F-16 AIRCREW TRAINING DEVELOPMENT PROJECT

Contract No. F02604-79-C8875

F-16 TASK ANALYSIS CRITERION-REFERENCED OBJECTIVE AND OBJECTIVES HIERARCHY REPORT.

VOLUME IV.

DEVELOPMENT REPORT, No. 6,
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by

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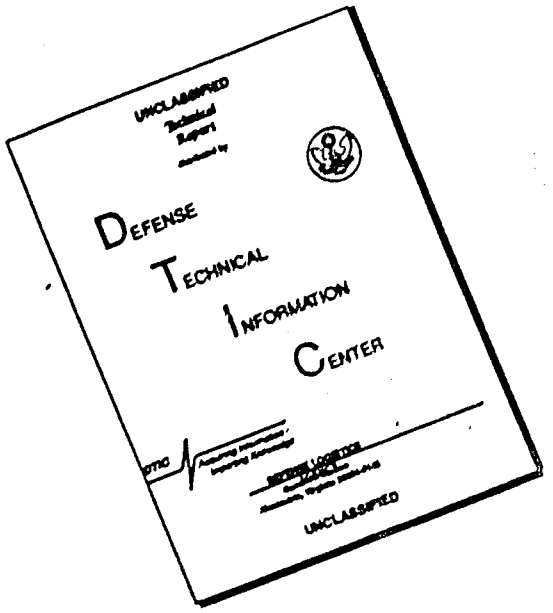

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1.8 Perform recovery [Hands-on]

1.8.1 Perform holding [Hands-on]

1.8.2 Determine type of approach to be flown (E) [Hands-on]

1.8.2.1 Name the varieties of approaches and identify the situations where each may or should be employed with no omissions. [Academic]

1.8.3 Perform descent/before landing check [Hands-on]

1.8.3.1 Describe the steps in the procedure for descent/before landing check with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.4 Perform single ship recovery [Hands-on]

1.8.4.1 Perform single ship descent [Hands-on]

1.8.4.1.1 Perform VFR descent [Hands-on]

1.8.4.1.1.1 Describe the steps in the procedure for VFR descent with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.4.1.2 Perform radar enroute (profile/STAR) descent [Hands-on]

1.8.4.1.3 Perform max range (minimum fuel/emergency fuel) descent [Hands-on]

1.8.4.1.3.1 State procedure for max range (min fuel/emergency fuel) descent with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.4.2 Perform TACAN penetration [Hands-on]

1.8.4.3 Perform single ship approach [Hands-on]

1.8.4.3.1 Perform terminal area visual approach procedures [Hands-on]

1.8.4.3.1.1 Perform overhead traffic pattern [Hands-on]

1.8.4.3.1.1.1 Describe the steps in the procedure for overhead traffic pattern with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.4.3.1.2 Perform VFR straight-in approach [Hands-on]

1.8.4.3.1.2.1 Describe the steps in the procedure for VFR straight-in approach with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.4.3.1.3 Perform VFR go-around1. [Hands-on]

1.8.4.3.1.3.1 State the procedure for VFR go-around with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.4.3.1.4 Perform closed pattern [Hands-on]

1.8.4.3.1.4.1 Describe the steps in the procedure for closed pattern with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.4.3.1.5 Perform VFR reentry [Hands-on]

1.8.4.3.1.5.1 Describe the procedure for VFR reentry. [Academic]

1.8.4.3.2 Perform terminal area approach procedures in weather [Hands-on]

1.8.4.3.2.1 Perform TACAN approach [Hands-on]

1.8.4.3.2.2 Perform ILS approach [Hands-on]

1.8.4.3.2.3 Perform 'localizer only' approach straight in [Hands-on]

1.8.4.3.2.4 Perform GCA approach [Hands-on]

1.8.4.3.2.4.1 Perform ASR approach [Hands-on]

1.8.4.3.2.4.2 Perform PAR approach [Hands-on]

1.8.4.3.2.5 Perform circling approach [Hands-on]

1.8.4.3.2.6 Perform airborne radar approach [Hands-on]

1.8.4.3.2.6.1 Describe the steps in the procedure for airborne radar approach with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.4.3.2.7 Perform missed approach [Hands-on]

1.8.4.3.2.8 Perform instrument patterns [Hands-on]

1.8.5 Perform formation recovery [Hands-on]

1.8.5.1 Perform formation recovery - lead [Hands-on]

1.8.5.1.1 Describe the steps in the procedure for formation recovery - lead with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.5.2 Perform formation recovery - wing [Hands-on]

1.8.5.2.1 Describe the steps in the procedure for formation recovery - wing with the associated notes, cautions, warnings, tolerances, and limits with no omissions. [Academic]

1.8.5.3 Describe procedures for formation recovery IAW applicable directives. [Academic]

1.8.6 Perform visual tactical recovery [Hands-on]

1.8.6.1 State the considerations for performing tactical recovery (during periods of anticipated base attack) with no omissions without error. (C) [Academic]

1.8.7 Perform recovery with emergency/degraded conditions [Hands-on]

1.8.7.1 Perform recovery with degraded flight instruments [Hands-on]

1.8.7.1.1 Given a scenario containing recovery with degraded flight instruments identify specific problems and describe actions to be taken in correct order with no omissions. [Academic]

1.8.7.1.1.1 Describe the flight instruments in the F-16A and F-16B aircraft [Academic]

1.8.7.1.1.2 List with no omissions and describe without error the components and/or functions the flight instruments, including as appropriate the sequence and modes of internal and external operation. [Academic]

1.8.7.1.1.3 Given a photograph or drawing of the aircraft cockpit, locate and describe the functions and manipulation of each control that directly affects the flight instruments without error. [Academic]

1.8.7.1.1.4 Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the flight instruments without error. [Academic]

1.8.7.1.1.5 State the possible modes of flight instruments degradation, and describe their causes and consequences without error. [Academic]

1.8.7.1.1.6 List with no omissions and describe without error any features of the flight instrument in the F-16B that differ or are in addition to those in the F-16A. [Academic]

1.8.7.2 Perform gyro-out approach [Hands-on]

1.8.7.2.1 Describe the steps in the procedure for gyro-out approach with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.7.3 Perform recovery using primary panel instruments (HUD out) [Hands-on]

1.8.7.3.1 Describe the steps in the procedure for recovery using primary panel instruments (HUD out) with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.7.4 Perform recovery using standby ADI/compass [Hands-on]

1.8.7.4.1 Describe the steps in the procedure for recovery using standby ADI/compass with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.8.7.5 Perform approach with flight control system malfunction/degraded handling characteristics. [Hands-on]

1.8.7.5.1 Describe the steps in the procedure for recovery with flight control system malfunction/degraded landing characteristics with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.7.6 Perform approach with asymmetric stores [Hands-on]

1.8.7.6.1 Describe the steps in the procedure for approach with asymmetric stores with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.7.7 Perform (simulated) flameout approach [Hands-on]

1.8.7.7.1 Describe the steps in the procedure for flameout with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.8.7.7.2 Describe situations where flameout approach may/should be employed without error. [Academic]

1.8.8 Describe local area approach procedures IAW local area directives. [Academic]

RECOVERY
1.8 CRITERION-REFERENCED OBJECTIVES

Tasks Without CROs

1.8.4.1
1.8.4.3.1
1.8.4.3.2
1.8.4.3.2.1
1.8.4.3.2.4
1.8.7.1

TASK NO.: 1.8

BEHAVIOR: Perform recovery

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.1

BEHAVIOR: Perform holding

CONDITION:

Agency: ARTCC
Information source for: Clearance to enter holding pattern

Manuals and pubs: None
Information source for: N/A

Activity: Recovery

External environment: IMC

Aids: Terminal FLIP

Product of previous task: None

Initiation cues: TACAN bearing/DME
Systems presenting cues: TACAN

STANDARD:

Authority: 60-2 Vol III, TBD

Performance precision: +/1 200 FT; +/- 5% airspeed; +/-2 miles point to point

Computational accuracy: N/A

TASK NO.: 1.8.2

BEHAVIOR: Determine type of approach to be flown (E)

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.3

BEHAVIOR: Perform descent/before landing check

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1 checklist
Information source for: Required checks

Activity: Recovery

External environment: IMC/VMC

Aids: None

Product of previous task: None

Initiation cues: Prior to descent
Systems presenting cues: N/A

STANDARD:

Authority: -1

Performance precision: 100% accuracy

Computational accuracy: N/A

TASK NO.: 1.8.4.1.1

BEHAVIOR: Perform VFR descent

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform single ship descent

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues: N/A
Systems presenting cues: TACAN, REO

STANDARD:

Authority: -1

Performance precision: +/- 300 FT; +/- 5% airspeed; +/- 5° heading

Computational accuracy: N/A

TASK NO.: 1.8.4.1.2

BEHAVIOR: Perform radar enroute (profile/STAR) descent

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform single ship descent

External environment: IMC

Aids: None

Product of previous task: None

Initiation cues: On direction of ARTCC
Systems presenting cues: Communications, REO

STANDARD:

Authority: 60-2, Vol III

Performance precision: +/- 200 FT; +/- 5% airspeed; +/- 2 miles TACAN fix

Computational accuracy: N/A

TASK NO.: 1.8.4.1.3

BEHAVIOR: Perform max range (minimum fuel/emergency fuel) descent

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CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform single ship descent

External environment: N/A

Aids: None

Product of previous task: Employ home mode (enroute)

Initiation cues: A long ways to go and not much gas to do it in
Systems presenting cues: Fuel

STANDARD:

Authority: -1

Performance precision: +/- 10 Knots

Computational accuracy: N/A

TASK NO.: 1.8.4.2

BEHAVIOR: Perform TACAN penetration

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform single ship recovery

External environment: IMC

Aids: None

Product of previous task: N/A

Initiation cues: When over IAF
Systems presenting cues: TACAN, naviagation and navigation aids

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STANDARD:

Authority: -1; 60-2

Performance precision: +/- 200 FT; +/- 5% airspeed; +/- 5° heading; +/- 500 FPM VVI

Computational accuracy: N/A

TASK NO.: 1.8.4.3.1

BEHAVIOR: Perform terminal area visual approach procedures

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.4.3.1.1

BEHAVIOR: Perform overhead traffic pattern

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform terminal area visual approach procedures

External environment: VMC

Aids: None

Product of previous task: N/A

Initiation cues: When overfly end of runway
Systems presenting cues: N/A

STANDARD:

Authority: 60-2, Vol. III

Performance precision: +/- .5 AOA; +/- 200 FT; +/- 5° runway alignment

Computational accuracy: N/A

TASK NO.: 1.8.4.3.1.2

BEHAVIOR: Perform VFR straight-in approach

CONDITION:

Agency: ATC
Information source for: Direction

Manuals and pubs: None
Information source for: N/A

Activity: Perform terminal area visual approach procedures

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues: On direction from ATC
Systems presenting cues: Communications

STANDARD:

Authority: *60-2, Vol. III*

Performance precision: +/- .5 AOA; +/- 200 FT; +/- 5° N/A heading

Computational accuracy: N/A

TASK NO.: 1.8.4.3.1.3

BEHAVIOR: Perform VFR go-around

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1
Information source for: Procedures

Activity: Perform terminal area visual approach procedures

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues:
Systems presenting cues:

STANDARD:

Authority: 60-2 and -1

Performance precision: TBD

Computational accuracy: N/A

TASK NO.: 1.8.4.3.1.4

BEHAVIOR: Perform closed pattern

CONDITION:

Agency: Tower
Information source for: Approval

Manuals and pubs: None
Information source for: N/A

Activity: Perform terminal area visual approach procedures

External environment: VMC

Aids: None

Product of previous task: Perform overhead traffic pattern, perform VFR go-around

Initiation cues: On reaching departure end of runway, or as directed by controlling agency
Systems presenting cues: HUD

STANDARD:

Authority: 60-2

Performance precision: +/- 5 AOA; +/- 200 FT

Computational accuracy: N/A

TASK NO.: 1.8.4.3.1.5

BEHAVIOR: Perform VFR reentry

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.4.3.2

BEHAVIOR: Perform terminal area approach procedures in weather

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CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.4.3.2.1

BEHAVIOR: Perform TACAN approach

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1, Terminal FLIP
Information source for: Procedures

Activity: Perform terminal area approach procedures in weather

External environment: IMC

Aids: None

Product of previous task: Perform TACAN penetration

Initiation cues: At FAF
Systems presenting cues: TACAN, navigation and navigation aids

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STANDARD:

Authority: 60-2, Vol. III

Performance precision: +/- 5% airspeed; +/- 200 FT; +/- 5° heading

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.2

BEHAVIOR: Perform ILS approach

CONDITION:

Agency: ATC
Information source for: Clearance

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform terminal area approach procedures in weather

External environment: IMC

Aids: None

Product of previous task: Perform radar enroute descent

Initiation cues:
Systems presenting cues: HUD, ILS, TACAN, navigation and navigation aids

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STANDARD:

Authority: 60-2, Vol III

Performance precision: +/- AOA; +/- 1 dot tolerance

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.3

BEHAVIOR: Perform "localizer only" approach straight in

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: Terminal Flip
Information source for: Procedures

Activity: Performe terminal area approach procedures in weather

External environment: IMC

Aids: None

Product of previous task: Perform radar enroute descent

Initiation cues: Glide slope unavailable or unreliable
Systems presenting cues: Navigation and navigation aids

STANDARD:

Authority: 60-2, Flip

Performance precision: +/-.5 AOA; -50 +100 at FT MDA; 1 dot tolerance

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.4.1

BEHAVIOR: Perform ASR approach

CONDITION:

Agency: ASR
Information source for: Direction

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform GCA approach

External environment: IMC

Aids: None

Product of previous task: Perform radar enroute descent

Initiation cues: On direction of ASR controller
Systems presenting cues: TACAN, Communications

STANDARD:

Authority: 60-2, Vol. III

Performance precision: MDA -50 +100 FT; +/- .5 AOA

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.4.2

BEHAVIOR: Perform PAR approach

CONDITION:

Agency: ARTCC
Information source for: Direction

Manuals and pubs: -1, terminal FLIP
Information source for: Procedures

Activity: Perform GCA approach

External environment: IMC

Aids: None

Product of previous task: Perform radar enroute descent

Initiation cues: On direction of ARTCC
Systems presenting cues: Communications

STANDARD:

Authority: FAA, 60-2

Performance precision: +/- .5 AOA; +100 -50 FT altitude at DH

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.5

BEHAVIOR: Perform circling approach

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform terminal area approach procedures in weather

External environment: VMC

Aids: None

Product of previous task: Perform TACAN approach

Initiation cues: Upon accomplishment of non-precision instrument approach
Systems presenting cues: TACAN

STANDARD:

Authority: 60-2

Performance precision: +/- 15 Knots -0; +/- 200 FT; +/- .5 mile

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.6

BEHAVIOR: Perform airborne radar approach

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform terminal area approach in weather

External environment: VMC, IMC

Aids: None

Product of previous task: N/A

Initiation cues: N/A
Systems presenting cues: REO, TACAN

STANDARD:

Authority: 55-16

Performance precision: +/- .5 AOA; +/- 5^{o} arming alignment; +100 -50 FT

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.7

BEHAVIOR: Perform missed approach

CONDITION:

Agency: ATC
Information source for: Instructions, clearance

Manuals and pubs: Terminal FLIP
Information source for: Procedures

Activity: Perform terminal area approach in weather

External environment: IMC

Aids: None

Product of previous task: Perform TACAN approach; Perform ILS approach; Perform ASR approach; Preform PAR approach; Perform circling approach

Initiation cues: MAP or DH is reached and runway enviornment is not in sight, or unable to make a safe landing, or directed by controlling agency
Systems presenting cues: HUD, REO, TACAN, ILS, navigation and navigation aids

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STANDARD:

Authority: 60-2

Performance precision: +100 -50 FT; .5 AOA; +/- .5 NM

Computational accuracy: N/A

TASK NO.: 1.8.4.3.2.8

BEHAVIOR: Perform instrument patterns

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.5

BEHAVIOR: Perform formation recovery

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.5.1

BEHAVIOR: Perform formation recovery - lead

CONDITION:

Agency: GCA
Information source for:

Manuals and pubs: None
Information source for: N/A

Activity: Perform formation recovery

External environment: IMC, VMC

Aids: None

Product of previous task: None

Initiation cues:
Systems presenting cues: TACAN, ILS

STANDARD:

Authority: 60-2, Vol III

Performance precision: +/- 300 FT; smooth control input

Computational accuracy: N/A

TASK NO.: 1.8.5.2

BEHAVIOR: Perform formation recovery - wing

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform formation recovery

External environment: IMC, VMC

Aids: None

Product of previous task: Preform fingertip formation; perform route formation

Initiation cues: Begin descent on direction from lead
Systems presenting cues: N/A

STANDARD:

Authority: 60-2, Vol III

Performance precision: Maintain position with only monentary deviations

Computational accuracy: N/A

TASK NO.: 1.8.6

BEHAVIOR: Perform visual tactical recovery

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform recovery

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.8.7.1

BEHAVIOR: Perform recovery with degraded flight instruments

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.8.7.1.1

BEHAVIOR: Perform gyro-out approach

CONDITION:

Agency: ATC
Information source for: Clearance/instructions

Manuals and pubs: None
Information source for: N/A

Activity: Perform recovery with degraded flight instruments

External environment: IMC

Aids: None

Product of previous task: None

Initiation cues: Loss or unreliablity of HDG information
Systems presenting cues: HUD, navigation and navigation aids

STANDARD:

Authority: 60-2

Performance precision: +/- .5 AOA; +100 -50 FT altitude at DH

Computational accuracy: N/A

TASK NO.: 1.8.7.1.2

BEHAVIOR: Perform recovery using primary panel instuments (HUD out)

CONDITION:

Agency: ATC
Information source for: Winds/clearance

Manuals and pubs: None
Information source for: N/A

Activity: Perform recovery with degraded flight instruments

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues: Hud Failure
Systems presenting cues: HUD

STANDARD:

Authority: 60-2

Performance precision: Same as normal landing

Computational accuracy: N/A

TASK NO.: 1.8.7.1.3

BEHAVIOR: Perform recovery using standby ADI/compass

CONDITION:

Agency: ATC
Information source for: Clearance and instructions

Manuals and pubs: None
Information source for: N/A

Activity: Perform recovery with degraded flight instruments

External environment: IMC

Aids: None

Product of previous task: N/A

Initiation cues: Loss of primary instruments
Systems presenting cues: Navigation and navigation aids

STANDARD:

Authority:

Performance precision: +/- .5 AOA; -50 +100 FT

Computational accuracy: N/A

TASK NO.: 1.8.7.2

BEHAVIOR: Perform approach with flight control system malfunction/degraded handling characteristices

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CONDITION:

Agency: ATC
Information source for: Winds/clearance

Manuals and pubs: -1
Information source for: Procedures

Activity: Perform recovery under emergency/degraded conditions

External environment: N/A

Aids: None

Product of previous task: Identify and respond to flight control system malfunction (enroute)

Initiation cues: Degraded handling characteristics
Systems presenting cues: Flight control

STANDARD:

Authority: -1

Performance precision: 100% accurracy

Computational accuracy: N/A

TASK NO.: 1.8.7.3

BEHAVIOR: Perform approach with asymmetric stores

CONDITION:

Agency: ATC
Information source for: Winds/clearance

Manuals and pubs: -1
Information source for: Restrictions

Activity: Perform recovery under emergency/degraded conditions

External environment: N/A

Aids: None

Product of previous task: Identify and accomplish flight with asymmetric stores

Initiation cues: Hung stores (asymmetric)
Systems presenting cues: SMS

STANDARD:

Authority: None

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.8.7.4

BEHAVIOR: Perform (simulated) flameout approach

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1
Information source for: Perform recovery under emergency/degraded conditions

Activity:

External environment: VMC

Aids: None

Product of previous task: Identify and respond to engine stall/stagnation; Identify and respond to engine failure (flameout); Respond to FUEL HOT caution light illumination

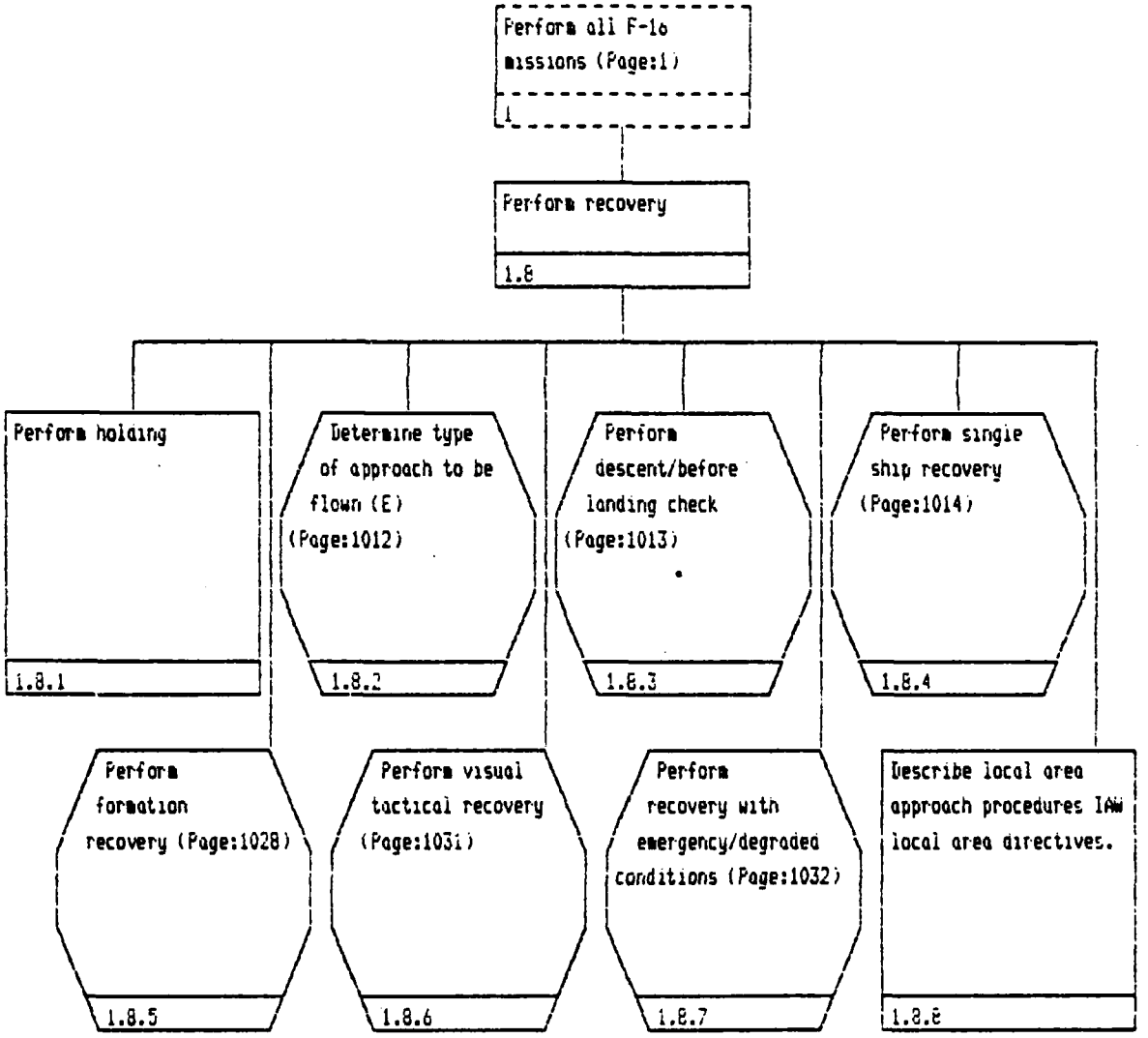
Initiation cues: Engine flameout
Systems presenting cues: Aircraft fuel, engine

