remains in special tracking status, and s/he will be scheduled for another LOE in six (6) months.

* Line Check - Pilots who are unsatisfactory on a QC or CQ Line Check will receive another Line Check three (3) months after an unsatisfactory event. If the follow-up Line Check event is satisfactory, then the individual will be removed from the special tracking program. However, if the event is unsatisfactory or the evaluator recommends continuation, the individual remains in special tracking status, and s/he shall be re-scheduled for another Line Check in three (3) months.

Regulatory Comparison and FAR Compliance:

The AQP allows development of proficiency-based programs that encourage innovations in the methods and technologies used during instruction and evaluation. This also allows for more efficient management of the training systems. Since these innovations may require some deviations from current FARs, the approved qualification standards document will replace the

applicable portions of the existing FAR 121 regulations. In addition, other FAA training guidance documents may also be used as the definitive basis for training programs.

AQP is a performance based training and evaluation program. For this reason, more than one specific event or form of media device may be used to validate or evaluate a task. This strategy is depicted in the maneuvers correlation chart by listing different events or descriptions under the AQP column. In addition, the terminology “train” is used in this column to show that a particular maneuver may be trained to proficiency rather than evaluated. This relates to the critical and currency designations.

Title 14 CFR Part 121 section 121.401(c):

Requires instructor or evaluator verification of qualification. AQP allows completion of distributed training (e.g., home study) to be verified by an entry into Transport Jet’s flight operations computer system. Upon successful completion of a computer-generated, random question exam, completion of the exam is logged electronically to each pilot’s record. In this way, qualification through distributed training is automatically verified, rather than an instructor’s certification of training completion at the training facility.

Section 121.419 (b) (2):

Specifies that initial ground training for pilots and flight engineers (FE) of Group II airplanes must be 120 programmed hours unless the FAA approves a reduction under section 121.405 guidance. Transport Jet’s AQP initial/transition curriculum includes all subjects listed in section 121.419(a), but for most airplanes is planned for less than 120 hours. Refer to the curriculum outlines in the Appendix for the specific hours planned for each curriculum in each fleet. The days of training and classroom hours planned for AQP are approximately the same number of days/hours in the currently approved part 121 programs, with principal operations inspector (POI) approval letter of hourly reduction under section 121.405.

Section 121.424:

Refers to part 121, appendix E, regarding the maneuvers and procedures to be included in flight training, and part 121 Appendix F for the maneuvers and procedures to be included in the flight check. The maneuvers and procedures for training and checking in Transport Jet’s AQP curricula are tailored for each airplane type and crew position and comply with the guidance in the 14 CFR 121 Subpart Y, Advisory Circular (AC) 120-54, and as approved by FAA for training and checking under AQP. Refer to the paragraph below titled section 121.441(b) (1) and appendices E & F for an explanation of maneuver variances.

Section 121.427(c) (1) (iii):

Specifies that recurrent ground training for pilots and Flight Engineers on Group II airplanes must consist of at least 25.0 hours unless reduced under section 121.405. Transport Jet’s AQP continuing qualification (recurrent) ground training curriculum incorporates a total of 18.0 planned hours. This includes 5.0 hours of distributed training and 13.0 hours of self-study/classroom instruction in aircraft specific, human factors (HFS), general subjects, security, and emergency drill training. The enabling objectives (EO) to be trained and validated in the continuing qualification curriculum are presented in module format in accordance with FAA Order 8400.10, Air Transportation Inspector’s Handbook, and described in the objectives section of this document. The days of training and

classroom hours planned for AQP are approximately the same number of days/hours in the currently approved part 121 programs, with POI approval letter of hourly reduction under part 121.405.

Section 121.433(a):

Specifies the crewmember must complete a training program approved under subpart N for the type airplane and crew position. Transport Jet's flight crewmembers will complete the training program approved under 14 CFR 121 Subpart Y (AQP).

Section 121.433(c)(1)(iii):

Specifies a 6-month pilot-in-command (PIC) recurrent training requirement. Transport Jet will conduct annual recurrent training and checking under the 14 CFR 121 Subpart Y full crew concept guidelines. Refer to the recurrent training curriculum outline in the appendix.

Section 121.433(c)(2):

Specifies that the proficiency check for pilots be as provided for under section 121.441. Transport Jet pilots in an AQP will complete the proficiency check as a Line operational evaluation (LOE) under the 14 CFR 121 Subpart Y full crew concept guidelines.

Section 121.434(g) (2):

References the section 121.441 proficiency checks as the start of the 120 days for pilots to accomplish 100 hours of flight time for consolidation of knowledge and skills. In Transport Jet's AQP, the 120 day cycle for completion of consolidation of knowledge and skills will begin upon completion of a Line Operational Evaluation (LOE).

Section 121.441(a) (1):

Specifies that each PIC will accomplish a proficiency check within the preceding 12 months; additionally, within the preceding 6 months, complete either a proficiency check or an approved simulator course of training under section 121.409. In Transport Jet's AQP, PICs will be scheduled for an annual crew oriented training and check (LOE) within the required 12 months (plus or minus 1 month). However, the PIC requirement at 6 months for either a proficiency check or a simulator training session will be eliminated. Exception: PICs in certain circumstances will be required training at the 6-month point (plus or minus 1 month).

Section 121 Appendices E & F and FAA Order 8400.10:

Require an Air Transportation flight instructor to train pilots in the interior and exterior visual inspection. XYZ's AQP allows the interior and exterior inspection (SPO 1.1.6.2 Aircraft Inspection) to be trained and validated by a ground instructor during the ground training segment of the qualification curriculum using advanced pictorials.

Section 121.441(b) (1) & Appendices E & F:

Specifies that the proficiency check for pilots include at least the procedures and maneuvers in part 121 appendix F. All appendix E events are included in appendix F. In addition, appendix E includes the following six additional events not listed in the appendix F proficiency check:

- Night takeoff and landings [II. (e) & IV. (i)];

- Zero flap approaches [III. (O), PIC only];
- Missed approaches that include a power plant failure [III.(p)(4)];
- Landing and go around with the horizontal stabilizer out of trim [IV.(b), PIC only];
- Zero flap landings, if the Administrator finds that event appropriate [IV.(h), PIC only];
- Manual reversion (if appropriate) [IV (i)].

In accordance with 14 CFR 121 Subpart Y and AC 120-54, the events to be trained and validated/evaluated in Transport Jet's AQP are the terminal proficiency objectives (TPO) and supporting proficiency objectives (SPO) described in the Proficiency Objectives section of this document. While occasionally labeled differently, these TPOs and SPOs are very similar to the events listed in appendices E and F, and all Appendix E and F events are included, except steep turns and circling approaches. Circling approaches are not authorized in Transport Jet's operations, and are not included in the curriculum. Refer to the Training & Evaluation Strategy section of this document for further information on training and evaluation procedures.

Section 121, Appendix H (6), Advanced Simulation Training Program:

Specifies that a special line-oriented flight training (LOFT) program is required, consisting of at least a 4-hour course of training for each flight crew, including at least two flight segments of the operator's route: one segment of normal operating procedures and another segment in appropriate abnormal and emergency flight operations. Transport Jet's AQP is structured to comply with the guidance contained in 14 CFR 121 Subpart Y and AC 120-54. As such, training, validation, and evaluation are conducted with a complete crew using the concepts of LOS.

Qualification Standards

Maneuvers	Part 121 Appendix E Air Carrier Training	Practical Test Standards FAA-S-8081-5C	Part 121 Appendix F Proficiency Check	AQP Qualification Curriculum	AQP Continuing Qualification Curriculum
Preflight					
Equipment Examination	N/A	Required (Page 1-1)	Required	Written/ETS/Oral	Written/ETS/Oral
Interior Preflight Inspection	Required	Required (Page 2-1)	Required	MV/LOE	Line check
Exterior Preflight Inspection	Required	Required (Page 2-1)	Required	MV/LOE	Line check
Taxiing	Required	Required (Page 2-3)	Required	MV/LOE	Line check
Powerplant Checks	Required	Required (Page 2-3)	Required	MV/LOE	Line check
Takeoffs					
Normal Takeoffs	Required	Required (Page 2-5)	Required	MV/LOE	Line check
Instrument Takeoff	Required	Required (Page 2-6)	Required	MV/LOE	MV/LOE
Crosswind Takeoff	Required	Required (Page 2-5)	Required	MV/LOE	Line check
Takeoff with Powerplant Failure	Required	Required (Page 2-7)	Required	MV/LOE	MV/LOE
Rejected Takeoff	Required	Required (Page 2-8)	Required	MV/LOE	MV/LOE
Instrument Procedures					
Area Departure and Arrival	Required	Required [Waivable] (Pages 2-9; 2-15)	Required [1Waivable]	MV/LOE	Line check
Holding	Required	Required [Waivable] (Page 2-16)	Required [Waivable]	MV/LOE	Brief
Normal ILS	Required	Required (Pages 2-16; 2-17)	Required	MV/LOE	MV/LOE
Autopilot Coupled ILS	Required	Not Required (Pages 2-16; 2-17)	Required	Train to Proficiency	MV/LOE
Manually Controlled ILS with Powerplant Failure	Required	Required (Pages 2-16; 2-17)	Required	MV/LOE	MV/LOE
Non-Precision Approach	Required	Required (Pages 2-18; 2-20)	Required	MV/LOE	MV/LOE
Second Non-precision Approach	Required	Required [Waivable] (Pages 2-18; 2-20)	Required	Train to Proficiency	Train to Proficiency
Circling Approach	Not Required	Required [Waivable] (Page 2-20) Note 5	Required [Waivable]	Train to Proficiency	Brief
Missed Approach from ILS	Required	Required (Pages 2-21; 2-22)	Required	MV/LOE	MV/LOE
Additional Missed Approach	Required	Required (Pages 2-21; 2-22)	Required	Train to Proficiency	N/A
Missed Approach with Powerplant Failure	Required	Required (Pages 2-21; 2-22)	Examiner Discretion	MV/LOE	MV/LOE

Qualification Standards

Inflight Maneuvers					
Steep Turns	Required	Required [Waivable] (Page 2-10)	Required	Train to Proficiency	N/A
Approach to Stalls	Required	Required [2 of 3 Waivable] (Pages 2-10; 2-11)	Required [2 Waivable]	Train to Proficiency	Train to Proficiency
Flight Characteristics	As Necessary	As Necessary	As Necessary	Train to Proficiency	N/A
Powerplant Failures	Required	Required (Page 2-12)	Required	MV/LOE	MV/LOE
Abnormal and Emergency Procedures will include all systems maneuvers and procedures as required by Aircraft Flight Manual	Required	Required (Pages 2-29; 2-30)	Required	A sampling of Abnormals and Emergencies will trained in the simulator and evaluated during MV and LOE.	Abnormals and Emergencies will be evaluated during ground school, trained in the simulator and evaluated during MV and LOE.
Landings					
Normal Landings	Required	Required (Page 2-23)	Required	MV/LOE	Line Check
Landing from an ILS	Required	Required (Page 2-24)	Required	MV/LOE	MV/LOE
Crosswind Landing	Required	Required (Page 2-23)	Required	MV/LOE	MV/LOE
Landing with Powerplant Failure	Required	Required (Page 2-25)	Required	MV/LOE	MV/LOE
Landing from a Circling Approach	Required	Required (Page 2-26)	Required	Train to Proficiency	N/A
Rejected Landing	Required	Required (Page 2-27)	Required	MV/LOE	MV/LOE
Zero Flap Landing	Required	Required (Page 2-28)	Required	N/A	N/A
Postflight					
After Landing	Required	Required (Page 2-31)	Required	Line Check	Line Check
Parking and Security	Required	Required (Page 2-31)	Required	Line Check	Line Check
Training					
Windshear/Microburst				Train to Proficiency	Train to Proficiency
GPWS				Train to Proficiency	Train to Proficiency
Low Vis Taxi				Train to Proficiency	Train to Proficiency
PRM				Train to Proficiency	Train to Proficiency
Upsets/Catastrophic Failures				Train to Proficiency	Train to Proficiency

The following section is an example of a Qualification Standards TPO/SPO document, using the generic Group II aircraft, “TwinJet”

TPO 1.1: Perform Flight Preparation Procedures

Aircraft: Twin Jet

Phase of Flight: 1.0 Pre-Departure, Push Back and Taxi

Task: 1.1 Perform Flight Preparation Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	Procedure Validation/LOE	LOE
Evaluation Condition	Variable conditions MEL: Autopilot inoperative Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level “C” FFS

Performance Statement:

Demonstrate the ability to perform Flight Preparations Procedures by:

- Reporting for duty
- Acquiring flight planning information
- Performing aircraft preflight inspection
- Determine if aircraft de-icing is needed

Crew Resource Management (CRM):

- Crew communications
 - a. Plan and brief operational requirements, safety issues, maintenance and MEL items. Encourage all crewmembers to participate in flight preparations and to state ideas and recommendations.
 - b. Communicate clearly by using plain language and standard terminology.
- Leadership and Teamwork
 - a. Clearly assign roles, tasks and responsibilities and establish guidelines for crew actions.
 - b. Manage plans as briefed and communicate changes or deviations from the plan.
 - c. Establish the importance of identifying error chains and the need to break them as early as possible.
- Decision Making
 - a. Flight crew assesses departure, enroute and destination weather, and determines if takeoff and destination alternate is required, review route of flight, fuel requirements and de-icing needs.

Aircraft Configuration:

- Aircraft at the gate
- Aircraft Gross Weights -variable

- Electrical configuration - variable
- Bleed source configuration – variable, as appropriate for the aircraft and environmental conditions
- Flaps/slats - as required

Natural Environment:

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC to IMC/RVR 600+
Precipitation: None, rain, snow, icing, etc.
Wind Speed/Direction: As desired
Temperature: Not to exceed aircraft starting limitations
Surrounding Terrain: N/A

Operational Environment:

Runway Conditions: Uncontaminated, contaminated, NOTAMs:
ATIS: Various ceilings and visibilities
ATC clearance:

Standards:

Procedures:

In accordance with Operations Manual/Flt Crew Policy Ch____
In accordance with FOM Ch____

Maneuvers:

N/A

References:

Operations Manual chapter____
Flight Operations Manual chap. ____
Runway Analysis chap. ____
Jeppesen charts – appropriate for flight

SPO 1.1.1: Crew Reports for Duty

Aircraft: Twin Jet

Phase of Flight: 1.0 Pre-Departure, Push Back, and Taxi

Task: 1.1 Perform Flight Preparation Procedures

Sub Task: 1.1.1 Crew Reports for Duty

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to report for duty by:

- Reporting to the aircraft in sufficient time to guarantee an on-time departure
- Know the procedures for crewmember sign-in, flight crew qualification requirements
- Know security procedures and duty rest requirements

Observable Behavior(s):

- Crew reports for duty on time and well-rested
- Crew possesses all their required individual equipment, manuals, and certificates
- Each crewmember's uniform and appearance is in accordance with GOM
- The captain's briefing should include crew coordination concepts, encourage crew communication, and set expectations for handling deviations from normal operations

Conditions

Refer to TPO 1.1

Standards

Refer to TPO 1.1

SPO 1.1.2: Acquire Flight Planning Information

Aircraft: Twin Jet

Phase of Flight: 1.0 Pre-Departure, Push Back and Taxi

Task: 1.1 Perform Flight Preparation Procedures

Sub Task: 1.1.2 Acquire Flight Planning Information

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to acquire flight-planning information by:

- Know actions required when receiving and assessing flight planning information
- Know requirements for signing the Dispatch Release
- Review flight planning information for altitude selection
- Review fuel information including long range planning
- Obtain and assess ATIS information
- Obtain and review ATC clearance
- Review security information

Observable Behavior(s):

- Crewmembers read and acknowledge all current company operations memos.
- Crew correctly evaluates weather data to determine need for a departure or destination alternate.
- Crew correctly evaluates NOTAMS, airport, and facilities reports for any areas that would affect the safe operation of the flight.
- Crew checks adequacy of departure, destination, and alternate weather.
- Crew correctly evaluates trip package to determine appropriateness of the flight release, flight plan, and fuel load for the trip.
- Crew correctly assesses impact of any open MEL and CDL items.
- Captain correctly signs and leaves one copy of the flight release at line departure station.

- Crewmembers demonstrate their proficient use of aircraft performance charts, tables, graphs, or other planning data.
- Crew establishes and maintains an environment for open communications.
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged. Others (FAA Aviation Safety Inspectors or other additional crewmembers) are included, when appropriate.

Conditions

Refer to TPO 1.1

Standards

Refer to TPO 1.1

SPO 1.1.3: Perform Aircraft Preflight Inspection

Aircraft: Twin Jet

Phase of Flight: 1.0 Pre-Departure, Push Back and Taxi

Task: 1.1 Perform Flight Preparation Procedures

Sub Task: 1.1.3 Perform Aircraft Preflight Inspection

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform an Aircraft Preflight Inspection:

- Know and perform a Preflight Inspection
- Know MEL/CDL and maintenance log book entries and procedures
- Report aircraft maintenance discrepancies IAW policies and procedures
- Verify the aircraft's condition is acceptable for flight

Observable Behavior(s):

- Captain ensures the exterior preflight is completed.
- Captain and First Officer properly configure the flight deck.
- Captain briefs all applicable items and ensures that all crewmembers understand any operational concerns of the flight.
- Pre-departure briefings address crew coordination and encourage communication. Expectations are set for handling deviations from normal operations.
- Captain and First officer preflight Long Range Navigation systems and enter correct flight data using proper procedures, if appropriate
- Captain and First Officer verify entries and changes to automated systems.
- Crew allows sufficient time prior to departure schedule to program the FMS.

Conditions

Refer to TPO 1.1

Standards

Refer to TPO 1.1

TPO 1.2: Perform Before Start Procedures

Aircraft: Twin Jet

Phase of Flight: 1.0 Pre-Departure, Push Back, & Taxi

Task: 1.2 Perform Before Start Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	Procedure Validation/LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inoperative Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level C FFS

Performance Statement

Demonstrate ability to perform Before Start Procedures:

- Complete Flight Deck Safety Inspection
- Complete Acceptance or Turnaround Checklist
- Complete Before Starting Engines Checklist

Crew Resource Management (CRM):

- Crew communications
 - a. Identify problems, deviations, errors and limitations promptly; express known facts rather than conclusions
 - b. Pilot-Flying (PF) performs the Takeoff Briefing appropriate for ATC departure clearance
- Leadership and Teamwork
 - a. Inform appropriate personnel of any unusual situation; keep cabin crew and passengers informed
 - b. Manage time critical tasks and situational demands by prioritizing flight team activities
- Situational Awareness
 - a. Resolve conflicting information through further investigation and discussion prior to pushback from the gate and before starting engines; maintain awareness of potential threats to aircraft safety

Conditions:

Abnormal - various abnormal conditions

Aircraft Configuration:

Aircraft at the gate

Aircraft Gross Weights - variable

Center of Gravity not to exceed limitations
Electrical configurations - variable
Bleed source configuration – as appropriate for the aircraft and operational conditions
Flaps/slats - as required

Natural Environment:

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC/IMC/RVR 600+
Precipitation: None, rain, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft starting limitations
Surrounding Terrain: Variable

Operational Environment:

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings and visibility
NOTAMS: Runway length, navaid operations, taxiway closures

Appropriate ATC Clearance:

SID, Special Single Engine Departure Procedures
Vectors after departure, departure altitudes,
Terrain and CFIT awareness

Standards:

Procedures:

In accordance with FOM Ch ____

Maneuvers:

N/A

References:

FOM Ch ____
Runway Analysis
Jeppesen
QRH

SPO 1.2.1: Complete Flight Compartment Safety Inspection Checklist

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.2, Perform Before Start Procedures

Sub Task: 1.2.1 Complete Flight Deck safety inspection checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

- Demonstrate the ability to complete the Flight Deck safety inspection checklist:
- Know when to perform the Flight Deck safety inspection checklist
- Know actions required to accomplishment Flight Deck safety inspection checklist

Observable Behaviors:

- Captain and First officer properly conduct cockpit safety checks using a checklist
- Crew will locate each item and briefly explain the purpose for inspecting the item
- If accomplished in simulator training, a pictorial means that realistic portrays the location and detail of each item may be substituted after the pictorial is approved by the POI

Conditions

Refer to TPO 1.2

Standards

Refer to TPO 1.2

SPO 1.2.2: Complete Acceptance or Turnaround Checklist

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.2, Perform Before Start Procedures

Sub Task: 1.2.2, Complete Acceptance or Turnaround Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to complete the Acceptance or Turnaround Checklist:

- Know the correct checklist to use when performing an acceptance or turnaround check
- Know the procedures and sequence to accomplish flight deck flows
- Know procedures for systems checks including first flight items
- Know all checklist items and correct response to each item

Observable Behaviors:

- Captain ensures the exterior preflight is complete
- Crew properly configures the flight deck using the correct checklist

Decision Making Conditions

Refer to TPO 1.2

Standards

Refer to TPO 1.2

SPO 1.2.3: Complete Before Starting Engines Checks

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.2, Perform Before Start Procedures

Sub Task: 1.2.3, Complete Before Starting Engines Check

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to complete the Before Start Checklist:

- Accomplish briefings and configure navigational equipment appropriate to ATC clearance
- Captain performs the crew briefing and additional crew member (ACM) briefing, if appropriate for the flight
- Pilot-Flying (PF) performs the Takeoff Briefing appropriate for ATC departure clearance
- Correctly set, adjust and verify radios and navigational equipment for departure

Observable Behaviors:

- Captain and First Officer review weight and balance data, and set correct data for takeoff
- Crew determines correct flap configuration for takeoff
- Captain scans the flight panel and overhead prior to calling for the Before Start checklist

Decision Making Conditions

Refer to TPO 1.2

Standards

Refer to TPO 1.2

TPO 1.3: Perform Starting Engines/Pushback Procedures

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.3, Crew Performs Starting Engines/Pushback Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	Procedure Validation/LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level C FFS

Performance Statement

Demonstrate the ability to perform Starting Engines and Pushback Procedures:

- Conduct challenge and response items (first officer reads and the captain responds)
- Acquire final load planning and performance data from ACARS, if equipped
- Perform final calculation of aircraft’s weight and balance
- Determine V-Speed, Takeoff data and flap configuration
- Perform Pushback Procedures
- Perform Engine Start Procedures
- Complete Engine Start Checklist
- Calculate Takeoff Thrust

Crew Resource Management (CRM):

- Crew communications
 - a. Determine, plan and discuss aircraft configuration choices, airport specific procedures and performance considerations
 - b. Flight crew assures that the cabin door is closed and cabin is secure prior to requesting pushback clearance.
- Leadership and Teamwork
 - a. Coordinate and accomplish all checklist procedures and monitor aircraft and engine(s) condition
- Decision Making
 - a. Recognize and act on “bottom lines” established for safety
- Situation Awareness
 - a. Identify and openly express any reduction or loss of personal situational awareness. Monitor situational awareness of others during the engine(s) start, and during aircraft pushback procedures.

