PILOT PERFORMANCE MANUAL

.

PILOT PERFORMANCE MANUAL
.
.
.

RECORD OF CHANGES

Change No. and
Date of Change
Date of
Entry
Page Count Verified by
(Signature)

What are the capabilities of the crew?
Where are crew requirements listed?
What are the crew requirements for IFR flight?
2.3 Evaluate preliminary weather briefing.
What sources can provide a . approved weather briefing?
What specific guidance is given in ..(series) for IFR weather criteria?
What specific factors in a preliminary IFR weather briefing should be considered during an evaluation?
How do you evaluate a weather brief?
2.4 Analyze weather conditions for assigned mission.
What specific factors in a compl.IFR weather briefing should be considered during an analysis?
How are weather conditions analyzed?
What reference material is available to use in analyzing weather conditions?
2.5 Make Go/No–Go decision.
What are the guidelines for evaluating weather, i.e., given weather, can you go or not?
2.6 Decode or interpret ..
What approved methods are available to get .?
How many different kinds of . are there?
Where can guidelines be found for interpreting .?
2.7 Plan route of flight and altitude.
How should route of flight be selected?
2.8 Plan departure and arrival.
What publications apply to planning an IFR flight?

2.9 Determine distance, ground speed, ETE, and fuel requirements and select departure alternate, if required.
Given a scenario, what is the distance, ground speed, .and fuel requirement to a departure alternate?
2.10 Determine distance, ground speed, ETE, and fuel requirements to destination and alternate airport if required.
Given a scenario, what is the distance, ground speed, .and fuel requirement to a destination and arrival alternate?
2.11 Compl.and file flight plan.
How can a flight plan be filed?
When is a flight plan required?
When is an alternate required?
How should altitude be selected?
What guidelines apply to the selection of altitude?

TASK OBJECTIVES

2-5

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 3.0 Prepare DD Form 365–4 or . Weight and Balance Form
TRAINING OBJECTIVE: Given DD Forms 365–1,–3,–4, and a Weight and Balance Data (NAVAIR 01–1B–40),
PREPARE Weight and Balance DD Form 365–F or . Weight and Balance Form in accordance with the flight
manual and ..(series).

_____

Enabling Objectives:
3.1 Compl.DD Form 365–4 or . Weight and Balance Form.
How is the Form DD 365–4 or . Weight and Balance Form completed?
How are the Forms DD 365–1, 365–2, and 365–3 completed?
Why is the DD Form 365–4 or . Weight and Balance Form required?
What are the definitions of terms used on the Form DD 365–4?
3.2 Verify takeoff condition (corrected weight) does not exceed gross weight limitations.
Where are the gross weight limits found?
What are the gross weight limits?
3.3 Verify takeoff center–of–gravity (corrected CG) is within takeoff CG limits.
Where are the CG limits found?
What are the CG limits?
3.4 Verify estimated landing weight does not exceed landing gross weight limitations.
Where are the landing gross weight limits found?
What are the gross weight landing limits?
3.5 Verify estimated landing CG point is within landing CG limits.
Where are the landing CG limits found?
What are the landing CG limits?
3.6 Determine limitations, if any, imposed by aircraft takeoff or landing CG or gross weight.
How are takeoff and landing CG limits calculated?
3.7 State proper order of auxiliary tank transfer and effects on center of gravity.
What is the proper order of auxiliary tank transfer?
What is the effect of improper tank transfer on center of gravity?

TASK OBJECTIVES

2-6

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 4.0 Prepare a Takeoff and Landing Data (TOLD) Card
TRAINING OBJECTIVE: Given a mission assignment, a flight manual, and Weight and Balance data,
PREPARE
a TOLD card in accordance with the flight manual.

_____

Enabling Objectives:

4.1 Determine field elevation, air temperature, pressure altitude, and wind speed.
Where is field elevation found?
How can you get runway air temperature?
How can you compute pressure altitude?
How can you get runway wind speed?
4.2 Compute density altitude.
How can you compute density altitude?
4.3 Compute mission gross weight.
How can you compute mission gross weight?
Where is the mission gross weight found on the DD Form 365–4 or . Weight and Balance Form?
4.4 Compute intermediate power available (SE).
How are the flight manual performance charts used to compute intermediate power available (SE)?
4.5 Compute power required to HIGE with/without wind.
How can you compute power required to HIGE with and without wind?
4.6 Compute power required to HOGE with/without wind.
How can you compute power required to HOGE with and without wind?
4.7 Compute maximum gross weight to HOGE.
4.8 Compute single engine level flight maximum airspeed.
4.9 .Compute single engine level flight minimum airspeed.
How can you compute single engine level flight minimum airspeed?
4.10 Compute maximum airspeed (blade stall limit).
How can you compute maximum airspeed (blade stall limit)?