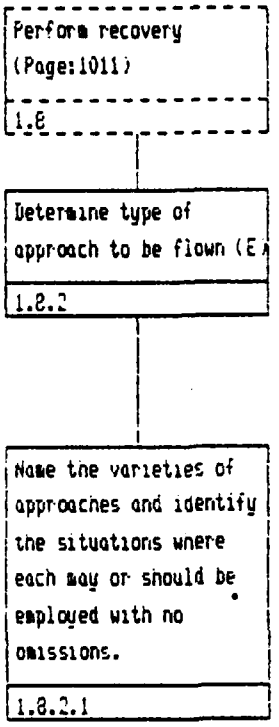
STANDARD:

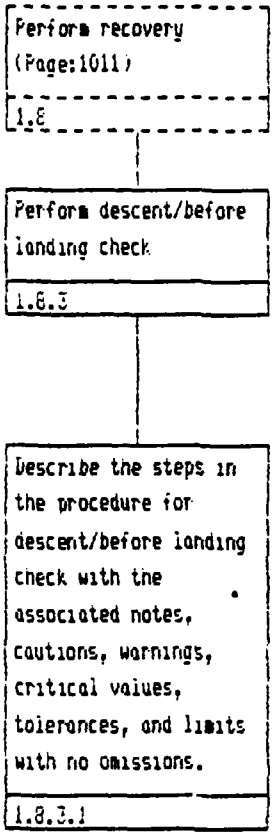
Authority: TACR 60-2

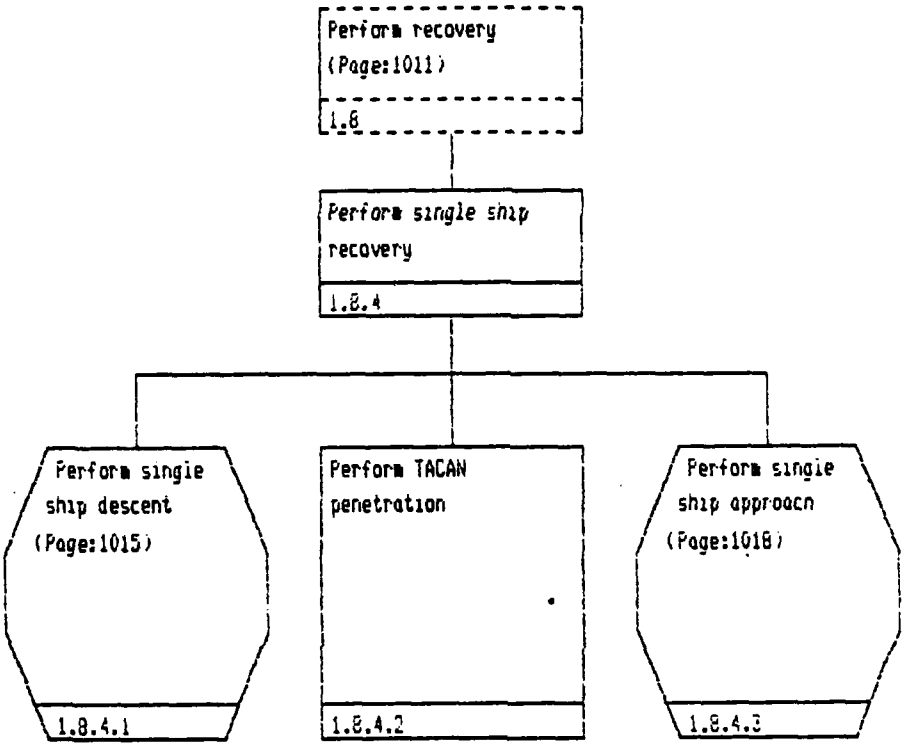
Performance precision: TD in first 1/3 of runway

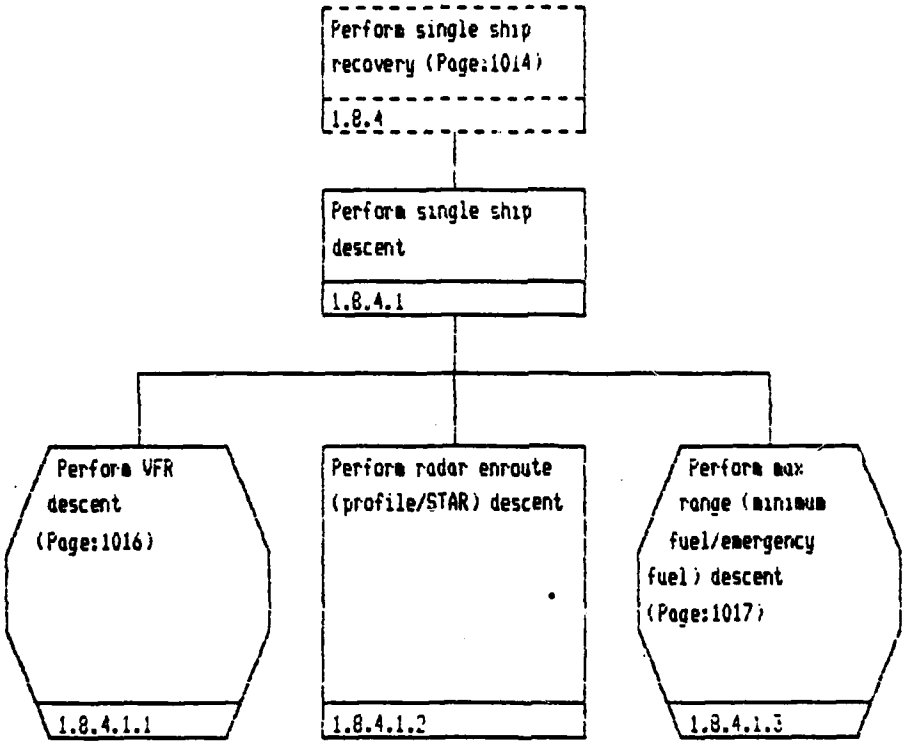
Computational accuracy: N/A

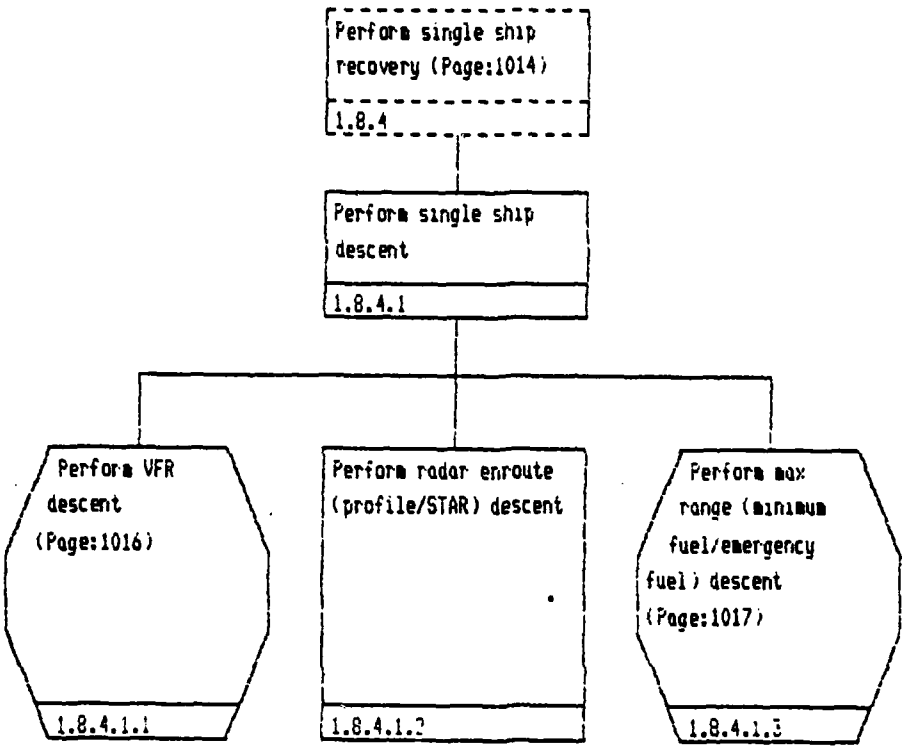

Perform all F-16 missions (Page:1)
1
Perform recovery
1.8
Perform holding
1.8.1
Determine type of approach to be flown (E) (Page:1012)
1.8.2
Perform descent/before landing check (Page:1013)
1.8.3
Perform single ship recovery (Page:1014)
1.8.4
Perform formation recovery (Page:1028)
1.8.5
Perform visual tactical recovery (Page:1031)
1.8.6
Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Describe local area approach procedures IAW local area directives.
1.8.8

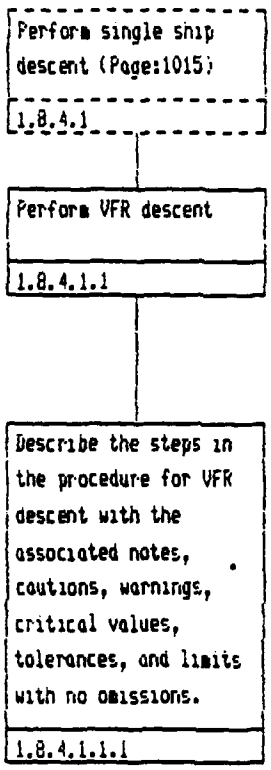

Perform recovery
(Page:1011)
1.8
Determine type of
approach to be flown (E
1.8.2
Name the varieties of
approaches and identify
the situations where
each may or should be
employed with no
omissions.
1.8.2.1

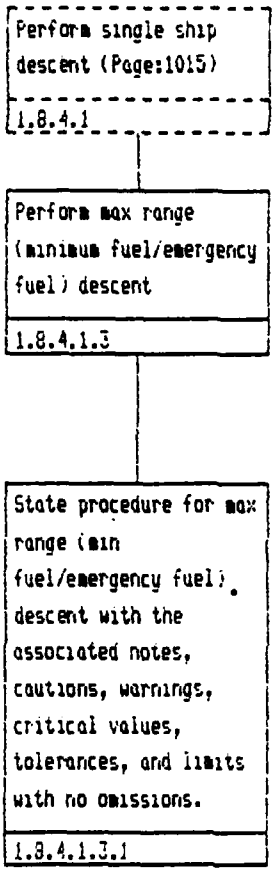

Perform recovery
(Page:1011)
1.8
Perform descent/before landing check
1.8.3
Describe the steps in the procedure for descent/before landing check with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.3.1

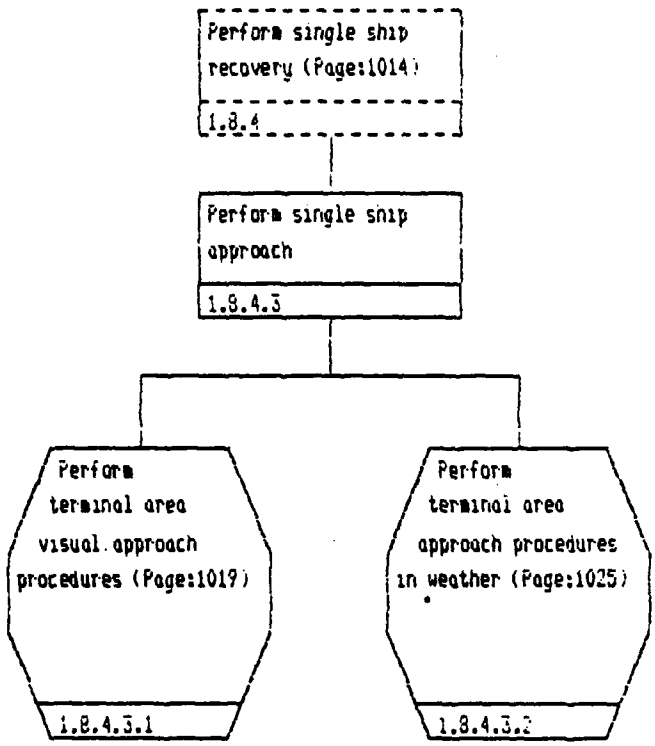

Perform recovery
(Page:1011)
1.8
Perform single ship recovery
1.8.4
Perform single ship descent
(Page:1015)
1.8.4.1
Perform TACAN penetration
1.8.4.2
Perform single ship approach
(Page:1018)
1.8.4.3

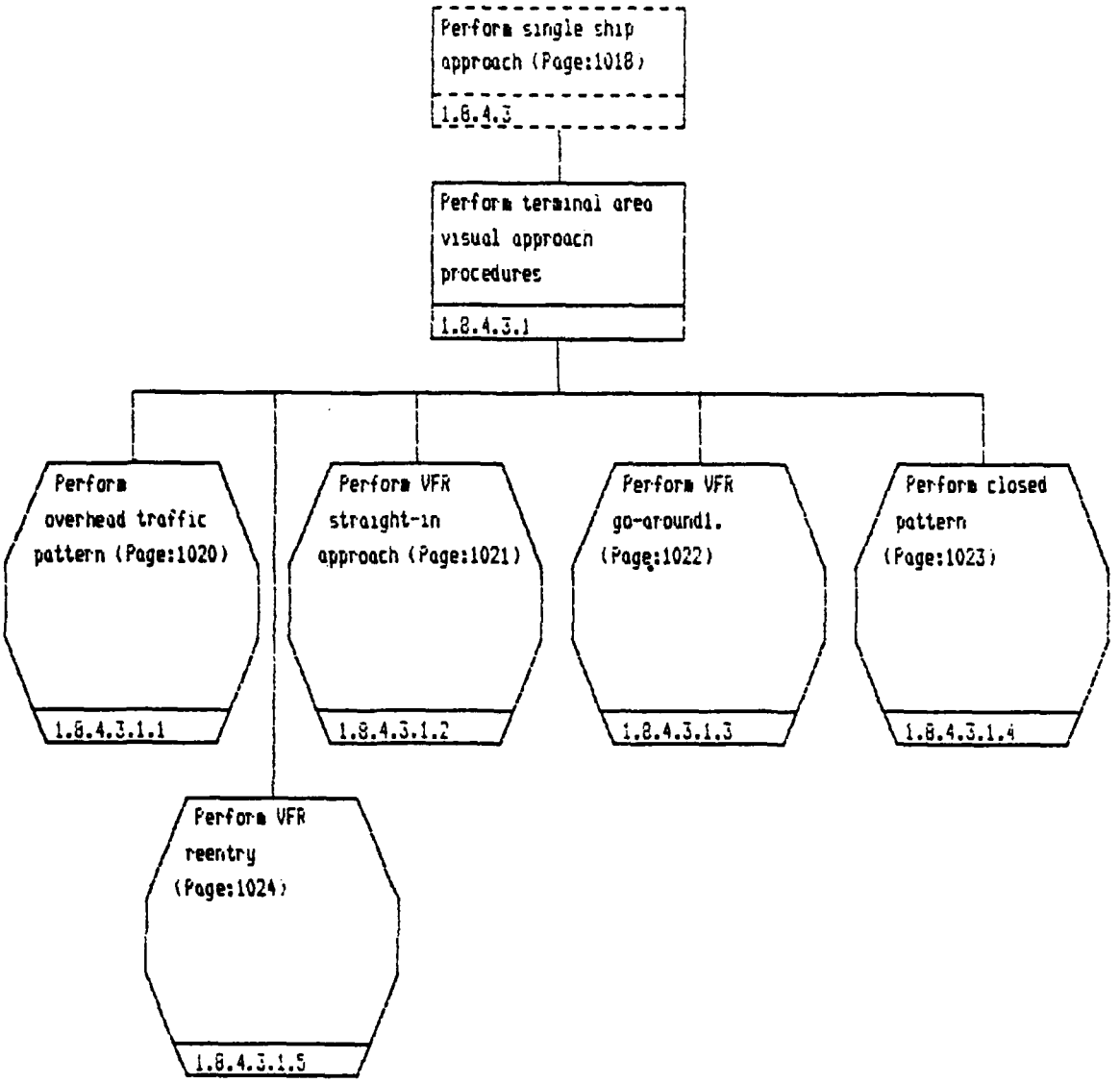

Perform single ship recovery (Page:1014)
1.8.4
Perform single ship descent
1.8.4.1
Perform VFR descent (Page:1016)
1.8.4.1.1
Perform radar enroute (profile/STAR) descent
1.8.4.1.2
Perform max range (minimum fuel/emergency fuel) descent (Page:1017)
1.8.4.1.3

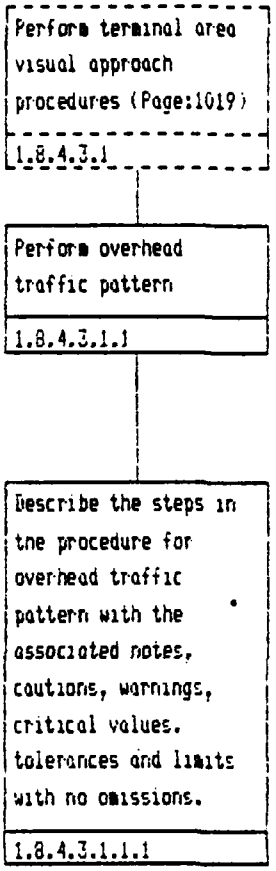

Perform single ship recovery (Page:1014)
1.8.4
Perform single ship descent
1.8.4.1
Perform VFR descent (Page:1016)
1.8.4.1.1
Perform radar enroute (profile/STAR) descent
1.8.4.1.2
Perform max range (minimum fuel/emergency fuel) descent (Page:1017)
1.8.4.1.3

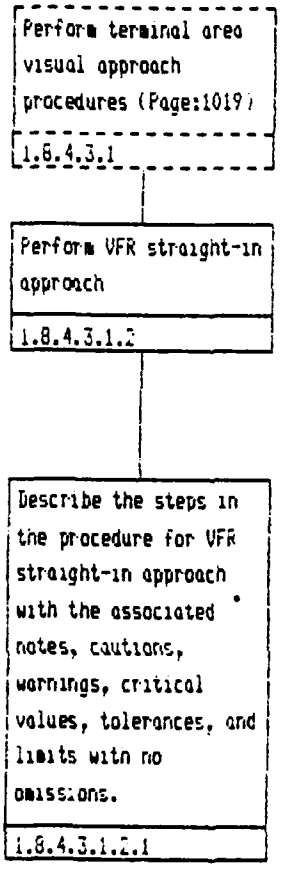

Perform single ship descent (Page:1015)
1.8.4.1
Perform VFR descent
1.8.4.1.1
Describe the steps in the procedure for VFR descent with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.4.1.1.1

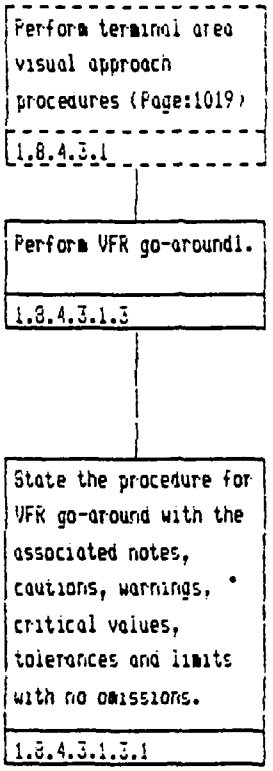

Perform single ship descent (Page:1015)
1.8.4.1
Perform max range (minimum fuel/emergency fuel) descent
1.8.4.1.3
State procedure for max range (min fuel/emergency fuel) descent with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.4.1.3.1

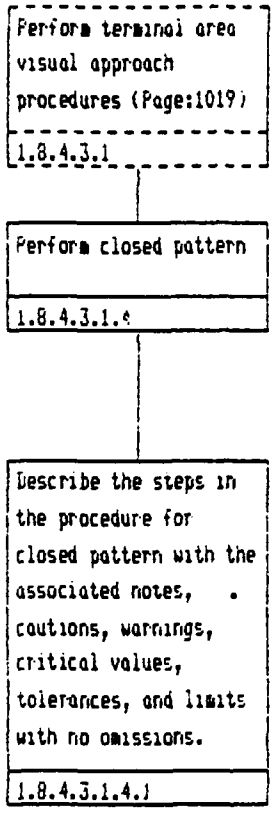

Perform single ship recovery (Page:1014)
1.8.4
Perform single ship approach
1.8.4.3
Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform terminal area approach procedures in weather (Page:1025)
1.8.4.3.2

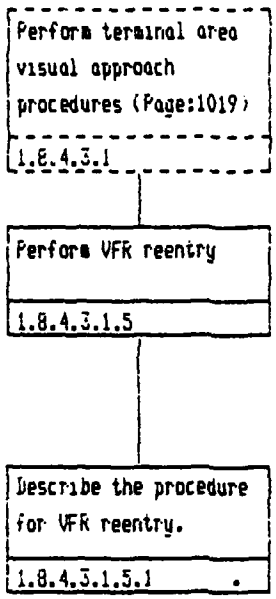

Perform single ship approach (Page:1018)
1.8.4.3
Perform terminal area visual approach procedures
1.8.4.3.1
Perform overhead traffic pattern (Page:1020)
1.8.4.3.1.1
Perform VFR straight-in approach (Page:1021)
1.8.4.3.1.2
Perform VFR go-around1. (Page:1022)
1.8.4.3.1.3
Perform closed pattern (Page:1023)
1.8.4.3.1.4
Perform VFR reentry (Page:1024)
1.8.4.3.1.5