Conditions

(Normal/Abnormal – initiate as required by the curriculum module or LOE scenario)

Aircraft Configuration

Aircraft at the gate
Various aircraft gross weights
Center of gravity not to exceed limitations
Flaps – as required
Slats – N/A
Various electrical configurations
Various bleed source configuration Flaps/slats - as required
Thrust set for FLEX or Normal
Nav aids set for departure

Natural Environment:

Time of Day: Day, Night, Dusk or Dawn
Ceiling and Visibility: VMC/IMC/RVR 600+
Precipitation: None, rain, snow, icing, etc.
Wind Speed/Direction: Variable (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft starting limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings and visibility
NOTAMS: Runway length and conditions, NAVAID operations
ATC Clearance: Ramp Control or ground operation clearance

Standards:

Procedures:

In accordance with Company Operations Manual Ch____
In Accordance with FOM Ch____

Maneuvers:

N/A

References:

Operations Manual: FOM Ch____
Aircraft QRH

SPO 1.3.1: Acquire Load Planning and Performance Data, and Computes Weight and Balance

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.3, Crew Performs Starting Engines/Pushback Procedures

Sub Task: 1.3.1, Crew Acquires Load Planning and Performance Data and Computes Weight and Balance

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to acquire load planning and performance data, and compute weight and balance:

- Compute the Actual Takeoff Weight and index for the aircraft before flight
- Assure the Load Manifest is complete and accurate
- Prepare performance data for the aircraft weight and environmental conditions
- Enter FMS Data information correctly
- Determine V-Speed and takeoff data and thrust settings for conditions

Observable Behaviors:

- First Officer accurately calculates and enters takeoff data using the Runway Analysis and takeoff data, as required.
- Captain and First Officer confirm all takeoff data is correct and determines the proper takeoff flap setting
- Crew correctly calculates V speeds

Conditions

Refer to TPO 1.3

Standards

Refer to TPO 1.3

SPO 1.3.2: Determine V-Speed and Takeoff Data

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push back and Taxi

Task: 1.3, Perform Starting Engines/Pushback Procedures

Sub Task: 1.3.2, Determine V-Speed and Takeoff Data

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to determine V-Speeds and takeoff data:

- Set V-Speeds and takeoff data based on Load Manifest TOW, outside conditions, OAT, altitude, runway and engine bleed air configuration

Observable behaviors:

- Crew reviews weight and balance data and environmental conditions to derive the correct data for a safe takeoff
- Crew correctly calculates V speeds
- Crew correctly sets V speed markers

Conditions

Refer to TPO 1.3

Standards

Refer to TPO 1.3

SPO 1.3.3: Perform Pushback Procedures

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push back and Taxi

Task: 1.3, Perform Starting Engines/Pushback Procedures

Sub Task: 1.3.3, Perform Pushback Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Pushback Procedures:

- Know hand signals and pushback procedures
- Initiate pushback with verbal or hand signals, brake operation procedures

Observable Behaviors:

- Crew follows appropriate flight deck-to-ground communication procedures
- Crew maintains contact with pushback crew during the pushback sequence
- Crew maintains constant awareness of the aircraft's status and position

Conditions

Refer to TPO 1.3

Standards

Refer to TPO 1.3

SPO 1.3.4: Perform Engine Start Procedure

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.3, Perform Start Engines/Pushback Procedures

Sub Task: 1.3.4, Perform Engine Starting Procedure

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Engine Start procedures:

- Know how and when to request clearance to initiate an engine start
- Know the different start procedures
- Know the engine start system components, start limitations and malfunctions
- Know the Abort Start Procedures
- Know Emergency Procedures and Memory Items for Engine Fire and Passenger Evacuation
- Prioritize engine start abnormalities

Observable Behaviors:

- Crew appropriately reads and responds to checklists
- Crew follows appropriate flight deck-to-ground communication procedures
- Crew makes required callouts during the engine start(s)
- Crew recognizes any start malfunction and applies the correct procedure
- Crew prepares for normal and contingency situations

Conditions

Refer to TPO 1.3

Standards

Refer to TPO 1.3

SPO 1.3.5: Complete Starting Engine(s) checklist

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.3, Perform Starting Engines/Pushback procedures

Sub Task: 1.3.5, Complete Starting Engines checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to complete the Starting Engines Checklist:

- Know all checklist challenge and response items

- Complete all checklist items and obtain pushback clearance, if required

Observable Behaviors:

- Crew obtains ATC clearance for pushback, when required, and monitors ATC
- Crew maintains contact with pushback crew during the pushback sequence
- Crew completes engine start procedure without errors or omission of any steps
- Crew completes checklist correctly
- Crew maintains a constant awareness of the aircraft's operational status and position

Conditions

Refer to TPO 1.3

Standards

Refer to TPO 1.3

TPO 1.4: Perform Pre-Departure Procedures

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.4, Perform Pre-Departure Ground Operations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Pre-Departure Procedures:

- Perform the Before Taxi Checklist
- Perform the Taxi Checklist (taxi both engines or single engine, as appropriate)
- Perform the Before Takeoff Checklist
- Perform the Line-Up Checklist

Crew Resource Management (CRM):

- Crew Communications
 - a. Communicate with ATC clearly by using standard terminology; understand ATC runway clearance and NOTAMS, and keep cabin crew and passengers updated on any delay or changes.
- Leadership and Teamwork
 - a. Coordinate and accomplish checklist procedures; crew will coordinate and follow the assigned ATC taxi clearance route with their airport surface chart, and shall adhere to ATC taxi clearances.
- Situational Awareness
 - a. Insure the runway assignment is understood and cross-checked upon runway line up with the HSI and/or compass heading.
 - b. Resolve all conflicting information, uncertainties and safety concerns through further investigation and discussion with ATC, the cabin crew or maintenance control, as appropriate to the situation, prior to runway lineup.

Conditions

Various abnormal conditions

Aircraft Configuration

Aircraft Gross Weight: Not to exceed aircraft limitations

Center of gravity: Not to exceed aircraft limitations

Natural Environment

Ceiling and Visibility: VMC to IMC/RVR

Precipitation: None, rain, snow, etc.

Wind Speed/Direction: Not to exceed limitations

Temperature: Not to exceed limitations

Operational Environment:

Runway Conditions: Uncontaminated or contaminated

ATIS: NOTAMs:

ATC Clearance:

Standards Procedures:

In Accordance with Ops Manual Ch____

In Accordance with Ops Manual/Aircraft Deicing/Anti-Icing Program Ch____

In Accordance with FOM Ch____

In Accordance with Jeppesen navigation charts

Maneuvers:

N/A

References:

Ops Manual

Flight Operations Manual

Jeppesen

Runway Analysis

Quick Reference Handbook

SPO 1.4.1: Perform Before Taxi Checks

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.4, Perform Pre-Departure Ground Operations

Sub Task: 1.4.1, Perform Before Taxi Checks

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Before Taxi Checks:

- Consider special requirements for low visibility taxi procedures, single engine or two engine taxi, first flight of the day items and cold weather operations
- Captain briefs anticipated or cleared taxi route and crew understanding taxi clearance
- Perform Low Visibility Taxi procedures including SMGCS, when applicable

- Know procedures and conditions for selecting windshield heat

Observable Behaviors:

- First Officer correctly sets the stabilizer trim
- Crew correctly completes the checklist, and ensures that all systems are within their normal operating range
- Captain analyzes conditions and correctly determines appropriate taxi procedure

Conditions

Refer to TPO 1.4

Standards

Refer to TPO 1.4

SPO 1.4.2: Perform Taxi

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.4, Perform Pre-Departure Ground Operations

Sub Task: 1.4.2, Perform Taxi

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Taxi:

- Know Low Visibility Taxi procedures, single engine or two-engine taxi, first flight of the day items and contaminated airport surfaces procedures
- Configure flight controls for takeoff according to the runway analysis information
- Perform flight control checks

Observable Behaviors:

- Captain taxis the aircraft safely, in accordance with the marshaller's signals and ATC clearance, and at a safe speed
- Crew observes runway hold lines, localizer critical areas, and other surface control markings and lighting
- First officer monitors aircraft position and taxi route, and advises the captain of any deviation from the taxi clearance
- Crew exercises high levels of vigilance during high and low workload conditions

Conditions

Refer to TPO 1.4

Standards

Refer to TPO 1.4

SPO 1.4.3: Perform Before Takeoff Check

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.4, Perform Pre-Departure Ground Operations

Sub Task: 1.4.3, Perform Before Takeoff Check

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Before Takeoff Checks:

- Perform the Before Takeoff Checklist
- Perform First Flight of the Day items, when appropriate
- Perform the second engine start, as required, coordinated with ATC
- Consider contaminated airport surface, analyze weather for icing conditions for proper deice procedures and proper use of hold over charts
- Make a Pre-Takeoff announcement to the cabin crew and passengers
- Check and clear any electronic messages
- Know the conditions for the use of continuous ignition, as required

Observable behaviors:

- Crew completes required checks prior to starting takeoff maneuver to verify the expected engine performance
- Crew correctly assesses the conditions and selects an appropriate departure profile, such as noise abatement procedures, use of continuous ignition and wake turbulence avoidance

Conditions

Refer to TPO 1.4

Standards

Refer to TPO 1.4

SPO 1.4.4: Perform Line-Up Check

Aircraft: Twin Jet

Phase of Flight: 1.0, Pre-Departure, Push Back and Taxi

Task: 1.4, Perform Pre-Departure Ground Operations

Sub Task: 1.4.4, Perform Line-Up Check Procedures

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Line-Up Check:

- Know procedures for performing the Line-up Checklist

- Determine availability of APU bleed use air for takeoff
- Configure Engine Bleed Air and Anti-Ice Systems for takeoff, as appropriate

Observable Behaviors:

- Crew ensures that all checklists are complete
- Crew verifies the runway heading against the compass heading
- Captain aligns aircraft with the centerline without using excessive runway length
- When aligned, PF applies appropriate correction for the existing wind component

Conditions

Refer to TPO 1.4

Standards

Refer to TPO 1.4

TPO 2.1: Perform Pre-Takeoff Preparations

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.1, Perform Pre-Takeoff Preparations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement - Demonstrate the ability to perform Pre-Takeoff Preparations:

- Ensure takeoff clearance is received and flight directors are set correctly
- Perform aircraft systems and engine monitoring
- Assess environmental conditions
- Calculate takeoff thrust according to tables or FADEC

Crew Resource Management (CRM):

- Crew communications
 - a. Discuss Rejected Takeoff procedure for runway/airport, coordinate the cabin report, and accurately respond to all ATC takeoff clearances
- Leadership and Teamwork
 - a. Flight crew ensures the completion of all final checklist items, and aligns the aircraft on the correct runway by verifying runway heading with aircraft instruments.
- Situational Awareness
 - a. Flight crew works as a team to ensure the runway and the approach path is clear of other aircraft, observes and discusses any weather threats on the departure path, and is prepared to deal with them, according to FOM guidance

Conditions -Various abnormal conditions

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity and not to exceed limitations

Various bleed source configuration

Flaps/slats - as required

Thrust set for FLEX, flight directors on or off, navaid set for departure

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC/RVR 600+

Precipitation: None, rain, snow, icing, etc.

Wind Speed/Direction: Various conditions (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Check for Obstacle Clearance

Operational Environment:

Runway Conditions: Uncontaminated or contaminated

ATIS: ceilings and visibility

NOTAMs Runway length, NAVAID operations, Taxiway closures

Appropriate ATC Clearance: SID, Special Single Engine Departure Procedures, ATC Vectors after Departure

Terrain and CFIT considerations: Determine from Jeppesen charts

Standards:

In Accordance with FOM

Maneuvers:

N/A

References:

Flight Operations Manual

Runway Analysis

Quick Reference Handbook

SPO 2.1.1: Perform Takeoff Preparations

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.1, Perform Pre-Takeoff Preparations

Sub Task: 2.1.1, Perform Takeoff Preparations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Takeoff Preparations:

- PIC ensures the flight directors are correctly set
- PF/PM both ensure that the aircraft is on the correct runway for takeoff
- Crew ensures all checklist are complete, cabin report complete, and an ATC takeoff clearance is received and acknowledged

Observable Behaviors:

- Crew sets/rechecks the applicable radios/flight instruments /FMS to the desired setting prior to initiating each takeoff

Conditions

Refer to TPO 2.1

Standards

Refer to TPO 2.1

SPO 2.1.2: Perform Aircraft Systems Monitoring

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.1, Perform Pre-Takeoff Preparations

Sub Task: 2.1.2, Perform Aircraft System Monitoring

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Aircraft Systems Monitoring:

- Verify engine performance prior to starting takeoff
- Monitor engine settings and instruments during takeoff to ensure predicted performance is achieved

Observable Behaviors:

- Crew completes required checks prior to starting takeoff
- Crew sets thrust appropriately, monitors engine indications and confirms that the calculated powerplant performance is achieved

Conditions

Refer to TPO 2.1

Standards

Refer to TPO 2.1

SPO 2.1.3: Assess Environmental Conditions

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.1, Perform Pre-Takeoff Preparations

Sub Task: 2.1.3, Assess Environmental Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to assess environmental conditions:

- Analyze weather data
- Determine conditions along the departure track, utilize weather radar as required, and consider wind limitations
- Demonstrate knowledge of standard conditions for takeoff and when actual weather conditions not meeting standard takeoff requirements must comply with the “Lower than Standard” takeoff criteria
- Demonstrate the skill to perform an instrument takeoff

Observable Behaviors:

- Crew communications
- Leadership and Teamwork

Conditions

Refer to TPO 2.1

Standards

Refer to TPO 2.1

TPO 2.2: Perform Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a takeoff by:

- Demonstrate proficiency in performing takeoff and climb, including airspeed control and timely configuration changes
- Apply operational knowledge and analysis to aircraft characteristics, runway length, runway lighting, takeoff path, surface conditions, wind plus any other factor that may effect safety
- Calculate takeoff thrust using thrust setting tables or Aircraft’s Automation
- Use proper rudder control inputs to maintain runway centerline, avoid use of tiller for steering
- Know flight control panel modes of operation and autopilot procedures and limitations
- Understand short runway takeoff operations
- Know and apply emergency procedures, when needed
- Know takeoff wind limitations

Crew Resource Management (CRM):

- Crew communications
 - a. Make all standard crew coordination call outs and ATC communications
- Leadership and Teamwork
 - a. PM monitors engine and aircraft performance and advises PF of any emergency conditions
- Situation Awareness
 - a. PF and PM remain alert for potential threats and errors during the takeoff roll
- Decision Making
 - a. Rejected takeoff decision to be taken in accordance with FOM criteria

Conditions:

Abnormals - various abnormal conditions

Aircraft Configuration

Various Aircraft Gross Weights
Center of Gravity not to exceed limitations
Various bleed source configuration
Flaps – set for takeoff, in accordance with FOM
Slats – set for takeoff
Thrust set for Reduced (Normal) or Maximum
Flight Directors On or Off
Nav aids set for Departure

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC/IMC/RVR 600+
Precipitation: None, rain, storms, snow, icing, etc
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings and visibility
NOTAMS: Various runway length, Navaid operations, and runway lighting conditions
Appropriate ATC Clearance: SID, Special Single Engine Departure procedures, radar vectors after departure
Terrain and CFIT considerations

Standards:

Procedures - In Accordance with FOM Ch_____

Maneuvers

- Exhibit adequate knowledge of takeoffs and initial climb including airspeeds, configurations and Emergency Procedures
- Consider operational factors such as aircraft characteristics, runway length, runway lighting, takeoff path, surface conditions, wind, obstructions and other factors, which could affect safety
- Adjust the powerplant controls as recommended by the manufacturer and Comair for existing conditions
- Note any obstructions or other hazards in the path
- Verify and correctly apply the existing wind component to the takeoff performance
- Ensure the aircraft is on the correct runway, and align the aircraft on the centerline
- Apply the controls correctly to ensure longitudinal alignment with the runway centerline, taking into consideration aircraft specific handling characteristics

- Increase power smoothly and positively to a predetermined value based on existing conditions
- Complete required checks to verify the expected powerplant performance prior to starting takeoff
- Monitor powerplant controls, settings and instruments during takeoff to ensure all predetermined parameters are met
- Adjust the controls to attain the desired pitch attitude at the predetermined airspeed to attain the desired performance for the particular takeoff segment
- Perform the required pitch changes, gear and slats/flaps retraction, power adjustments and other required pilot-related activities at the required airspeed within the tolerances established
- in the FOM
- Use applicable Noise Abatement Procedures
- Comply with ATC clearances and instructions issued by ATC
- Accomplish the appropriate checklist items
- Maintain appropriate climb segment airspeed
- Maintain desired heading within +/- 5 degrees
- Maintain desired airspeed within +/- 5 kts

References:

Flight Operations Manual
Quick Reference Handbook

SPO 2.2.1: Perform Normal Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.1, Perform Normal Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform a Normal Takeoff:

- Follow normal procedures unless performance restrictions, environmental conditions or engine limitations dictate otherwise
- Perform the takeoff roll and perform a normal takeoff, observing V1, V2, and V2+10.
- Maintain runway centerline on takeoff roll
- Apply crosswind corrections, as appropriate

Observable Behaviors:

- Crew sets the radios/flight instruments/FMS to the desired settings prior to initiating each takeoff

- Crew correctly analyzes conditions and selects an appropriate departure profile, such as noise abatement profile
- Crew accurately sets engine thrust and monitors engine performance indications
- Crew verifies and acknowledge entries and changes to automated systems
- PF uses manual and/or autoflight techniques that result in smooth and accurate aircraft control
- PF calls for and verifies the accomplishment of landing gear and flap retraction
- Crew adheres to landing gear and flap retraction schedule/limitations
- Crew maintains situation awareness of potential threats to aircraft safety throughout the takeoff maneuver
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Refer to TPO 2.2

Standards

Refer to TPO 2.2

SPO 2.2.2: Perform Crosswind Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task 2.2, Perform Takeoff

Sub Task: 2.2.2, Perform Crosswind Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	Variable conditions Temp <15C Wind 15X 500 OVC 2.0 RCR Dry	Variable
Media	Level C FFS	Level C FFS

Performance Statement:

Demonstrate the ability to perform a Crosswind Takeoff:

- PF correct for directional deviations with smooth and positive control inputs
- Keep the aircraft on the runway centerline by applying aileron into the crosswind and maintain directional control with smooth rudder inputs
- Comply with Normal Takeoff procedures after liftoff

Observable Behaviors:

- PF applies correction for the existing wind component
- PF applies the controls correctly to maintain alignment on the runway centerline
- PM establishes Communication with ATC with standard phraseology
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Crosswind component greater than 10 kts
 Refer to TPO 2.2

Standards

Refer to TPO 2.2

SPO 2.2.3: Perform Reduced Visibility Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.3, Perform Reduced Visibility Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	*Heavy Weight/IMC Temp <10C Wind light 600/600/600RVR RCR 12	Variable 600/600/600RVR
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Reduced Visibility Takeoff:

- Know when the visibility is less than standard conditions
- Execute a reduced visibility takeoff by following lower-than-standard minimums takeoff procedures
- Perform a Normal Takeoff Roll (to V1) and performing a Normal Takeoff (V1 to 1,000 ft AGL and 1,000 ft to climb transition)
- The captain determines who will conduct the takeoff when the FO has less than 100 hours
- Consider runway lighting requirements
- Know takeoff alternate requirements

Observable Behaviors:

- Crew sets the radios/flight instruments/FMS to the desired settings prior to initiating each takeoff
- Crew correctly analyzes conditions and selects an appropriate departure profile
- Crew accurately sets engine thrust and monitors engine performance indications
- Crew verifies and acknowledge entries and changes to automated systems
- PF uses manual and/or autoflight techniques that result in smooth and accurate aircraft control
- PF calls for and verifies the accomplishment of landing gear and flap retraction
- Crew adheres to landing gear and flap retraction schedule/limitations
- Crew maintains situation awareness of potential threats to aircraft safety throughout the takeoff maneuver
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Required (transmissometer) ground equipment

Runway Visual Range (RVR): 600 Touch Down, 600 Mid-Point, 600 Rollout

Refer to TPO 2.2

Standards

Refer to TPO 2.2

SPO 2.2.4: Perform Maximum Performance Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.4, Perform Maximum Performance Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform a Maximum Performance Takeoff:

- Know when additional aircraft performance is necessary
- Execute a Maximum Performance Takeoff when the Maximum Allowable Takeoff Weight has been derived using the performance additives associated with a Performance Takeoff (static) within the Runway Analysis Data or performance data on the Dispatch Release
- Know conditions when a Maximum Performance Takeoff is not authorized

Observable Behaviors:

- Crew correctly analyzes conditions and selects an appropriate departure profile

- Crew sets the radios/flight instruments/FMS to the desired settings prior to initiating each takeoff
- Crew accurately sets engine thrust and monitors engine performance indications
- Crew verifies and acknowledge entries and changes to automated systems
- PF uses manual and/or autoflight techniques that result in smooth and accurate aircraft control
- PF calls for and verifies the accomplishment of landing gear and flap retraction
- Crew adheres to landing gear and flap retraction schedule/limitations
- Crew maintains situation awareness of potential threats to aircraft safety throughout the takeoff maneuver
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Refer to TPO 2.2

Standards

Refer to TPO 2.2

SPO 2.2.5: Perform Rejected Takeoff

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.5, Perform Rejected Takeoff

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	*Heavy Weight/IMC MEL Autobrakes inop Temp <15C Wind 10X 500 OVC 2.0 RCR 12	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Rejected Takeoff:

- Understand the Rejected Takeoff concept and emergency procedures
- Execute a Rejected Takeoff at speeds below 100 kts when a malfunction occurs; above 100 kts and less than V1, reject a takeoff for engine failure, fire or other conditions directed by company procedure, stop the aircraft on the runway, and order an evacuation, if necessary

- Complete the appropriate QRH and/or evacuation procedures

Observable Behaviors:

- Captain aborts the takeoff, if problem occurs during any takeoff where a rejected takeoff procedure should be initiated, and the aircraft can safely be stopped on the remaining runway/stopway
- Crew correctly recognizes and applies rejected takeoff procedures
- Crew accomplishes the appropriate powerplant failure, or other procedures and/or checklists, IAW Aircraft Operations Manual
- Captain properly assumes control of the aircraft and applies rejected takeoff procedures
- Captain makes appropriate decision when initiating rejected takeoff procedures
- First Officer monitors the aircraft’s systems during the RTO, and assists the Captain as requested or required for safety
- Captain brings the aircraft to a stop before any emergency/abnormal procedures are applied
- Crew is aware of brake energy limits and takes appropriate action
- Crew notifies ATC of rejected takeoff and requests assistance, if needed
- Crew notifies Flight Control and makes an appropriate notation in the aircraft logbook
- Crew prepares for normal and contingency situations
- Crew maintains constant awareness of the aircraft’s operational status and position

Conditions

Various abnormal conditions to produce a rejected takeoff
 Refer to TPO 2.2

Standards

Refer to TPO 2.2
 PF applies controls to maintain longitudinal alignment on the center of the runway.
 PF maintains positive control to bring the airplane to a safe stop.