PILOT PERFORMANCE MANUAL

BASIC OPERATOR TASKS

.

SECTION 2 .

.

TASK OBJECTIVES

2-7
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 5.0 Conduct Passenger and Crew Briefing
TRAINING OBJECTIVE: Given a mission statement, **PRESENT** a passenger and crew briefing in accordance with
the flight manual.

Enabling Objectives:
5.1 Brief no smoking and seat belt rules.
What are the no smoking rules?
What are the seat belt rules?
5.2 Brief emergency exits.
Where are the emergency exits located?
Who in the aircraft should use which exit?
Which are primary and secondary exits?
How are the exits opened?
When should the exits be opened?
Who should open the exits?
5.3 Brief action required in case of ditching or crash.
What action should passengers and crew take in a ditching or crash situation?
5.4 Brief use of inflatable life preserver.
How are inflatable life preservers supplied to aircrew used?
How are inflatable life preservers supplied to passengers used?
5.5 Brief use of emergency flotation.
How is emergency flotation used?

5.6 Brief movement in .during flight.
What movement within the .during flight is allowed?
5.7 Brief use of the ICS.
How is the ICS used?

TASK OBJECTIVES

2-8

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 6.0 Use Rescue and Survival Equipment
TRAINING OBJECTIVE: Given an .aircraft, **IDENTIFY** the location, **EXPLAIN** the function, and **DESCRIBE** the procedures used to operate all rescue and survival equipment on board in accordance with ..(series), the flight manual, and the Aviation Life Support Systems Manual (.
M13520.1 (series)).

_____

Enabling Objectives:
6.1 State the reference that lists the minimum required rescue and survival equipment.
Where would you look to find out the minimum required rescue and survival equipment?
What is the minimum required rescue and survival gear?
6.2 Identify the location of required rescue and survival gear.
Where is the gear stowed?
6.3 Explain the purpose of the rescue and survival gear.
What is the gear used for?
6.4 Describe the procedures used to operate the gear.
What safety precautions should be observed with the MK–25/58? How do you arm them? How do you deploy them?
How do you determine the frequency of a DMB? What are the deployment limitations?
How long will the CG–P1 operate? How many GPM? What are the components? How is it assembled?
What life preserver does a passenger wear? How is it worn? How is it inflated?
How is the folding litter assembled?
What are the weight limitations for the rescue devices?
How are message blocks deployed?
What is the maximum number that the LRU–20A will keep afloat? How is it inflated?
Who can be hoisted using the survivor sling?
Who is authorized to wear the LPU–25/P?
How long are the trail lines? What is the weak link for?

TASK OBJECTIVES

2-9

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 7.0 Comply with Flight Manual Operating Limits and Limits in ..(series)
TRAINING OBJECTIVE: Given an .aircraft or a simulator, **OPERATE** the aircraft in accordance with all limitations, Notes, Cautions, and Warnings found in the flight manual and applicable .
(series) limits.

_____

Enabling Objectives:

7.1 State flight manual and .(series) operating limits.

What are the operating limits contained in chapter 4 of the flight manual?

What limits are contained in the flight manual other than in chapter 4?

What are the Notes contained in the flight manual?

What are the Cautions contained in the flight manual?

What are the Warnings contained in the flight manual?

What are the operating limits contained in ..(series)?

7.2 Identify aircraft operation approaching or beyond limitations.

How can one identify when the aircraft is in an operation which is approaching or beyond limits?

7.3 Correct erroneous operation.

How can one correct erroneous operation when detected?

TASK OBJECTIVES

2-10

UNIT: BASIC OPERATOR TASKS

JOB: Preflight Tasks

TASK: 8.0 Review Maintenance Records

TRAINING OBJECTIVE: Given an aircraft maintenance record book, **EVALUATE** the readiness of the aircraft for

flight in accordance with the flight manual, Aeronautical Engineering Maintenance Management Manual (.M13020.1 (series)), and ..(series).

_____

Enabling Objectives:

8.1 Recognize correct pre/thru/post flight sign–offs.

What does the Engineering Maintenance Management Manual require for pre/thru/post flights?