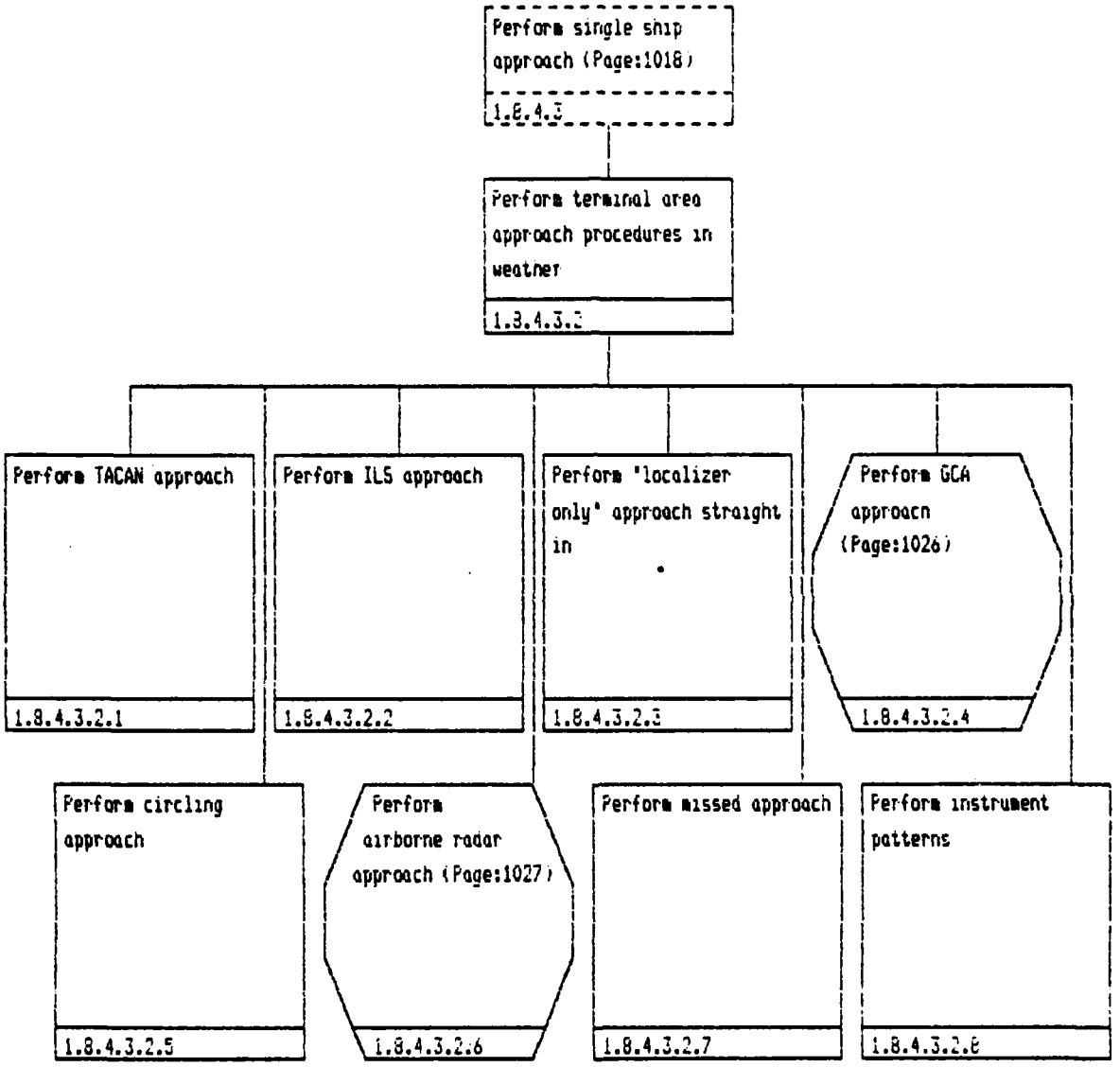

Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform overhead traffic pattern
1.8.4.3.1.1
Describe the steps in the procedure for overhead traffic pattern with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.4.3.1.1.1

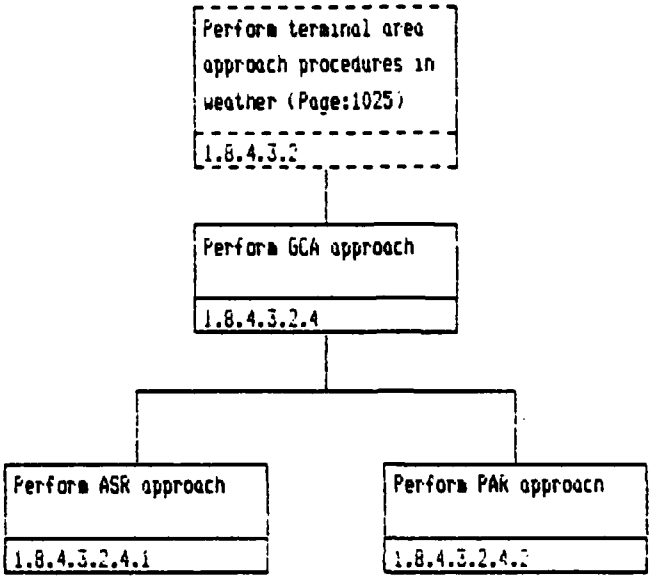

Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform VFR straight-in approach
1.8.4.3.1.2
Describe the steps in the procedure for VFR straight-in approach with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.4.3.1.2.1

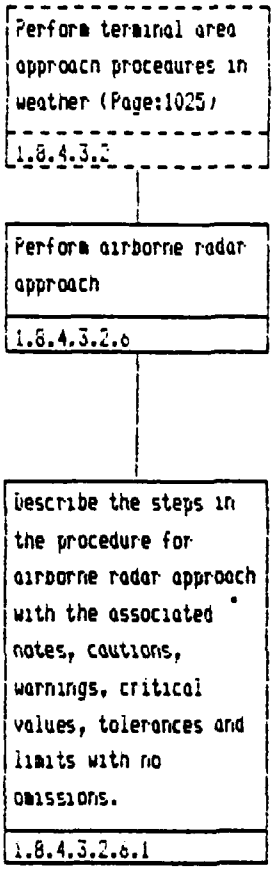

Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform VFR go-around1.
1.8.4.3.1.3
State the procedure for VFR go-around with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.4.3.1.3.1

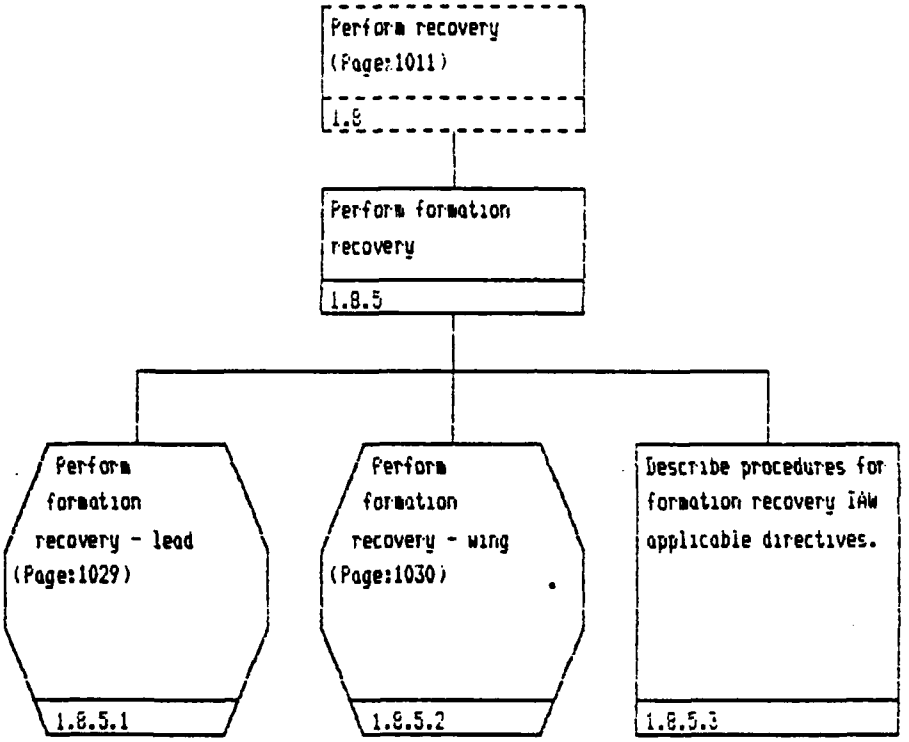

Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform closed pattern
1.8.4.3.1.4
Describe the steps in the procedure for closed pattern with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.4.3.1.4.1

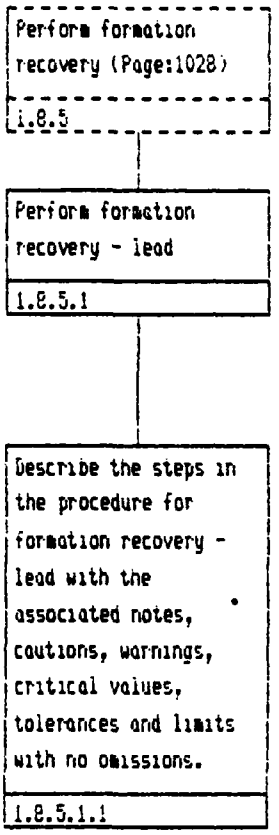

Perform terminal area visual approach procedures (Page:1019)
1.8.4.3.1
Perform VFR reentry
1.8.4.3.1.5
Describe the procedure for VFR reentry.
1.8.4.3.1.5.1

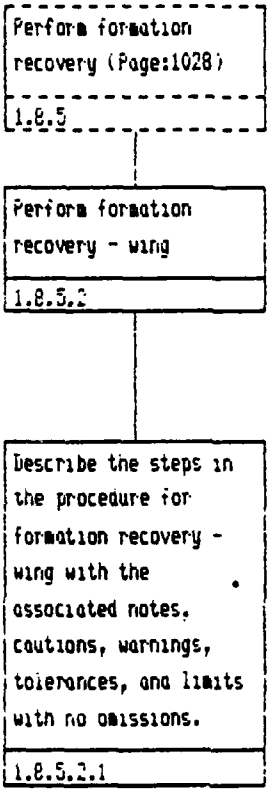

Perform single ship approach (Page:1018)
1.8.4.3
Perform terminal area approach procedures in weather
1.8.4.3.2
Perform TACAN approach
1.8.4.3.2.1
Perform ILS approach
1.8.4.3.2.2
Perform 'localizer only' approach straight in
1.8.4.3.2.3
Perform GCA approach (Page:1026)
1.8.4.3.2.4
Perform circling approach
1.8.4.3.2.5
Perform airborne radar approach (Page:1027)
1.8.4.3.2.6
Perform missed approach
1.8.4.3.2.7
Perform instrument patterns
1.8.4.3.2.8

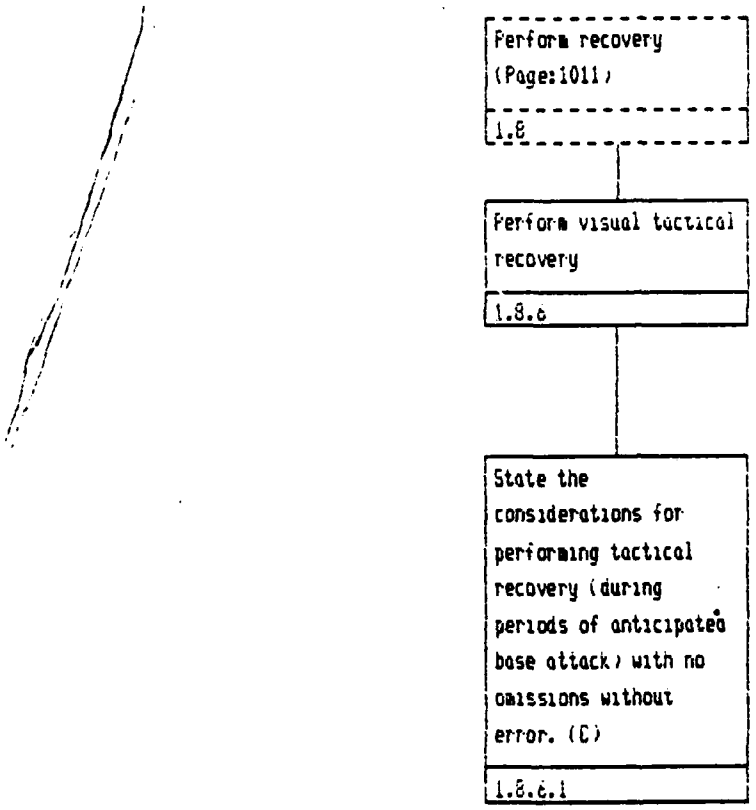

Perform terminal area approach procedures in weather (Page:1025)
1.8.4.3.2
Perform GCA approach
1.8.4.3.2.4
Perform ASR approach
1.8.4.3.2.4.1
Perform PAR approach
1.8.4.3.2.4.2

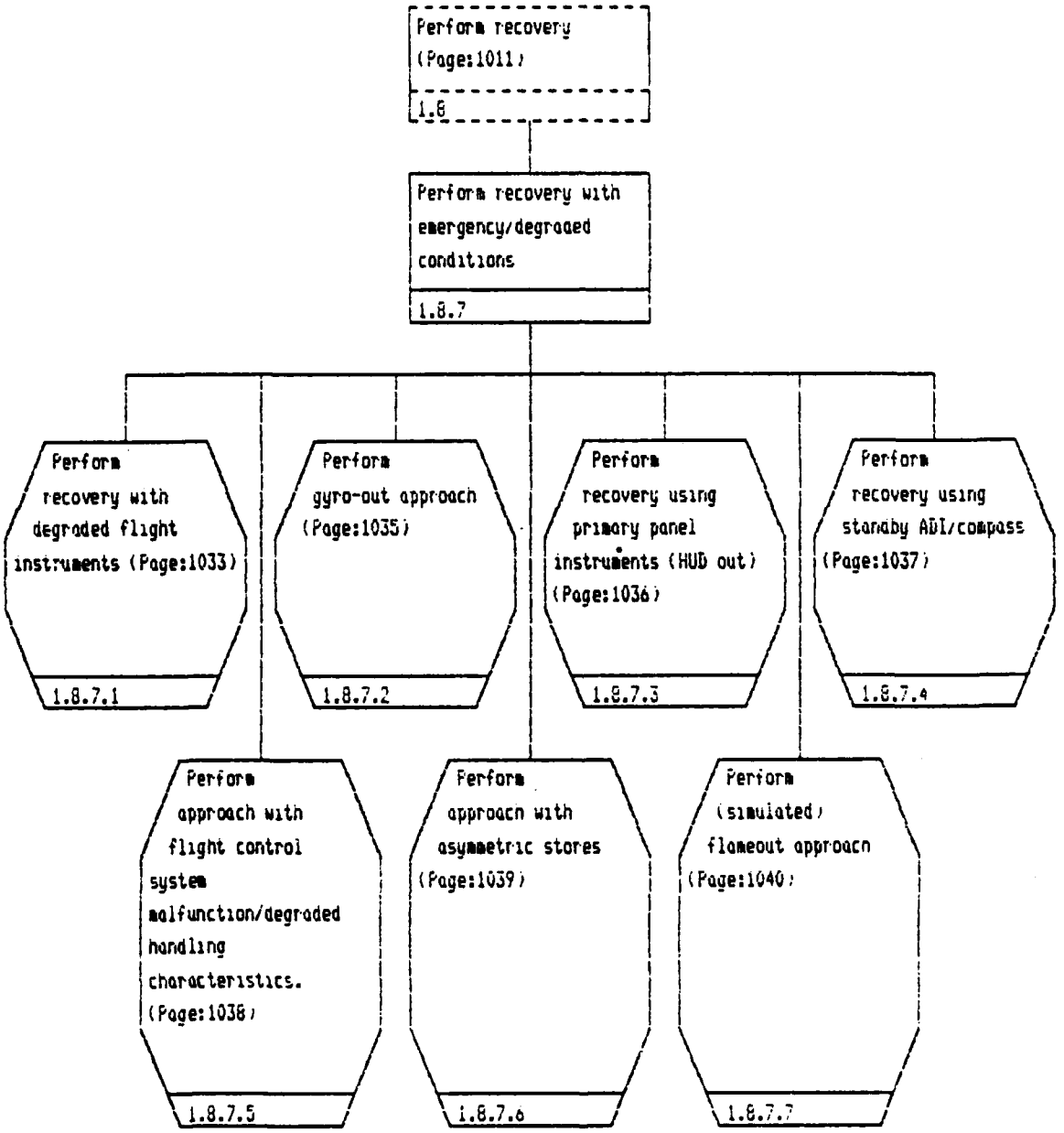

Perform terminal area approach procedures in weather (Page:1025)
1.8.4.3.2
Perform airborne radar approach
1.8.4.3.2.6
Describe the steps in the procedure for airborne radar approach with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.4.3.2.6.1

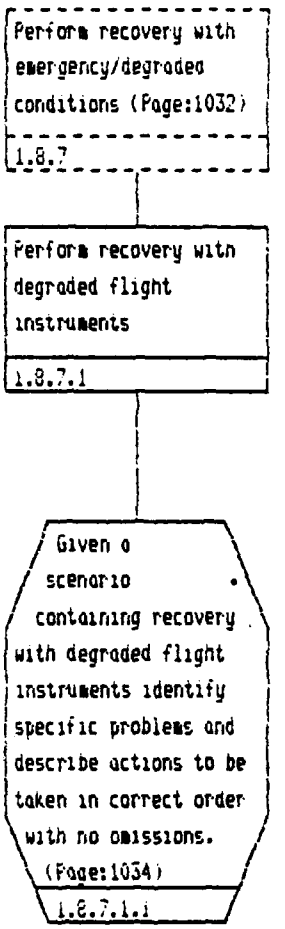

Perform recovery
(Page:1011)
1.8
Perform formation recovery
1.8.5
Perform formation recovery - lead
(Page:1029)
1.8.5.1
Perform formation recovery - wing
(Page:1030)
1.8.5.2
Describe procedures for formation recovery IAW applicable directives.
1.8.5.3

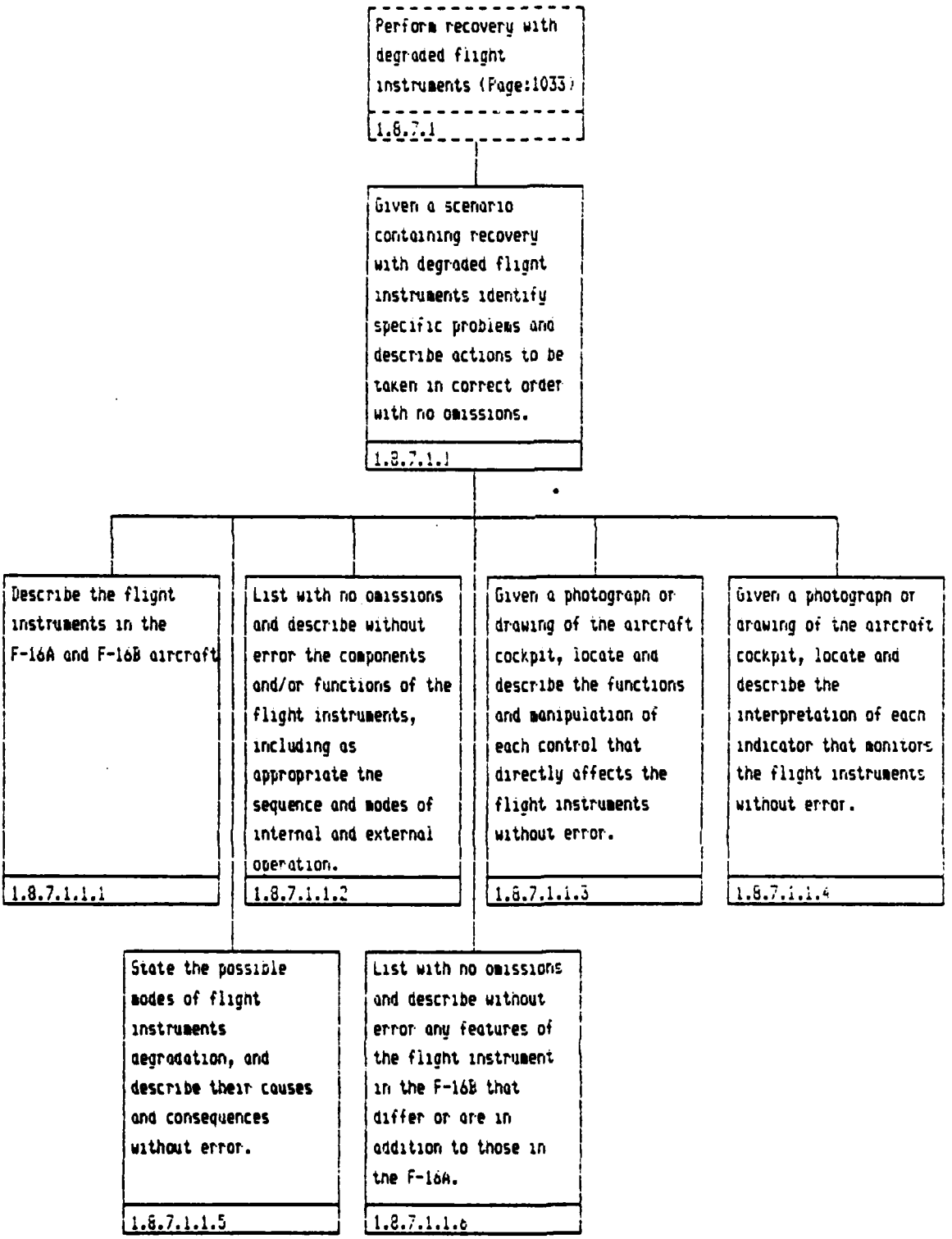

Perform formation recovery (Page:1028)
1.8.5
Perform formation recovery - lead
1.8.5.1
Describe the steps in the procedure for formation recovery - lead with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.5.1.1

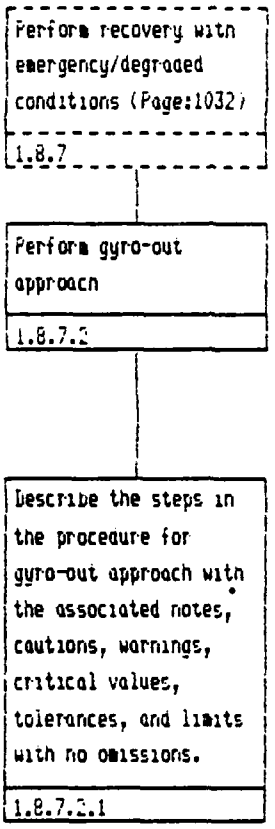

Perform formation recovery (Page:1028)
1.8.5
Perform formation recovery - wing
1.8.5.2
Describe the steps in the procedure for formation recovery - wing with the associated notes, cautions, warnings, tolerances, and limits with no omissions.
1.8.5.2.1