SPO 2.2.6: Perform Takeoff (with Suspected Windshear)

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.6, Perform Takeoff (with suspected windshear)

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	*Heavy Weight/VMC/IMC Temp >25C Wind Gusting 25	Variable

	1000 OVC 3.0 TSVC RCR Dry	
Media	Level C FFS	Level C FFS

Performance Statement:

Demonstrate the ability to perform a takeoff with suspected windshear by:

- Understanding and recognizing potential windshear conditions
- Knowing windshear avoidance strategies
- Perform a takeoff, encountering a Windshear Alert and resuming a Normal Takeoff (at 1,500 ft) or if the windshear has been cleared
- Know engine power settings and pitch angles to fly for successful escape from windshear
- Know procedure for an inadvertent windshear encounter before liftoff and prior to V1
- Know procedure for an inadvertent windshear encounter before liftoff and after V1

Observable Behaviors:

- Crew correctly analyzes conditions, and selects an appropriate departure profile
- Crew sets the radios/flight instruments/FMS to the desired settings prior to initiating takeoff
- Crew accurately sets engine thrust and monitors engine performance indications
- PF uses manual and/or autoflight techniques that result in smooth and accurate aircraft control
- PF calls for and verifies the accomplishment of landing gear and flap retraction
- Crew adheres to landing gear and flap retraction schedule/limitations
- Crew maintains situation awareness of potential threats to aircraft safety throughout the maneuver
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Environmental conditions conducive to windshear activity

Refer to TPO 2.2

Standards

Refer to TPO 2.2

SPO 2.2.7: Perform Takeoff (with Powerplant Failure)

Aircraft: Twin Jet

Phase of Flight: 2.0, Takeoff

Task: 2.2, Perform Takeoff

Sub Task: 2.2.7, Perform Takeoff (with powerplant failure)

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	*Heavy Weight/IMC Temp >25C Wind 10X 500 OVC 2.0 RCR 12	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Takeoff with a Powerplant Failure at V1 by:

1. Align the aircraft on the runway
2. Maintain the alignment with the heading appropriate for climb performance and terrain clearance when the powerplant failure occurs
3. Accomplish all procedures from the inception of the powerplant failure through 1,500 ft
4. Determine when a Special Engine-out departure procedure briefing is required
5. Conduct a Special Engine-out departure procedure briefing

Observable Behaviors:

- Crew considers, prior to beginning the takeoff, operational factors that could affect the maneuver
- PM correctly sets engine thrust levers
- Crew correctly identifies the malfunctioning engine and type of engine problem
- Captain coordinates flight deck activities to establish proper balance between command authority and crewmember participation. Captain acts decisively when the situation requires
- Crew completes Engine Failure/Fire items without error or omission of steps
- Crew completes Emergency, Abnormal, and After Takeoff checklists in the proper sequence without error or omission of steps
- Crew notifies ATC of the situation and declares an emergency, if applicable
- Crew interaction is appropriate for the operational situation

Conditions

Various abnormal conditions to produce a powerplant failure at V1

Refer to TPO 2.2

Standards

Refer to TPO 2.2

PF maintains positive rate of climb.

PF maintains runway heading +/- 10 degrees

PF maintains airspeed within +/- 5 knots of profile

PF climbs at or above V2 and limits bank angle to 15 degrees until V2 + 15 and greater is achieved.

TPO 3.1: Perform Initial Climb Configuration

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.1 Perform Initial Climb Configuration

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Initial Climb Configuration:

- Perform climb checks, monitoring aircraft systems, assessing environmental conditions, monitor weather conditions and communicate and coordinate with ATC
- Perform aircraft configuration changes
- Perform noise abatement and instrument departure procedures

Crew Resource Management (CRM):

- Crew communications
 - a. Communicate and coordinate with ATC, notify the cabin crew when it is safe to move about the cabin
- Leadership and Teamwork
 - a. Advise cabin crew if adverse weather is anticipated
- Decision Making
 - a. If adverse weather conditions exist, use on-board weather radar and coordinate any course deviations with ATC
- Situational Awareness
 - a. Monitor aircraft pressurization, engine performance, aircraft systems, maintain crew awareness of TCAS traffic conflicts and weather conditions during the climb

Conditions

Abnormal – various conditions

Aircraft Configuration

Aircraft Gross Weight - variable

Center of Gravity not to exceed limitations

Various bleed source configuration

Flaps-as required
Slats-as required
Thrust set for reduced or normal power
Flight Directors selected and Nav aids set for departure

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Variable
Precipitation: None, rain, storms, snow, icing, etc
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Variable

Operational Environment

Runway Conditions: N/A
ATIS: N/A
NOTAMs: Navaid operations, Sigmet
ATC Clearance: SID, Special Single Engine Departure Procedures, Vectors after departure
Terrain and CFIT considerations

Standards

Procedures -
In Accordance with FOM Ch____
In Accordance with Ops Manual Ch____
In Accordance with JEPPESEN charts

Maneuvers

- Adjust pitch attitude as required to climb and accelerate to an airspeed of not less than V2 + 10/15 KIAS at 35 ft above the runway
- Establish proper pitch attitude for climb
- Maintain runway alignment/heading
- Perform Climb Checks

References

FOM
Ops Manual
Jeppesen

SPO 3.1.1: Perform Aircraft Configurations

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.1, Perform Initial Climb Configuration

Sub Task: 3.1.1, Perform Aircraft Configuration

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to properly retract gear and slats/flaps:

- Maintain standard takeoff and climb profiles, including airspeed control, minimum maneuver airspeed awareness, landing gear and flap airspeed limitations

Observable Behaviors:

- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM
- Crew maintains constant awareness of aircraft status and position
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 3.1

Standards

Refer to TPO 3.1

SPO 3.1.2: Perform Climb Checks

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.1, Perform Initial Climb Configuration

Sub Task: 3.1.2, Perform Climb Checks

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Climb Checks by:

- Perform Climb Checks
- Comply with ATC communication and departure procedures
- Demonstrate operation of the flight control panel
- Set thrust levers to proper position

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the proposed flight
- Crew completes checklist correctly, and shares any safety or operational concerns

Conditions

Refer to TPO 3.1

Standards

Refer to TPO 3.1

SPO 3.1.3: Perform Noise Abatement Requirements and Departure Procedures

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.1, Perform Initial Climb Configuration

Sub Task: 3.1.3, Perform Noise Abatement Requirements and Departure Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Noise Abatement and Departure Procedures by:

- Performing Noise Abatement Procedures and maneuvers
- Executing assigned Departure Procedures

Crew Resource Management (CRM):

- Crew uses the applicable noise abatement and wake turbulence avoidance procedures, as required
- PF configures for normal climb after noise abatement departure, as required
- PF responds to and accomplishes ATC instructions in a timely manner
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the proposed flight
- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM.
- Crew monitors and responds to TCAS

Conditions

Refer to TPO 3.1

Standards

Refer to TPO 3.1

TPO 3.2: Establish Final Climb Configuration

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.2 Establish Final Climb Configuration

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform the final climb configuration by:

- Performing 10,000 ft check
- Transition to cruise altitude
- Conduct climb navigation/SID

Crew Resource Management (CRM):

- Crew communications
 - a. Notify cabin crew above 10,000 ft. sterile cockpit procedure; maintain appropriate ATC communication, and enroute navigation awareness
- Leadership and Teamwork
 - a. Insure all climb checklists are complete; crew continues to monitor aircraft pressurization, engine performance and all aircraft systems
 - b. PM accomplishes fuel, performance, and navigation recording procedures
- Situation Awareness
 - a. Crew maintains constant awareness of the aircraft’s status and position
 - b. Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged

Conditions

Abnormals

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for Climb
Flight Control Computer mode set
Nav aids set for departure and en route navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Variable
Precipitation: None, rain, storms, snow, icing, etc
Wind Speed/Direction: Variable (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: N/A
ATIS: N/A
NOTAMs: Navaid operations, Sigmets
Appropriate ATC Clearance: SID, Special Single Engine Departure Procedures, Vectors after departure
Terrain and CFIT considerations

Standards

Procedural
In Accordance with FOM Ch____
In Accordance with Ops Manual Ch____
In Accordance with Jeppesen Ch____

Maneuvers:

- Establish initial climb profile
- Perform Climb Checks

References:

FOM
Ops Manual
Jeppesen

SPO 3.2.1: Perform 10,000 Ft Check

Aircraft: Twin Jet
Phase of Flight: 3.0 Climb
Task: 3.2, Establish Final Climb Configuration
Sub Task: 3.2.1, Perform 10,000 ft Check
Crew (Duty) Position: PIC and SIC
Criticality: No
Currency: Yes

Performance Statement

Demonstrate the ability to perform a 10,000 ft Check by:

- Perform a 10,000 ft Check when passing 10,000 MSL, or upon leveling at a lower altitude for cruise flight
- Know different climb speeds and profiles for transition to cruise altitude
- Know thrust setting procedures or FADEC generated thrust information
- Demonstrate correct thrust lever position detent for FADEC system
- Notify flight attendant
- Complete 10,000 ft Check

Observable Behaviors:

- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the flight
- Crew maintains constant awareness of aircraft's status, TCAS, and route navigation

Conditions TCAS

Refer to TPO 3.2

Standards

Refer to TPO 3.2

SPO 3.2.2: Perform Transition to Cruise Altitude

Aircraft: Twin Jet

Phase of Flight: 3.0 Climb

Task: 3.2, Establish Final Climb Configuration

Sub Task: 3.2.2, Perform Transition to Cruise Altitude

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to transition to cruise altitude by:

- Monitoring aircraft performance, accelerating to a cruise performance Mach speed, and setting altimeters as required
- Reset altimeters (29.92) while transitioning through FL 180
- Demonstrate that selected cruise altitude is within aircraft performance limits prior to reaching cruise altitude

Observable Behaviors:

- Crewmembers verify and acknowledge entries and changes to automated systems
- Crew maintains constant awareness of aircraft status and position
- Crew interaction is appropriate for the operational situation

Conditions: Refer to TPO 3.2

Standards: Refer to TPO 3.2

TPO 4.1: Perform Cruise Procedures

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.1, Perform Cruise Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform en route Cruise Procedures and checks by:

- Establishing cruise profile
- Performing Cruise Checklist

Crew Resource Management (CRM):

- Crew communications
 - a. Coordinate the route and altitude with ATC to achieve the most efficient and comfortable ride to destination
- Leadership and Teamwork
 - a. Crew maintains constant awareness of the aircraft’s status and position
 - b. PM accomplishes fuel, performance, and navigation recording procedures
 - c. Flight crew informs the cabin crew of anticipated turbulence; coordinates with dispatcher or maintenance control, as appropriate, any safety concerns
- Situation Awareness
 - a. Maintain vigilance for potential weather conditions that may affect the flight and coordinate any clearance deviation with ATC

Conditions – Normal/Abnormal

Aircraft Configuration

Various Aircraft Gross Weights
 Center of Gravity not to exceed limitations
 Flaps-Up
 Slats-Up
 Thrust set for Climb
 Flight Control Computer mode set
 NAVAIDs set for departure and en route navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: N/A ATIS: N/A

NOTAMs: Navaid operations, Sigmets

ATC Clearance: SID, Special Single Engine Departure Procedures, Vectors after departure

Terrain and CFIT considerations

Standards:

Procedures:

In Accordance with FOM Ch __

Maneuvers

- Establish cruise profile
- Perform Cruise Checks

References

FOM

SPO 4.1.1: Establish Cruise Profile

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.1, Perform Cruise Procedures

Sub Task: 4.1.1, Establish Cruise Profile

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to understand the Dispatch Release cruise information:

- Know Dispatch Release planned altitude information
- Understand requirements and procedures for determining operation within maximum safe altitudes
- Verify engine indications for selected cruise profile and adjust thrust as necessary
- Make all standard call-outs

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- Crew maintains constant awareness of aircraft status and position
- Crewmembers verify and acknowledge entries and changes to automated systems

- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 4.1

Standards

Refer to TPO 4.1

SPO 4.1.2: Perform Cruise Checklist

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.1, Perform Cruise Procedures

Sub Task: 4.1.2, Perform Cruise Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform Cruise checklist:

- Know procedures for Cruise checklist
- Know EICAS messages and their interpretations
- Perform Cruise checklist
- Perform fuel monitoring procedures during flight

Observable Behaviors:

- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged
- Crew performs Cruise checklist, and maintains constant awareness of aircraft's operational status, fuel state and navigational position
- Crewmembers verify and acknowledge entries and changes to automated systems
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 4.1

Standards

Refer to TPO 4.1

TPO 4.2: Perform Cruise Situational Assessment

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.2, Perform Cruise Situational Assessment

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement:

Demonstrate the ability to perform a cruise situational assessment:

- Assess environmental conditions
- Monitor aircraft systems

Crew Resource Management (CRM):

- Crew communications
 - a. Use standard ATC communication procedures, request ATC ride reports, and inform cabin crew about anticipated turbulence and cabin seat belt usage
- Leadership and Teamwork
 - a. Keep cabin crew informed of flight conditions, turbulence and arrival information
- Situational Awareness
 - a. Maintain vigilance for changing enroute weather conditions, annotate actual vs. predicted fuel consumption, and monitor aircraft systems
 - b. Coordinate any altitude change requests between PF/PM and ATC

Conditions:

Normal/Abnormals

Aircraft Configuration

Aircraft Gross Weights - Variable

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for cruise conditions

Flight Control Computer mode set

Nav aids appropriate for en route navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Variable

Precipitation: None, rain, storms, snow, icing, etc

Wind Speed/Direction: Variable (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Variable

Operational Environment

Runway Conditions: N/A

ATIS: N/A

NOTAMs: Navaid operations, Sigmets

ATC Clearance: SID, Special Single Engine Departure Procedures, ATC Vectors after departure,

Terrain and CFIT considerations

Standards:

Procedural

In Accordance with FOM

In Accordance with Ops Manual

Maneuvers

- Establish cruise profile
- Perform Cruise Checks

References

FOM

Ops Manual

Jeppesen

Dispatch Release

SPO 4.2.1: Assess Environmental Conditions

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.2, Perform Cruise Situational Assessment

Sub Task: 4.2.1, Assess Environmental Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement:

Demonstrate the ability to assess environmental conditions:

- Perform weather analysis and operate equipment as required
- Analyze weather along flight path
- Know description, functions and operating procedures for weather radar, anti-icing equipment and ignition system
- Analyze actual fuel consumption vs. flight plan's predicted fuel burn

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PM establishes communications with ATC, using proper phraseology
- Crew selects appropriate route and altitude for conditions
- Crew correctly navigates while using long-range navigation equipment (as applicable)
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged
- Crew maintains constant awareness of aircraft's fuel status vs. the flight plan
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 4.2

Standards

Refer to TPO 4.2

TPO 4.3: Perform Aircraft Systems Monitoring

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.3, Perform Aircraft Systems Monitoring

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform procedures for monitoring aircraft systems by:

- Interpret and address Annunciator messages
- Monitor engine instruments to include calculated or generated thrust settings

Crew Resource Management (CRM):

- Crew communications
 - a. Ensure all ATC enroute and altitude changes are coordinated and monitored by the flight crew
- Leadership and Teamwork
 - b. Flight crew coordinates changes in aircraft performance, weather deviations, altitude or route changes and transfer of flight controls
- Situational Awareness
 - c. Monitor all aircraft and engine performance indications, note any variations from normal indications or deviations from the flight plans predicted fuel burn

Conditions:

Abnormals - Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for cruise

Flight Control Computer mode set

Nav aids set for en route navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: N/A

ATIS: N/A

NOTAMs: Navaid operations, Sigmets

ATC Clearance: SID, Special Single Engine Departure Procedures, radar vectors after departure

Terrain clearance and CFIT considerations

Standards:

In Accordance with FOM Ch __

In Accordance with Ops Manual Ch __

Procedures:

In Accordance with FOM

Maneuvers:

N/A

References:

FOM

TPO 4.4: Perform Cruise Navigation Procedures

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.4, Perform Cruise Navigation Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Cruise Navigation Procedures by:

- Complying with the dispatch flight plan
- Understanding communications with ATC
- Performing navigation

Crew Resource Management (CRM):

- Crew communications
 - a. PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
 - b. PM establishes and maintains communications with ATC, using correct phraseology
- Leadership and Teamwork
 - a. Flight crew keeps the cabin crew informed and crew interaction is appropriate for the operational situation
- Situational Awareness
 - a. Flight crew maintains threat vigilance and awareness of the aircraft’s status and navigational position
- Decision Making
 - a. Decisions (including operational limitations) are clearly stated to other crew members and acknowledged.

Conditions:

Abnormals - Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for cruise

Flight Control Computer mode set
Nav aids set for en route navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc
Wind Speed/Direction: Set appropriately (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: N/A
ATIS: N/A
NOTAMs: Navaid operations, Sigmets
ATC Clearance: En route clearance, radar vectors after departure
Terrain and CFIT considerations

Standards

In Accordance with FOM Ch ___
In Accordance with Ops Manual Ch ___

Maneuvers

N/A

References

FOM
Ops Manual
Jeppesen
Dispatch Release

SPO 4.4.1: Communicate with ATC

Aircraft: Twin Jet
Phase of Flight: 4.0, Cruise
Task: 4.4, Perform Cruise Navigation Procedures
Sub Task: 4.4.1, Communicate with ATC
Crew (Duty) Position: PIC and SIC
Criticality: No
Currency: Yes

Performance Statement

Demonstrate the ability to perform communication with ATC:

- Know specific ATC en route clearance
- Understand procedures for establishing communications with ATC
- Know requirements and procedures for en route flight following

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the proposed flight
- PM establishes communications with ATC using proper phraseology

Conditions

Refer to TPO 4.4

Standards

Refer to TPO 4.4

SPO 4.4.2: Perform Navigation

Aircraft: Twin Jet

Phase of Flight: 4.0, Cruise

Task: 4.4, Perform Cruise Navigation Procedures

Sub Task: 4.4.2, Perform Navigation

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform cruise navigation:

- Know the features and operation of navigation systems and navigation displays
- Monitor navigation progress from waypoint to waypoint
- Execute change to flight plan or divert to alternate, as necessary
- Crosscheck engine performance and fuel consumption
- Make appropriate passenger information announcements

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the flight
- Crew uses the current and appropriate navigation publications for the flight
- Crew selects appropriate route and altitude for conditions
- Crew correctly navigates while using long-range navigation equipment (as applicable)
- Crew maintains constant awareness of aircraft status and position
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 4.4

Standards

Refer to TPO 4.4

TPO 5.1: Perform Descent Procedures

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.1, Perform Descent Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC Turbulence, set as appropriate Temp <0C -Rime 200 OVC .5 Wind variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform descent from cruise altitude procedures by:

- Assessing environmental conditions
- Reviewing destination and alternate consideration
- Performing aircraft systems monitoring

Crew Resource Management (CRM)

- Crew Communications
 - a. Obtain latest ATIS information and begin preparing for terminal area arrival
- Leadership and Teamwork
 - a. Begin crew coordination in preparation for arrival in the terminal area
- Decision Making
 - a. Decisions (including operational limitations) are clearly stated to other crew members and acknowledged.
- Situation Awareness
 - a. PIC and FO maintain traffic vigilance, Nav aids set for the descent/approach, complete check lists and maintain a sterile cockpit below 10,000 feet. Determine gate and ground support needs.