How are pre/thru/post flights signed off?

8.2 Identify servicing sign–offs.

What is the purpose of each block on the CG Form 4377 yellow and pink sheets?

What do servicing sign–offs indicate?

8.3 Identify carried forward discrepancies.

What do the initials PP and CF mean on the Form CG Form 5181?

How are PP and CF items entered and signed off on the CG Form 5181?

8.4 Identify pending inspection due times.

Where are pending inspection due times indicated on CG Form 5181–60–1?

8.5 Identify actual aircraft hours.

Where are total aircraft flight hours indicated?

8.6 Identify Up/Down block, engine hour block, engine start, landings, flight time blocks.

What is the purpose of each block on the Form CG Form 4377 yellow and pink sheets.

8.7 Identify discrepancies and corrective action for each of the past six flights.

Discuss the significance of selected discrepancies.

8.8 Evaluate readiness of the aircraft for flight.

What discrepancies would cause the aircraft to be unsafe for flight?

Who determines what equipment is required for the flight?

What publication(s) assign responsibility for the decision?

TASK OBJECTIVES

2-11

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 9.0 Perform a Preflight Inspection
TRAINING OBJECTIVE: Given an .aircraft and a flight manual PCL, **PERFORM** a preflight inspection in accordance with the flight manual.

Enabling Objectives:
9.1 Identify all equipment, controls, or indicators listed in the flight manual pocket checklist preflight inspection.
What does each item look like?
Where is each item located?
What is the function of each item?
9.2 Identify cracks, leaks, bends, and other discrepancies.
How do you identify cracks, leaks, bends, and other discrepancies?
9.3 Obtain assistance from maintenance personnel in evaluating suspected discrepancies.
How can you obtain assistance from maintenance personnel concerning suspected discrepancies?
9.4 Evaluate readiness of aircraft for flight.
How can you evaluate the readiness of the aircraft for flight?
9.5 Enter discrepancies before or after flight on appropriate maintenance records.
How are discrepancies entered?
Where are discrepancies entered?

TASK OBJECTIVES

2-12

UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 10.0 Perform Start Checklist
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and a mission assignment, **PERFORM** a Start Checklist and **EVALUATE** readiness of aircraft in accordance with the flight manual.

Note: Start Checklist includes the following:
Prestart Checks
Systems Check
Starting Engines
Rotor Engagement
Enabling Objectives:
10.1 Identify all equipment, controls, and indicators listed in the flight manual PCL Start Checklist.
Identify, locate and explain the function of each piece of equipment, control, or indicator.
10.2 Perform from memory each action when cued.
What action is to be taken for each cue?
10.3 Recognize incorrect aircraft performance.
What is the correct indication for each item evaluated on the Start Checklist ?
10.4 Recognize incorrect crew response to each item on the Start Checklist.
What is the correct crew response to each item on the Start Checklist?
10.5 Obtain assistance from maintenance personnel in evaluating suspected discrepancies.
When should assistance be obtained?
How is assistance obtained?

Who has the authority to say that the system is OK or not?
10.6 Evaluate readiness of aircraft for completion of checklist.
What invalid system checks will terminate the mission?
10.7 Perform Fuel Status check.
How are individual tanks disabled from the fuel system menu?
What computations are utilized to define Bingo time?

PILOT PERFORMANCE MANUAL

BASIC OPERATOR TASKS

.

SECTION 2 .

.

TASK OBJECTIVES

2-13

10.8 Perform a System Reset.
What actions are required to compl.a system reset?
What automatic system checks are completed during a system reset?
How is the GPS time selected?
What does the internal system battery do?
How and when can grid center be changed?
What effect does grid center have on the tactical plot?
10.9 Perform a System Initialization.
What actions are required to compl.a system initialization?
When would a system initialization be completed instead of a system reset?
10.10 Check the System Status.
What actions are required to check individual system status?
How are systems enabled and disabled?
What step should be taken to troubleshoot system malfunctions?
10.11 Perform an Operational Readiness Test (ORT).
What actions are required to perform an ORT on individual and group systems?
When would an ORT be required?
10.12 Perform a Cold Start.
What actions are required to perform a cold start?
What effect does a cold start have on the system?
What system information is lost when a cold start is completed?
10.13 Adjust Control Display Unit (CDU) brightness.
What actions are required to adjust the CDU brightness?
What effect does switching the Copilots CDU brightness to night have on the Multi Function Display (MFD)?
10.14 Configure the Pilot, Copilot, and C2 Internal Communication System (ICS).
Identify and explain the following features of the ICS: DISC, ALL, VOX, VOL, CONF1, CONF2, and AUX ICOM.
How are the Pilot, Copilot, and C2 positions configured to communicate on CONF1 and CONF2?
What actions are required to adjust VOX and ICS volume?
What effect does operation of the ICS Call feature have on internal and external communications?