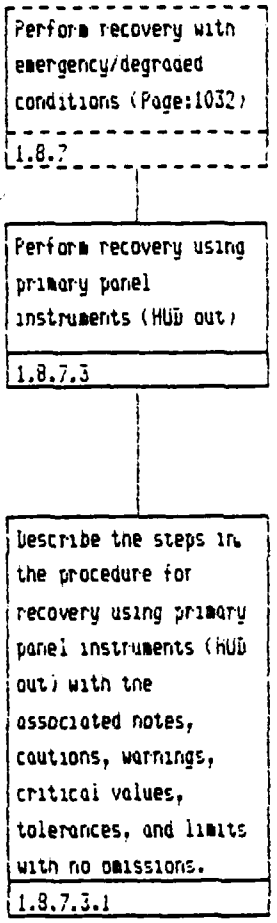

Perform recovery
(Page:1011)
1.8
Perform visual tactical recovery
1.8.6
State the considerations for performing tactical recovery (during periods of anticipated base attack) with no omissions without error. (C)
1.8.6.1

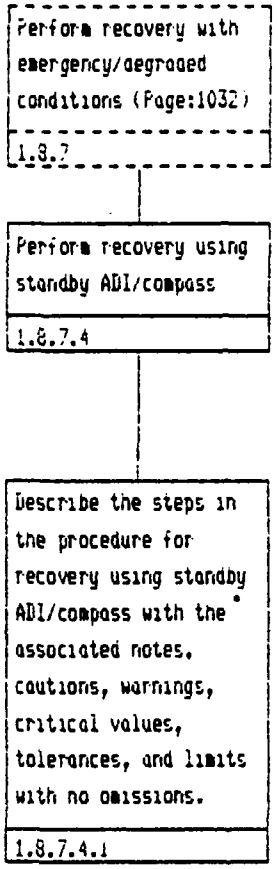

Perform recovery
(Page:1011)
1.8
Perform recovery with emergency/degraded conditions
1.8.7
Perform recovery with degraded flight instruments (Page:1033)
1.8.7.1
Perform gyro-out approach (Page:1035)
1.8.7.2
Perform recovery using primary panel instruments (HUD out) (Page:1036)
1.8.7.3
Perform recovery using standby ADI/compass (Page:1037)
1.8.7.4
Perform approach with flight control system malfunction/degraded handling characteristics. (Page:1038)
1.8.7.5
Perform approach with asymmetric stores (Page:1039)
1.8.7.6
Perform (simulated) flameout approach (Page:1040)
1.8.7.7

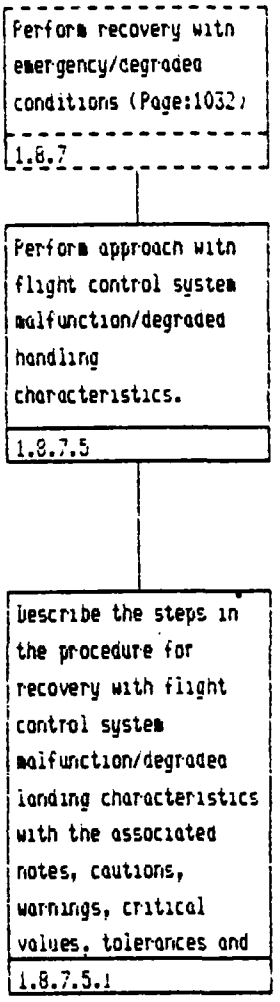

Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform recovery with degraded flight instruments
1.8.7.1
Given a scenario containing recovery with degraded flight instruments identify specific problems and describe actions to be taken in correct order with no omissions. (Page:1034)
1.8.7.1.1

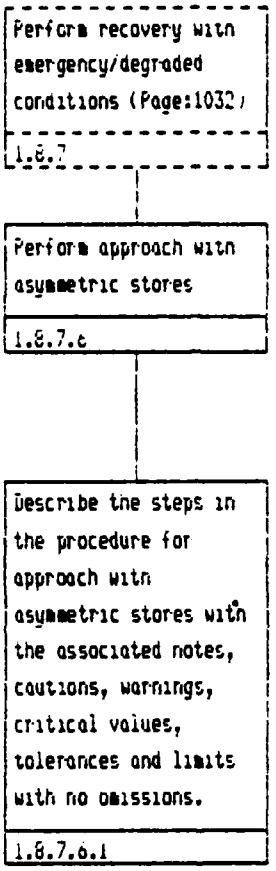

Perform recovery with degraded flight instruments (Page:1033)
1.8.7.1
Given a scenario containing recovery with degraded flight instruments identify specific problems and describe actions to be taken in correct order with no omissions.
1.8.7.1.1
Describe the flight instruments in the F-16A and F-16B aircraft
1.8.7.1.1.1
List with no omissions and describe without error the components and/or functions of the flight instruments, including as appropriate the sequence and modes of internal and external operation.
1.8.7.1.1.2
Given a photograph or drawing of the aircraft cockpit, locate and describe the functions and manipulation of each control that directly affects the flight instruments without error.
1.8.7.1.1.3
Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the flight instruments without error.
1.8.7.1.1.4
State the possible modes of flight instruments degradation, and describe their causes and consequences without error.
1.8.7.1.1.5
List with no omissions and describe without error any features of the flight instrument in the F-16B that differ or are in addition to those in the F-16A.
1.8.7.1.1.6

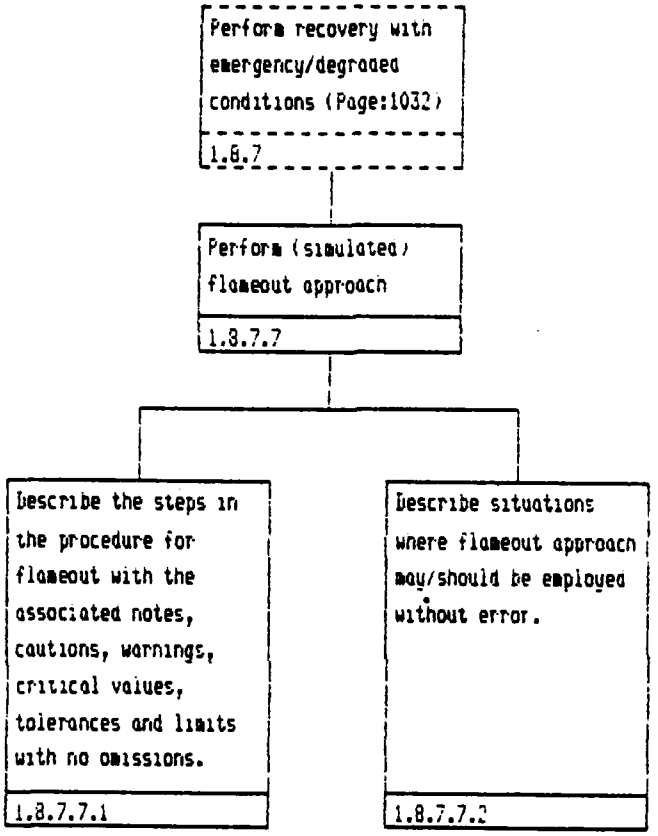

Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform gyro-out approach
1.8.7.2
Describe the steps in the procedure for gyro-out approach with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.7.2.1


Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform recovery using primary panel instruments (HUD out)
1.8.7.3
Describe the steps in the procedure for recovery using primary panel instruments (HUD out) with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.7.3.1


Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform recovery using standby ADI/compass
1.8.7.4
Describe the steps in the procedure for recovery using standby ADI/compass with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.8.7.4.1


Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform approach with flight control system malfunction/degraded handling characteristics.
1.8.7.5
Describe the steps in the procedure for recovery with flight control system malfunction/degraded landing characteristics with the associated notes, cautions, warnings, critical values, tolerances and
1.8.7.5.1


Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform approach with asymmetric stores
1.8.7.6
Describe the steps in the procedure for approach with asymmetric stores with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.7.6.1


Perform recovery with emergency/degraded conditions (Page:1032)
1.8.7
Perform (simulated) flameout approach
1.8.7.7
Describe the steps in the procedure for flameout with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.8.7.7.1
Describe situations where flameout approach may/should be employed without error.
1.8.7.7.2

1.9 Perform landing. [Hands-on]

1.9.1 Perform normal landing, including rollout. [Hands-on]

1.9.1.1 Describe the steps in the procedure for normal landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.1.1.1 System's workbook--AOA system. [Academic]

1.9.1.1.1.1 Describe the AOA system in the F-16A and F-16B aircraft. [Academic]

1.9.1.1.1.2 List with no omissions and describe without error the components and/or functions of the AOA system, including as appropriate the sequence and modes of internal and external operation. [Academic]

1.9.1.1.1.3 Given a photograph or drawing of the aircraft cockpit, locate and describe the function and manipulation of each control that directly affects the AOA system without error. [Academic]

1.9.1.1.1.4 Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the AOA system without error. [Academic]

1.9.1.1.1.5 State the possible modes of AOA system degradation, and describe their causes and consequences, without error. [Academic]

1.9.1.1.1.6 List with no omissions and describe without error any features of the AOA syste m in the F-16B that differ or are in addition to those in the F-16A. [Academic]

1.9.2 Perform formation landing. [Hands-on]

1.9.2.1 Perform formation landing as a lead aircraft. [Hands-on]

1.9.2.1.1 Describe the steps in the procedure for formation landing as a lead aircraft with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.

1.9.2.2 Perform formation landing as a wingman. [Hands-on]

1.9.2.2.1 Describe the steps in the procedure for formation landing as a wingman with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.2.3 Describe the steps in the procedure for formation landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.3 Perform touch and go. [Hands-on]

1.9.3.1 Describe the steps in the procedure for touch and go with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.4 Perform short field landing. [Hands-on]

1.9.4.1 Describe the steps in the procedure for short field landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.5 Perform night landing. [Hands-on]

1.9.5.1 Describe the steps in the procedure for night landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.6 Perform crosswind landing. [Hands-on]

1.9.6.1 Describe the steps in the procedure for crosswind landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.9.7 Perform low RCR landing. [Hands-on]

1.9.7.1 Describe the steps in the procedure for low RCR landing. [Academic]

1.9.8 Perform landing under emergency/degraded conditons. [Hands-on]

1.9.8.1 Perform alternate gear extension procedure. [Hands-on]

1.9.8.1.1 Describe the steps in the procedure for alternate gear extension in correct order with no omissions. [Academic]

1.9.8.2 Perform approach-end arrestment. [Hands-on]

1.9.8.2.1 Describe the steps in the procedure for approach-end arrestment in correct order with no omissons. [Academic]

1.9.8.3 Perform departure-end arrestment. [Hands-on]

1.9.8.3.1 Describe the steps in the procedure for departure-end arrestment in correct order with no omissions. [Academic]

1.9.8.4 Perform emergency gear retraction. [Hands-on]

1.9.8.4.1 Describe the steps in the procedure for emergency gear retraction which may/should be employed in correct order with no omissions. [Academic]

1.9.8.4.2 Describe situations where emergency gear retraction may/should be employed with no omissions. [Academic]

1.9.8.5 Perform landing gear emergency landing. [Hands-on]

1.9.8.5.1 Describe the steps in the procedure for landing gear emergency landing in correct order with no omissions. [Academic]

1.9.8.5.2 Describe situations where landing gear emergency landing may/should be employed with no omissions. [Academic]

1.9.8.6 Identify and respond to landing gear failure to extend. [Academic]

1.9.8.6.1 Given indications occurring during landing gear failure to extend identify the specific problem without error. [Academic]

1.9.8.6.2 State the steps in the corrective procedure for landing gear failure to extend in correct order with no omissions. [Academic]

1.9.8.7 Perform landing with asymmetric stores.*[Hands-on]

1.9.8.7.1 Describe the steps in the procedure for landing with asymmetric stores. [Academic]

1.9.8.8 Perform crosswind landing wtih asymmetric stores. [Hands-on]

1.9.8.8.1 Describe the steps in the procedure for crosswind landing with asymmetric stores in correct order with no omissions. [Academic]

1.9.8.9 Identify and respond to blown tire on landing [Hands-on]

1.9.8.9.1 Identify and respond to blown main gear tire on landing. [Hands-on]

1.9.8.9.1.1 Given indications occurring during blown main gear tire on landing identify the specific problem without error. [Academic]

1.9.8.9.1.2 State the steps in the corrective procedure for blown main gear tire on landing in correct order with no omissions. [Academic]

1.9.8.9.2 Identify and respond to blown nose gear tire on landing. [Hands-on]

1.9.8.9.2.1 Given indications occurring during blown nose gear tire on landing identify the specific problem without error. [Academic]

1.9.8.9.2.2 State the steps in the corrective procedure for blown nose gear tire on landing in correct order with no omissions. [Academic]

1.9.8.9.3 Given indications occurring during blown tire on landing identify the specific problem without error. [Academic]

1.9.8.9.4 State the steps in the corrective procedure for blown tire on landing in correct order with no omissions. [Academic]

1.9.8.10 Perform landing with stuck throttle. [Hands-on]

1.9.8.10.1 Describe the steps in the procedure for stuck throttle in correct order with no omissions. [Academic]

1.9.8.11 Identify and respond to nose gear ground safety switch failure. [Hands-on]

1.9.8.11.1 Given indications occurring during nose gear ground safety switch failure identify the specific problem without error. [Academic]

1.9.8.11.2 State the steps in the corrective procedure for nose gear ground safety switch failure in correct order with no omissions. [Academic]

1.9.8.12 Perform landing with nosewheel steering failure. [Hands-on]

1.9.8.12.1 Given indications occurring during nosewheel steering failure identify the specific problem without error. [Academic]

1.9.8.12.2 State the steps in the corrective procedure for landing with nosewheel steering failure in correct order with no omissions. [Academic]

1.9.8.13 Perform landing with hydraulic system failure. [Hands-on]

1.9.8.13.1 Given indications occurring during hydraulic system failure identify the specific problem without error. [Academic]

1.9.8.13.2 State the steps in the corrective procedure for landing with hydraulic system failure in correct order with no omissions. [Academic]

1.9.8.14 Identify and respond to brake failure on landing. [Hands-on]

1.9.8.14.1 Given indications occurring during brake failure on landing identify the specific problem without error. [Academic]

1.9.8.14.2 State the steps in the corrective procedure for brake failure on landing in correct order with no omissions. [Academic]

1.9.8.15 Perform landing with HUD out. [Hands-on]

1.9.8.15.1 State the steps in the corrective procedure for landing with HUD out in correct order with omissions. [Academic]

1.9.8.15.1.1 System workbook--HUD/camera. [Academic]

1.9.8.15.1.1.1 Describe the HUD camera in the F-16A and F-16B aircraft. [Academic]

1.9.8.15.1.1.2 List with no omissions and describe without error the components and/or functions of the HUD/camera, including as appropriate the sequence and modes of internal and external operation. [Academic]

1.9.8.15.1.1.3 Given a photograph or drawing of the aircraft cockpit, locate and describe the function and manipulation of each control that directly affects the HUD/camera without error. [Academic]

1.9.8.15.1.1.4 Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the HUD/camera without error. [Academic]

1.9.8.15.1.1.5 State the possible modes of HUD/camera degradation, and describe their causes and consequences without error. [Academic]

1.9.8.15.1.1.6 List with no omissions and describe without error any features of the HUD/camera in the F-16B that differ or are in addition to those in the F-16A. [Academic]

1.9.8.16 Perform precautionary landing. [Hands-on]

1.9.8.16.1 Describe the steps in the procedure for precautionary landing in correct order with no omissions. [Academic]

1.9.8.16.2 Describe situations where precautionary landing may/should be employed with no omissions. [Academic]

1.9.8.17 Perform simulated flameout landing (SFO). [Hands-on]

1.9.8.17.1 Describe the steps in the procedure for flameout landing in correct order with no omissons. [Academic]

LANDING

1.9 CRITERION-REFERENCED OBJECTIVES

Tasks Without CROs

1.9.8.3
1.9.8.4
1.9.8.9
1.9.8.13
1.9.8.15
1.9.8.17

TASK NO.: 1.9.1

BEHAVIOR: Perform normal landing, including rollout

CONDITION:

Agency: ATC
Information source for: Winds/landing clearance/traffic advisories

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: VMC/day

Aids: None

Product of previous task: None

Initiation cues: On short final
Systems presenting cues: N/A

STANDARD:

Authority: 60-2

Performance precision: +/- .5 AOA; TD zone 150-1000 FT

Computational accuracy: N/A

TASK NO.: 1.9.2

BEHAVIOR: Perform formation landing

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.9.2.1

BEHAVIOR: Perform formation landing as a lead aircraft

CONDITION:

Agency: ATC
Information source for: Winds/landing clearance/traffic adv.

Manuals and pubs: None
Information source for: N/A

Activity: Perform formation landing

External environment: Day/VMC

Aids: None

Product of previous task: Accomplish formation recovery

Initiation cues: On short final
Systems presenting cues: N/A

STANDARD:

Authority: 60-2

Performance precision: Smooth with wingman consideration

Computational accuracy: N/A

TASK NO.: 1.9.2.2

BEHAVIOR: Perform formation landing as a wingman

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Peform formation landing

External environment: Day/VMC

Aids: None

Product of previous task: None

Initiation cues: Lead on short final
Systems presenting cues: N/A

STANDARD:

Authority: 60-2

Performance precision: Maintain position with only momentary deviations and safe separation

Computational accuracy: N/A

TASK NO.: 1.9.3

BEHAVIOR: Perform touch and go

CONDITION:

Agency: ATC
Information source for: Winds/clearance/traffic adv.

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: Day/VMC

Aids: None

Product of previous task: None

Initiation cues: On short final
Systems presenting cues: N/A

STANDARD:

Authority: 60-2

Performance precision: +/- .05 AOA; TD Zone 150-1000

Computational accuracy: N/A

TASK NO.: 1.9.4

BEHAVIOR: Perform short field landing

CONDITION:

Agency: ATC
Information source for: Wind/clearance/traffic adv.

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: Day/VMC

Aids: None

Product of previous task: Accomplish approach

Initiation cues: On short final
Systems presenting cues: N/A

STANDARD:

Authority: -1

Performance precision: To within first 500 FT of runway with decreased landing roll

Computational accuracy: N/A

TASK NO.: 1.9.5

BEHAVIOR: Perform night landing

CONDITION:

Agency: ATC
Information source for: Winds/clearance/traffic adv.

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: VMC/night

Aids: None

Product of previous task: Accomplish approach

Initiation cues: On short final as indicated by runway lights
Systems presenting cues: N/A

STANDARD:

Authority: 60-2

Performance precision: +/- .5 AOA, TD Zone 150-1000 FT

Computational accuracy: N/A

TASK NO.: 1.9.6

BEHAVIOR: Perform crosswind landing

CONDITION:

Agency: ATC
Information source for: Clearance to land, winds/traffic advisories

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: VMC/crosswind component less than 20 KTS

Aids: None

Product of previous task: Accomplish approach

Initiation cues: On short final and unable to maintain heading
Systems presenting cues: N/A

STANDARD:

Authority: None

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.7

BEHAVIOR: Perform low RCR landing

CONDITION:

Agency: ATC
Information source for: Winds/RCR/clearance/traffic adv.

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing

External environment: VMC

Aids: None

Product of previous task: Accomplish approach

Initiation cues: On short final
Systems presenting cues: N/A

STANDARD:

Authority: None

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.1

BEHAVIOR: Perform alternate gear extension procedure

CONDITION:

Agency:
Information source for:

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority: -1

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.2

BEHAVIOR: Perform approach-end arrestment

CONDITION:

Agency: ATC/SOF
Information source for: Instruction

Manuals and pubs: -1 checklist
Information source for: Procedure

Activity: Perform landing under emergency/degraded conditions

External environment: VMC

Aids: None

Product of previous task: Perform landing with blown tire; perform landing with hydraulic/electrical system failure; perform low RCR landing; perform crosswind landing; accomplish straight-in approach

Initiation cues: Blown tire, hydraulic failure, electrical failure, RCR, crosswind, damaged runway
Systems presenting cues: Landing gear, hydraulic power supply, electrical power

---

STANDARD:

Authority: -1

Performance precision: 100%

Computational accuracy: N/A

TASK NO.: 1.9.8.3

BEHAVIOR: Perform departure-end arrestment

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority: -1

Performance precision:

Computational accuracy:

TASK NO.: 1.9.8.4

BEHAVIOR: Perform emergency gear retraction

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority: -1

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.5

BEHAVIOR: Perform landing gear emergency landing

CONDITION:

Agency:
Information source for:

Manuals and pubs: Terminal FLIP, -1
Information source for: Arresting hook engagement limits; procedures

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority: -1

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.6

BEHAVIOR: Identify and respond to landing gear failure to extend

---

CONDITION:

Agency: ATC
Information source for: Winds/clearance

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded condition

External environment: VMC

Aids: None

Product of previous task:

Initiation cues: Red light in gear handle and one or more wheel lights out with gear handle down
Systems presenting cues: Landing gear

STANDARD:

Authority: -1

Performance precision: 100% accuracy

Computational accuracy: N/A

TASK NO.: 1.9.8.7

BEHAVIOR: Perform landing with asymmetric stores

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task: Identify and perform flight with asymmetric stores

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.9.8.8

BEHAVIOR: Perform crosswind landing with asymmetric stores

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.9

BEHAVIOR: Identify and respond to blown tire on landing

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.9.8.9.1

BEHAVIOR: Identify and respond to blown main gear tire on landing

---

CONDITION:

Agency: ATC/SOF
Information source for: Instruction

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded condition

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues: Blown main tire, loud noise, vibration, all from wingman/tower
Systems presenting cues: Communications

STANDARD:

Authority: -1

Performance precision: 100%

Computational accuracy: N/A

TASK NO.: 1.9.8.9.2

BEHAVIOR: Identify and respond to blown nose gear tire on landing

---

CONDITION:

Agency: ATC/SOF
Information source for: Instruction

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded conditions

External environment: VMC

Aids: None

Product of previous task: None

Initiation cues: Blown nose gear tire, loud noise, vibration, call from wingman/tower
Systems presenting cues:

STANDARD:

Authority: -1

Performance precision: 100%

Computational accuracy: N/A

TASK NO.: 1.9.8.10

BEHAVIOR: Perform landing with stuck throttle

CONDITION:

Agency: ATC/SOF
Information source for: Winds/clearance/adv.