Conditions

Abnormal -Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for descent
Flight Control Computer mode set
Nav aids set for descent and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMs: Various runway length, Navaid operations, runway lighting
Appropriate ATC Clearance: STAR clearance, radar vectors for descent
Terrain and CFIT considerations

Standards

In Accordance with FOM Ch ____
In Accordance with Ops Manual Ch ____

Maneuvers

N/A

References

FOM
Ops Manual Runway Analysis NOTAMs Dispatch Release QRH

SPO 5.1.1: Assess Environmental Conditions

Aircraft: Twin Jet
Phase of Flight: 5.0, Descent and Hold
Task: 5.1, Perform Descent Procedures
Sub Task: 5.1.1, Assess Environmental Conditions
Crew (Duty) Position: PIC and SIC
Criticality: No
Currency: Yes

Performance Statement

Demonstrate the ability to assess the environmental conditions by:

- Perform weather analysis and operating equipment as required
- Analyze weather along descent flight path
- Know description, function and operating procedures for weather radar, anti-icing equipment and ignition system

Observable Behaviors:

- Crew uses appropriate level of weather radar for the current environmental conditions
- Crew selects appropriate route and altitude for weather conditions and terrain
- Crew maintains constant awareness of aircraft's status and navigation position
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 5.1

Standards

Refer to TPO 5.1

SPO 5.1.2: Destination/Alternate Considerations

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.1, Perform Descent Procedures

Sub Task: 5.1.2, Destination/Alternate Considerations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to obtain weather reports by:

- Obtaining ATIS information
- Reviewing runway conditions to consider a need for potential diversion to an alternate
- Correctly interpreting all weather conditions when considering an alternate
- Assessing destination and alternate weather conditions, fuel status, delays, NOTAMs and aircraft mechanical status

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PM selects and obtains the ATIS information
- Crew plans for terminal area arrival operations
- Crew maintains constant awareness of aircraft status, weather conditions and navigational position, including terrain awareness
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 5.1

Standards

Refer to TPO 5.1

SPO 5.1.3: Perform Aircraft Systems Monitoring

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.1, Perform Descent Procedures

Sub Task: 5.1.3, Perform Aircraft Systems Monitoring

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform procedures for monitoring aircraft systems by:

- Interpreting and clearing electronic aircraft systems messages
- Monitoring engine instruments
- Knowing calculated or generated thrust settings

Observable Behaviors:

- Crew maintains constant awareness of aircraft's operational status and position
- Crew correctly interprets cockpit indications
- Crew discusses any normal or abnormal system operating characteristic or limitation; and the corrective action for a specific malfunction
- Crewmembers possess adequate knowledge of the normal and non-normal procedures, know immediate action items to accomplish, and proper checklist to accomplish
- Crew prepares for normal and contingency situations
- Crewmembers recognize and report work overloads in self and others
- Crew prioritizes secondary tasks to allow sufficient resources for dealing effectively with primary flight duties
- Crew interaction is appropriate for the operational situation

Conditions

Refer to TPO 5.1

Standards

Refer to TPO 5.1

TPO 5.2: Perform Descent Initiation

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.2, Perform Descent Initiation

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC Turbulence, set as appropriate Temp <0C -Rime 200 OVC .5 Wind variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform descent initiation by:

- Planning descent profile
- Selecting descent flight plan route
- Verifying the route with ATC and the FMS inputs
- Performing descent profile
- Performing communication procedures

Crew Resource Management (CRM)

- Crew Communications
 - a. PF completes approach briefing without omission of any safety briefing items
- Leadership and Teamwork
 - a. Flight crew accurately completes Descent checklist
- Decision Making
 - a. Crew selects suitable runway for existing conditions
- Situation Awareness
 - a. Crew considers destination and alternate weather, fuel, terrain, and ATC factors in approach planning

Conditions

Abnormals

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-Up

Slats-Up

Thrust set for descent

Flight Control Computer mode set

Nav aids set for descent and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway lengths, Navaid operations, runway lighting conditions

ATC Clearance: STAR clearance, radar vectors for descent

Terrain and CFIT considerations

Standards

In Accordance with FOM Ch _ and _

In Accordance with Ops Manual Ch _ and _

Maneuvers

N/A

References

FOM

Ops Manual NOTAMs Jeppesen

QRH

SPO 5.2.1: Perform Descent Profile

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.2, Perform Descent Initiation

Sub Task: 5.2.1, Perform Descent Profile

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform a descent profile:

- Knows the operation of navigation systems and understanding navigation displays
- Monitors automation for initiation of descent
- Initiates descent

- Monitors flight path angle using altitude range calculations
- Adjusts thrust levers for descent
- Maintains position and terrain awareness
- Maintains altitude and crossing restriction awareness

Observable Behaviors:

- Crew allows sufficient time for programming of the Flight Management System prior to initiating descent maneuver
- PF navigates the aircraft using the aircraft FMS in accordance with published descent profile/procedure, or as directed by ATC
- PF adheres to airspeed restrictions and adjustments required by regulations, ATC, the AOM, and the GOM
- PF establishes, where appropriate, a rate of descent consistent with the surrounding terrain, airplane operating characteristics and safety

Conditions

Refer to TPO 5.2

Standards

Refer to TPO 5.2

SPO 5.2.2: Perform Communications Procedures

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.2, Perform Descent Initiations

Sub Task: 5.2.2, Perform Communications Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform required communication procedures:

- Complies with ATC descent clearance requirements
- Knows descent communication/ATC procedures
- Knows required in-range company communication procedure

Observable Behaviors:

- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PM selects and uses the appropriate communications frequencies, and selects and identifies the navigation aids associated with the flight
- Crew maintains constant awareness of aircraft's status and position
- Crew interaction is appropriate for the operational situation

Conditions: Refer to TPO 5.2

Standards: Refer to TPO 5.2

TPO 5.3: Perform Descent Checklist

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.3, Perform Descent Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC Light Turbulence Temp <0C -Rime 200 OVC .5 Wind variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Descent checklist procedures:

- Knows contents of, and procedures for Descent checklist
- Performs actions required for Descent checklist (18,000 ft)
- Communicates with flight attendant(s)
- Smoothly transitions from cruise altitude to descent

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew notifies the cabin crew of sterile cockpit condition, and all ATC clearances are accurately acknowledged
- Leadership and Teamwork
 - a. Ensure all checklists are complete and properly followed, maintenance issues and relevant cabin or passenger needs are coordinated with ground personnel
- Decision Making
 - a. Decisions (including operational limitations) are clearly stated to other crew members and accurately acknowledged.
- Situation Awareness
 - a. Crew is alert for adverse weather and icing conditions, terrain, altimeter settings, ATIS, and crew briefing of relevant operational conditions

Conditions

Abnormals

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations
Flaps-as required
Slats-as required
Thrust set for descent
Flight Control Computer mode set
Nav aids set for descent and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMs: Describe various runway lengths, navaid operations, runway lighting conditions
ATC Clearance: STAR clearance, radar vectors for descent
Terrain and CFIT considerations

Standards

In accordance with FOM Ch _ and _

Maneuvers

N/A

References

FOM Jeppesen
Runway Analysis
NOTAMs
QRH

SPO 5.3.1: Transition from Cruise Altitude

Aircraft: Twin Jet
Phase of Flight: 5.0, Descent and Hold
Task: 5.3, Perform Descent Checklist
Sub Task: 5.3.1, Transition from Cruise Altitude
Crew (Duty) Position: PIC and SIC
Criticality: No
Currency: Yes

Performance Statement

Demonstrate the ability to perform procedures for transitioning from cruise altitude:

- Monitor and set aircraft systems
- Know operation of APU controls and AC generation, pneumatic air supply, all displays and limitations
- Know contents of, and procedures for transitioning from cruise altitude, including requirements for resetting and cross-checking altimeters
- Know when and what to consider regarding bleed air conditions
- Set landing data
- Crew monitors TCAS during descent

Observable Behaviors:

- Crewmembers reset correct barometric altimeter setting passing transition altitude
- Crew considers destination and alternate weather, fuel, and ATC factors in approach planning
- Crew is responsive to TCAS alerts
- PF appropriately requests Approach checklist
- Crew completes checklist correctly
- Crew appropriately configure the aircraft's systems for the descent

Conditions

Refer to TPO 5.3

Standards

Refer to TPO 5.3

TPO 5.4: Perform Holding Procedures

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.4, Perform Holding Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE/MV
Evaluation Condition	IMC Turbulence, if appropriate Temp <0C -Rime 200 OVC .5 Wind variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Holding Procedures:

- Performs ATC Holding Clearance
- Establishes holding pattern entry
- Establishes holding pattern
- Communicates with dispatch
- Maintains recommended airspeeds
- Programs Missed Approach Procedures

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew advises dispatch of holding, and PF advises non-standard hold airspeeds to ATC and PM
- Leadership and Teamwork
 - a. PIC coordinates activities, and appropriately balances the workload
 - b. PF follows appropriate entry procedures for a standard, non-standard, published, or non-published holding pattern.
- Decision Making
 - a. Crew makes a divert decision plan, and coordinates it with dispatch
- Situation Awareness
 - a. Crew considers weather conditions, fuel consumption data and consults dispatch, as appropriate, before a divert decision is taken
 - b. Crew monitors and responds to TCAS

Conditions

Abnormals

Various

Aircraft Configuration

Various Aircraft Gross Weights
Center of Gravity not to exceed limitations
Flaps-as required
Slats-as required
Thrust set for Holding
Flight Management System mode set
Nav aids set for Holding and arrival area navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMS: Describe various runway lengths, navaid operations, runway lighting conditions
Appropriate ATC Clearance: STAR clearance, radar vectors for descent
Terrain and CFIT considerations

Standards

Procedural

In Accordance with FOM Ch.____
In Accordance with Airman's Information Manual

Maneuvers

Complies with ATC holding instructions and reporting requirements. Changes to recommended holding airspeed appropriate for the altitude. Follows recommended holding entry and FMS data monitoring procedures.

Complies with holding pattern leg length when DME distance is assigned by ATC. Uses proper wind drift correction techniques to maintain the desired radial, track and bearing. Arrives at the holding fix as closely as possible to the EFC time.

Maintain:

1. Airspeed +/- 10 kts
2. Altitude +/- 100 ft
3. Heading +/- 10 degrees
4. Accurately tracks radials, courses and bearings

References:

FOM

SPO 5.4.1: Perform ATC Holding Clearance

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.4, Perform Holding Procedures

Sub Task: 5.4.1, Perform ATC Holding Clearance

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform ATC Holding Clearance:

- Performs actions required for the holding clearance
- Understands holding instructions from ATC and ensuring all parts of the holding clearances are received
- Reviews holding pattern entry
- Revises holding pattern and FMS data as necessary

Observable Behaviors:

- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crew complies with ATC reporting requirements
- PF communicates non-standard holding speeds with crew and ATC
- Crew establishes divert decision criteria

Conditions

Refer to TPO 5.4

Standards

Refer to TPO 5.4

SPO 5.4.2: Establish Holding Pattern Entry

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.4, Perform Holding Procedures

Sub Task: 5.4.2, Establish Holding Pattern Entry

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform proper holding pattern entry:

- Establishes holding airspeed
- Follows Airman's Information Manual (AIM) holding pattern entry procedures

Observable Behaviors:

- PM computes proper holding airspeed
- PF changes to the recommended holding airspeed appropriate for the airplane and holding altitude to cross the holding fix at or below maximum holding airspeed
- PF follows AIM entry procedures for a standard, non-standard, published, or non-published holding pattern.
- Crew monitors and responds to TCAS

Conditions

Refer to TPO 5.4

Standards

Refer to TPO 5.4

SPO 5.4.3: Establish Holding Pattern

Aircraft: Twin Jet

Phase of Flight: 5.0, Descent and Hold

Task: 5.4, Perform Holding Procedures

Sub Task: 5.4.3, Establish Holding Pattern

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform holding pattern procedures:

- Utilizes leg timing and makes corrections to the leg, as required, ensuring compliance with ATC clearance
- Obtains all-engine/one engine-out holding performances

Observable Behaviors:

- Crew recognizes arrival at the clearance limit or holding fix
- PF complies with the standard, non-standard, published, or non-published holding pattern, and, when a DME distance is specified, follows the holding pattern leg length
- PF uses the proper timing criteria required by the holding altitude and/or ATC instructions
- Crew considers weather and fuel consumption factors and consults flight control, as appropriate, when deciding to continue holding or to divert to an alternate airfield
- Crew monitors and responds to TCAS

Conditions

Refer to TPO 5.4

Standards

Refer to TPO 5.4

TPO 6.1: Perform Approach Preparation

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	IMC Light Turbulence Temp <0C -Rime 200 OVC .5 Wind variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform approach preparations:

- Receives and analyzes weather conditions on the approach path
- Accomplishes ATC communications and verifies the approach clearance
- Monitors aircraft systems
- Sets and verifies Navaids appropriate for the intended approach
- Accomplishes approach briefing and performs the approach checklist

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew complies with ATC clearances and uses standard phraseology
 - b. Crewmembers ask questions, as necessary, to ensure understanding of crew actions and decisions
- Leadership and Teamwork
 - a. The crew coordinates the selection and identification of all navigational, instrument references and communications procedures used for the intended approach
 - b. Captain coordinates flight deck activities to establish proper balance between command authority and crewmember participation. Captain acts decisively when the situation requires
- Decision Making
 - a. PF correctly configures the aircraft for the meteorological and operating conditions
- Situation Awareness
 - a. Crew maintains navigational and terrain awareness at all times
 - b. PF transitions to a normal landing only when the aircraft is in position to land within the touchdown zone, using a safe rate of descent and aligned with the runway centerline

Conditions: Normal/Abnormal - Various

Aircraft Configuration

Various Aircraft Gross Weights
Center of Gravity not to exceed limitations
Flaps-as required
Slats-as required
Thrust set for Holding
Flight Control Computer mode set
Nav aids set for approach and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMS: Various runway lengths, Navaid operations, runway lighting and markings
ATC Clearance: STAR clearance, radar vectors for descent
Terrain and CFIT considerations

Standards

Procedural

In accordance with FOM Ch ____
In accordance with Ops Manual Ch ____
In accordance with applicable Jeppesen Charts

Maneuver

N/A

References

FOM
Operations Manual
Jeppesen charts
QRH

SPO 6.1.1: Assess Environmental Conditions

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.1, Assess Environmental Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to assess environmental conditions:

- Monitors and evaluates ATIS and other weather conditions
- Evaluates windshear threats
- Uses the anti-icing equipment and radar, as required
- Maintains situational awareness to aircraft position and terrain
- Utilizes continuous ignition, as required

Observable Behaviors:

- PF establishes the appropriate airplane configuration and airspeed/V-speed after evaluating turbulence, wind shear, microburst conditions, and other meteorological and operating conditions
- Crew establishes divert decision criteria

Conditions

Refer to TPO 6.1

Standards

Refer to TPO 6.1

SPO 6.1.2: Perform ATC Communications

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.2, Perform ATC Communication

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform ATC communications:

- Complies with all ATC approach clearances, including modifications and ensures that no ambiguity or misunderstanding exists
- Establishes and maintains communications with the appropriate ATC facility

Observable Behaviors:

- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions.

Conditions: Refer to TPO 6.1

Standards

Refer to TPO 6.1

SPO 6.1.3: Perform Aircraft Systems Monitoring

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.3, Perform Aircraft Systems Monitoring

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform aircraft systems monitoring:

- Continually monitors appropriate aircraft systems for this phase of flight and accomplishes appropriate procedures for any degraded aircraft systems

Observable behaviors:

- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the approach
- Crew completes checklist correctly

Conditions

Refer to TPO 6.1

Various abnormal conditions

Standards

Refer to TPO 6.1

SPO 6.1.4: Perform Approach Continuation Factors

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.4, Perform Approach Continuation Factors

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform approach continuation factors:

- Makes an informed decision to continue with a planned approach or divert to an alternate airport
- Communicates weather versus minimums required for the approach with other pilot

- Knows fuel and mechanical status of the aircraft
- Monitors the success of preceding aircraft on the approach
- Understands wind, braking action, windshear and/or other operational reports

Observable Behaviors:

- Crew considers weather and fuel consumption factors and consults flight control, as appropriate, before deciding to continue holding or to fly to an alternate airfield
- Crewmembers ask questions, as necessary, to ensure understanding of crew actions and decisions

Conditions

Refer to TPO 6.1

Standards

Refer to TPO 6.1

SPO 6.1.5: Set Nav aids

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.5, Set Nav aids

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Airman demonstrates the ability to correctly set all Nav aids:

- Knows limitations of available Nav aids
- Enters and identifies correct Nav aids for the approach, including DH/MDA markers

Observable Behaviors:

- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew manages flight director and autopilot in accordance with company procedures
- Crew uses automated systems at appropriate levels for the approach to be flown

Conditions

Refer to TPO 6.1

Standards

Refer to TPO 6.1

SPO 6.1.6: Perform Approach Briefing

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.6, Perform Approach Briefing

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform the Approach Briefing:

- Knows content of the Approach Briefing and correct procedures
- Knows appropriate level and modes of automation and briefing the level to be used
- Knows and utilizes standard call outs on approach
- Transfers control of the aircraft to Pilot Monitoring (PM) during Approach briefing
- Determines instrument or visual approach, as appropriate

Observable Behaviors:

- Captain/First Officer assume proper roles of PF and PM in accordance with AOM
- Workload and task distribution are clearly communicated and acknowledged. Adequate time is provided for task completion
- Crewmembers ask questions, as necessary, to ensure understanding of crew actions and decisions
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew recognizes RVR values; plans and briefs a monitored approach
- Crew applies gust/wind factors and considers effects of meteorological phenomena such as wind shear, microburst, and other related safety of flight factors

Conditions

Refer to TPO 6.1

Standards

Refer to TPO 6.1

SPO 6.1.7: Perform Approach Checklist

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.1, Perform Approach Preparation

Sub Task: 6.1.7, Perform Approach Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Performance Statement

Demonstrate the ability to perform an Approach Checklist:

- Crew performs the Approach Checklist without error or omission

Observable Behaviors:

- Crew correctly completes checklist items

Conditions

Refer to TPO 6.1

Standards

Refer to TPO 6.1

TPO 6.2: Perform Precision Approach Procedures

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC MEL: Autopilot Inop Temp >25C Wind 10X 200 OVC .5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Precision Approach procedures:

- Complete CAT I, CAT II and PRM ILS approaches with both normal aircraft operations and degraded aircraft systems
- Operates the flight guidance and autopilot controls, monitors autopilot and ILS indications
- Sets the NAV radios and monitor NAV indications as appropriate
- Conducts approach within stabilized criteria, and makes all standard call outs
- Utilizes proper crew coordination methods applicable to the approach
- Conducts the Before Landing checklist
- Understands visual cues and making the correct landing or Missed Approach decision
- Smoothly transitions to a visual landing, and maintains runway centerline alignment

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew uses standard terminology, sets correct frequencies, coordinates and cross-checks the appropriate level of aircraft automation system for the intended approach
- Leadership and Teamwork
 - a. Captain/First officer assume proper roles of PF and PM in accordance with the AOM procedure
 - b. Flight crew accurately completes the checklist
- Decision Making
 - a. Flight crew plans for normal operations, and anticipates potential contingencies
- Situation Awareness
 - a. Flight crew is cognizant of all conditions that may apply to the approach such as displaced thresholds, meteorological conditions, NOTAMS, or ATC instructions

- b. Crewmembers should ask questions, as necessary, to resolve doubts and ensure that a shared understanding of crew actions and decisions is achieved

Conditions

Abnormal

Various possible abnormal conditions, including flap malfunctions and single engine operations

Aircraft Configuration

Aircraft gross weights – variable, including maximum landing weight

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for approach configuration

Flight Management System and automation set for the intended approach

Nav aids set for approach and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various terrain and obstacle conditions

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway lengths, Navaid operations, and runway lighting conditions

ATC Clearance: STAR clearance, and radar vectors for approach

Terrain and CFIT considerations

Standards

Procedural

In accordance with FOM Ch ____

In accordance with Ops Manual Ch ____

In accordance with applicable Jeppesen Charts

Maneuvers

- Prior to the final approach segment maintain altitude +/- 100 ft, airspeed +/- 10 kts,
- Heading +/- 5°
- Accurately tracks radials, courses, and bearings
- Performs Before Landing checklist without error or omission
- While on final approach segment, maintains no more than ¼ scale deflection on localizer and glide slope, airspeed +/- 5 kts from target airspeed
- Avoids descent below the Decision Altitude/Decision Height before initiating a Missed
- Approach procedure or transitioning to a landing

- Transitions to a normal landing, while maintaining runway centerline
- Crew makes all standard call-outs

References

Flight Operations Manual
 Operations Manual
 Jeppesen
 QRH

SPO 6.2.1: Perform Coupled ILS Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.1, Perform Coupled ILS Approach

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind 10X 200 OVC .5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform an autopilot coupled ILS approach by:

- Demonstrate proper procedure for PF transitioning to outside visual references with the PM making all standard call-outs
- Concludes with either a landing or a Missed Approach (autopilot engaged)

Observable Behaviors:

- Captain/First Officer assume proper roles of PF and PM, in accordance with AOM
- Crew selects, tunes, identifies, and monitors the operational status of ground and aircraft navigational equipment used for an autopilot coupled ILS approach
- Crew manages flight directors and autopilot(s) in accordance with company procedures
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF transitions to a normal landing approach only after the airplane is in a position from which a landing in the runway touchdown zone can be made at a normal rate of descent by using normal maneuvering
- If a significant departure from normal approach criteria occurs below 500' AGL, and corrective action is not immediately effective, PF executes a go-around maneuver

- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Autopilot(s) must be operational

Weather will be set to DA + 50~100 ft, visibility at published minimum for the approach

Standards

Refer to TPO 6.2

SPO 6.2.2: Perform Non-Coupled ILS Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.2, Perform Non-Coupled ILS Approach

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC MEL Autopilot Inop Temp >25C Wind 10X 200 OVC .5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a non-coupled ILS CAT I Approach:

- Demonstrates proper procedure and communications for PM transitioning to outside visual references and makes standard call outs
- Approach will conclude as either a landing or a missed approach (with autopilot off) to a hold

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors

- PF maintains proper course/attitude, as commanded by the flight director
- PF avoids descent below the DH before initiating a missed approach procedure or transitioning to a landing
- PF initiates immediately the missed approach when at the DH/RA, and the required visual references for the runway are not unmistakably visible and identifiable
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Ceiling will be set to DA + 75~100 ft, visibility set at published minimum for the approach

Standards

Refer to TPO 6.2

SPO 6.2.3: Perform Coupled ILS CAT II Approach (Two Engines)

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.3, Perform Coupled ILS CAT II Approach (Two Engine)

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind variable 1200RVR	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Coupled ILS CAT II Approach (Two Engine):

- Demonstrates proper procedure for a captain transitioning to outside visual references and the FO makes standard call outs
- The captain correctly identifies required visual cues and evaluates ILS tracking to continue to a landing
- Tests the radar altimeter system(s) prior to approach and monitors the marker beacon receiver while on the approach
- Considers additional field length landing distance requirement

- Concludes with either a landing or a Missed Approach (autopilot engaged)

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew recognizes RVR values; plans and briefs a monitored approach
- Crew uses automated systems at appropriate levels
- On a monitored approach, Captain correctly assumes control of the aircraft for landing
- PF avoids descent below the DH before initiating a missed approach procedure or transitioning to a landing
- PF initiates immediately the missed approach when at the DH/RA, and the required visual references for the runway are not unmistakably visible and identifiable
- Captain transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Autopilot must be operational

Weather will be set to DH + 50~75 ft, visibility at published minimum for the approach on landing operations, and may be set below minimums for missed approach operations

Standards

Refer to TPO 6.2

SPO 6.2.4: Perform Coupled ILS CAT II Approach (Single Engine)

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.4, Perform Coupled ILS CAT II Approach (Single Engine)

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	TP
Evaluation Condition	IMC Engine Flameout Temp >25C Wind variable 1200 RVR	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Coupled ILS CAT II Approach (Single Engine):

- Uses proper protocols for a captain transitioning to outside visual references while the FO makes standard call outs
- Captain correctly identifies required visual cues and evaluates ILS tracking to continue to a landing
- Tests the radar altimeter system(s) prior to approach and monitoring the marker beacon receiver while on the approach
- Considers additional field length landing distance requirement
- Concludes with either a landing or a Missed Approach (autopilot engaged)

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew recognizes RVR values; plans and briefs a monitored approach
- On a monitored approach, Captain correctly assumes control of the aircraft for landing
- PF avoids descent below the DH before initiating a missed approach procedure or transitioning to a landing
- PF initiates immediately the missed approach when at the DH/RA, and the required visual references for the runway are not unmistakably visible and identifiable
- Captain transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Autopilot must be operational

Weather will be set to DH + 50 ft, visibility at minimum for the approach for landing operations, may be set below minimums for Missed Approach operations

Standards

Refer to TPO 6.2

SPO 6.2.5: Perform ILS/PRM Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.5, Perform ILS/PRM Approach

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	TP
Evaluation Condition	VMC Temp >25C Wind 10X 1000/3	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform an ILS/PRM Approach:

- Knows and correctly briefs the PRM approach requirements
- Knows the breakout maneuvers and performs them, when required
- Understands radio monitoring requirements and sets the #2 radio to the final ATC monitor

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew recognizes RVR values; plans and briefs a monitored approach
- On a monitored approach, Captain correctly assumes control of the aircraft for landing
- PF avoids descent below the DH before initiating a missed approach procedure or transitioning to a landing
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Weather will be set at or above requirements for the specified approach

Standards

Refer to TPO 6.2

SPO 6.2.6: Perform Single Engine ILS Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.6, Perform Single Engine ILS Approach

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC MEL: Autopilot Inop Engine Fire Temp >25C Wind 10X 200 OVC .5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Single Engine ILS Approach (manual) by:

- Captain/FO know the autopilot must be off but flight director(s) may be used
- Uses proper procedures for PM transition to outside visual references and make all standard call outs
- PF demonstrates a smooth transition to a landing, and maintains runway centerline alignment

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- PF maintains proper course/attitude, as commanded by the flight director
- PF avoids descent below the DH before initiating a missed approach procedure or transitioning to a landing

- PF initiates immediately the missed approach when at the DH/RA, and the required visual references for the runway are not unmistakably visible and identifiable
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

Weather will be set to DA + 50~100 ft, visibility at minimum for the approach for landing operations, may be set below minimums for Missed Approach operations

Standards

Refer to TPO 6.2

SPO 6.2.7: Perform ILS Approach with Flap Malfunction

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.2, Perform Precision Approach Procedures

Sub Task: 6.2.7, Perform ILS Approach with Flap Malfunction

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	TP
Evaluation Condition	IMC Flap Assymetry Temp >25C Wind 10X 1000/3	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform an ILS Approach with Flap Malfunction:

- Considers an increase in actual landing distance and calculates required approach speeds
- Demonstrates proper procedure for PM transitioning to outside visual references and makes all standard call outs
- PF demonstrates a smooth transition to a landing and maintains runway centerline alignment

Observable Behaviors:

- Crew completes checklist correctly

- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment associated with the ILS approach
- Crew reviews displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions associated with the ILS
- Crew applies gust/wind factors and evaluates meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew work together to calculate the increased approach speeds and landing distance
- PF maintains proper course/attitude, as commanded by the flight director
- PF initiates immediately the missed approach when at the DH/RA, and the required visual references for the runway are not unmistakably visible and identifiable
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.2

- Flap malfunction to cause degraded flap setting from normal landing configuration
- Autopilot may be on or off, in accordance with aircraft checklist requirements

Standards

Refer to TPO 6.2

TPO 6.3: Perform Non-Precision Approach Procedures

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Note: Each pilot will perform two different non-precision approaches during each Maneuvers Validation. All non-precision approaches will be performed as PF or PM during the CQ cycle.