PILOT PERFORMANCE MANUAL

BASIC OPERATOR TASKS

.

SECTION 2 .

.

TASK OBJECTIVES

2-14

10.15 Configure the Pilot, Copilot, and C2 Communication System.
Identify and explain the following communication menu items: V/UHF1, V/UHF2, HF/C2, CHAN, VOL, SONO, KY–58, Back–up Radio, and Emergency.
What actions are required to tune the V/UHF1, V/UHF2, and HF Radio?
What actions are required to program preset frequencies into the channel menu?

What actions are required to tune the V/UHF1 or V/UHF2 radio using preset channels?
What actions are required to adjust radio volumes using the volume and SONO menus?
What situations will cause the back–up radio to become active?
What effect does the back–up radio activation have on internal and external communication system configuration and operation?
What actions are required to activate the emergency radio?
What effect does emergency radio activation have on the communications configuration?
What actions are required to deactivate the emergency radio?
10.16 Communicate on the V/UHF1, V/UHF2, and HF Radios.
What actions are required to transmit and/or monitor the V/UHF1, V/UHF2, and HF Radios?
What are correct voice radio communications procedures?
How are communications established with a unit?

TASK OBJECTIVES

2-15
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 11.0 Perform External Power/Air Start
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and mission assignment, **PERFORM** an external power/air start in accordance with the flight manual.

_____
Enabling Objectives:
11.1 Identify all equipment, controls, and indicators listed in the flight manual PCL Start Checklist.
Identify, locate and explain the function of each piece of equipment, control, or indicator.
11.2 Perform from memory each action when cued.
What action is to be taken for each cue?
11.3 Recognize incorrect aircraft performance.
What is the correct indication for each item evaluated on the Start Checklist?
11.4 Recognize incorrect crew response to each item on the Start Checklist.
What is the correct crew response to each item on the Start Checklist?
11.5 Obtain assistance from maintenance personnel in evaluating suspected discrepancies.
When should assistance be obtained?
How is assistance obtained?
Who has the authority to say that the system is OK or not?
11.6 Evaluate readiness of aircraft for completion of checklist.
What invalid system checks will terminate the mission?

TASK OBJECTIVES

2-16
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 12.0 Perform Special Procedures Checklists
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and mission assignment, **PERFORM** the designated Special Procedures Checklists and **EVALUATE** readiness of aircraft in accordance with
the flight manual.

_____

Note: Special Procedures Checklists include the following:
A. Lockpin Status Check
B. Blade Spread Checklist
C. Cargo Hook Operational Check
D. Blade De–Ice System Check
E. Anti–Ice Check
F. HIT Check
G. Blade Fold Checklist
H. Accelerometer Null Procedures
I. Buddy Start
J. Power Available Check
Enabling Objectives:
12.1 Identify all equipment, controls, and indicators listed in the flight manual PCL Special Procedures Checklists.
Identify, locate and explain the function of each piece of equipment, control, or indicator.
12.2 Perform from memory each action when cued.
What action is to be taken for each cue?
12.3 Recognize incorrect aircraft performance.
What is the correct indication for each item evaluated on the designated Special Procedures Checklist?
12.4 Recognize incorrect crew response to each item on the designated Special Procedures Checklist.
What is the correct crew response to each item on the designated Special Procedures Checklist?
12.5 Obtain assistance from maintenance personnel in evaluating suspected discrepancies.
When should assistance be obtained?
How is assistance obtained?
Who has the authority to say that the system is OK or not?
12.6 Evaluate readiness of aircraft for completion of the designated Special Procedures Checklist.
What invalid system checks will terminate the mission?

TASK OBJECTIVES

2-17
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 13.0 Perform Before Taxi Checklist
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and a mission assignment, **PERFORM** the Before Taxi Checklist in accordance with the flight manual.