Manuals and pubs: -1 checklist
Information source for: Required procedures

Activity: Perform landing under emergency/degraded conditions

External environment: VMC

Aids: None

Product of previous task: Accomplish approach

Initiation cues: On short final with throttle stuck
Systems presenting cues: Engine

STANDARD:

Authority: -1

Performance precision: 100% accuracy

Computational accuracy: N/A

TASK NO.: 1.9.8.11

BEHAVIOR: Identify and respond to nose gear ground safety switch failure

---

CONDITION:

Agency:
Information source for:

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded condtions

External environment:

Aids:

Product of previous task:

Initiation cues: Speedbrakes are fully extended with landing gear down
Systems presenting cues: Speedbrake

STANDARD:

Authority: -1

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.12

BEHAVIOR: Perform landing with nosewheel steering failure

CONDITION:

Agency: ATC
Information source for: Winds/clearance/adv.

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform landing under emergency/degraded conditions

External environment: VMC

Aids: None

Product of previous task: Accomplish approach

Initiation cues: NWS caution light
Systems presenting cues: NWS

STANDARD:

Authority: -1

Performance precision: 100% accuracy

Computational accuracy: N/A

TASK NO.: 1.9.8.13

BEHAVIOR: Perform landing with hydraulic system failure

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.9.8.14

BEHAVIOR: Identify and respond to brake failure on landing

CONDITION:

Agency: ATC
Information source for: Winds/clearance

Manuals and pubs: None
Information source for: N/A

Activity: Perform landing under emergency/degraded condition

External environment: VCM

Aids: None

Product of previous task: None

Initiation cues: Lack of response to brake application or anti-skid caution light illuminated
Systems presenting cues: Wheel brake

STANDARD:

Authority: None

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.15

BEHAVIOR: Perform landing with HUD out

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.9.8.16

BEHAVIOR: Perform precautionary landing

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task: Identify and respond to engine malfunction (enroute)

Initiation cues: Known or suspected engine malfunction
Systems presenting cues: Engine

STANDARD:

Authority:

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.9.8.17

BEHAVIOR: Perform simulated flameout landing (SFO)

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform landing under emergency/degraded conditions

External environment:

Aids:

Product of previous task:

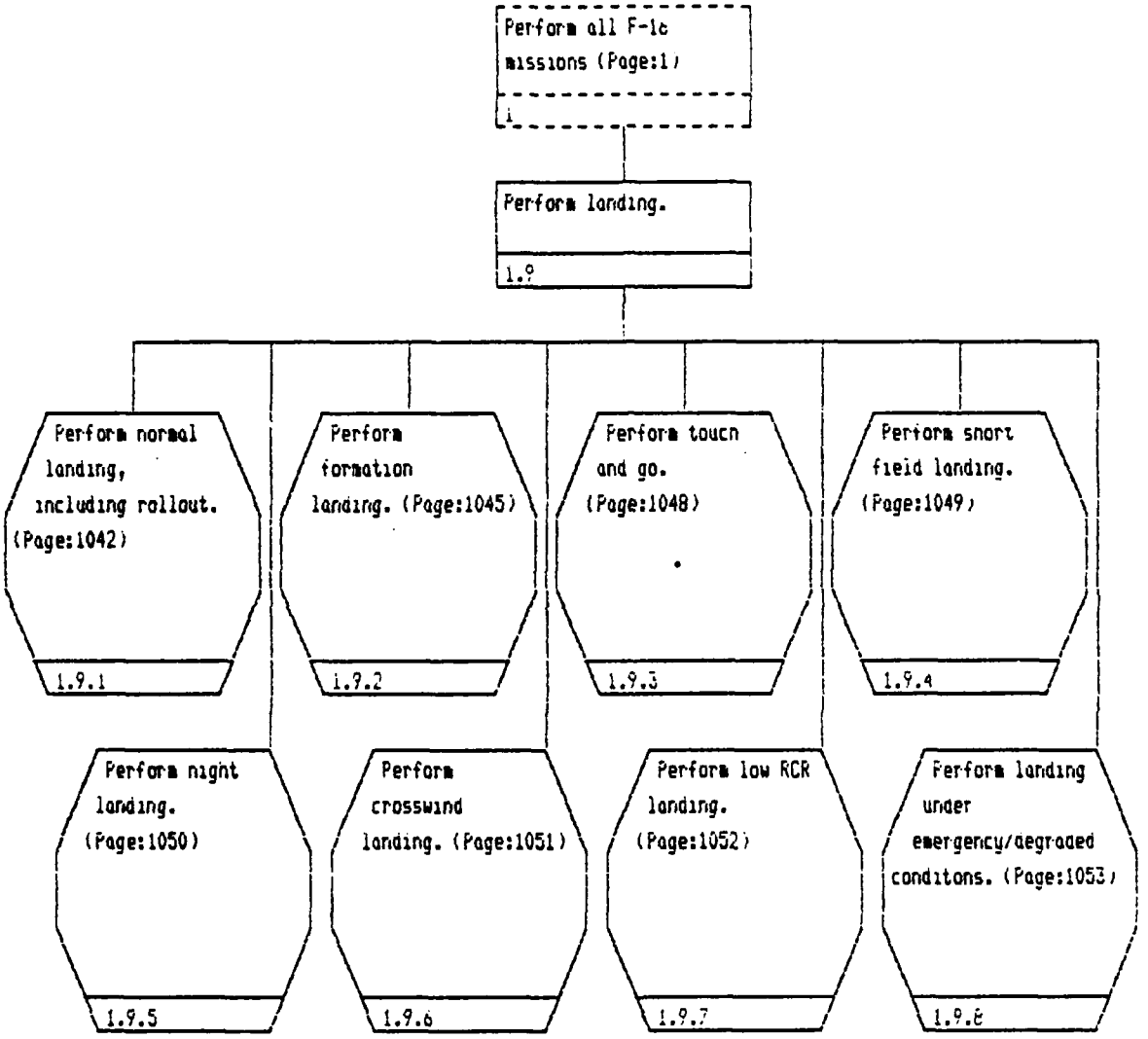
Initiation cues:
Systems presenting cues:

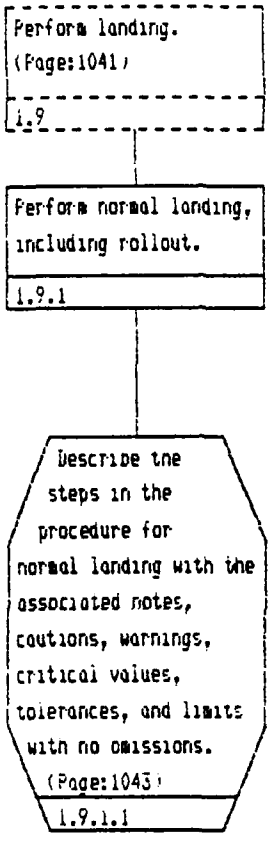
STANDARD:

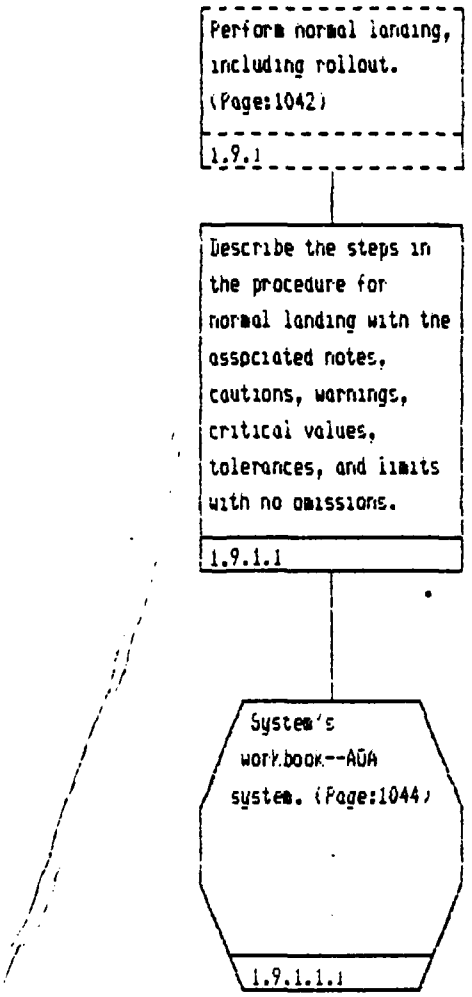
Authority:

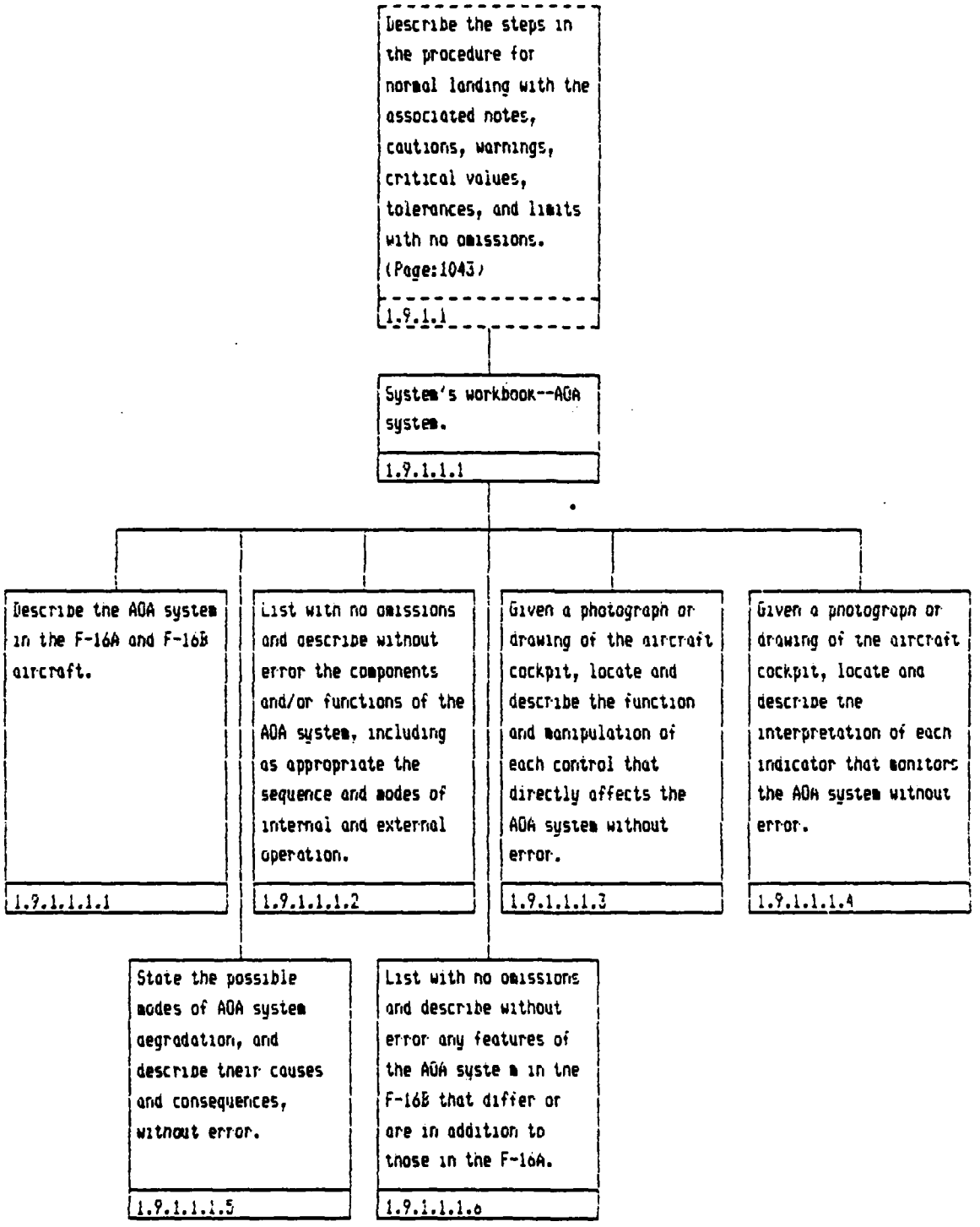
Performance precision:

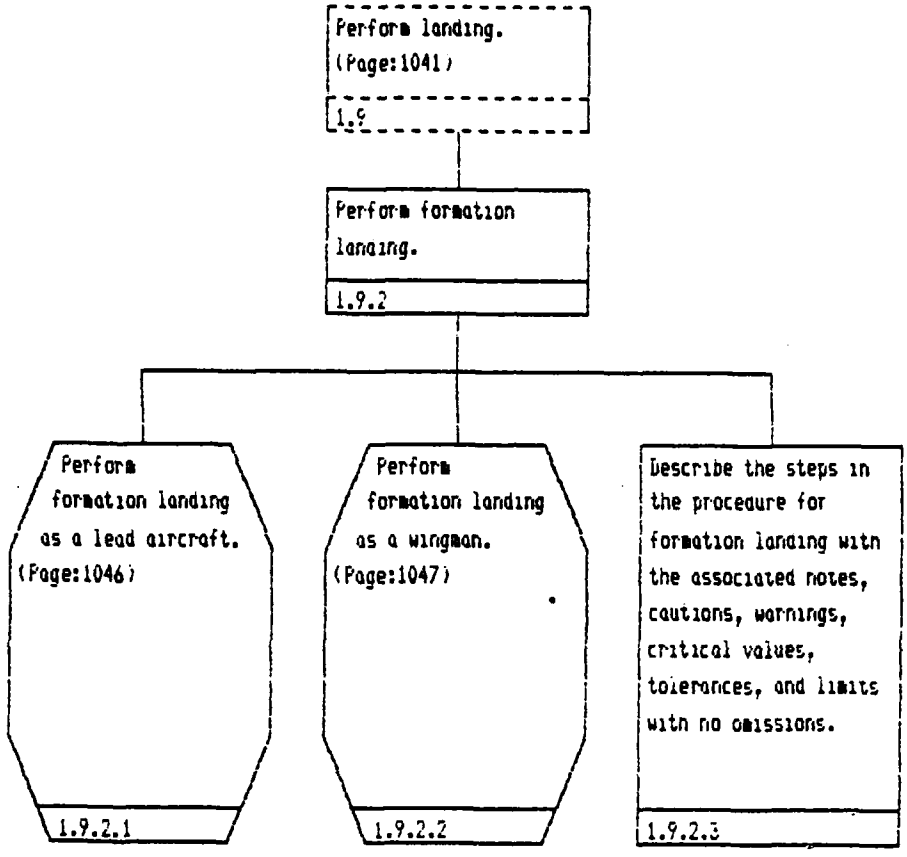
Computational accuracy:

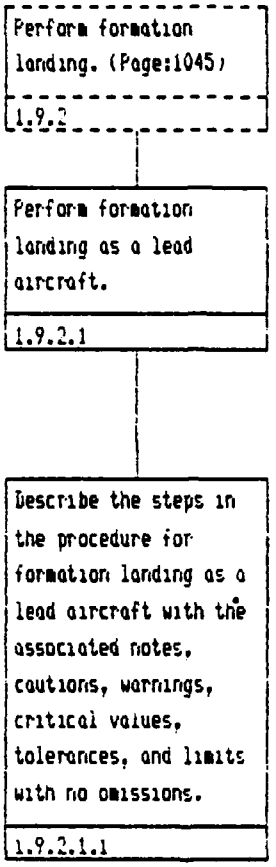

Perform all F-16 missions (Page:1)
1
Perform landing.
1.9
Perform normal landing, including rollout. (Page:1042)
1.9.1
Perform formation landing. (Page:1045)
1.9.2
Perform touch and go. (Page:1048)
1.9.3
Perform short field landing. (Page:1049)
1.9.4
Perform night landing. (Page:1050)
1.9.5
Perform crosswind landing. (Page:1051)
1.9.6
Perform low RCR landing. (Page:1052)
1.9.7
Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8

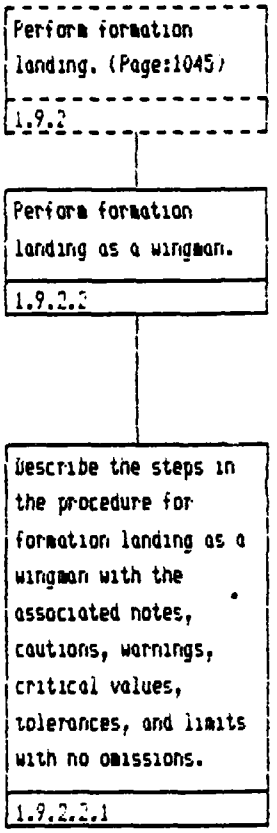

Perform landing.
(Page:1041)
1.9
Perform normal landing, including rollout.
1.9.1
Describe the steps in the procedure for normal landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
(Page:1043)
1.9.1.1

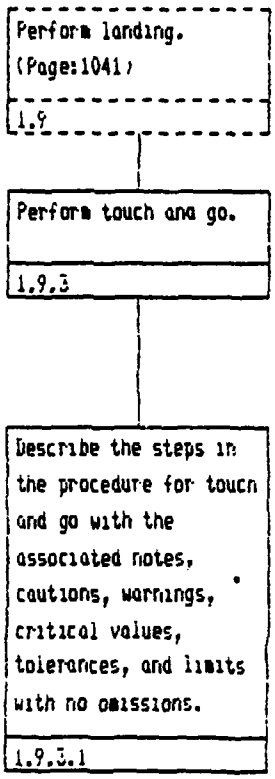

Perform normal landing, including rollout. (Page:1042)
1.9.1
Describe the steps in the procedure for normal landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.1.1
System's workbook--AUA system. (Page:1044)
1.9.1.1.1

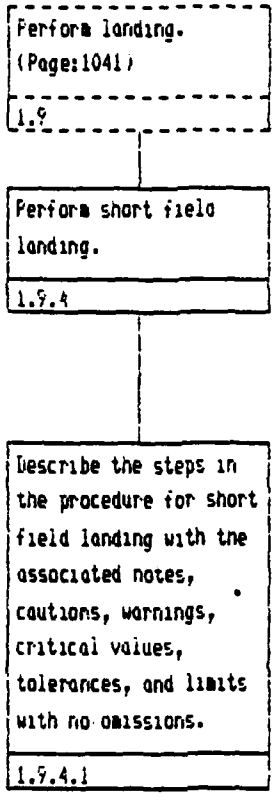

Describe the steps in the procedure for normal landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. (Page:1043)
1.9.1.1
System's workbook--AOA system.
1.9.1.1.1
Describe the AOA system in the F-16A and F-16B aircraft.
1.9.1.1.1.1
List with no omissions and describe without error the components and/or functions of the AOA system, including as appropriate the sequence and modes of internal and external operation.
1.9.1.1.1.2
Given a photograph or drawing of the aircraft cockpit, locate and describe the function and manipulation of each control that directly affects the AOA system without error.
1.9.1.1.1.3
Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the AOA system without error.
1.9.1.1.1.4
State the possible modes of AOA system degradation, and describe their causes and consequences, without error.
1.9.1.1.1.5
List with no omissions and describe without error any features of the AOA system in the F-16B that differ or are in addition to those in the F-16A.
1.9.1.1.1.6

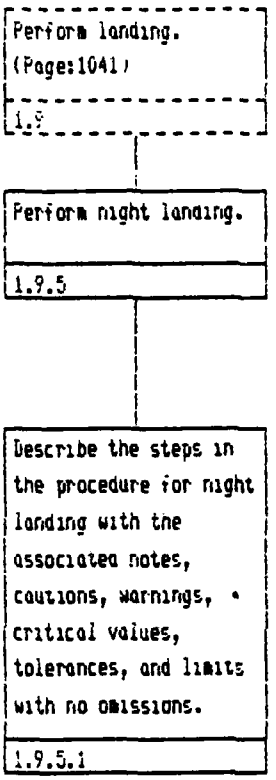

Perform landing.
(Page:1041)
1.9
Perform formation
landing.
1.9.2
Perform
formation landing
as a lead aircraft.
(Page:1046)
1.9.2.1
Perform
formation landing
as a wingman.
(Page:1047)
1.9.2.2
Describe the steps in
the procedure for
formation landing with
the associated notes,
cautions, warnings,
critical values,
tolerances, and limits
with no omissions.
1.9.2.3

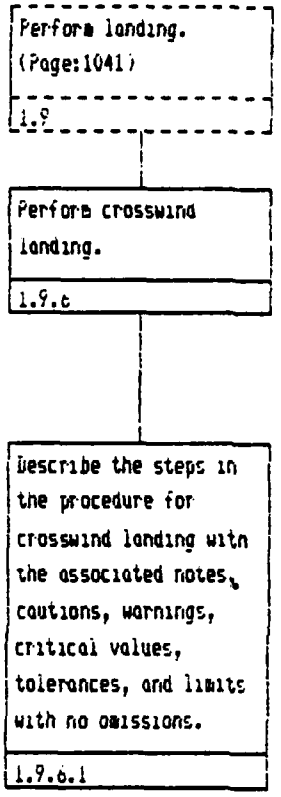

Perform formation landing. (Page:1045)
1.9.2
Perform formation landing as a lead aircraft.
1.9.2.1
Describe the steps in the procedure for formation landing as a lead aircraft with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.2.1.1

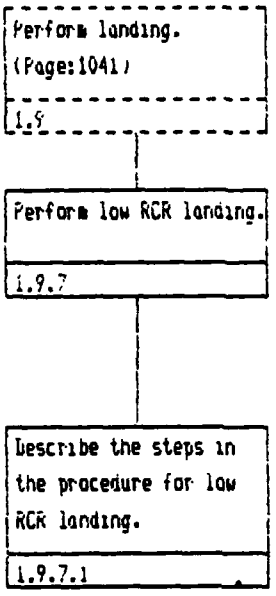

Perform formation landing. (Page:1045)
1.9.2
Perform formation landing as a wingman.
1.9.2.3
Describe the steps in the procedure for formation landing as a wingman with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.2.3.1


Perform landing.
(Page:1041)
1.9
Perform touch and go.
1.9.3
Describe the steps in the procedure for touch and go with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.3.1