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC MEL Auto pilot Inop Temp >25C Wind 10X 500 OVC 2 or lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Non-Precision Approach procedures:

- Performs VOR, NDB, LOC, LOC-BC, ASR, LDA or LDA/PRM Approach for both normal aircraft operations and degraded aircraft systems
- Operates the FCP and autopilot controls and monitoring autopilot operation as required
- Sets NAV radios and monitoring NAV indications as necessary
- Perform stabilized approaches and makes standard call outs
- Perform approaches using proper CRM crew coordination
- Perform Before Landing checklist at the appropriate point
- Maintain MDA altitude and appropriate airspeed until MAP or landing decision is reached
- Understands visual cues and makes the correct landing or Missed Approach decision
- Understands the ground proximity alerts/warnings and takes timely action
- Transitions from MDA to a visual landing, and maintains runway centerline alignment

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and use standard terminology in ATC communications
 - b. Positive and negative performance feedback is given at appropriate times and is specific, objective, and given constructively

- Leadership and Teamwork
 - a. Crewmembers pace themselves to accurately accomplish all checklist items
 - c. Crewmembers should ask questions, as necessary, to resolve doubts and ensure that a shared understanding of crew actions and decisions is achieved
- Decision Making
 - a. Captain coordinates flight deck activities to establish proper balance between command authority and crewmember participation. Captain acts decisively when the situation requires
 - b. Crew remains focused on accomplishing the approach task, but they also retain a shared flexibility to mitigate any threats or errors encountered
 - c. Crewmembers speak up and state their information with appropriate assertiveness until there is clear resolution decision
- Situation Awareness
 - a. Flight crew demonstrates high levels of vigilance in both high and low workload conditions
 - b. Workload and task distribution are clearly communicated and acknowledged. Adequate time is provided for task completion

Conditions

Abnormal

Various possible abnormal conditions including flap malfunctions and single engine operations.

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required

Thrust set for Approach

Flight Control Computer and Automation set

NAVAIDs set for Approach and Arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, Navaid operations, runway lighting

ATC clearance: STAR clearance, and radar vectors for approach

Terrain and CFIT considerations

Standards: TPO 6.3; FAA PTS; FOM

Procedures:

In accordance with FOM Ch ____

In accordance with Ops Manual Ch ____

In accordance with applicable Jeppesen Charts

Maneuvers:

- Prior to the final approach segment maintain altitude +/- 100 ft, airspeed +/- 10 kts, heading +/- 5 degrees
- Accurately track all radials, courses, and bearings
- Perform Before Landing checklist without error or omission
- While on final approach segment, maintains no more than 1/2 scale deflection of CDI indication or within 5 degrees of bearing, airspeed +/- 5 kts from target airspeed
- Maintains MDA +50/-0 after reaching MDA
- Avoid descent below the MDA before initiating a Missed Approach procedure or transitioning to a landing
- Transitions to a normal landing and maintains runway centerline alignment
- Make standard calls, as required

References

Flight Operations Manual

General Operations Manual

Jeppesen

Runway Analysis

QRH

FAA Practical Test Standards

SPO 6.3.1: Perform VOR Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.1, Perform VOR Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform a VOR Non-Precision Approach by:

- Makes the appropriate lateral mode selection if using automation (NAV or HDG mode)
- Uses timing or other means (DME) to determine the Missed Approach point
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crew completes checklist correctly

- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

In accordance with the FOM, the autopilot operation can be either on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile, as appropriate for the simulator's visual heuristics

Standards

Refer to TPO 6.3

SPO 6.3.2: Perform NDB Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.2, Perform NBD Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform an NDB Non-Precision Approach by:

- Selects bearing pointers to be displayed on the navigation instruments
- Makes the appropriate lateral mode selection if using automation: HDG mode (NAV if using FMS overlay)
- Uses the appropriate heading corrections to maintain a desired approach track
- Uses timing or other means to determine the Missed Approach point.
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Autopilot operation can be on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.3: Perform LOC Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.3, Perform LOC Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform an LOC Non-Precision Approach by:

- Makes the appropriate lateral mode selection if using automation (NAV or APP mode)
- Uses timing or other means to determine the Missed Approach point
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Autopilot operation can be on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.4: Perform LOC BC Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.4, Perform LOC BC Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform a LOC BC Non-Precision Approach:

- Ensures course selectors are set to the inbound front course
- Makes the appropriate lateral mode selection if using automation (BC mode)
- Uses timing or other means to determine the Missed Approach point
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering

- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Autopilot operation can be on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.5: Perform LDA Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.5, Perform LDA Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform an LDA Non-Precision Approach:

- Makes the appropriate lateral mode selection, if using automation
- Uses timing or other approved means to determine the Missed Approach point
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the approach
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling

- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Autopilot operation can be on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.6: Perform LDA PRM Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.6, Perform LDA PRM Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

To be developed with the airline's FAA Principal Operations Inspector

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the approach
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA

- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Standards

Refer to TPO 6.3

SPO 6.3.7: Perform Single Engine Non-Precision Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.7 Perform Single Engine Non-Precision Approach

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC Engine Overtemp Temp >25C Wind 10X 500 OVC 2 or lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Single Engine Non-Precision Approach:

- Uses timing or other means to determine the Missed Approach point
- Complies with applicable flap settings for Single Engine Approach/Landing and making the appropriate Vref correction factors
- Determines the required landing distance
- Lands or executing Missed Approach

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the approach
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Engine malfunction to cause single engine operations

Autopilot operation can be on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.8: Perform Non-Precision Approach with Flap Malfunction

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.8, Perform Non-Precision Approach with Flap Malfunction

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC MEL Autopilot Inop No Flap Temp >25C Wind 10X 500 OVC 2 or lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Non-Precision Approach of any type with the flap/slat system failed less than normal (full flap) settings:

- Crew uses timing or other means to determine the Missed Approach point
- Makes the appropriate Vref correction factors and determines the landing length requirements

Observable Behaviors:

- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the approach
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- Crew considers factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, NOTAMs, or ATC instructions
- Crew applies gust/wind factors and takes into account meteorological phenomena such as wind shear, microburst, and other related safety of flight factors
- Crew manages flight director and autopilot in accordance with company procedures
- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- PF establishes a rate of descent that will ensure arrival at the MDA
- Crew computes a visual descent point (VDP)
- Crew avoids deviating from slot position when breaking out under a low ceiling
- PF executes the missed approach, if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made with a normal rate of descent, using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions

Refer to TPO 6.3

Flap malfunction to cause degraded flap setting from normal landing configuration. Autopilot may be either on or off, in accordance with FOM guidance

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards

Refer to TPO 6.3

SPO 6.3.9: Perform ASR Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.3, Perform Non-Precision Approach Procedures

Sub Task: 6.3.9, Perform ASR Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform an ASR Non-Precision Approach:

- Makes the appropriate lateral mode selection, if using automation
- Uses timing or other approved means to determine the Missed Approach point
- Ensures the proper communication procedures are maintained with ATC
- Concludes with either a landing or a Missed Approach

Observable Behaviors:

- Crewmembers should ask questions, as necessary, to resolve doubts and ensure that a shared understanding of crew actions and decisions is achieved
- Crew completes checklist correctly
- Crewmembers select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the phase of flight
- Crewmembers select, tune, identify, and monitor the operational status of ground and airplane navigation equipment used for the approach
- PF complies, in a timely manner, with all ATC clearances, instructions, and restrictions
- PF establishes the appropriate airplane configuration and airspeed/V-speed
- PF avoids deviating from slot position when breaking out under a low ceiling
- PF transitions to a normal landing approach only when the airplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal maneuvering
- PF executes a go-around if a significant departure from normal approach parameters occurs below 500' AGL and corrective action is not immediately effective
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions

Conditions:

Refer to TPO 6.3

In accordance with the FOM, the autopilot operation may be either on or off

Weather will be set to MDA + 100 ft, visibility at charted minimum + ½ mile

Standards:

Refer to TPO 6.3

TPO 6.4: Perform Visual Approach Procedures

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.4, Perform Visual Approach Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	VMC Temp >25C Wind 15X 1500/3	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform procedures for a Visual Approach to a different runway:

- Demonstrates knowledge of approach angles, minimum maneuvering airspeeds, Vref speeds, configurations and limitations
- Maintains stabilized approach criteria, including airspeed within +5/-0 kts while on final
- Ensures the aircraft is positioned to perform a Normal Landing, considering wind effects on ground track, making the appropriate corrections and crew call outs
- Complies with ATC clearances, including any applicable charted Visual Approach procedures
- Concludes with either a landing or a Missed Approach

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew maintains communication with ATC, and solicits critical information from ATC that will help maintain safety
- Leadership and Teamwork
 - a. Crew works together to apply gust/wind factors, maintains traffic vigilance, and anticipates meteorological conditions, such as wind shear, microburst, and runway conditions that may challenge safety
- Decision Making
 - a. Crew evaluates and establishes an approach and landing configuration that's appropriate for the runway and meteorological conditions
- Situation Awareness
 - a. Crew demonstrates vigilance in both high and low workload conditions
 - b. PF executes a go-around if a critical deviation from normal approach criteria occurs below 500 feet AGL and corrective action is not effective

Conditions:

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for Approach

Flight Control Computer and Automation set

Nav aids - set for Approach and Arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway lengths, Navaid operation, runway lighting conditions

ATC Clearance: STAR clearance, and radar vectors for approach

Terrain/obstacle and CFIT considerations

Standards:

In accordance with FOM Ch __

In accordance with Ops Manual Ch ____

In accordance with Airmen's Information Manual

In accordance with applicable Jeppesen Charts

Maneuvers:

- Uses and remains at or above the provided Visual Approach Aid (VASI/PAPI) and/or electronic glide path
- Considers wind effects on ground track and makes appropriate corrections
- Maintains appropriate minimum airspeeds while maneuvering the aircraft
- Performs the Before Landing checklist without any errors or omissions
- Maintains stabilized approach criteria, including airspeed within +5/ -0 kts while on final approach
- Understands limitations of the autopilot system
- Makes all standard call-outs

References:

FOM

Ops Manual

Airmen's Information Manual

Jeppesen

Runway Analysis

TPO 6.5: Perform Approach with Windshear Encountered

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.5, Perform Approach with Windshear Encountered

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC Temp >25C Wind 15X 1500/3 TSVC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform an approach with windshear encountered by:

- Making assessments of flight path cues when windshear starts
- Knowing environmental conditions that favor windshear
- Knowing and correctly using interpretations of the PFD indications for alerts/warnings including fly out guidance
- Knowing generic windshear escape procedures
- Managing engine thrust settings during windshear escape
- Checking weather and/or pilot reports

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew maintains standard communication with ATC, and solicits critical information from ATC that will help maintain the aircraft’s safety
- Leadership and Teamwork
 - a. Crew works together to apply gust/wind factors, maintains traffic vigilance, and anticipates meteorological conditions, such as wind shear, microburst, and runway conditions that may challenge safety
- Decision Making
 - a. Crew evaluates and establishes an approach and landing configuration that’s appropriate for the runway and meteorological conditions, and if windshear is encountered, then crew promptly executes a windshear escape maneuver
- Situation Awareness
 - a. Crew anticipates/recognizes potential distractions, and takes appropriate action to mitigate any threats encountered
 - b. If a critical deviation from normal approach criteria occurs below 500 feet AGL, and corrective action is not effective, PF executes a windshear escape go-around

Conditions:

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for Approach

Flight Control Computer and Automation set

Nav aids set for Approach and Arrival navigation

Natural Environment:

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway lengths, navaid operations, and runway lighting conditions

ATC Clearance: STAR clearance, and vectors for approach

Terrain and CFIT considerations

Standards:

In accordance with FOM Ch _____

In accordance with Ops Manual Ch ____

In accordance with Airmen's Information Manual

In accordance with applicable Jeppesen Charts

Maneuvers:

- Knows and correctly uses interpretations of the flight director indications for alerts/warnings including fly out guidance
- Smoothly manages pitch control appropriate for the existing conditions
- Properly manages engine thrust settings during windshear escape maneuver

References:

Flight Operations Manual

General Operations Manual

Airman's Information Manual

Jeppesen

TPO 6.6: Perform Missed Approach Procedures

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.6 Perform Missed Approach Procedures

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind 10X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Missed Approach Procedures:

- Initiates a Missed Approach either upon ATC instruction, approach has gone outside of stable approach parameters, aircraft not in position to continue to a landing, or failure to acquire runway environment visually by the MAP
- Demonstrates proper thrust management and reconfiguring for climb in the correct sequence
- Demonstrates proper airspeed control
- Uses automation appropriately, including autopilot and navigational systems
- Complies with the published Missed Approach Procedures including amendments by ATC
- Maintains situational awareness regarding terrain and desired ground track
- Flying in either two engine or single engine condition, as appropriate

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and use standard terminology in ATC communications
- Leadership and Teamwork
 - a. PF initiates a missed approach when the required visual references are lost or unsuitable for safe landing
 - b. PM assists the PF by performing appropriate engine power, aircraft configuration changes and ATC communications
- Decision Making
 - a. Missed approach decision is taken by PF, or if the PM detects an imminent unsafe condition
- Situation Awareness

- a. Crew demonstrates high level of terrain awareness during the execution of a missed approach maneuver
- b. Crew anticipates/recognizes potential distractions, and takes appropriate action to mitigate any threats encountered

Conditions -

Abnormal

Various engine or flaps/slats malfunctions

Aircraft Configuration:

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for Approach

Flight Control Computer Automation set

NAVAIDs set for Approach and Arrival navigation

Natural Environment:

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, navaid operations, runway lighting

ATC Clearance: STAR clearance, and radar vectors for approach

Terrain and CFIT considerations

Standards:

In accordance with FOM Ch___

In accordance with Ops Manual Ch _ and _

In accordance with Airmen's Information Manual

In accordance with applicable Jeppesen Charts

Maneuvers:

- Make correct decisions regarding when to execute Missed Approach procedures.
- Maintains control of pitch and airspeed according to the aircraft configuration in use (i.e.: engine or 2)
- Autopilot usage will be demonstrated using proper procedures
- Complies with Missed Approach Procedures, including ATC clearance amendments
- Maintains situational awareness to aircraft's desired ground track, as well as any terrain/obstacle considerations

References:

FOM Chapter__
Operations Manual
Airmen's Information Manual
Jeppesen

SPO 6.6.1: Perform Normal Climb after Missed Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.6 Perform Missed Approach Procedures

Sub Task: 6.6.1, Perform Normal Climb after Missed Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform a Normal Climb:

- Sets required (normal) thrust settings and reconfiguring the aircraft using normal protocols
- Maintains airspeed at V2 or V2 + 10-15 kts until level off altitude is achieved
- Properly uses the flight director/autopilot modes
- Complies with published Missed Approach procedures and/or ATC clearances
- Follows established noise abatement procedures

Observable Behaviors:

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 6.6

Weather may be set to cause Missed Approach.

ATC clearance may be used to cause Missed Approach

Standards

Refer to TPO 6.6

SPO 6.6.2: Perform Single Engine Climb after Missed Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.6 Perform Missed Approach Procedures

Sub Task: 6.6.2, Perform Single Engine Climb after Missed Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC Engine Fire Temp >25C Wind 10X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrates the ability to perform a Single Engine Climb by:

- Setting required (maximum) thrust
- Using proper reconfiguration procedures
- Maintaining airspeed at approximately V2 until level off altitude is achieved
- Properly using flight director/autopilot modes
- Complying with the published Missed Approach Procedures and/or ATC clearances

Observable Behaviors:

- PF appropriately responds to any GPWS warnings
- PF makes a timely decision to reject the landing for actual or simulated circumstances
- PF applies the appropriate power setting for the flight conditions, and establishes a pitch attitude necessary to obtain the desired performance
- PF trims the aircraft as necessary, and maintains the proper heading during the missed approach procedure
- PM notifies ATC when safety-of-flight is no longer a concern, and states the crew's intentions
- Crew completes checklist correctly

Conditions

Refer to TPO 6.6

Weather may be set to trigger the Missed Approach condition

ATC clearance may be modified to cause the Missed Approach condition

Standards

Refer to TPO 6.6

SPO 6.6.3: Perform Published Holding from Missed Approach

Aircraft: Twin Jet

Phase of Flight: 6.0, Approach

Task: 6.6 Perform Missed Approach Procedures

Sub Task: 6.6.3, Perform Published Holding from Missed Approach

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC Temp >25C Wind 10X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Published Holding from Missed Approach:

- Select the appropriate entry procedure and maintain situational awareness
- Understand the limitations of the navigational equipment and select the appropriate level of automation to be used
- Make the required ATC communication
- Control airspeed and altitude while observing the minimum maneuvering speeds

Observable Behaviors:

- PF initiates immediately a missed approach at DH/RA, and the required visual references for the runway fail to be unmistakably visible and identifiable
- PM reports to ATC when the missed approach procedure is initiated
- Crew correctly selects and identifies all instrument references, flight director and autopilot controls, navigation and communications equipment associated with the missed approach to a holding maneuver
- Crew complies with the missed approach procedure or an ATC clearance
- Crew follows the checklist items for the go-around procedure
- PM requests a clearance, if appropriate, to an alternate airport, or another approach

Conditions

Refer to TPO 6.6

Possible degraded navigational systems

Standards

Refer to TPO 6.6

TPO 7.1: Perform Landing Preparations

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.1, Perform Landing Preparations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	LOE
Evaluation Condition	IMC Temp >25C Wind 15X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform landing preparations by:

- Correcting for wind conditions to ensure aircraft is aligned with the centerline and descending within the touchdown zone while maintaining the glide slope or VASI as appropriate
- Managing thrust to arrive at 50 ft over the threshold at the appropriate speed
- Utilizing standard calls

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and use standard terminology in ATC communications, and they correctly interpret the landing clearance
- Leadership and Teamwork
 - a. Crew accurately completes Landing checklist and uses an appropriate aircraft configuration for normal and abnormal conditions
- Decision Making
 - a. PF makes landing decision at DH when transitioning from IMC
- Situation Awareness
 - a. Crew maintains vigilance for threats and acts to mitigate errors

Conditions:

Normal/Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for Landing

Nav aids set for Approach and Arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Variable, appropriate to the scenario

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, Navaid operations, and runway lighting conditions

ATC Clearance: Landing clearance

Terrain and CFIT considerations

Standards

In accordance with FOM Ch ____

In accordance with Ops Manual Ch _ and _

In accordance with Airmen's Information Manual

Maneuvers

- Make smooth flight control inputs and maintain desired flight path
- Manage thrust settings to achieve desired threshold airspeed
- Utilize standard calls as necessary

References

FOM

Ops Manual

Airmen's Information Manual

Runway Analysis

QRH

TPO 7.2: Perform Normal Landing

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.2, Perform Normal Landing

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Evaluation Strategy	MV	LOE
Evaluation Condition	IMC Temp >25C Wind 15X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a normal landing by:

- Managing thrust to arrive at 50 ft over the threshold at the appropriate Vref speed
- Utilizing standard calls; captain assumes control of the aircraft at approximately 60 knots when the first officer is landing the aircraft
- Using thrust reversing appropriately and within system limitations; maintaining suitable deceleration until either stopped or upon reaching desired taxi speed