_____

Enabling Objectives:
13.1 Identify all equipment, controls, or indicators listed in the flight manual PCL Before Taxi Checklist.
What does each piece of equipment, control, or indicator look like?
Where is each piece of equipment, control, or indicator located?
What is the function of each piece of equipment, control, or indicator?
13.2 Perform from memory each action when cued.
What action is to be taken for each cue?
13.3 Recognize incorrect aircraft performance.
What is the correct indication for each item evaluated on the Taxi Checklist?
13.4 Recognize incorrect crew response to each item on the Before Taxi Checklist.
What is the correct crew response to each item on the Before Taxi Checklist?
13.5 Obtain assistance from maintenance personnel in evaluating suspected aircraft discrepancies when

necessary.
When should assistance be obtained?
How is assistance obtained?
Who has the authority to say that the system is OK or not?
13.6 Evaluate readiness of aircraft for taxi.
What invalid system checks will terminate the mission?

TASK OBJECTIVES
2-18
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 14.0 Perform Ground Taxi
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and a mission assignment, **PERFORM** taxi in accordance with the flight manual and ATC standards.

Enabling Objectives:
14.1 Check area around and in front of aircraft.
What are the ground clearance, slope limits, and obstruction clearance limits for ground taxi?
14.2 Respond correctly to taxi signals.
What are the taxi signals?
What is the correct response to each?
What . publication contains ground taxi signals?
14.3 Check brakes.
What is a brake check?
What is the procedure for checking brakes?
14.4 Maintain appropriate taxi speed.
What is appropriate taxi speed?
14.5 Follow correct taxi route.
What is the correct taxi route?
How are taxi routes normally marked?
14.6 Coordinate pedals and cyclic in direction of turn.
What is the procedure for coordinating the pedals and cyclic in the direction of turn?
Why are the pedals and cyclic coordinated in the direction of turn?
14.7 Maintain a constant speed.
What is the procedure for maintaining a constant taxi speed?
14.8 Maintain desired heading and track.
What is the procedure for maintaining a desired heading and track?
ATC STANDARDS:
Follow Flight Manual procedures without error; Perform smooth and safe operation of flight controls during taxi; Maintain desired heading and track.

TASK OBJECTIVES
2-19
UNIT: BASIC OPERATOR TASKS
JOB: Preflight Tasks
TASK: 15.0 Perform Before Takeoff Checklist
TRAINING OBJECTIVE: Given an .aircraft or simulator, a flight manual PCL, and a mission assignment,

PERFORM the Before Takeoff Checklist in accordance with the flight manual.

Enabling Objectives:
15.1 Identify all equipment, controls, or indicators listed in the flight manual PCL Before Takeoff Checklist.
What does each piece of equipment, control, or indicator look like?
Where is each piece of equipment, control, or indicator located?
What is the function of each piece of equipment, control, or indicator?
15.2 Perform from memory each action when cued.
What action is to be taken for each cue?
15.3 Recognize incorrect aircraft performance.
What is the correct indication for each item evaluated on the Before Takeoff Checklist?
15.4 Recognize incorrect crew response to each item on the Before Takeoff Checklist.
What is the correct crew response to each item on the Before Takeoff Checklist?
15.5 Obtain assistance from maintenance personnel in evaluating suspected aircraft discrepancies when necessary.
When should assistance be obtained?
How is assistance obtained?
Who has the authority to say that the system is OK or not?
15.6 Evaluate readiness of aircraft for takeoff.
What invalid system checks will terminate the mission?

TASK OBJECTIVES

2-20
UNIT: BASIC OPERATOR TASKS
JOB: Takeoff Tasks
TASK: 16.0 Perform Takeoff to Hover
TRAINING OBJECTIVE: Given an .aircraft, **PERFORM** a Takeoff To Hover in accordance with the flight
manual and ATC standards.

Enabling Objectives:
16.1 Adjust collective full down then center cyclic slightly aft of neutral.
Why center cyclic slightly aft of neutral?
How do SAS1, SAS2, Trim, and Autopilot assist in controlling flight attitude?
How does boost servo pressure assist in controlling flight attitude?
How does the flight control interaction of the mixing unit assist in controlling flight attitude?
How are pitch and roll attitude trim changes made?
How are collective trim changes made?
How are pedal trim changes made?
16.2 Increase collective with smooth, positive pressure.
How much and how fast should collective increase be?
16.3 Coordinate pedal movement with collective position to maintain heading.
How is pedal movement with collective position coordinated?
16.4 Adjust for left roll tendency to prevent drift.
Why is there a left roll tendency?
16.5 Adjust collective, cyclic, and pedals for vertical ascent.
How are they adjusted?
16.6 Check for proper control response and aircraft CG.