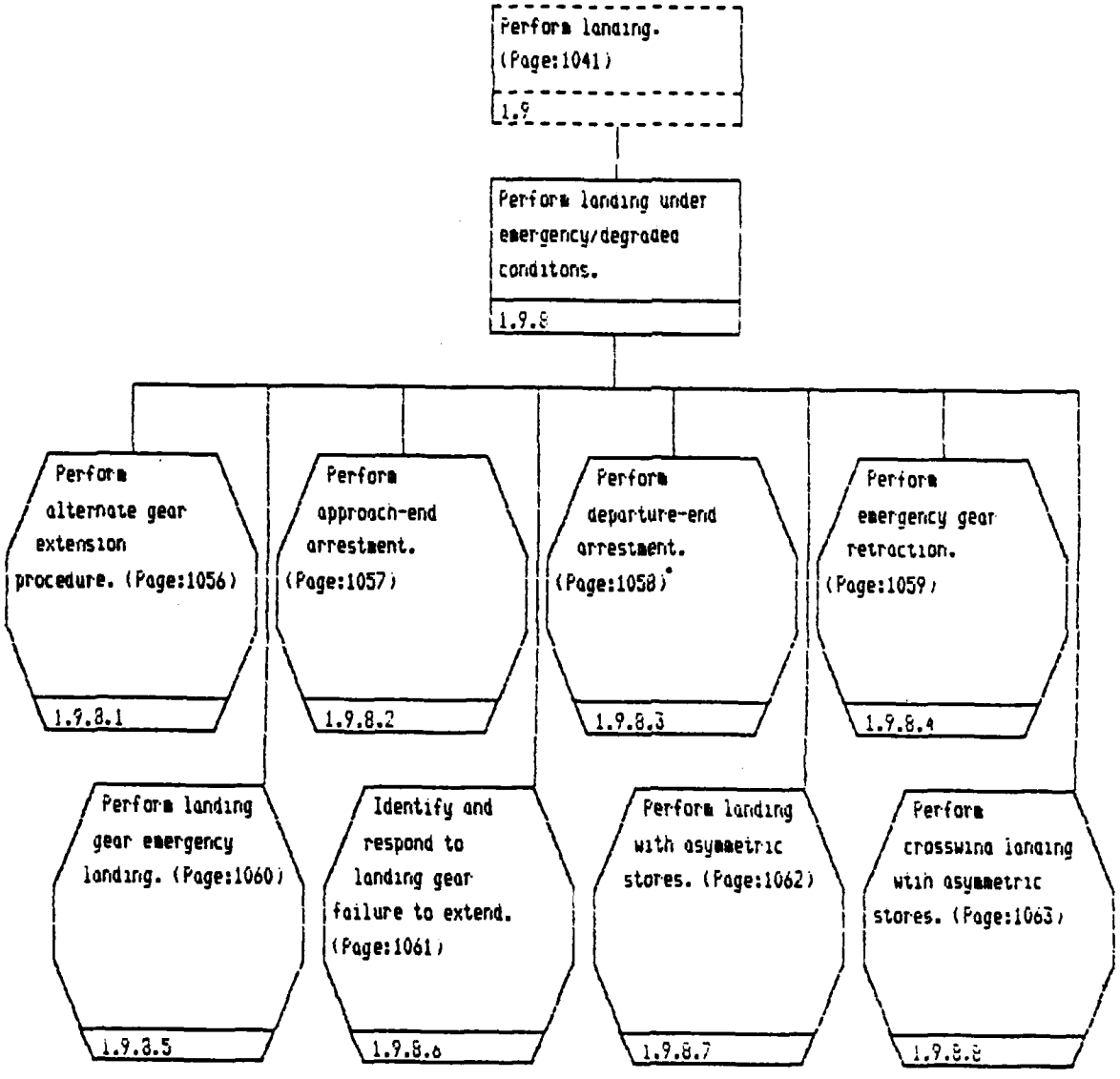

Perform landing.
(Page:1041)
1.9
Perform short field landing.
1.9.4
Describe the steps in the procedure for short field landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.4.1


Perform landing.
(Page:1041)
1.9
Perform night landing.
1.9.5
Describe the steps in the procedure for night landing with the associated notes, cautions, warnings, • critical values, tolerances, and limits with no omissions.
1.9.5.1


Perform landing.
(Page:1041)
1.9
Perform crosswind landing.
1.9.6
Describe the steps in the procedure for crosswind landing with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.9.6.1


Perform landing.
(Page:1041)
1.9
Perform low RCR landing.
1.9.7
Describe the steps in the procedure for low RCR landing.
1.9.7.1

Continued on page: 1054



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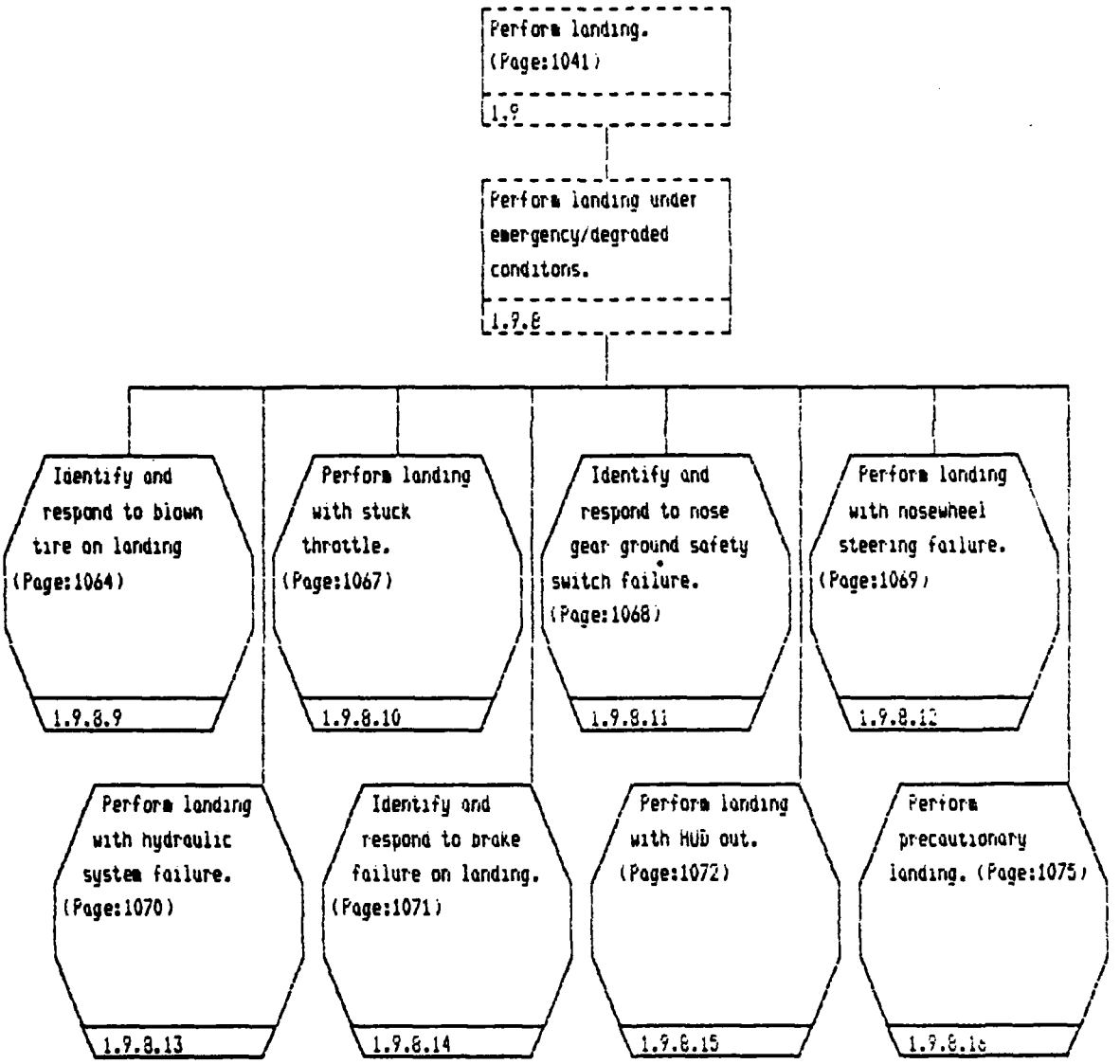
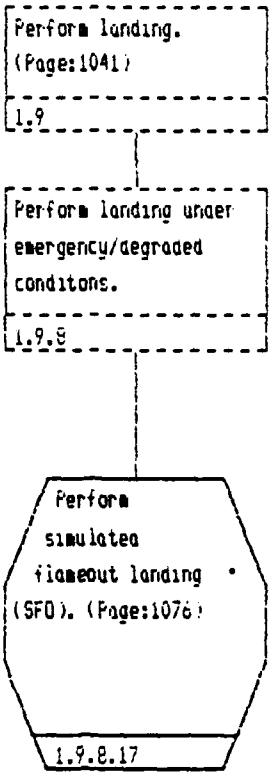
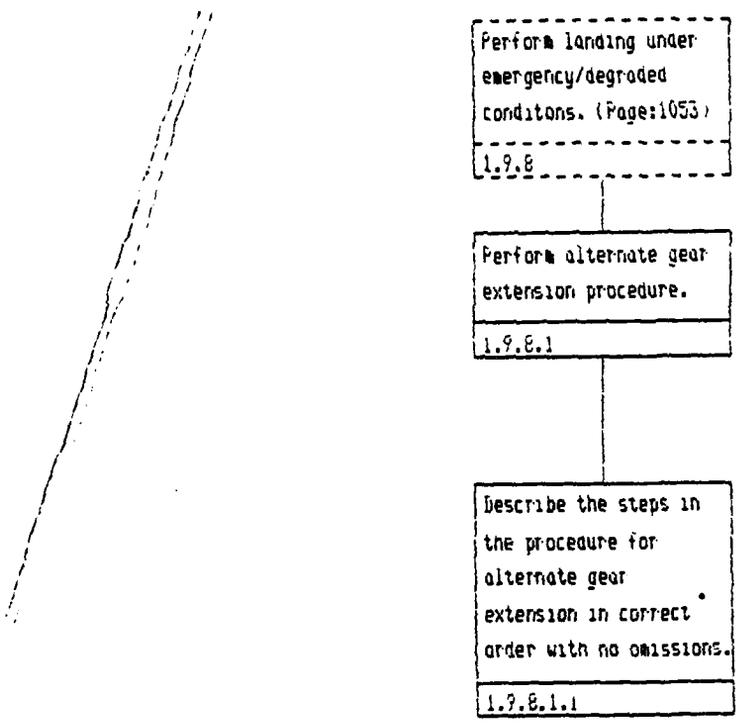
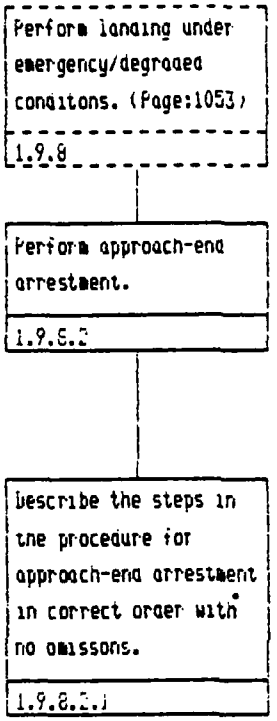
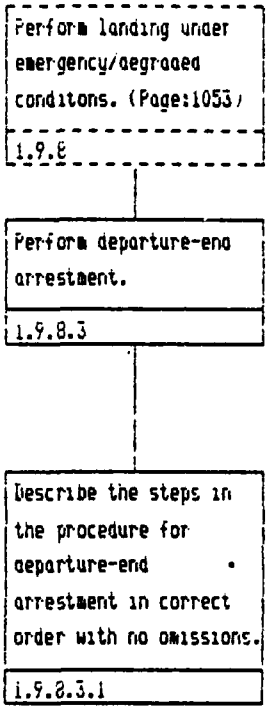


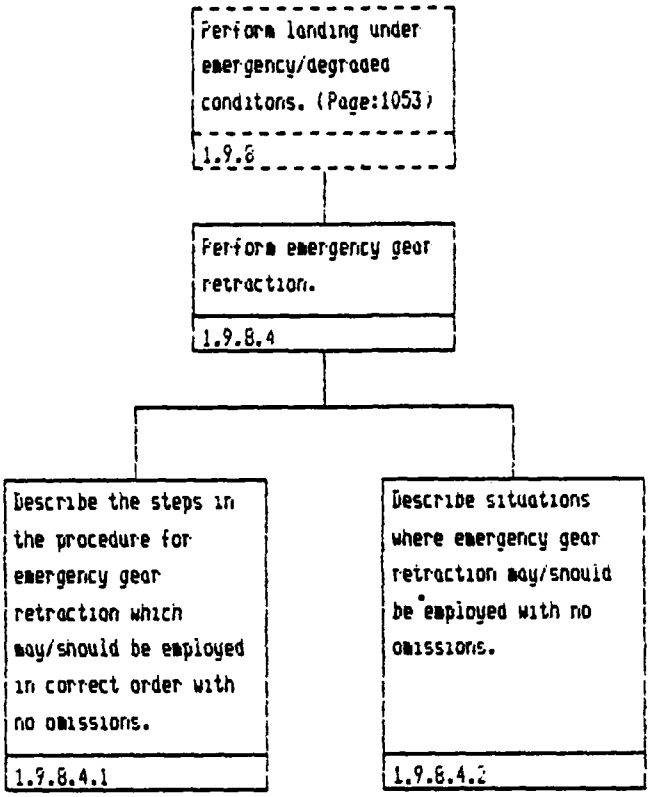
Continued from page: 1054

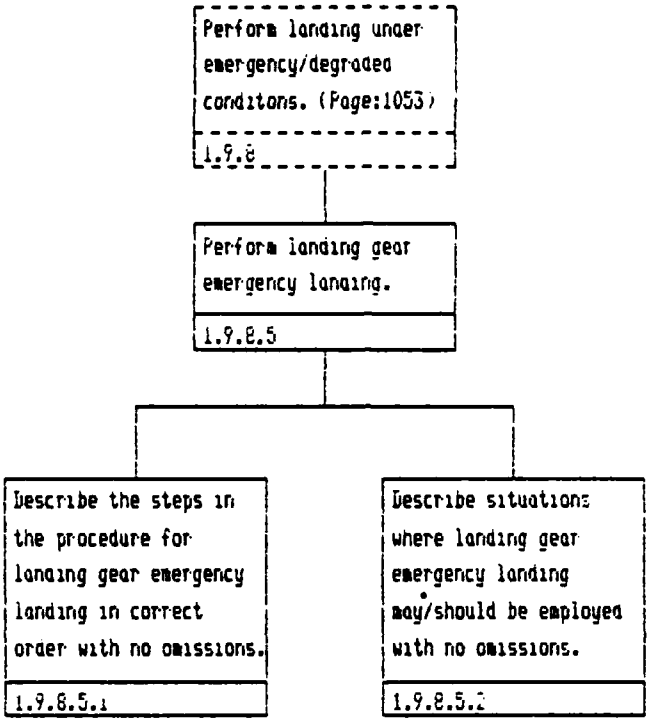


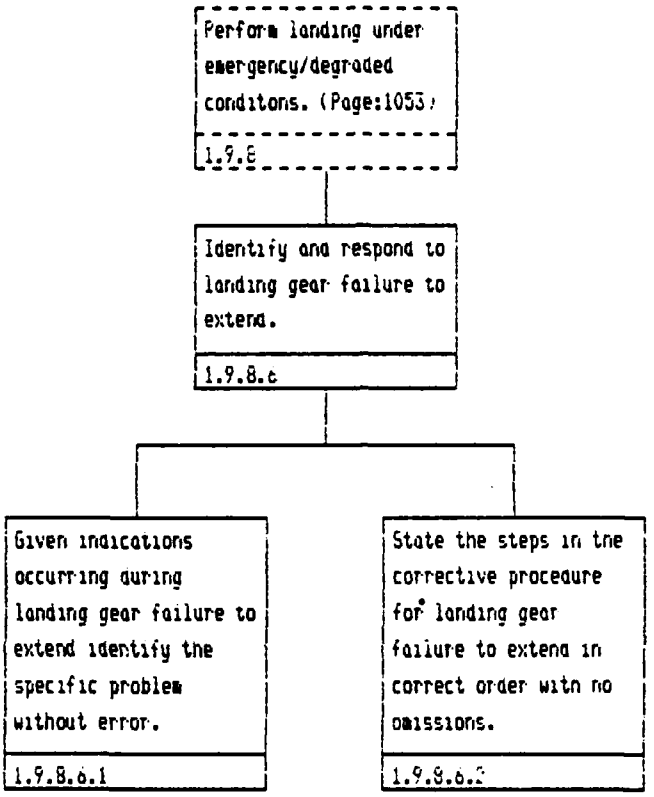

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform alternate gear extension procedure.
1.9.8.1
Describe the steps in the procedure for alternate gear extension in correct order with no omissions.
1.9.8.1.1

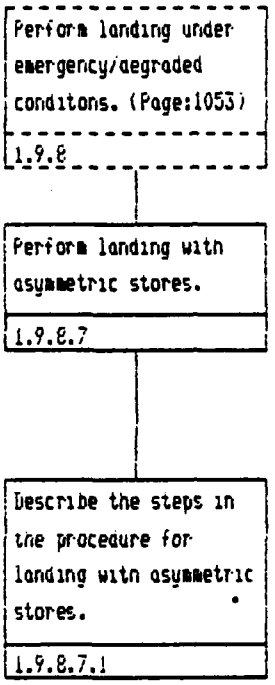

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform approach-end arrestment.
1.9.8.2
Describe the steps in the procedure for approach-end arrestment in correct order with no omissons.
1.9.8.2.1

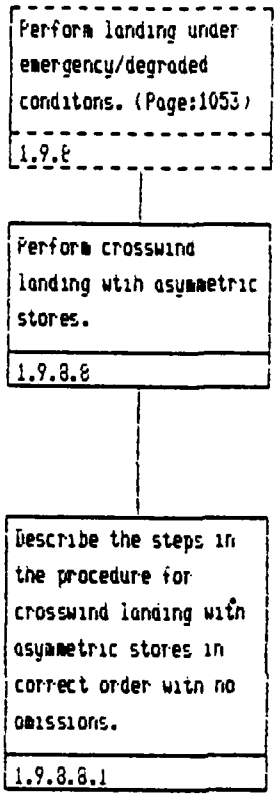

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform departure-end arrestment.
1.9.8.3
Describe the steps in the procedure for departure-end arrestment in correct order with no omissions.
1.9.8.3.1

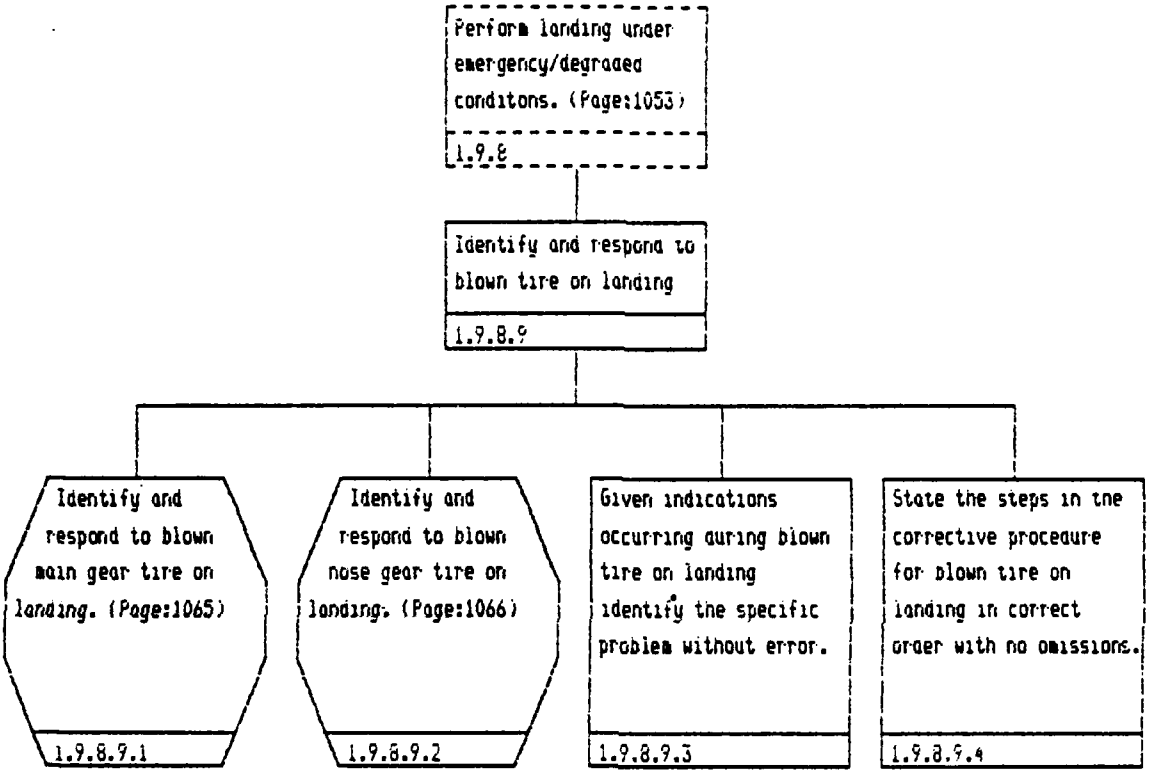

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform emergency gear retraction.
1.9.8.4
Describe the steps in the procedure for emergency gear retraction which may/should be employed in correct order with no omissions.
1.9.8.4.1
Describe situations where emergency gear retraction may/should be employed with no omissions.
1.9.8.4.2

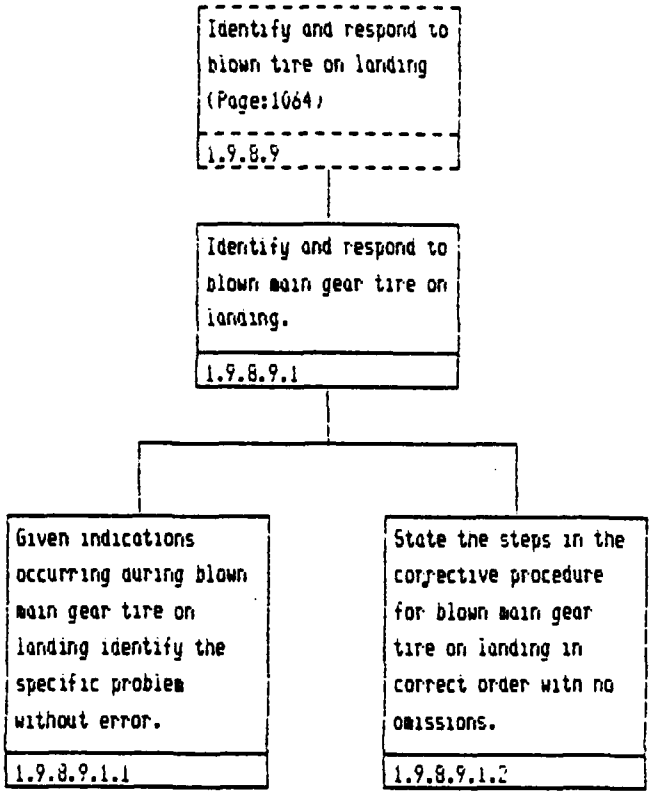

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform landing gear emergency lanaing.
1.9.8.5
Describe the steps in the procedure for lanaing gear emergency landing in correct order with no omissions.
1.9.8.5.1
Describe situations where landing gear emergency landing may/should be employed with no omissions.
1.9.8.5.2