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM
- Leadership and Teamwork
 - a. When the FO is landing the aircraft, the captain will take control of the aircraft prior to 60 knots using a smooth control transfer technique
- Decision Making
 - a. Crew obtains and correctly interprets the landing clearance from ATC
- Situation Awareness
 - a. When landing from a either a precision approach, non-precision or visual approach, the crew is aware of the landing traffic sequence

Conditions

Normal/Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for Landing

Nav aids set for Approach and Arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, NAVAID operations, runway lighting

Appropriate ATC Clearance: Landing clearance

Terrain and CFIT considerations

Standards:

In accordance with FOM Ch ____

In accordance with Ops Manual Ch _ and _

In accordance with Airmen's Information Manual

Maneuvers:

- Make smooth flight control inputs and maintain desired flight path
- Manage thrust settings to achieve desired threshold airspeed
- Flare at appropriate point and avoid excessive float so as to land within the specified touchdown zone
- Utilize standard call outs
- Use thrust reverser within aircraft limitations

References:

FOM chapter __

Ops Manual

Airmen's Information Manual

Runway Analysis

Aircraft QRH

TPO 7.3: Perform Crosswind Landing

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.3, Perform Crosswind Landing

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind >15X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Crosswind Landing by:

- Making smooth control inputs to achieve desired ground track without drift
- Utilizing standard calls; captain assumes control of the aircraft before 60 kts when the first officer is landing the aircraft
- Understanding aircraft limitations regarding maximum crosswind components
- Flaring aircraft at appropriate point, maintain the runway centerline and not allow any drift to occur

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM
- Leadership and Teamwork
 - a. When the FO is landing the aircraft the Captain assumes control of the aircraft prior to 60 knots by using a smooth flight control transfer technique, and continues any necessary crosswind correction until no longer needed
- Decision Making
 - a. Crew decides upon an appropriate aircraft configuration for normal and abnormal flight conditions
- Situation Awareness
 - a. Crew remains vigilant for any runway or airport condition that could be unsafe

Conditions

Normal/ Abnormal

Various engine or flight control malfunctions

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust set for landing

Nav aids set for approach and arrival navigation

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, navaid operations, runway lighting

ATC Clearance: Landing clearance

Terrain and CFIT considerations

Standards

In accordance with FOM Ch ____

In accordance with Ops Manual Ch _ and _

In accordance with Airmen's Information Manual

Maneuvers

- Make smooth flight control inputs and maintains desired flight path
- Transition from a "crab" technique on final to a sideslip method for the actual landing.
- Manage thrust settings to achieve desired threshold airspeed
- Flares at appropriate point and avoid excessive float so as to land within the specified touchdown zone
- Understand and apply maximum crosswind limitations
- Utilize all standard call-outs

References

FOM

Ops Manual

Airmen's Information Manual

Runway Analysis

TPO 7.4: Perform Abnormal Landing

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.4, Perform Abnormal Landing

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind 15X lowest approach minimums	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform an Abnormal Landing by:

- Making smooth control inputs to achieve desired ground track
- Flaring aircraft at appropriate point and not allowing excessive float to develop
- Understanding implications of the abnormal condition regarding higher Vref speeds, additional stopping distance and the potential impact of degraded aircraft systems
- Flaring aircraft at appropriate point without drift, and touch down on centerline
- Utilizing standard calls; Captain assumes control of the aircraft prior to 60 knots when the first officer is landing the aircraft

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM
- Leadership and Teamwork
 - a. When the FO is landing the aircraft the Captain assumes control of the aircraft prior to 60 knots by using a smooth flight control transfer technique, and continues to apply a crosswind correction until no longer needed
- Decision Making
 - a. Crew decides upon an appropriate aircraft configuration for abnormal flight conditions in accordance with the FOM
- Situation Awareness
 - a. Crew remains vigilant for any runway or airport condition that could be unsafe

Conditions

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required
Thrust set for landing
Nav aids set for approach and arrival navigation

Natural Environment:

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment:

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMs: Various runway lengths, navaid operations, and runway lighting
ATC Clearance: Emergency landing clearance
Terrain and CFIT considerations

Standards:

In accordance with FOM Ch ____
In accordance with Ops Manual Ch _ and _
In accordance with applicable QRH procedures
In accordance with Airmen's Information Manual

Maneuvers

- Make smooth flight control inputs and maintain desired flight path
- Manage thrust settings to achieve desired threshold airspeed
- Flare at appropriate point and avoid excessive float so as to land within the specified touchdown zone
- Manage thrust and brakes appropriate for the landing situation
- Make standard calls and, as necessary for the abnormal condition, any additional required calls

References

FOM
Ops Manual
QRH
Airmen's Information Manual
Runway Analysis

SPO 7.4.1: Perform Single Engine Landing

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.4, Perform Abnormal Landing

Sub Task: 7.4.1, Perform Single Engine Landing
Crew (Duty) Position: PIC and SIC
Criticality: Yes
Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC MEL: Autopilot Inop Engine Fire Temp >25C Wind 10X 200 OVC .5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Single Engine Landing by:

- Selecting a 20° flap setting and calculate resultant increase in Vref speed and landing distance
- Managing thrust lever retardation so as to avoid directional control problems and maintain the runway centerline
- Operating engine reverse thrust consistent with directional control

Observable Behaviors:

- Crew makes all standard callouts as PF and PM Leadership and Teamwork
- Crew decides upon an appropriate aircraft configuration for abnormal flight conditions in accordance with the FOM
- When the FO is landing the aircraft, the captain assumes control of the aircraft prior to 60 knots using a smooth flight control transfer technique, and continues any necessary crosswind correction until no longer needed
- Crew remains vigilant for any runway or airport condition that could threaten safety

Conditions

Refer to TPO 7.4
 Engine condition/malfunction to cause 1 engine operation

Standards

Refer to TPO 7.4

SPO 7.4.2: Perform No Flap Landing

Aircraft: Twin Jet
Phase of Flight: 7.0, Landing
Task: 7.4, Perform Abnormal Landing
Sub Task: 7.4.2, Perform No Flap Landing

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	TP
Evaluation Condition	VMC No Glidepath information Temp >25C Wind light 3000/5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform No Flap Landing by:

- Making prompt thrust lever retardation at appropriate point
- Being aware of potential high sink rates to develop, reducing descent rate during the landing flare
- Smoothly lowering nose wheel after main gear touchdown
- Maximizing reverse thrust and brakes after nose wheel touchdown

Observable Behaviors:

- Crew makes all standard callouts as PF and PM
- Crew decides upon an appropriate aircraft configuration for abnormal flight conditions in accordance with the FOM
- When the FO is landing the aircraft, the captain assumes control of the aircraft prior to 60 knots using a smooth flight control transfer technique, and continues any necessary crosswind correction until no longer needed
- Crew remains vigilant for any runway or airport condition that could threaten safety
- Crew completes all checklist items in a timely manner

Conditions

Refer to TPO 7.4

Flaps/slats malfunction to cause no extension of the trailing edge flaps

Standards

Refer to TPO 7.4

SPO 7.4.3: Perform Landing with No Ground Lift Dumping (GLD)

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.4, Perform Abnormal Landing

Sub Task: 7.4.3, Perform Landing with No Ground Lift Dumping (GLD)

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	TP
Evaluation Condition	IMC Temp >25C Wind 10X 200 OVC .5 RVR 12	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Landing with No Ground Lift Dumping (GLD) by:

- Selecting appropriate flap setting and calculating resultant increase in Vref speed and landing distance
- Making prompt thrust lever retardation at appropriate point
- Extending flight spoilers and/or reselecting ground lift dumping after touchdown as directed by the QRH procedure
- Maximizing reverse thrust and brakes after nose wheel touchdown

Observable Behaviors:

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 7.4

Malfunction to cause a failure of the ground lift dumping system

Standards

Refer to TPO 7.4

SPO 7.4.4: Perform Landing with Failed Stab Trim

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.4, Perform Abnormal Landing

Sub Task: 7.4.4, Perform Landing with Failed Stab Trim

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC Temp >25C Wind light 3000/5	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Landing with Failed Stab Trim by:

- Selecting a 20° flap setting and calculate resultant increase in Vref speed and landing distance
- Understanding pitching moment with thrust reduction and avoiding sudden reductions
- Note: According to type aircraft operated by your airline, landing with jammed stabilized may be an emphasized training condition

Observable Behaviors:

- Crew makes all standard callouts as PF and PM
- Crew decides upon an appropriate aircraft configuration for abnormal flight conditions in accordance with the FOM
- When the FO is landing the aircraft, the captain assumes control of the aircraft prior to 60 knots using a smooth flight control transfer technique, and continues any necessary crosswind correction until no longer needed
- Crew remains vigilant for any runway or airport condition that could threaten safety
- Crew completes all checklist items in a timely manner

Conditions

Refer to TPO 7.4

Malfunction(s) to cause a dual channel failure of the stabilizer trim system

Standards

Refer to TPO 7.4

TPO 7.5: Perform Rejected Landing (Two Engine)

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.5, Perform Rejected Landing (Two Engine)

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	IMC Temp >25C Wind 10X 500 OVC 2	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Rejected Landing (Two Engine) by:

- Recognizing the conditions when a rejected landing is necessary, or the best safety option
- Understanding potential hazards of low energy bailed landings
- Making Rejected Landing standard call outs
- Utilizing proper flight director procedures, thrust lever advancement techniques and aircraft reconfiguration schedules
- Smoothly controlling pitch and roll to follow the command bars
- Flying published Missed Approach procedures, or as directed by ATC
- Completing the appropriate checklist

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard PF/PM callouts, and uses standard terminology in all ATC communications
- Leadership and Teamwork
 - a. Crew acts as a team when accomplishing a rejected landing maneuver
 - b. Crew completes all checklist items in a timely manner
- Decision Making
 - a. PF makes timely decision to reject the landing and announces the decision to PM
- Situation Awareness
 - a. Crew communicates actions and intentions to ATC in a timely manner, and remains clear of any obstacles or terrain that may threaten safety
 - b. Crew remains vigilant for any conflicting traffic

Conditions

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights
Center of Gravity not to exceed limitations
Flaps-as required
Slats-as required
Thrust set for Go-Around
NAVAIDs set for Missed Approach and Hold

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and available runways
NOTAMS: Various runway length, Navaid operations, runway lighting
Appropriate ATC Clearance: Emergency landing clearance
Terrain and CFIT awareness

Standards

In accordance with Ops Manual Ch _ and _
In accordance with FOM Ch _ and _

Maneuvers

- Take prompt action to initiate a rejected landing as required
- Disconnect autopilot and pitch to an appropriate attitude
- Promptly set the proper (normal) go-around thrust setting and reconfigure the aircraft using proper reconfiguration protocols
- Maintain runway heading to at least 400 ft AAE or comply with ATC instructions as necessary
- Promptly notify ATC of the rejected landing as required

References

FOM
Ops Manual
Jeppesen
Runway Analysis
QRH

TPO 7.6: Perform Rejected Landing (Single Engine)

Aircraft: Twin Jet

Phase of Flight: 7.0, Landing

Task: 7.6, Perform Rejected Landing (Single Engine)

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC MEL Autopilot Inop Temp >25C Wind 10X 1500/3	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Rejected Landing (Single Engine) by:

- Recognizing when a rejected landing is required due to being out of position to complete the landing, unstable approach or ATC instruction
- Understanding potential hazards of low energy bailed landings
- Making standard calls associated with a Rejected Landing
- Utilizing proper protocols regarding use of flight directors, thrust lever advancement and aircraft reconfiguration.
- Controlling pitch in a positive manner towards the command bars, assuming a pitch attitude sufficient to maintain V2 or V2 GA
- Completing published Missed Approach procedures or following instructions from ATC

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and uses standard terminology in all ATC communications
- Leadership and Teamwork
 - a. Crew acts as a team when accomplishing a rejected landing maneuver
 - b. Crew completes all checklist items in a timely manner
- Decision Making
 - a. PF makes timely decision to reject the landing and announces the decision to PM
- Situation Awareness
 - a. Crew discusses the potential hazards of a low-energy rejected landing, clearly understand the procedure, and they're prepared to execute the maneuver as a team
 - b. Crew communicates actions and intentions to ATC in a timely manner, and remains clear of any obstacles or terrain that may threaten safety

Conditions

Abnormal

Initiate a malfunction to cause one engine to be shutdown

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required

Thrust set for go-around

Nav aids set for Missed Approach and Hold

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Runway Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and available runways

NOTAMs: Various runway length, Navaid operations, runway lighting

Appropriate ATC Clearance: Emergency landing clearance

Terrain and CFIT awareness

Standards

In accordance with Ops Manual Ch _ and _

In accordance with FOM Ch ____

Maneuvers

- Take prompt action to initiate a rejected landing as required
- Disconnect autopilot and pitch to an appropriate attitude
- Promptly set the proper (maximum) go-around thrust setting and reconfigures the aircraft using proper protocols
- Maintain runway heading to at least 400 ft AAE or comply with ATC instructions as necessary
- Promptly notify ATC of the rejected landing, as required
- Remain aware of any obstacles or terrain hazards

References

FOM

Ops Manual

Jeppesen

Runway Analysis

QRH

TPO 8.1: Perform After Landing Operations

Aircraft: Twin Jet

Phase of Flight: 8.0, Taxi and Parking

Task: 8.1, Perform After Landing Operations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

The crew will perform after landing procedures by:

- Obtaining ATC taxi clearance
- Performing checklists at appropriate points
- Making an informed decision concerning APU use for passenger comfort after considering environmental, bleed air, and electrical power issues
- Communicating with company operations, as required

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and use standard terminology in ATC communications
- Leadership and Teamwork
 - a. Captain taxis aircraft, FO communicates with ATC
- Decision Making
 - a. Crew notifies ground personnel of any special support requirements
- Situation Awareness
 - a. After clearing the runway, crew refers to airport diagram, and resolves any taxi clearance ambiguities before proceeding
 - b. Crew ensures an ATC clearance is received prior to crossing any active runway

Conditions

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required
Thrust - as required
NAVAIDs - as required

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC/IMC/RVR 1800 or 1200 as appropriate
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Taxiway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and Runway conditions or closures
NOTAMs: Various runway length, Navaid operations, runway lighting
ATC Clearance: Landing clearance, Terrain and CFIT considerations

Standards

Procedural

In accordance with Ops Manual Ch __ and __
In accordance with FOM Ch _ and _

Maneuvers

- The captain chooses appropriate places to complete remaining checklist
- Crew maintains Sterile Cockpit
- Crew makes an informed decision regarding single engine taxi and APU usage after considering environmental and other relevant conditions

References

FOM
Ops Manual
QRH

TPO 8.2: Perform Taxi Operation

Aircraft: Twin Jet

Phase of Flight: 8.0, Taxi and Parking

Task: 8.2, Perform Taxi Operations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	LOE	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level C FFS	Level C FFS

Performance Statement

The crew will perform taxi operations by:

- Understanding and briefing taxi clearances including any restrictions
- Referencing appropriate taxi charts and other relevant material
- Accounting for NOTAMs, ATC or other reports regarding effects of contaminated surfaces upon taxing operations
- Making an informed decision regarding one vs. two engine taxi

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew makes all standard callouts as PF and PM, and use standard terminology in ATC communications
- Leadership and Teamwork
 - a. Crew accurately completes After Landing checklist
- Decision Making
 - a. Captain decides when a single engine taxi is appropriate
 - b. Crew notifies ground personnel of any special support requirements
- Situation Awareness
 - a. After clearing the runway, crew refers to a current airport taxi diagram, and resolves any taxi clearance ambiguities before proceeding with the taxi
 - b. Crew ensures an ATC clearance is received prior to crossing any active runway

Conditions

Abnormal

N/A

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required Slats-as required Thrust as required

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC/IMC/RVR various
Precipitation: None, rain, storms, snow, icing, etc.
Wind Speed/Direction: Various
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various

Operational Environment

Taxiway Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and taxiway closures
NOTAMs: Various runway lengths, Navaid operations, and runway lighting conditions
Appropriate ATC Clearance: Taxi clearance

Standards

In accordance with Ops Manual Ch __ and _
In accordance with FOM Ch_ and _

Maneuvers

- Captain will brief ATC taxi instructions and crew will refer to taxi and other ground movement area charts to follow progress during taxi operations
- Captain will maintain a safe taxi speed considering visibility and taxiway/ramp conditions
- Captain will decide about conducting single engine taxi operations and follow appropriate shutdown procedures, including EGT cool down limitations and first flight requirements, if applicable

References

FOM
Ops Manual
QRH

TPO 8.3: Perform After Landing Checklist

Aircraft: Twin Jet

Phase of Flight: 8.0, Taxi and Parking

Task: 8.3, Perform After Landing Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	PV	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level C FFS

Performance Statement

Demonstrate the ability to perform the After Landing Checklist by:

- Clearing the active runway
- The Captain calling for and the First Officer performing the checklist and verifying items as complete
- Taking environmental considerations into account regarding anti-ice and external light usage

Crew Resource Management (CRM)

- Crew Communications
 - a. Crew uses only standard checklist responses
- Leadership and Teamwork
 - a. Crew performs the After Landing checklist without error or omission
- Decision Making
 - a. At the discretion of the captain, the flaps/slats are reconfigured in accordance with the FOM
- Situation Awareness
 - a. After clearing the runway, and when safety permits, the After Landing checklist is initiated at the captain's discretion.

Conditions

Abnormal

Various

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required

Thrust - as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various (tailwinds, turbulence, crosswinds and gusty winds)

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Ramp Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and taxiway closures

NOTAMs: Various runway length, NAVAID operations, runway lighting

Appropriate ATC Clearance: Taxi clearance

Standards

In accordance with Ops Manual Ch ____

In accordance with FOM Ch _ and _

Maneuvers

- Complete the After Landing checklist at the appropriate time without omission or error

References

FOM

Ops Manual

TPO 8.4: Perform Parking Checklist

Aircraft: Twin Jet

Phase of Flight: 8.0, Taxi and Parking

Task: 8.4, Perform Parking Checklist

Crew (Duty) Position: PIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	PV	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop. Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level C FFS

Performance Statement

Demonstrate the ability to perform the Parking Checklist by the captain by:

- Reaching the correct parking position
- Verbalizing after the engines have been shut down
- Giving electrical power considerations to external vs. internal power

Crew Resource Management (CRM)

- Crew Communications
 - a. Captain follows standard taxi signals from ground crew, and notifies the cabin when parked at gate (seat belt sign off)
- Leadership and Teamwork
 - a. Crew completes the accurately Shutdown/Securing Aircraft checklist
- Decision Making
 - a. Captain completes aircraft maintenance log book entries
- Situation Awareness
 - a. Crew turns off the aircraft’s beacon light before leaving the aircraft

Conditions

Abnormal

None to various APU/engine/external power possibilities

Aircraft Configuration

Aircraft at the gate

Various electrical configurations

Various bleed source configurations

Flaps-as required

Slats-N/A

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: Various

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating

Operational Environment

Ramp Conditions: Uncontaminated or contaminated

ATIS: Various ceilings, visibility and taxiway closures

NOTAMs: N/A

Ground Operations: Ramp clearance

Standards:

In accordance with Ops Manual Ch ____

In accordance with FOM Ch ____

Maneuvers

- Complete Parking checklist without error or omission
- Observe engine cool down limits

References

FOM

Ops Manual

TPO 8.5: Perform Terminating Checklist

Aircraft: Twin Jet

Phase of Flight: 8.0, Taxi and Parking

Task: 8.5, Perform Terminating Checklist

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: Yes

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	PV	LOE
Evaluation Condition	Variable conditions MEL-Autopilot inop Temp <-2C Wind 10X -SN 500 OVC 1.0	Variable
Media	Level 5 FTD	Level C FFS

Performance Statement

Demonstrate the ability to perform the Terminating checklist by:

- Following proper protocols regarding when to operate the Terminating checklist
- Using a do-list procedure
- Performing the post flight inspection as required including completing any aircraft logbook records
- Captain ensures that passengers have deplaned safely

Crew Resource Management (CRM)

- Crew Communications
 - a. Flight crew coordinates any cabin maintenance issues and enters them in the cabin log book
- Leadership and Teamwork
 - a. Crew conducts post-flight external aircraft inspection, and captain completes any aircraft maintenance logbook write-ups
- Decision Making
 - a. Ensure that all passengers have de-planed the aircraft safely, and any unaccompanied minors are with their proper guardians
- Situation Awareness
 - a. Flight crew turns off the aircraft’s beacon before leaving the aircraft

Conditions

Abnormal

None to various APU/engine/external power

Aircraft Configuration

Aircraft at the gate

Various electrical configurations

Various bleed source configurations
Flaps-N/A
Slats-N/A

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: Various
Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various
Temperature: Not to exceed aircraft operating

Operational Environment

Ramp Conditions: Uncontaminated or contaminated
ATIS: Various ceilings, visibility and Taxiway closures
NOTAMs: N/A
Clearance: Appropriate Ramp taxi clearance

Standards:

In accordance with Ops Manual Ch 4 and 5
In accordance with FOM Ch 2 and 3

Maneuvers

- Complete Terminating checklist without error or omission

References

FOM
Ops Manual

TPO 9.1: Perform Steep Turn

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.1, Perform Steep Turn

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Steep Turn by:

- Performing a steep turn proficiency maneuver
- Demonstrating adequate knowledge of steep turns and the factors of wing loading, angle of bank, pitch and power requirements and over-banking tendencies

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Abnormal

N/A

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required

Slats-as required

Thrust - as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC/RVR various

Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Appropriate ATC clearance

Standards

In accordance with FOM Ch _ and _

Maneuvers

- Select appropriate altitude
- PF smoothly adjusts bank angle, pitch and power to initiate, maintain and recover from the maneuver
- Rolls out within 10° of specified heading; recovering to a straight and level attitude, or reverses direction of turn as directed
- PF maintains airspeed within +/- 10 kts, specified altitude within +/- 100 ft, and bank angle of at least 45° (+/- 5°)

References

FOM

TPO 9.2: Perform Approach to Stall

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.2, Perform Approach to Stall

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Approach to stall proficiency maneuver to one of three different configurations; takeoff, en route and landing configuration by:

- Selecting an altitude no lower than 10,000 ft AGL at appropriate airspeed
- Setting appropriate V2 speed for aircraft weight and flaps/slats configuration
- Ensuring maneuver area is clear of other aircraft
- Maintaining altitude until first indication of impending stall then takes prompt action to recover

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Abnormal

N/A

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required

Thrust - as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Appropriate ATC clearance