How can proper control response be detected?
How can proper aircraft CG be detected?
16.7 Check system instruments.
What should system instrument indications be?
16.8 Check flight instruments.
What should flight instrument indications be?
16.9 Hover at desired altitude.
What is the procedure for hovering at a desired altitude?

16.10 Maintain appropriate hover altitude.
What is appropriate hover altitude?
16.11 Maintain takeoff heading.
How is takeoff heading maintained?
ATC STANDARDS:
Perform smooth, positive flight control inputs; Experience minimal drift or yaw; Maintain heading ± 5 degrees; Perform positive climb to 10 ±3 ft.

UNIT: BASIC OPERATOR TASKS
JOB: Hovering Tasks
TASK: 17.0 Perform Hovering Flight
TRAINING OBJECTIVE: Given an .aircraft, **PERFORM** hovering flight in accordance with the flight manual and ATC standards.

Enabling Objectives:
17.1 Take off.
What is the correct procedure for making a takeoff to hover?
17.2 Climb and stabilize at desired altitude.
What is the procedure for climbing vertically and stabilizing at a desired altitude?
What is the desired hover altitude?
What effect, if any, does aircraft weight have on desired hover altitude?
17.3 Hover while maintaining desired altitude, position, and heading.
What are appropriate outside visual cues to use while maintaining a hover?
At what attitude does the .hover in zero wind?
17.4 Turn and stabilize at desired heading.
What is the procedure for making a hovering turn?
What are the two ways the heading trim switch works?
What maximum turn rate limits apply?
17.5 Move in any direction horizontally and stabilize at new position.
What is the procedure for moving horizontally in any direction while maintaining heading and altitude?
17.6 Land from a hover.
What is the procedure for making a vertical landing from a hover?
ATC STANDARDS:
Note wind speed and direction prior to commencement of turns; Do not exceed controlled, constant

rate of turn, 30 degrees/sec turn; Maintain position over the spot and altitude 10 ± 3 ft.

TASK OBJECTIVES

2-23

UNIT: BASIC OPERATOR TASKS
JOB: Takeoff Tasks
TASK: 18.0 Perform Normal Takeoff
TRAINING OBJECTIVE: Given an .aircraft, **PERFORM** a Normal Takeoff in accordance with the flight manual and ATC standards.

Enabling Objectives:
18.1 Maintain hover altitude, position and heading.
How does one maintain a stable hover?
18.2 Apply forward cyclic to begin acceleration.
How much forward cyclic is appropriate?
How much acceleration is desirable?
18.3 Apply collective to begin climb.
How much collective is appropriate?
What rate of climb is desirable?
18.4 Anticipate and correct for nose tuck caused by airflow over the stabilator.
What is nose tuck?
What effect does stabilator programming have on controlling the flight attitude of the aircraft?
18.5 Increase power to achieve desired rate of climb.
What is maximum continuous power for the .aircraft?
18.6 Maintain ground track alignment with takeoff direction.
How is ground track maintained?
At what point during acceleration does the heading hold feature of the autopilot convert to coordinated turn control?
18.7 Maintain runway heading below 50 knots then trim aircraft.
How does the pilot trim the ball to center if necessary when the autopilot is maintaining coordinated turn control?
18.8 Maintain desired rate of climb.
What is desired rate of climb?
How is it maintained?
18.9 Maintain desired climb airspeed.
What is desired climb airspeed?
At what point during acceleration does the autopilot convert from pitch attitude hold to airspeed hold?

TASK OBJECTIVES

2-24

18.10 Maintain climb and acceleration parameters within Height/Velocity Performance Chart for Single Engine failure.
What are the safe speed/altitude combinations shown on the single engine failure Height/Velocity Performance Chart?
18.11 Maintain takeoff power until reaching desired climb airspeed.
What is takeoff power?
Why should it be maintained?

ATC STANDARDS:
Maintain hover altitude 10 ±3 ft, 5 to 8° nose down; Do not exceed 10°; Maintain takeoff power (approximately 15% above hover torque), not to exceed aircraft limits; Maintain takeoff heading until 50 knots, then center the ball.

PILOT PERFORMANCE MANUAL

BASIC OPERATOR TASKS

.

.