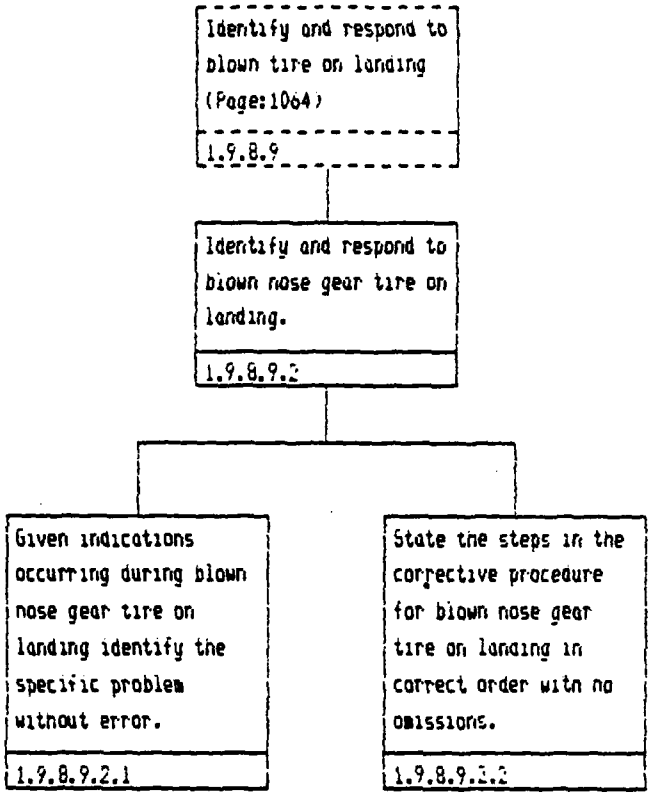

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Identify and respond to landing gear failure to extend.
1.9.8.6
Given indications occurring during landing gear failure to extend identify the specific problem without error.
1.9.8.6.1
State the steps in the corrective procedure for landing gear failure to extend in correct order with no omissions.
1.9.8.6.2

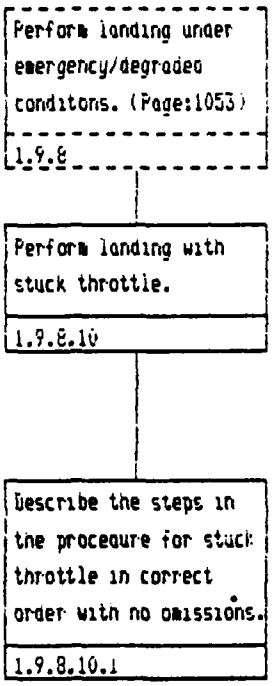

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform landing with asymmetric stores.
1.9.8.7
Describe the steps in the procedure for landing with asymmetric stores.
1.9.8.7.1

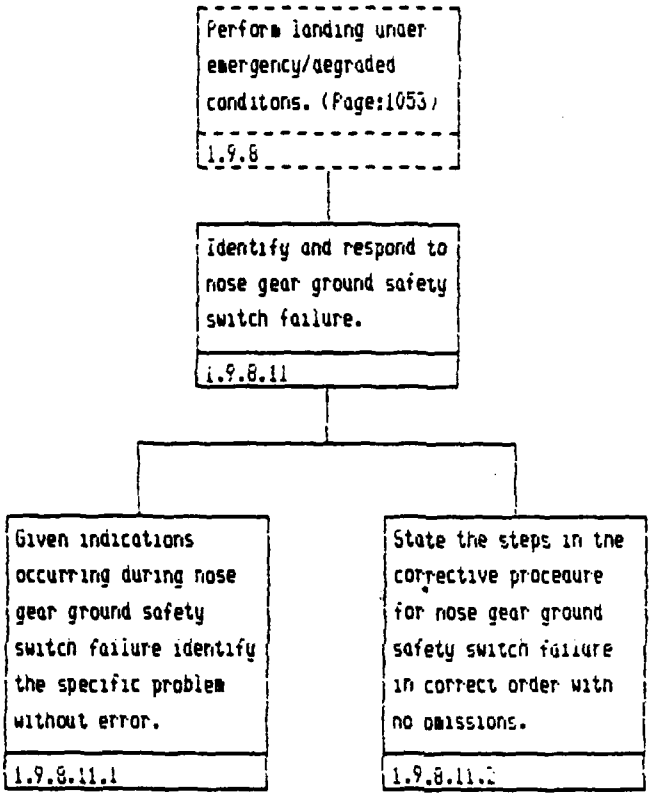

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform crosswind landing with asymmetric stores.
1.9.8.8
Describe the steps in the procedure for crosswind landing with asymmetric stores in correct order with no omissions.
1.9.8.8.1

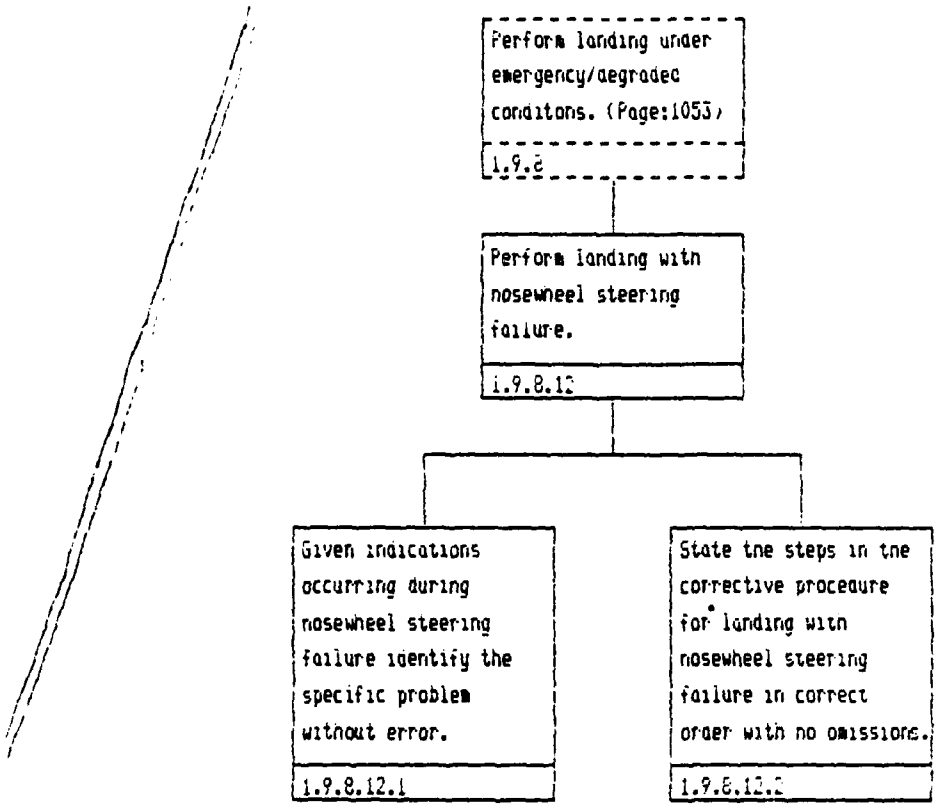

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Identify and respond to blown tire on landing
1.9.8.9
Identify and respond to blown main gear tire on landing. (Page:1065)
1.9.8.9.1
Identify and respond to blown nose gear tire on landing. (Page:1066)
1.9.8.9.2
Given indications occurring during blown tire on landing identify the specific problem without error.
1.9.8.9.3
State the steps in the corrective procedure for blown tire on landing in correct order with no omissions.
1.9.8.9.4

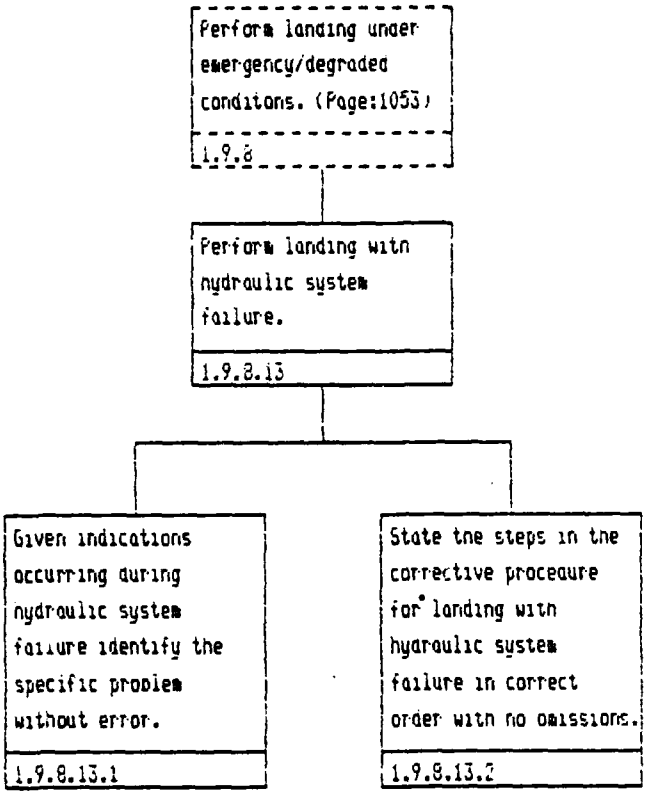

Identify and respond to blown tire on landing (Page:1064)
1.9.8.9
Identify and respond to blown main gear tire on landing.
1.9.8.9.1
Given indications occurring during blown main gear tire on landing identify the specific problem without error.
1.9.8.9.1.1
State the steps in the corrective procedure for blown main gear tire on landing in correct order with no omissions.
1.9.8.9.1.2

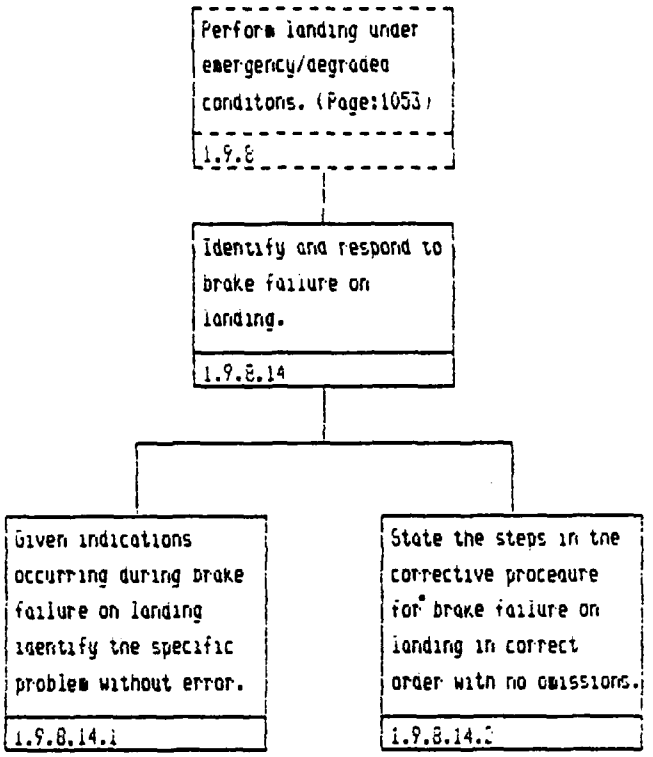

Identify and respond to blown tire on landing (Page:1064)
1.9.8.9
Identify and respond to blown nose gear tire on landing.
1.9.8.9.2
Given indications occurring during blown nose gear tire on landing identify the specific problem without error.
1.9.8.9.2.1
State the steps in the corrective procedure for blown nose gear tire on landing in correct order with no omissions.
1.9.8.9.2.2

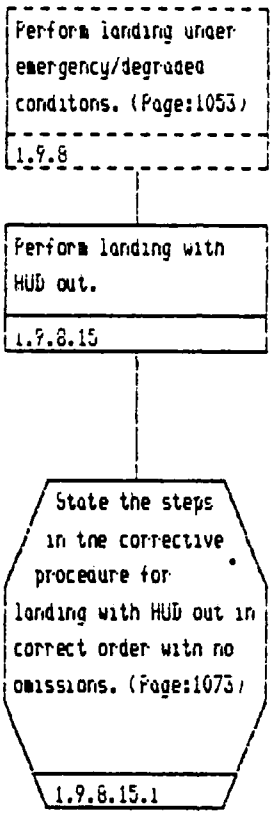

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform landing with stuck throttle.
1.9.8.10
Describe the steps in the procedure for stuck throttle in correct order with no omissions.
1.9.8.10.1

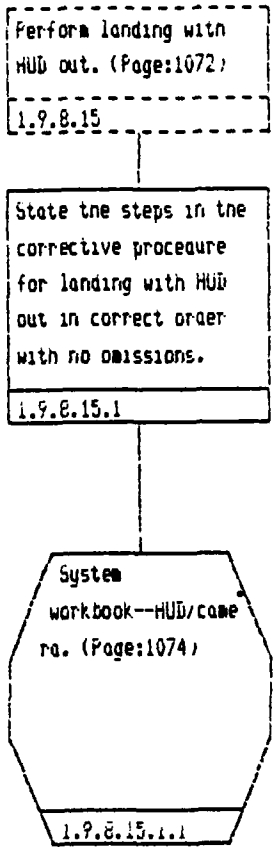

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Identify and respond to nose gear ground safety switch failure.
1.9.8.11
Given indications occurring during nose gear ground safety switch failure identify the specific problem without error.
1.9.8.11.1
State the steps in the corrective proceaure for nose gear ground safety switch failure in correct order with no omissions.
1.9.8.11.2

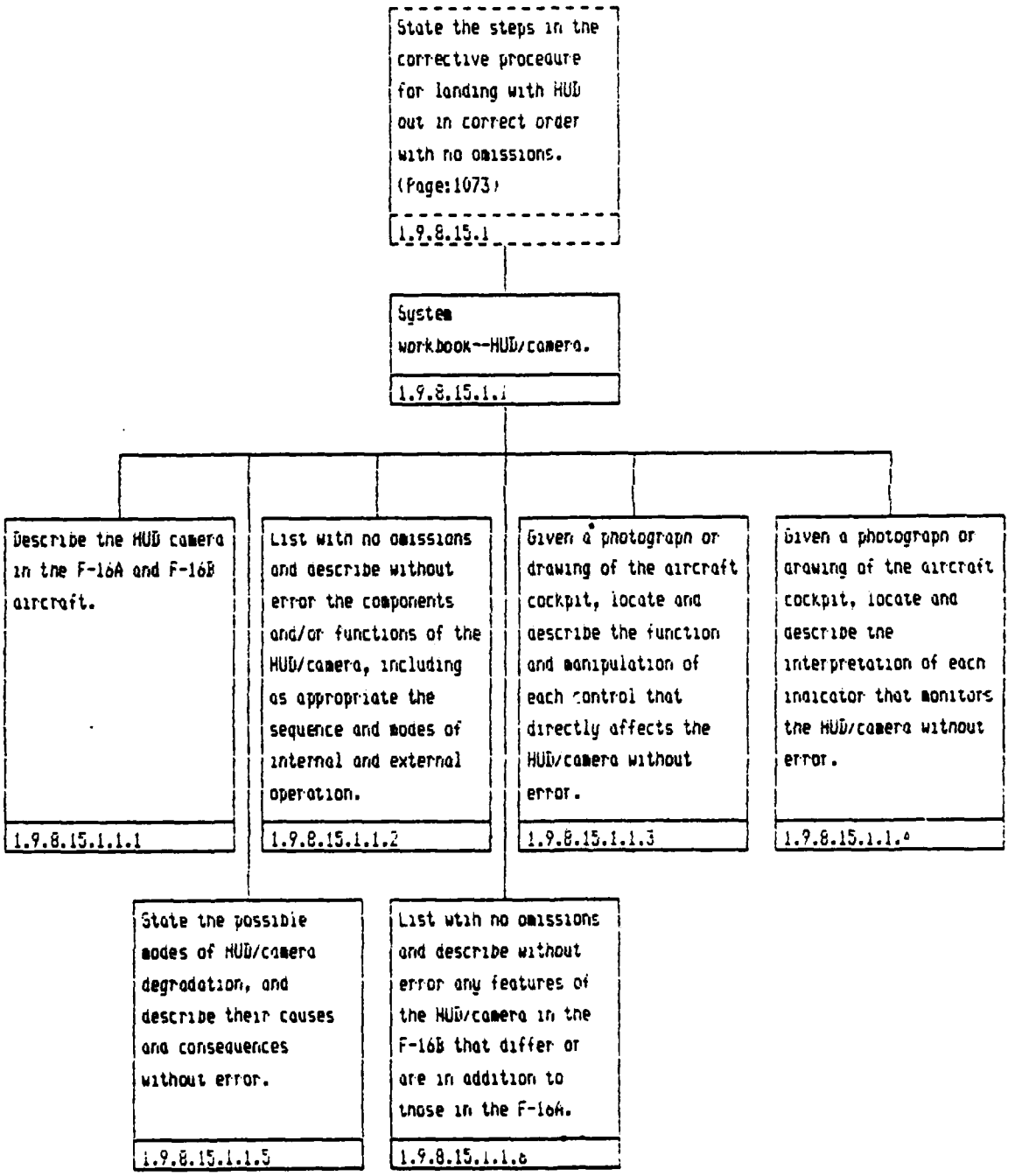

Perform landing under emergency/degraded conditions. (Page:1053)
1.9.8
Perform landing with nosewheel steering failure.
1.9.8.12
Given indications occurring during nosewheel steering failure identify the specific problem without error.
1.9.8.12.1
State the steps in the corrective procedure for landing with nosewheel steering failure in correct order with no omissions.
1.9.8.12.2

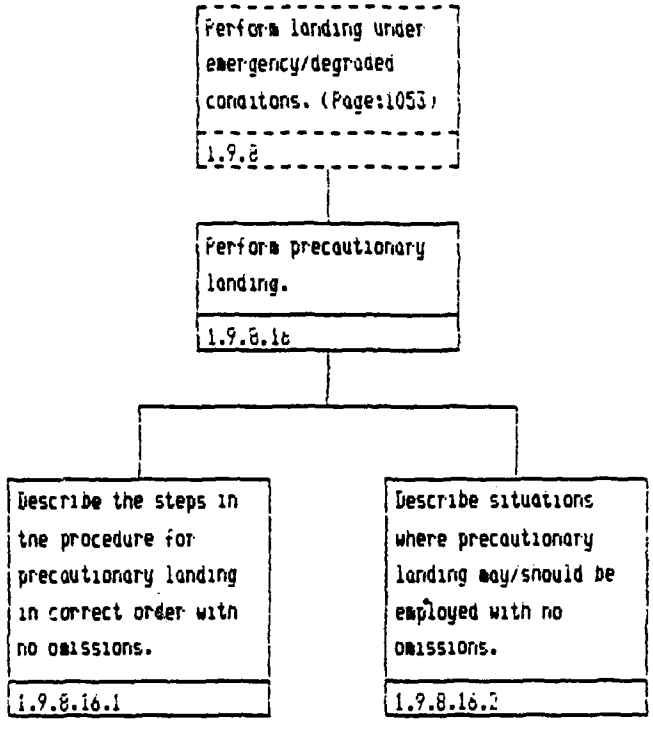

Perform landing under emergency/degraded conditions. (Page:1053)
1.9.8
Perform landing with hydraulic system failure.
1.9.8.13
Given indications occurring during hydraulic system failure identify the specific problem without error.
1.9.8.13.1
State the steps in the corrective procedure for landing with hydraulic system failure in correct order with no omissions.
1.9.8.13.2

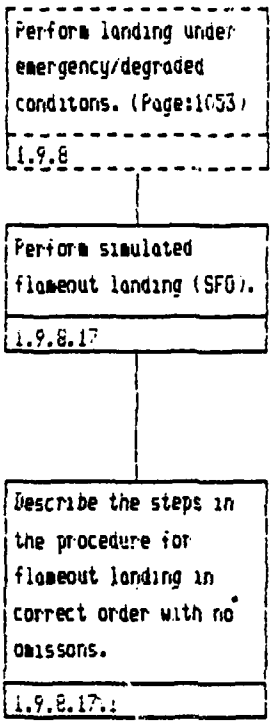

Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Identify and respond to brake failure on landing.
1.9.8.14
Given indications occurring during brake failure on landing identify the specific problem without error.
1.9.8.14.1
State the steps in the corrective procedure for brake failure on landing in correct order with no omissions.
1.9.8.14.2


Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform landing with HUD out.
1.9.8.15
State the steps in the corrective proceaure for landing with HUD out in correct order with no omissions. (Page:1073)
1.9.8.15.1


Perform landing with HUD out. (Page:1072)
1.9.8.15
State the steps in the corrective procedure for landing with HUD out in correct order with no omissions.
1.9.8.15.1
System workbook--HUD/camera. (Page:1074)
1.9.8.15.1.1


State the steps in the corrective procedure for landing with HUD out in correct order with no omissions. (Page:1073)
1.9.8.15.1
System workbook--HUD/camera.
1.9.8.15.1.1
Describe the HUD camera in the F-16A and F-16B aircraft.
1.9.8.15.1.1.1
List with no omissions and describe without error the components and/or functions of the HUD/camera, including as appropriate the sequence and modes of internal and external operation.
1.9.8.15.1.1.2
Given a photograph or drawing of the aircraft cockpit, locate and describe the function and manipulation of each control that directly affects the HUD/camera without error.
1.9.8.15.1.1.3
Given a photograph or drawing of the aircraft cockpit, locate and describe the interpretation of each indicator that monitors the HUD/camera without error.
1.9.8.15.1.1.4
State the possible modes of HUD/camera degradation, and describe their causes and consequences without error.
1.9.8.15.1.1.5
List with no omissions and describe without error any features of the HUD/camera in the F-16B that differ or are in addition to those in the F-16A.
1.9.8.15.1.1.6


Perform landing under emergency/degraded conditions. (Page:1053)
1.9.8
Perform precautionary landing.
1.9.8.16
Describe the steps in the procedure for precautionary landing in correct order with no omissions.
1.9.8.16.1
Describe situations where precautionary landing may/should be employed with no omissions.
1.9.8.16.2


Perform landing under emergency/degraded conditons. (Page:1053)
1.9.8
Perform simulated flameout landing (SFO).
1.9.8.17
Describe the steps in the procedure for flameout landing in correct order with no omissons.
1.9.8.17.1