Standards

In accordance with FOM Ch _

Maneuvers

- Select appropriate altitude to ensure aircraft safety
- Ensure area is clear of other aircraft
- Configure (flaps/slats, thrust) aircraft appropriate for the selected maneuver
- Maintain altitude until first indication of incipient stall then take prompt action to recover
- Demonstrate smooth and positive aircraft control during entry, stall regime, and recovery

Note: recovery will be straight and level flight at 200 kts

References:

FOM chapter__

SPO 9.2.1: Perform Takeoff Configuration Stall

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.2, Perform Approach to Stall

Sub Task: 9.2.1, Perform Takeoff Configuration Stall

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC Heavyweight Initiate during climbout	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Takeoff Configuration Stall by:

- Disconnecting autopilot and flight director
- Reducing thrust to idle
- Reconfiguring flaps/slats to either 8° or 20° as directed
- At 160 kts initiates a turn using 20° of bank as directed

- At first positive sign of impending stall advances thrust levers and calls for max thrust
- Rolling wings level and maintaining that heading
- Adjust pitch to maintain altitude at which the stall occurred; if altitude loss occurred, hold V2 to climb back to initial altitude

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions:

Refer to TPO 9.2

Standards:

Refer to TPO 9.2

Recovers to reference airspeed (200 kts) +/- 10 kts

Maintains altitude +/- 100 ft

Maintains heading +/- 10°

Demonstrates smooth and positive aircraft control during entry, stall regime and recovery

Reconfigures aircraft at appropriate airspeeds

SPO 9.2.2: Perform En Route Configuration Stall

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.2, Perform Approach to Stall

Sub Task: 9.2.2, Perform Enroute Configuration Stall

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC Autopilot/Autothrottle malfunction	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform En Route Configuration Stall by:

- Disconnecting autopilot and flight director
- Reducing thrust to idle

- Maintaining heading and altitude throughout maneuver
- At initial stall buffet, advance thrust levers and call for maximum thrust; if altitude loss has occurred, accelerate to V2 + 20 knots and climb to initial altitude

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 9.2

Standards

Refer to TPO 9.2

Recovers to reference airspeed (200 kts) +/- 10 kts

Maintains altitude +/- 100 ft

Maintains heading +/- 10°

Demonstrates smooth and positive aircraft control during entry, stall regime and recovery

SPO 9.2.3: Perform Landing Configuration Stall

Aircraft: Twin jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.2, Perform Approach to Stall

Sub Task: 9.2.3, Perform Landing Configuration Stall

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC Initiate during approach	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform Landing Configuration Stall by:

- Ensuring autopilot is off
- Setting thrust to 45%
- Reconfiguring aircraft to the landing configuration using proper protocols. At first positive sign of impending stall, advances thrust levers and calls for max thrust. If altitude loss has occurred, accelerates to V2 to climb back to initial altitude

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 9.2

Standards

Refer to TPO 9.2

Recovers to reference airspeed (normally 200 kts) +/- 10 kts

Maintains altitude +/- 100 ft

Maintains heading +/- 10°

Demonstrates smooth and positive aircraft control during entry, stall regime and recovery

Reconfigures aircraft at appropriate airspeeds using correct protocols

TPO 9.3: Perform Dutch Roll (Specific Flight Characteristics)

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.3, Perform Dutch Roll/Specific Flight Characteristics

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	VMC	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform specific flight characteristics of the aircraft by performing either a high altitude Dutch Roll or a Low Speed/high Drag Dutch Roll or unusual attitude recoveries.

For Dutch Rolls:

- Selecting an appropriate altitude.
- Configuring the aircraft for the maneuver: autopilot and yaw dampers off
- Applying sharp rudder inputs in both left and right directions (rudder doublet)
- Recognizing conditions conducive for Dutch Roll to develop and takes prompt corrective actions
- Recognizes an upset has occurred and correctly interpreting aircraft attitude, including flight director displays
- Makes appropriate and, as required, aggressive control inputs to regain the normal flight regime

Note: For training purposes, an unusual attitude is defined as an aircraft in-flight unintentionally exceeding the tolerances normally experienced in line operations or training.

- Pitch attitudes greater than 25 degrees, nose up
- Pitch attitudes greater than 10 degrees, nose down
- Bank angles greater than 45 degrees
- Within the above tolerances, but flying at airspeeds improper for the flight conditions

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

N/A

Aircraft Configuration

Various Aircraft Gross Weights
Center of Gravity not to exceed limitations
Flaps-as required Slats-as required Thrust as required

Natural Environment

Time of Day: Day, night, dusk or dawn
Ceiling and Visibility: VMC/IMC
Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various
Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various
Operational Environment
ATC clearance for proper altitude

Standards

In accordance with FOM Ch 2, 3 and 7

Maneuvers

As appropriate for the SPO

References

FOM

SPO 9.3.1: Perform High Altitude Dutch Roll

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.3, Perform Dutch Roll/Specific Flight Characteristics

Sub Task: 9.3.1, Perform High Altitude Dutch Roll

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Note: **Demonstration only for aircraft initial qualification**

Performance Statement

Demonstrate the ability to perform High Altitude Dutch Roll by:

- Stabilizing the aircraft at 35,000 ft MSL at a target airspeed of VFS
- Configuring the aircraft with autopilot and yaw dampers off
- Applying rudder doublet

Observable Behaviors:

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 9.3

Autopilot and yaw dampers off to initiate maneuver

Standards

Refer to TPO 9.3

Demonstrate knowledge of conditions that influence Dutch Roll characteristics and knows the proper procedures for resuming normal flight. Demonstrates ability to recognize and apply proper corrective action for neutralizing the Dutch roll

- Maintains smooth and positive aircraft control during entry and recovery
- Minimizes altitude loss and stays within aircraft limitations

SPO 9.3.2: Perform Low Speed/High Drag Dutch Roll

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.3, Perform Dutch Roll/Specific Flight Characteristics

Sub Task: 9.3.2, Perform Low Speed/High Drag Dutch Roll

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform Low Speed/High Drag Dutch Roll by:

- Stabilizing the aircraft no lower than 10,000 ft AGL
- Reconfiguring the aircraft to the landing configuration at a target airspeed of ____ kts
- Configuring aircraft with autopilot and yaw dampers off

Observable Behaviors:

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 9.3

Autopilot and yaw dampers off to initiate maneuver

Standards

Refer to TPO 9.3

Demonstrates knowledge of factors that influence Dutch Roll characteristics and proper procedures for resuming normal flight

Demonstrates ability to recognize and apply proper corrective action for neutralizing the Dutch Roll

Maintains smooth and positive aircraft control during entry and recovery

Minimizes altitude loss and stays within aircraft limitations

SPO 9.3.3: Perform Upset/Unusual Attitude Recovery

Aircraft: Twin jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.3, Perform Dutch Roll/Specific Flight Characteristics

Sub Task: 9.3.3, Perform Upset/Unusual Attitude Recovery

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to perform an Upset/Unusual Attitude Recovery by:

- Recovering from an unusual attitude or an induced vortex wake upset

Unusual attitudes will include at least:

- Nose high low-energy recovery
- Nose low high-energy recovery

Vortex wake upset may include:

- Preceding aircraft wake upset; takeoff or landing
- Crossing aircraft upset

Observable Behaviors:

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Refer to TPO 9.3 for flight attitudes used

For upset recoveries, select appropriate vortex wake upset

Standards

Refer to TPO 9.3

Crew will recognize unusual attitudes encounters, including attitude display indications. Crews will take prompt corrective action to return to normal level flight attitudes and/or climb the aircraft as appropriate. Crew will make appropriate and, if necessary, aggressive control inputs. Crew adjusts thrust levers to return the aircraft to a safe energy state.

TPO 9.4: Perform Maximum Rate Descent

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.4, Perform Maximum Rate Descent

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	Variable	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a Maximum Rate (Emergency) Descent:

- Knows when a maximum rate descent is required and acting promptly
- Establishes crew oxygen and communications, after which the captain will become the PF
- Captain determines minimum altitude to descend to and performs memory items
- Captain ascertains proper airspeed to perform the descent and maintaining that airspeed
- First officer performs PA and accomplishes appropriate malfunction checklist

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Abnormal

Various malfunctions to cause maximum rate descent

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required Slats-as required Thrust as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

ATC clearance for safe altitude

Standards

In accordance with FOM Ch ____

Maneuvers

- Execute memory item procedures correctly
- Evaluate aircraft status to determine proper descent airspeed
- Evaluate terrain and minimum altitude
- Avoid exceeding aircraft limitations
- Properly coordinate with other crewmembers and ATC as required

References

FOM

TPO 9.5: Perform CFIT Escape Maneuvers

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.5, Perform CFIT Escape Maneuvers

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC Heavyweight Initiate during climbout	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform a CFIT Escape Maneuver:

- Understands the GPWS system including its modes, displays, and alert/warning levels
- Knows to apply the procedure any time that situational awareness is in doubt and that impact with terrain or obstacle is not unequivocally ruled out
- Advances thrust levers to maximum
- Disconnects the autopilot and pitches to a target attitude of 20° at a rate of 3°/sec
- Understands that a lower than normal airspeed may occur in the maneuver, however, stick shaker will be respected and a concurrent reduction of pitch will be necessary in that event
- Rolls wings level and ensure flight spoilers are retracted to maximize the lift vector
- Monitors the flight instruments
- Continues the maneuver until emergency safe sector altitude is reached, or visual verification can be made that the terrain or obstacle has been cleared

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Abnormal

ATC heading/altitudes to cause CFIT scenario

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required Slats-as required Thrust as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

Appropriate ATC clearance

Standards

In accordance with FOM Ch ____

Maneuvers

- Understand the GPWS system including displays
- Promptly react to loss of situational awareness and/or GPWS warnings by applying the maneuver
- Smoothly and accurately use flight control inputs to desired pitch attitudes
- Understand recovery altitude and airspeeds
- Advise ATC of situation

References

FOM

Ops Manual

TPO 9.6: Perform TCAS Procedures

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.6, Perform TCAS Procedures

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	TP	TP
Evaluation Condition	IMC Initiate during descent	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform TCAS procedures:

- Knows the TCAS system including its features, modes, displays and alert/warning levels
- Attempts to visually acquire the opposing aircraft when an encounter occurs
- Disconnects the autopilot and complies with the corrective action within five seconds if an RA encounter occurs
- Understands to never maneuver contrary to the RA
- Returns to the original clearance after the system has announced “Clear of Conflict” and/or comply with further ATC instructions

Crew Resource Management (CRM)

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Abnormal

Appropriate TCAS scenario to cause TA, preventative RA or corrective RA encounter

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps-as required Slats-as required Thrust as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations
Surrounding Terrain: Various
Operational Environment
ATC heading/altitudes to cause TCAS scenario

Standards

In accordance with FOM Ch ____
In accordance with Ops Manual Ch ____

Maneuvers

- Understand the TCAS system including operation, features, and limitations
- Understand TCAS displays including TA, RA and generated vertical commands
- If reacting to a corrective RA, disconnect autopilot and smoothly achieve commanded climb/ descend within five seconds
- Notify ATC as required, attempts to smoothly and promptly return to the assigned altitude unless modified by ATC

References

FOM
Ops Manual

TPO 9.7: Perform International Operations

Aircraft: Twin Jet

Phase of Flight: 9.0, Special Operations Procedures and Maneuvers

Task: 9.7, Perform International Operations

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	PV	TP
Evaluation Condition	As determined	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to perform International Operations Procedures:

- Understanding Immigration and Customs procedures
- Know international flight preparation and planning Procedures
- Know weather minimums and alternate airports protocols during international flights
- Know weather services and approved reporting sources
- Understanding any Operation Specifications limitation issued by a foreign country, while operating in foreign airspace

Crew Resource Management (CRM)

- Crewmembers report for duty at the prescribed time prior to departure
- Crewmembers possess all required equipment, manuals, and certificates
- Crew correctly evaluates NOTAMS, airport, and facilities reports for any areas that would affect the safe operation of the flight
- Crew correctly evaluates trip package to determine appropriateness of the flight release, flight plan, and fuel load for the trip
- Crewmembers demonstrate proficient use of performance charts, tables, graphs, or other planning data
- Captain correctly signs and leaves one copy of release at station
- Crew preflight Long Range Navigation systems and enters correct flight data using proper procedures, if appropriate
- Crew obtains and correctly interprets the takeoff and departure clearance as issued by ATC
- Crew adheres to company communication procedures
- Crew correctly navigates while using long-range navigation equipment (as applicable)
- PM establishes communications with ATC, using proper phraseology
- Crew complies with ATC reporting requirements
- Crewmembers set correct barometric altimeter setting passing transition altitude
- Crew applies the necessary adjustments to the published Decision Height (DH) and visibility criteria for the airplane approach category, as required

- Crew applies the necessary adjustments to the published Minimum Descent Altitude (MDA) and visibility criteria for the airplane approach category, as required
- Crew obtains and correctly interprets the landing clearance as issued by ATC
- PM/Second Officer accomplish fuel, performance, and navigation recording procedures
- Crewmembers demonstrate adequate knowledge of the airplane forms/logs to record the flight time/discrepancies
- Crew prepares for normal and contingency situations
- Crew allows sufficient time prior to maneuvers for programming of the Flight Management System
- Crewmembers periodically review and verify the status of aircraft automated systems
- Crew anticipates/recognizes potential distractions and takes appropriate action
- Crewmembers recognize fatigue and take specific steps to help maintain crew alertness
- Workload and task distribution are clearly communicated and acknowledged. Adequate time is provided for task completion

Conditions

Abnormal

N/A

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity not to exceed limitations

Flaps/Slats - as required

Thrust - as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc. Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

N/A

Standards

In accordance with Ops Manual Ch ____

In accordance with Transport Jet Airlines' Operation Specifications

Maneuvers

PF and PM are knowledgeable about, and are able to apply international flight procedures

References

Operations Manual

Transport Jet Airlines Operation Specifications

Jeppesen Charts

TPO 10.1: Respond to Emergency and/or Abnormal Situations

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Curricula	Qualification	Continuing Qualification
Evaluation Strategy	MV	MV
Evaluation Condition	As determined	Variable
Media	Level C FFS	Level C FFS

Performance Statement

Demonstrate the ability to respond to emergency and/or abnormal situations by:

- Delegating responsibilities as to performing checklists and flying pilot duties Knowing and performing Emergency Memory Items Checklists
- Understanding challenge and response method for actions related to operating thrust levers, generators, and any engine/APU fire switch light and fire bottles
- Assessing system status and selecting appropriate QRH procedures(s)
- Understanding and establishing priorities in dealing with multiple failures
- Properly evaluating degraded aircraft systems and resultant aircraft capabilities
- Managing the ECAS system properly to derive maximum informational benefit
- Properly coordinating procedures so as to keep both pilots and the flight attendant informed of the aircraft status
- Coordinating as needed with dispatch regarding aircraft status and, as applicable, the need for flight diversion
- Referencing MEL to ensure applicable operations procedures are complied with if continuing operation

Crew Resource Management (CRM)

- Crewmember recognizing an emergency announces the observed emergency clearly and distinctly
- PM cancels aural and visual warnings
- PF calls for the completion of Emergency/Abnormal checklist
- Crew notifies ATC of situation and declares an emergency
- Crew notifies company as soon as practical, providing required information clearly and accurately for operational impact
- Crewmembers demonstrate the proper emergency procedures relating to the particular airplane type
- Crew discusses any normal or abnormal system operating characteristic or limitation, and the corrective action for a specific malfunction

- Crewmembers possess adequate knowledge of the normal and emergency procedures, know immediate action items to accomplish, and proper checklist to accomplish
- Crewmembers correctly interpret cockpit indications
- Crewmembers correctly analyze state of aircraft systems from these indications
- Crewmembers appropriately follow the direction of the captain
- Crewmembers speak up and state their information with appropriate assertiveness until there is clear resolution decision
- When conflicts arise, the crew remains focused on the problem or situation at hand. Conflict issues are identified and resolved
- Captain coordinates flight deck activities to establish proper balance between command authority and crewmember participation. Captain acts decisively when the situation requires
- Decisions (including operational limitations) are clearly stated to other crewmembers and acknowledged
- Crew maintains constant awareness of aircraft status and position
- Crewmembers demonstrate high levels of vigilance in both high and low workload conditions
- Crew prepares for normal and contingency situations
- Workload and task distribution are clearly communicated and acknowledged. Adequate time is provided for task completion
- Crew prioritizes secondary tasks to allow sufficient resources for dealing effectively with primary flight duties
- Crew anticipates/recognizes potential distractions and takes appropriate action
- Crew actions avoid creating self-imposed workload and stress
- Crew uses automated systems at appropriate levels
- Crew allows sufficient time prior to maneuvers for programming of the Flight Management System

Conditions

Abnormal

Various abnormal and/or emergency conditions

See SPO for additional information

Aircraft Configuration

Various Aircraft Gross Weights

Center of Gravity - not to exceed limitations

Flaps/Slats-as required

Thrust - as required

Natural Environment

Time of Day: Day, night, dusk or dawn

Ceiling and Visibility: VMC/IMC

Precipitation: None, rain, storms, snow, icing, etc.

Wind Speed/Direction: Various

Temperature: Not to exceed aircraft operating limitations

Surrounding Terrain: Various

Operational Environment

None

Standards

In accordance with FOM Ch ____

In accordance with Ops Manual Ch ____

In accordance with the QRH

Maneuvers

Knowledge and application of emergency or abnormal procedures

References Ops Manual FOM

QRH

Runway Analysis

SPO 10.1.1: Powerplant Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.1, Powerplant Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: Yes (a sample of powerplant emergencies will be evaluated each cycle during the oral, MV or LOE)

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the powerplant emergency condition:

- Successfully and accurately identifies the appropriate powerplant emergency immediate action item and performs it in accordance with the QRH
- Successfully accomplishes the QRH flow pattern for the powerplant emergency procedure
- If applicable, successfully references and accomplishes the abnormal flow pattern checklist

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various powerplant emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.2: Smoke/Fire Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.2, Smoke/Fire Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: Yes (a sample of powerplant emergencies will be evaluated each cycle during the oral, MV or LOE)

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the smoke/fire emergency condition:

- Reacts to the smoke condition by successfully identifying the appropriate immediate action item and performing it in accordance with the QRH
- Knows the use of emergency oxygen equipment, related communication equipment, and smoke goggles
- Knows the procedural aspects to isolating and removing smoke accumulation from the aircraft
- Coordinates with the flight attendant on smoke condition and, for smoke in the cabin and/or lavatory situations, provides guidance on smoke/fire isolation procedure

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various smoke/fire emergencies will be induced

Standards

Refer to TPO 10

SPO 10.1.3: Pressurization Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.3, Pressurization Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: Yes (a sample of powerplant emergencies will be evaluated each cycle during the oral, MV or LOE)

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the pressurization emergency condition:

- Reacts to the emergency condition by applying the appropriate memory item checklist
- Applies the emergency descent procedure and its related crew tasks
- If a loss of pressurization has occurred, correctly applies the QRH flow pattern to decide methodology for the descent and attempts to regain pressurization.

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various pressurization emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.4: Auto Flight Control Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.4, Auto Flight (AFCS) Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the AFCS emergency condition by:

- Knows relevant Annunciator messages related to the AFCS system
- Establishes crew priorities for Pilot-Flying and Pilot-Not-Flying duties associated with higher flight deck workload during an autopilot failure condition
- Understands the impact of an autopilot failure upon landing minimums requirements

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various other emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.5: APU Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.5k, APU Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to APU Emergency condition:

- Reacts appropriately to the presented APU warning indication, including any applicable memory items
- Correctly analyzes the need for APU shutdown during over-temp conditions

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various APU emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.6: Bleed Air Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.6, Bleed Air Emergencies

Crew (Duty) Position:

PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to Bleed Air emergency condition:

- Knows the impact of failed bleed air systems on other aircraft systems
- Correctly completes QRH flow procedure regarding bleed air system isolation and/or engine shutdown as required

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various bleed air emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.7: Ditching or Forced Landing Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.7, Ditching or Forced Landing Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to Ditching/Forced Landing emergency condition:

- If applicable, performs the memory items checklist
- Selects the appropriate aircraft configuration for either ditching or forced landing
- Briefs flight attendant(s) on the situation and the amount of time available
- Coordinates flight deck tasks to reconfigure aircraft for the ditching or landing event

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various ditching or forced landing emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.8: Passenger Evacuation Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1, Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.8, Passenger Evacuation Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: Yes

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to an evacuation emergency condition:

- Correctly performs the applicable memory items to initiate the evacuation
- Promptly coordinates with the flight attendant(s) the aircraft situation and the method to perform the evacuation
- Uses PA system at the correct time to initiate evacuation and inform the passengers
- Notifies ATC of the situation

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various emergencies will be induced to cause an evacuation

Standards

Refer to TPO 10.1

SPO 10.1.9: Electrical Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.9, Electrical Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to electrical emergency condition by:

- Correctly performs the memory item checklist
- Identifies reason for loss of electric power and promptly reverting to engine failure procedures if that is the actual cause
- Applies QRH flow procedure to attempt the re-establish electrical power
- Considers impact of loss of other systems and making necessary flight decisions to coordinate flight completion with degraded aircraft systems

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various electrical emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.10: Flight Control Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.10, Flight Control Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: Yes (Aileron System jammed emergency will be evaluated each cycle during the oral, MV, or LOE)

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to flight control emergency condition:

- Maintains aircraft control using any available primary and/or secondary flight control
- Correctly applies any applicable memory item
- Crew coordinates as needed to operate any needed flight control disconnect
- Correctly applies QRH emergency flow pattern to alleviate the jammed situation
- Reconfigures aircraft to recommended configuration, if unable to resolve the emergency
- Crew communicates the problem to ATC and Dispatch

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various flight control emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.11: Fuel Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.11 Fuel Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the fuel emergency condition:

- Immediately assesses fuel situation to determine remaining flight duration and chooses appropriate diversion airport
- Knows minimum fuel requirements for go-around operations
- Evaluates and identifies the appropriate emergency and/or abnormal procedures

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various fuel emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.12: Ice and Rain Protection Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.12, Ice and Rain Protection Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the ice or rain emergency condition:

- Correctly applies QRH procedures and/or flow pattern to determine and isolate the anti-icing emergency malfunction
- Assesses flight conditions and flight path weather to leave and avoid icing conditions

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork

- Decision Making
- Situation Awareness

Conditions

Various ice and/or rain emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.13: Landing Gear Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.13, Landing Gear Emergencies

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the landing gear emergency condition:

- Correctly applies any applicable memory item
- Correctly understands applicable landing gear Annunciator messages and indications
- Correctly applies QRH procedures and/or flow pattern to correct the landing gear emergency malfunction
- Coordinates with the flight attendant(s) as needed if landing with the landing gear in an unsafe condition
- Coordinates with ATC

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various landing gear emergencies will be induced

Standards

Refer to TPO 10.1

SPO 10.1.14: Door Emergencies

Aircraft: Twin jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.14, Door Emergency
Crew (Duty) Position: PIC and SIC
Criticality: No
Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the door emergency condition:

- Correctly applies QRH procedure to maintain safety of flight
- Promptly coordinates with the flight attendant(s) regarding door status, flight diversion and need to avoid approaching the main cabin door
- Correctly identifies and prioritizing door usage during emergency and/or abnormal door procedures

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

The passenger door open emergency will be induced

Standards

Refer to TPO 10.1

SPO 10.1.15: Aural/Visual Emergencies

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.15, Aural and/or Visual Emergency Warnings

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to aural and/or visual emergency warning condition:

- Immediately applies the applicable QRH or memory item checklist items

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Standards

Refer to TPO 10.1

SPO 10.1.16: Powerplant Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.15, Powerplant Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the powerplant abnormal condition:

- Chooses the correct abnormal powerplant checklist after accurately assessing Annunciator messages and other indications
- Correctly follows flow patterns contained within QRH procedures
- Correctly applies engine start abort procedures without initial reference to the QRH
- Correctly applies the engine restart procedures in accordance with the QRH

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various powerplant abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.17: Air Conditioning Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.17, Air Conditioning Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate ability to respond appropriately to the air conditioning abnormal condition:

- Selects proper abnormal air conditioning checklist by referencing applicable Annunciator messages and/or available QRH procedures
- Knows aircraft limitations regarding single pack operations
- Knows limitations and procedures for cargo heating system if carrying live animals
- Monitor and correctly manipulate pressurization controls when operating the manual pressurization control procedure

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various air conditioning problems will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.18: Automatic Flight Control System Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.18, Automatic Flight Control System Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the Autoflight system abnormal condition by:

- Know messages contained within Annunciator on other flight deck displays
- Understanding the possibility of loss of autopilot during generator transfers
- Understanding the impact of autopilot failures upon landing weather minimums

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various Autoflight system abnormal conditions will be induced

Standards

Refer to TPO 10.1

SPO 10.1.19: APU Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.19, APU Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the APU abnormal condition by:

- Selecting proper QRH procedure based on Annunciator messages
- Determining essential need for APU when making shutdown decision during APU abnormal indications
- Know APU operating limitations

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various APU abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.20: Door Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.20

Door Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the door abnormal condition by:

- Verifying cabin pressure indications to determine impact of door abnormal condition indications
- Correctly manipulating manual pressurization controls to comply with QRH procedures
- Coordinating with flight attendant(s) to verify status of main cabin door latches, when required

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various door abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.21: Electrical Abnormal Conditions

Aircraft: Twin jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.21, Electrical Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the electrical abnormal condition by:

- Successfully accomplishing the QRH flow pattern in response to the specific electrical message or other flight deck indication
- Correctly using the electric bus inoperative QRH to determine impact on other aircraft systems during a degraded electrical system condition

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various electrical abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.22: Fire Protection Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.22 Fire Protection Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the fire protection abnormal condition by:

- Successfully accomplishing the QRH flow pattern in response to the specific fire protection message
- Understanding fire detection loop operation

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various fire protection abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.23: Flight Control Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.23, Flight Control Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the flight control abnormal condition by:

- Successfully accomplishing the QRH flow pattern in response to the specific flight control message or other indications

- Maintaining aircraft control using any available primary and/or secondary flight control
- Coordinating to operate any needed flight control disconnect
- Computing accurately Vref corrections and landing distance increases, if appropriate, when landing with degraded flight controls

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various flight control abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.24: Fuel Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.24, Fuel Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the fuel abnormal condition:

- Understand Annunciator messages related to fuel system messages and their impact upon engine and fuel system operation
- Accomplish the QRH flow pattern in response to the specific fuel system message
- Know the manual and automatic fuel balancing procedures
- Prioritize fuel issues that may be associated with multiple emergency and/or abnormal failures

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various fuel abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.25: Hydraulic Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.25, Hydraulic Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the hydraulic abnormal condition by:

- Accomplish the QRH flow pattern in response to the specific hydraulic system message
- Understand the effect of degraded hydraulic system(s) upon other aircraft systems
- Understand and comply with aircraft limitations with one or more hydraulic systems failed
- Prioritize fuel issues that may be associated with multiple emergency and/or abnormal failures

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various hydraulic abnormal conditions will be induced.

Standards

Refer to TPO 10.1

SPO 10.1.26: Ice and Rain Protection Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.26, Ice and Rain Protection Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the ice and or rain protection abnormal condition by:

- Select appropriate ice or rain protection abnormal checklist
- Correctly performing the ice dispersal procedure if required
- Understand and brief the effects of degraded pitot-static failures upon flight deck instrumentation
- Know ice and rain protection system operating limitations

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various ice and/or rain protection systems abnormal conditions will be induced

Standards

Refer to TPO 10.1

SPO 10.1.27: Instruments Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.27, Instrument Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the instrument abnormal condition:

- Select the proper QRH procedure based on Annunciator indications and/or flight deck failure indications
- Know and correctly engage degraded mode selections as required
- Apply proper crew coordination procedures when operating with degraded flight instruments or radio sources
- Understand the impact of degraded instrument systems upon landing weather minimums

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various instrument abnormal conditions will be induced

Standards

Refer to TPO 10.1

SPO 10.1.28: Landing Gear Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.28, Landing Gear Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the landing gear abnormal condition:

- Select the proper QRH procedure based on Annunciator indications
- Correctly follow QRH flow pattern
- Accurately compute landing distance increases when landing with degraded brake conditions

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various landing gear abnormal conditions will be induced

Standards

Refer to TPO 10.1

SPO 10.1.29: Miscellaneous Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.29, Miscellaneous Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the miscellaneous abnormal condition:

- Select the proper QRH procedure based on Annunciator message or observed condition
- Coordinate with flight attendant(s) as required for pilot incapacitation, oxygen or emergency lights abnormal condition

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Other miscellaneous abnormal conditions will be induced

Standards

Refer to TPO 10.1

SPO 10.1.30: Aural/Visual Abnormal Conditions

Aircraft: Twin Jet

Phase of Flight: 10.0, Emergency and/or Abnormal Procedures

Task: 10.1 Respond to Emergency and/or Abnormal Situations

Sub Task: 10.1.30, Aural/Visual Abnormal Conditions

Crew (Duty) Position: PIC and SIC

Criticality: No

Currency: No

Performance Statement

Demonstrate the ability to respond appropriately to the aural or visual abnormal condition:

- Select the proper QRH procedure based upon observed flight deck failures
- Select appropriate degraded modes based upon flight situation

Observable Behaviors: Note – see TPO 10.1 CRM statement

- Crew Communications
- Leadership and Teamwork
- Decision Making
- Situation Awareness

Conditions

Various aural and/or visual abnormal conditions will be induced

Standards

Refer to TPO 10.1

User Note - Section 11:

No Qualification Standards are developed for Task Analysis, Section 11, since these task listings are aircraft ground training subjects. Knowledge gained during ground school subjects training will be evaluated during the administration of Systems Validation, Procedures Validation, Maneuvers Validation and the Line Oriented Evaluation (LOE).

The following section contains sample Supporting Pilot Qualification Standards. These Qualification Standards are non-phase specific tasks.

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.1 Crew Communications: Perform as a Crewmember in the Communication Process

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
			X			X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

The pilot will fulfill his role as an effective communicator by consistently informing, crew/team through both verbal and nonverbal signals while balancing the demands of the flight deck environment.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Listen actively
- Provide and accept constructive feedback
- Use standardized or pre-briefed terminology and phraseology
- Communicate changes or expected changes to automation, systems, flight status, etc.
- Gain the attention of crew / team / passengers before communicating
- Balance communications (crew, ATC, team, passengers, and company) with operational demands and priorities

Captains Should:

- Establish and reinforce crew and team communication channels
- Prebrief operational requirements and expectations
- Inform the team of unanticipated contingencies in a timely fashion

First Officers Should:

- Offer or assert his perspective when safety and/or efficiency would be enhanced

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Task: 12.1, Perform Non-Phase Specific Operations

Subtask: 12.1.2, Crew Communications: Perform ATC Communication Procedures

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG		FLT TRNG		FLT STD
INDOCTRINATION		X				
				X		
QUALIFICATION	SPEC PURP	GRND TRNG		FLT TRNG		FLT STD
				X		X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG		FLT TRNG		FLT STD
		X		X		
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	Procedures					

PERFORMANCE STATEMENT

The Pilot will demonstrate the ability to perform ATC Communications Procedures by understanding the role of ATC while complying with standard policies for ATC reports.

CONDITIONS:

Natural Environment (optional)

Aircraft encounters unforecast or hazardous weather

Operational Environment: (optional)

- Aircraft leaving VHF communications range
- Aircraft vacating previously assigned altitude
- Aircraft reaches newly assigned altitude
- Aircraft approaching holding fix/clearance limit
- Aircraft leaving holding fix
- Aircraft leaving final approach fix inbound
- Aircraft executing a missed approach
- Aircraft unable to climb/descend 500 fpm
- TAS varying from filed flight plan by:
 - +/- 5% or 10 knots
 - +/- .01 Mach or greater than assigned Mach
- ETA in error 3 minutes or greater
- Operating IFR in non-radar environment
- ATC requests non-mandatory reports
- FAA ATC controlling agency
- ICAO ATC controlling agency

Abnormal contingencies: (optional)

- Loss of VOR/ADF/ILS or communications capability

STANDARDS

Procedures:

Transport Jet Airline’s Flight Operations Manual, Long Range Navigation Section.

Transport Jet Airline’s Manual Introduction, ATC Route Information and Communications Sections.

REFERENCES

Transport Jet Airline’s Flight Operations Manual, Long Range Navigation Section

Transport Jet Airline’s Manual Introduction, ATC Route Information and Communications Sections

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.2 Perform as a Crewmember in the Teambuilding Process

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
			X		X	
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

The pilot will exhibit effective crew coordination by consistently utilizing skills and techniques which enhance crew/team interaction and improve the performance of operational tasks.

DESIRED LEARNING OUTCOMES

All Crew Members Should:

- Acknowledge changes in automation / configuration of A/C systems or operational status
- Provide timely input to accomplish **Task:** assert experience and knowledge when needed
- Back up other crew members and establish “team concept” environment
- Provide constructive feedback and accept self critique without becoming defensive
- Admit mistakes and/or limitations promptly
- Resolve disparities in interpretation, priority, technique, etc.

Captains Should:

- Create an environment for open communication through briefing and soliciting input
- Clearly state personal techniques and expectations for subordinate crew members
- Assign tasks according to crew member capabilities (experience and skill)

First Officers Should:

- Inform Captain of task progress and status
- Ask for clarification of roles and responsibilities when uncertain
- Be ready to assume situational leadership when directed

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations/Abnormal Operations/Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.3 Exhibit Workload Management Skills

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
			X			X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

The pilot will fulfill his role as an effective workload manager by consistently utilizing individual and crew skills to manage time critical tasks when situational demands force the pilot to prioritize flightdeck activities.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Prioritize individual tasks according to situational demands and published operational priorities
- Prepare for high workload phases of flight during low workload phases of flight
- Recognize and state when becoming overloaded
- Use an appropriate level of automation when recognizing it will reduce workload.

Captains Should:

- Prioritize crew tasks according to operational demands
- Assign crew tasks according to situational priorities
- Create time to manage tasks and make decisions when becoming task saturated

First Officers Should:

- Be available for other tasks when not overburdened.
- Suggest priorities that will enhance the completion of operational tasks

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0, Crew Resource Management

Subtask: 12.3.1 Exhibit Planning Skills

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
			X		X	
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

As part of work load planning, the each pilot will exhibit effective planning skills by consistently anticipating operational requirements when situational demands allow for proactive thinking.

DESIRED LEARNING OUTCOMES

All Crew Members should:

- Plan ahead to maintain a proactive level of awareness
- Adapt to changes and factors that affect the current or future flight status
- Plan for and pre-brief automation tasks
- Plan for and pre-brief operational prioritization of upcoming tasks
- Plan for and pre-brief the levels, modes, and configurations of automation to be used
- Execute plans as briefed or communicate changes / deviations from the plan

Captains Should:

- Focus crew’s attention on upcoming requirements/demands
- Divide planning tasks and responsibilities among the crew

First Officers Should:

- Call the crew’s attention to anticipated future requirements
- Ask for clarification when plans are unclear

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.4 Demonstrate Situational Awareness Management Skills

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
			X		X	
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG		FLT STD	
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

The pilot will fulfill his role as an effective situational awareness manager by constantly refocusing his attention, and/or the attention of supporting crew members, to the level necessary to assimilate key elements of the aviation environment necessary to support the selection of appropriate courses of action.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Recognize when automation is becoming a detriment to situational awareness, and use an appropriate level of automation
- Ensure that distractions do not degrade overall crew situational awareness
- Alert crew/team when added vigilance or attention may be necessary
- Recognize and inform other crew members when individual awareness is low (ask questions to validate)
- Maintain an awareness of the automation/systems modes selected by the crew or automatically initiated by the flight management computer (mode awareness)
- Maintain an awareness of the capabilities available in engaged automation/systems modes (mode confusion)
- Maintain an awareness of other crew/team member capacity and task accordingly

Captains Should:

- Assign and monitor duties for operational requirements
- Divide awareness tasks and responsibilities
- Brief and initiate strategies for handling distractions

First Officers Should:

- Recommend priorities upon recognizing situational awareness is low during any phase of flight
- Contribute information to enhance the crew’s situational awareness

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors
 Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0, Crew Resource Management

Subtask: 12.5, Perform as a Crewmember in Decision Making

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
			X			X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X	X			
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
				Level 5		

GLOBAL ROLE

The pilot will fulfill his role as an effective decision maker by consistently selecting a safe and effective course of action while utilizing all available resources appropriate to the conditions.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Match decision making requirements with available time
- Review assumptions and decisions before selecting a course of action
- State symptoms not conclusions when initially identifying a problem
- Look for multiple cues when identifying a problem
- Proactively contribute to the research of options

Captains Should:

- Initiate and direct the crew's research efforts
- Selects options and makes decisions according to FOM operational priorities

First Officers Should:

- Proactively contribute to the selection of a course of action
- Accept and execute decisions when finalized

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0, Crew and Resource Management

Subtask: 12.6, Perform as a Crewmember in Threat and Error Management

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
						X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				X
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will fulfill his role as a safety conscious crew member by assigning safety as the first operational priority, exhibiting conservative behavioral tendencies relative to aircraft operation, effectively utilizing all available resources, maintaining a vigilant and receptive demeanor, strictly adhering to company policies / procedures and all Federal Aviation Regulations, while deviating only when necessary under the captain’s emergency authority to the extent required to ensure safety.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Ensure possession of all required documents while performing duties as a crew member
- Comply with required crew restrictions
- Ensure continuous maintenance of crew member qualification status
- Comply with standard operational and procedural policies
- Become familiar with all available information concerning the conduct of each flight
- Apply standard published considerations regarding aircraft operational control
- Employ standard communications phraseology/signals
- Maintain continuous vigilance and immediately report any unsafe conditions
- Complete required communications in a timely and efficient manner

Captains Should:

- Direct activities of all crew members in a manner that promotes safety
- Exhibit model behavior regarding proper conduct, professional appearance, alertness, discipline, and adherence to operating procedures
- Ensure flight attendant staffing meets minimum regulatory and company requirement
- Ensure Aircraft Log Book is always properly documented

First Officers Should:

- Assist the captain in the conduct of a safe and efficient aircraft operation
- Maintain communications link with the company at all times
- Document Aircraft Log Book and Cabin Discrepancy Log as directed by the captain

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors
 Transport Jet Airline’s Pilot Operating Manual (POM) Normal Operations, Abnormal

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0, Crew Resource Management

Subtask: 12.6.1, Exhibit Threat and Error Management Skills

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will understand human factors principles that affect both individual and team performance. To maximize individual and group performance and to minimize risk exposure, pilots will consistently apply their knowledge of human factors to guide their decisions and actions.

DESIRED LEARNING OUTCOMES

All Crewmembers Should Identify:

- The basic definition and dimensions of human error
- The concept of error chains and the pilot’s role in recognizing and stopping them
- How to identify the work and non-work related stressors (environmental, interpersonal, personal, private life, and organizational) that affect job performance
- How to avoid or minimize the adverse effects of stress
- How advanced information and computer technology can enhance and/or detract from individual and group performance
- The expanded team concept and their role on the expanded team
- The attributes of professionalism and how individual, group, and expanded team performance are affected by professional and unprofessional acts
- How personality attributes effect individual and group performance
- Their individual personality traits and how to accommodate and work effectively with other personality types
- How culture and gender issues can affect individual and group performance
- The factors that contribute to fatigue
- The effect of fatigue on individual and group performance
- The effect of nutrition on individual performance

- The primary hazardous attitudes and their effect on individual, group and company performance
- What company and industry resources are available for human factors questions and problems
- The use of company reporting and feedback systems to improve human performance

Captains Should Identify:

- The roles and concepts of leadership
- How one's leadership style affects group performance
- The source and proper application of command authority

First Officers Should Identify:

- The roles and concepts of "followership" as they relate to being a crewmember
- How to accommodate various leadership styles
- How "followership" style affects group performance

REFERENCES

Transport Jet Airline's Flight Operations Manual (FOM) Human Factors

Transport Jet Airline's Pilot's Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.7 Exhibit Crew Member Duties and Responsibilities Related to Passenger Comfort

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
						X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				X
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will fulfill his role as a facilitator to passenger comfort by exhibiting compassionate behavior towards passenger needs, ensuring that passengers are an integral part of the communications loop, and operating the flight with a minimal amount of undue disruption.

DESIRED LEARNING OUTCOMES

All Crew Members Should:

- Treat passengers with care and respect
- Avoid flight near or through known thunderstorms or heavy rain to the fullest extent possible
- Strive to exceed passenger expectations
- Ensure cabin environment is comfortable prior to boarding
- Provide a comfortable environment, operationally and physically
- Control the aircraft as smoothly as possible
- Disseminate information of passenger interest in a timely manner

Captains Should:

- Inform passengers of current and forecast weather information at intended destination
- Ensure the Fasten Seat Belt sign is illuminated during aircraft ground movement
- Illuminate the Fasten Seat Belt sign when movement about the cabin becomes difficult

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.8 Exhibit Crew Member Duties and Responsibilities Related to Public Relations

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
						X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				X
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will exhibit effective public relations skills by projecting a professional image, displaying professional appearance and attitude traits at all times, keeping passengers apprised of all situations in a timely manner and behaving courteously when interacting with other employees/crewmembers and passengers.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Exhibit both on and off duty professional conduct, appearance and courteous demeanor
- Avoid reading any material not directly related to aircraft operation during performance of duties
- Leave seat only in performance of flight duty or to satisfy physiological needs
- Actively thank customers from the cockpit entrance whenever possible
- Avoid deplaning until all passengers have left the aircraft
- Comply with standard PA policies and procedures

Captains Should:

- Complete timely PA announcements in the event of delays/late arrivals or other related information
- If rejected takeoff is necessary, promptly complete rejected takeoff PA in a professional manner
- Ensure only one pilot leaves cockpit at a time

First Officers Should:

- Complete timely cabin pre-takeoff notification
- Complete aircraft times reports

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0, Crew Resource Management

Subtask: 12.9 Exhibit Crew Member Duties and Responsibilities Related to Flight Schedules

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
						X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				X
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will fulfill his role in maintaining an on-time schedule by exhibiting promptness in reporting for duty and signing in, coordinating pre-departure activities to facilitate on-time departures, planning ground operations to minimize taxi time and requesting direct routings when enroute time can be reduced.

DESIRED LEARNING OUTCOMES

All Crew Members Should:

- Report and sign-in for rotations within the required lead time properly uniformed and in possession of all required documentation
- Contact stations agent or flight control as conditions warrant
- Ensure accuracy of contract maintenance aircraft log book entries
- Request direct routings when applicable
- [If quick turnaround landing weight exceeded] Notifies all applicable parties of minimum ground time

Captains Should:

- Correctly interpret pre-departure flight planning information
- Elicit report of cabin readiness
- [If delay] Coordinate with flight attendants, flight control and ATC to determine the best course of action
- Establish communications with tug operator in a timely manner using standard phraseology

First Officers Should:

- Obtain pre-departure clearance in a timely manner
- [If required] Promptly correct weight data record with Flight Control
- [If required] Perform radio closeout procedures in a timely manner
- [If gear pins installed by maintenance] Ensure aircraft log book annotation regarding gear pin removal

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

PILOT QUALIFICATION STANDARDS (Supporting)

Aircraft: Twin Jet

Phase of Flight: Non-Phase Specific

Task: 12.0 Crew Resource Management

Subtask: 12.10 Exhibit Crew Member Duties and Responsibilities Related to Efficiency

Crew (Duty) Position: Captain, First Officer

CURRICULUM	SEGMENTS					
	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
INDOCTRINATION		X				
QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
						X
CONTINUING QUALIFICATION	SPEC PURP	GRND TRNG	FLT TRNG			FLT STD
		X				X
MEDIA ALL	CLASS / BRIEF	CBT	CAPT	FTD	SIM	AIRCRAFT
	X					

GLOBAL ROLE

The pilot will fulfill his role regarding efficient operation of each flight by adhering to operational procedures relating to economy, complying with fuel conservation techniques and operating the aircraft/flight as efficiently as possible while ensuring economy does not compromise flight safety.

DESIRED LEARNING OUTCOMES

All Crewmembers Should:

- Start the APU five (5) minutes prior to departure (unless passenger comfort needs dictate otherwise)
- Comply with standard policy regarding external power and conditioned air usage
- Apply fuel conservation techniques with compromise to safety, passenger comfort, public relations or operational requirements
- Perform land and hold short maneuver only for runways meeting standard criteria

Captains Should:

- Avoid the use of reverse thrust during pushback (unless operational necessities require otherwise)
- Apply standard overweight landing considerations

First Officers Should:

- Annotate aircraft log book if an overweight landing was performed

REFERENCES

Transport Jet Airline’s Flight Operations Manual (FOM) Human Factors

Transport Jet Airline’s Pilot’s Operating Manual (POM) Normal Operations, Abnormal Operations, and Supplemental Operations