1.10 Perform post flight procedures [Hands-on]

1.10.1 Perform normal post flight procedures [Hands-on]

1.10.1.1 Perform after clearing runway checks [Hands-on]

1.10.1.1.1 Match after landing checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error. [Academic]

1.10.1.2 Accomplish dearming procedures [Hands-on]

1.10.1.2.1 Describe the steps in the procedure for dearming with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.10.1.3 Accomplish before engine shutdown checks [Hands-on]

1.10.1.3.1 Match prior to engine shutdown checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error. [Academic]

1.10.1.4 Accomplish engine shutdown [Hands-on]

1.10.1.4.1 Match engine shutdown checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error. [Academic]

1.10.1.5 Accomplish before leaving cockpit procedures/cockpit egress [Hands-on]

1.10.1.5.1 Describe the steps in the before leaving cockpit procedures/cockpit egress with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.10.1.6 Accomplish post flight aircraft inspection [Hands-on]

1.10.1.6.1 Match post flight aircraft inspection checklist items with their associated notes, warnings, cautions, tolerances, limits and critical values without error. [Academic]

1.10.2 Perform night post flight procedures [Hands-on]

1.10.3 Perform quick turnaround procedures [Hands-on]

1.10.3.1 Describe the steps in the procedure for quick turn-around with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions. [Academic]

1.10.4 Accomplish hot refueling [Hands-on]

1.10.4.1 Describe the steps in the procedure for hot refueling with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions. [Academic]

1.10.5 Describe local area post flight procedures [Academic]

TASK NO.: 1.10

BEHAVIOR: Perform post flight procedures

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.10.1.1

BEHAVIOR: Perform after clearing runway checks

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform normal post flight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: After landing
Systems presenting cues: N/A

STANDARD:

Authority: -1

Performance precision: Accurately IAW procedures

Computational accuracy: N/A

TASK NO.: 1.10.1.2

BEHAVIOR: Accomplish dearming procedures

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform normal post flight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: After landing if dearming required
Systems presenting cues: N/A

STANDARD:

Authority: 55-16; IP

Performance precision: IAW prodedure; safely IAW IP judgment

Computational accuracy: N/A

TASK NO.: 1.10.1.3

BEHAVIOR: Accomplish before engine shutdown checks

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform normal postflight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: After stopped in parking area
Systems presenting cues: N/A

STANDARD:

Authority: -1 checklist

Performance precision: Accurately IAW procedures

Computational accuracy: N/A

TASK NO.: 1.10.1.4

BEHAVIOR: Accomplish engine shutdown

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform normal post flight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: When before engine shutdown complete; ground crew signal
Systems presenting cues: N/A

STANDARD:

Authority: -1

Performance precision: Accurately IAW procedures

Computational accuracy: N/A

TASK NO.: 1.'0.1.5

BEHAVIOR: Accomplish before leaving cockpit procedures/cockpit egress

---

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform normal post flight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: When engine shutdown complete
Systems presenting cues: N/A

STANDARD:

Authority: IP

Performance precision: Safely IAW IP judgment

Computational accuracy: N/A

TASK NO.: 1.10.1.6

BEHAVIOR: Accomplish post flight aircraft inspection

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform normal post flight procedures

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: After exiting cockpit
Systems presenting cues: N/A

STANDARD:

Authority: IP judgment

Performance precision: Safely and with appropriate thoroughness IAW IP judgment

Computational accuracy: N/A

TASK NO.: 1.10.2

BEHAVIOR: Perform night post flight procedures

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform post flight procedures

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.10.3

BEHAVIOR: Perform quick turnaround procedures

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity: Perform post flight procedures

External environment:

Aids:

Product of previous task:

Initiation cues: Prior to engine shutdown
Systems presenting cues: N/A

STANDARD:

Authority:

Performance precision:

Computational accuracy: N/A

TASK NO.: 1.10.4

BEHAVIOR: Accomplish hot refueling

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: -1 checklist
Information source for: Procedures

Activity: Perform post flight procedures

External environment: N/A

Aids: None

Product of previous task: Perform after clearing runway checks

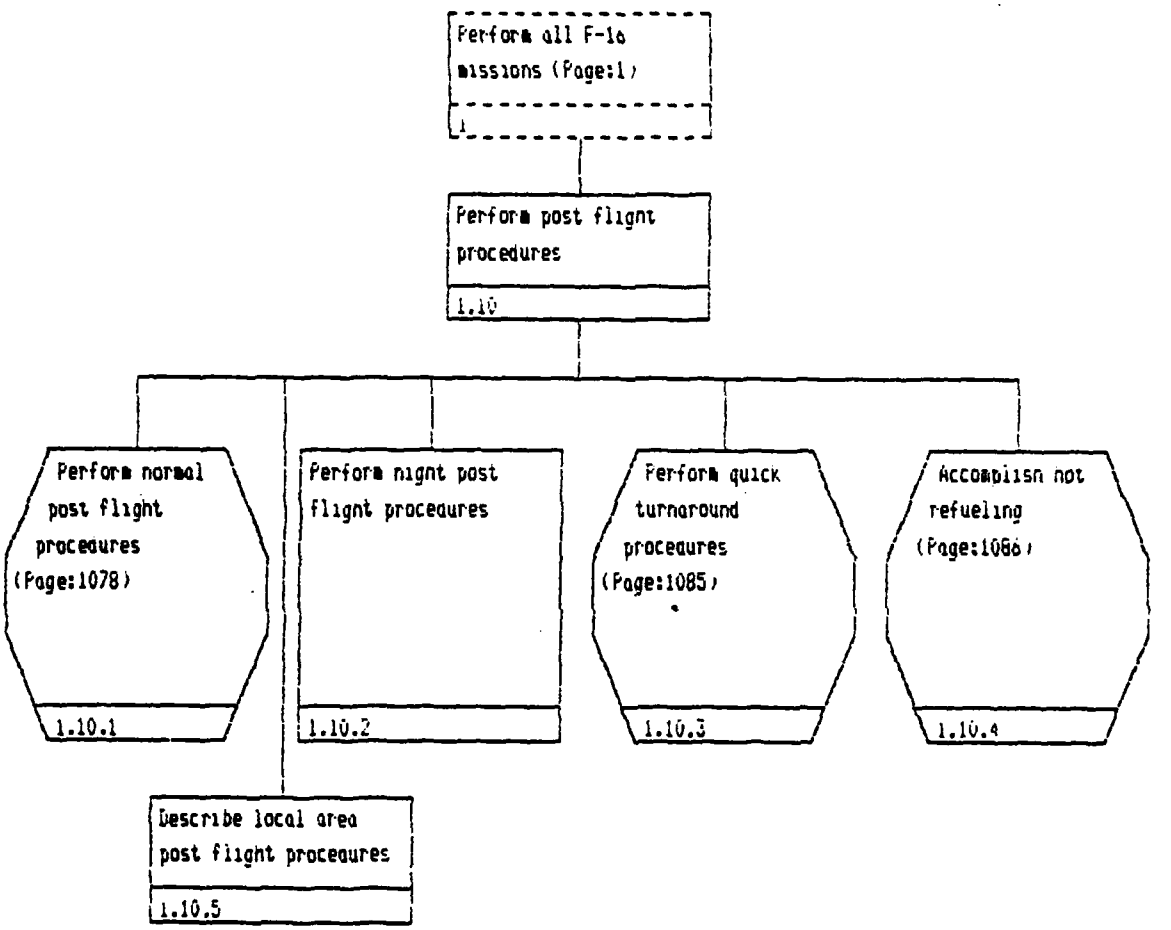
Initiation cues: After landing checks complete, when hot refueling required
Systems presenting cues: N/A

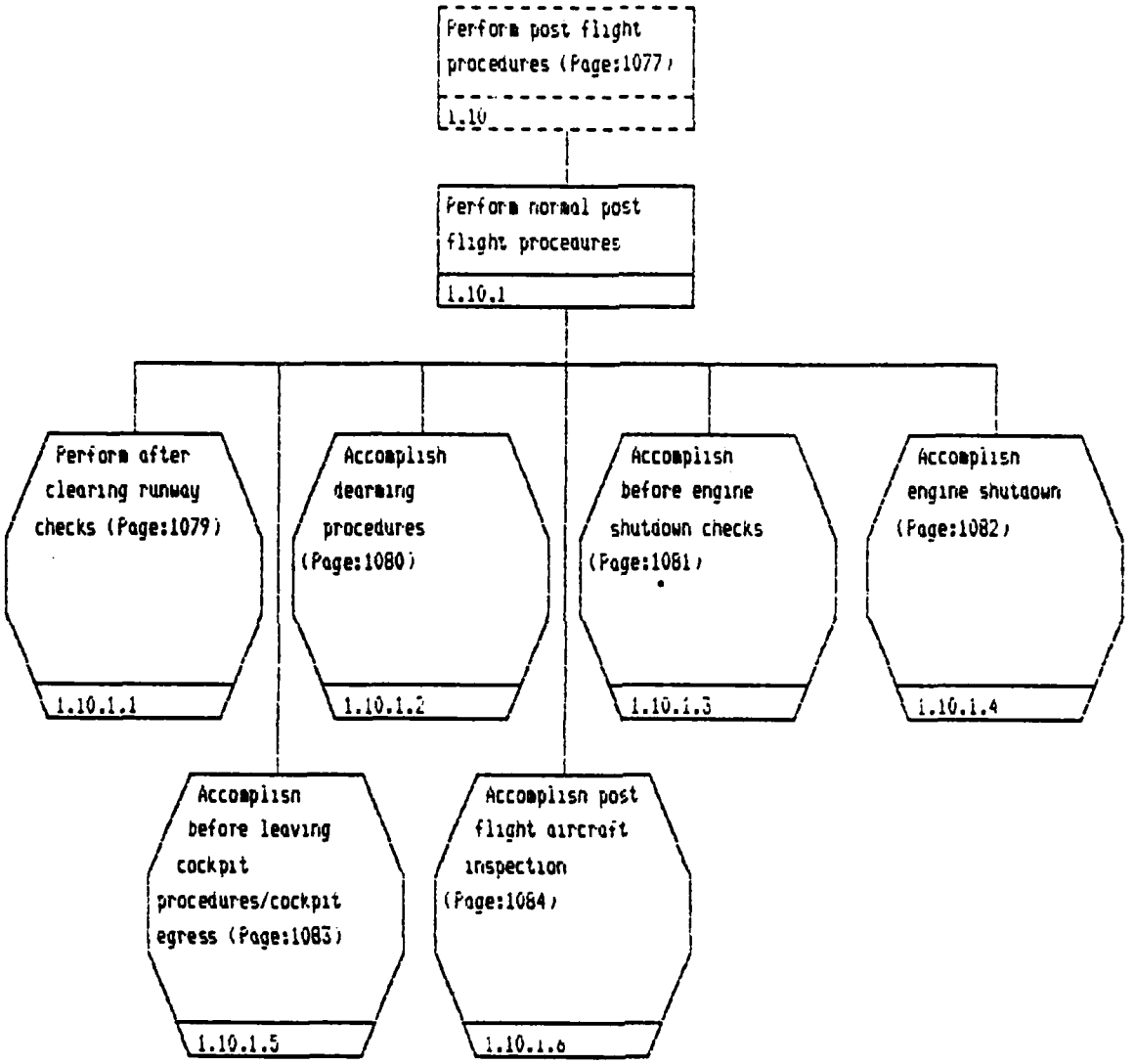
STANDARD:

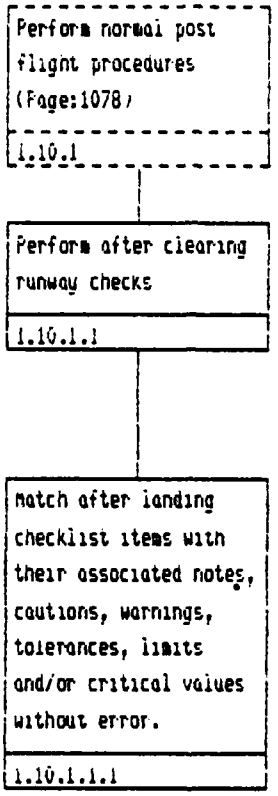
Authority: -1 and IP

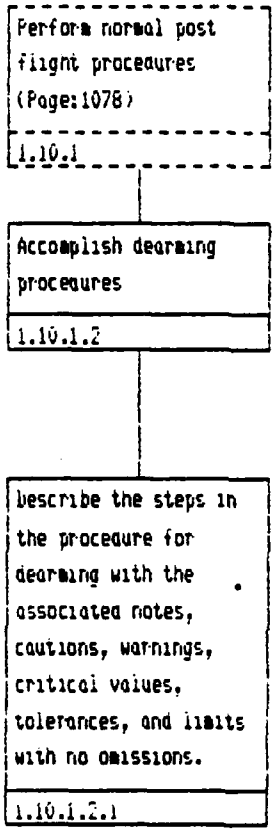
Performance precision: Accurately IAW -1, safely IAW IP judgment

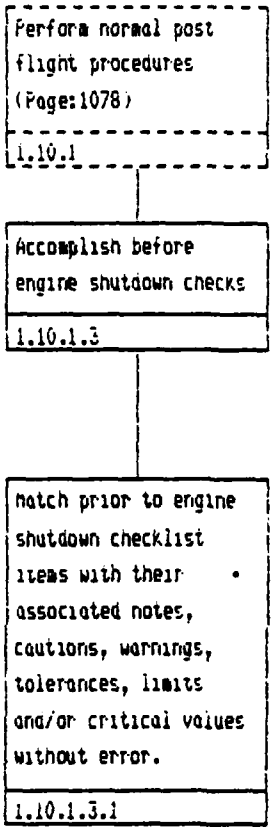
Computational accuracy: N/A

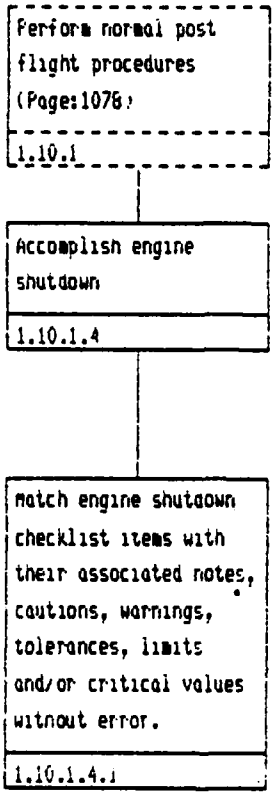

Perform all F-16 missions (Page:1)
1
Perform post flight procedures
1.10
Perform normal post flight procedures (Page:1078)
1.10.1
Perform night post flight procedures
1.10.2
Perform quick turnaround procedures (Page:1085)
1.10.3
Accomplish hot refueling (Page:1086)
1.10.4
Describe local area post flight procedures
1.10.5

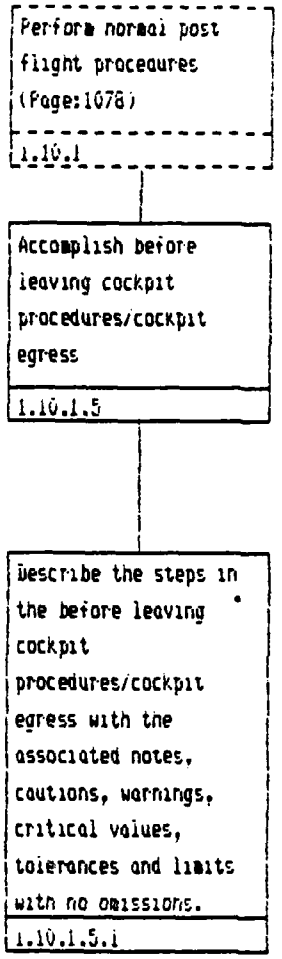

Perform post flight procedures (Page:1077)
1.10
Perform normal post flight proceaures
1.10.1
Perform after clearing runway checks (Page:1079)
1.10.1.1
Accomplish dearming procedures (Page:1080)
1.10.1.2
Accomplish before engine shutdown checks (Page:1081)
1.10.1.3
Accomplish engine shutdown (Page:1082)
1.10.1.4
Accomplish before leaving cockpit procedures/cockpit egress (Page:1083)
1.10.1.5
Accomplish post flight aircraft inspection (Page:1084)
1.10.1.6

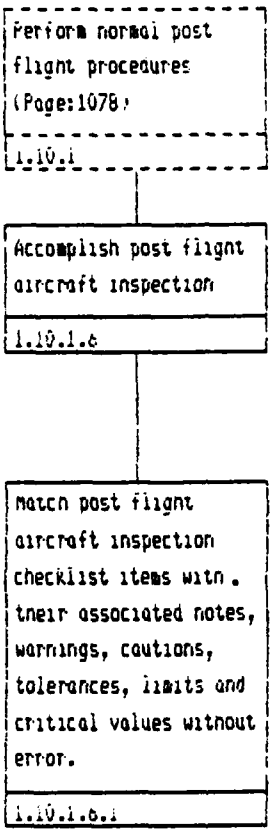

Perform normal post flight procedures (Page:1078)
1.10.1
Perform after clearing runway checks
1.10.1.1
Match after landing checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error.
1.10.1.1.1

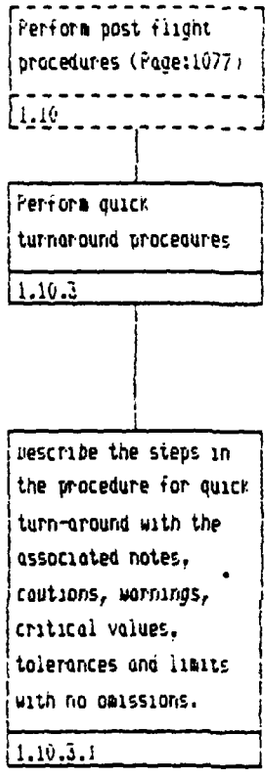

Perform normal post flight procedures (Page:1078)
1.10.1
Accomplish dearming procedures
1.10.1.2
Describe the steps in the procedure for dearming with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.10.1.2.1

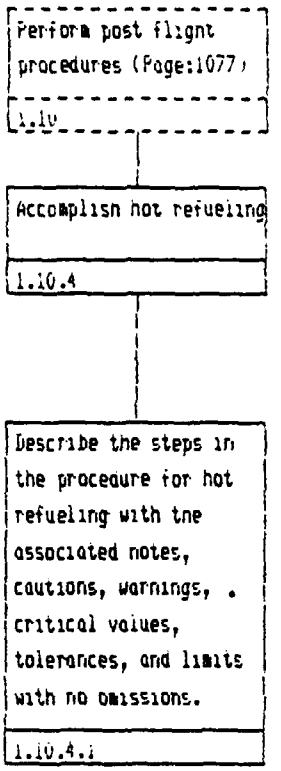

Perform normal post flight procedures (Page:1078)
1.10.1
Accomplish before engine shutdown checks
1.10.1.3
Match prior to engine shutdown checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error.
1.10.1.3.1


Perform normal post flight procedures (Page:1078)
1.10.1
Accomplish engine shutdown
1.10.1.4
Match engine shutdown checklist items with their associated notes, cautions, warnings, tolerances, limits and/or critical values without error.
1.10.1.4.1


Perform normal post flight procedures (Page:1078)
1.10.1
Accomplish before leaving cockpit procedures/cockpit egress
1.10.1.5
Describe the steps in the before leaving cockpit procedures/cockpit egress with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.10.1.5.1


Perform normal post flight procedures (Page:1078)
1.10.1
Accomplish post flight aircraft inspection
1.10.1.6
Match post flight aircraft inspection checklist items with their associated notes, warnings, cautions, tolerances, limits and critical values without error.
1.10.1.6.1


Perform post flight procedures (Page:1077)
1.10
Perform quick turnaround procedures
1.10.3
Describe the steps in the procedure for quick turn-around with the associated notes, cautions, warnings, critical values, tolerances and limits with no omissions.
1.10.3.1


Perform post flight procedures (Page:1077)
1.10
Accomplish hot refueling
1.10.4
Describe the steps in the procedure for hot refueling with the associated notes, cautions, warnings, critical values, tolerances, and limits with no omissions.
1.10.4.1

1.11 Perform mission debriefing [Hands-on]

1.11.1 Perform maintenance debriefing procedures [Hands-on]

1.11.1.1 Inform crew chief/line chief of aircraft status (E) [Hands-on]

1.11.1.2 Accomplish AFTO Form 781 [Hands-on]

1.11.1.2.1 Describe the steps in the procedure for completing AFTO Form 781 in correct order with no omissions. [Academic]

1.11.1.3 Accomplish maintenance debriefing [Hands-on]

1.11.1.3.1 State the items of information to be contained in the maintenance debrief with no omissions. [Academic]

1.11.1.4 Describe the steps in the procedure for maintenance debriefing in correct order with no omissions. [Academic]

1.11.2 Accomplish intelligence debriefing [Hands-on]

1.11.2.1 State the items of information to be contained in the intelligence debrief with no omissions. [Academic]

1.11.3 Accomplish flight debriefing [Hands-on]

1.11.3.1 Describe procedures for flight debriefing in correct order with no omissions. [Academic]

MISSION DEBRIEFING
1.11 CRITERION-REFERENCED OBJECTIVES

Tasks Without CROs

1.11.1.1

TASK NO.: 1.11.1

BEHAVIOR: Perform maintenance debriefing procedures

CONDITION:

Agency:
Information source for:

Manuals and pubs:
Information source for:

Activity:

External environment:

Aids:

Product of previous task:

Initiation cues:
Systems presenting cues:

STANDARD:

Authority:

Performance precision:

Computational accuracy:

TASK NO.: 1.11.1.2

BEHAVIOR: Accomplish AFTO Form 781

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform maintenance debriefing

External environment: N/A

Aids: None

Product of previous task: None

Initiation cues: After flight
Systems presenting cues: N/A

STANDARD:

Authority:

Performance precision: 100% accuracy

Computational accuracy: N/A

TASK NO.: 1.11.1.3

BEHAVIOR: Accomplish maintenance debriefing

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform maintenance debriefing procedures

External environment: N/A

Aids: Maintenance debrief forms

Product of previous task: None

Initiation cues: Immediately after flight
Systems presenting cues: N/A

STANDARD:

Authority: 55-16

Performance precision: Completely

Computational accuracy: N/A

TASK NO.: 1.11.2

BEHAVIOR: Accomplish intelligence debriefing

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform mission debriefing

External environment: N/A

Aids: Briefing guides

Product of previous task: None

Initiation cues: After flight
Systems presenting cues: N/A

STANDARD:

Authority: 55-16

Performance precision: Completely

Computational accuracy: N/A

TASK NO.: 1.11.3

BEHAVIOR: Accomplish flight debriefing

CONDITION:

Agency: None
Information source for: N/A

Manuals and pubs: None
Information source for: N/A

Activity: Perform mission debriefing

External environment: N/A

Aids: Briefing guides

Product of previous task: None

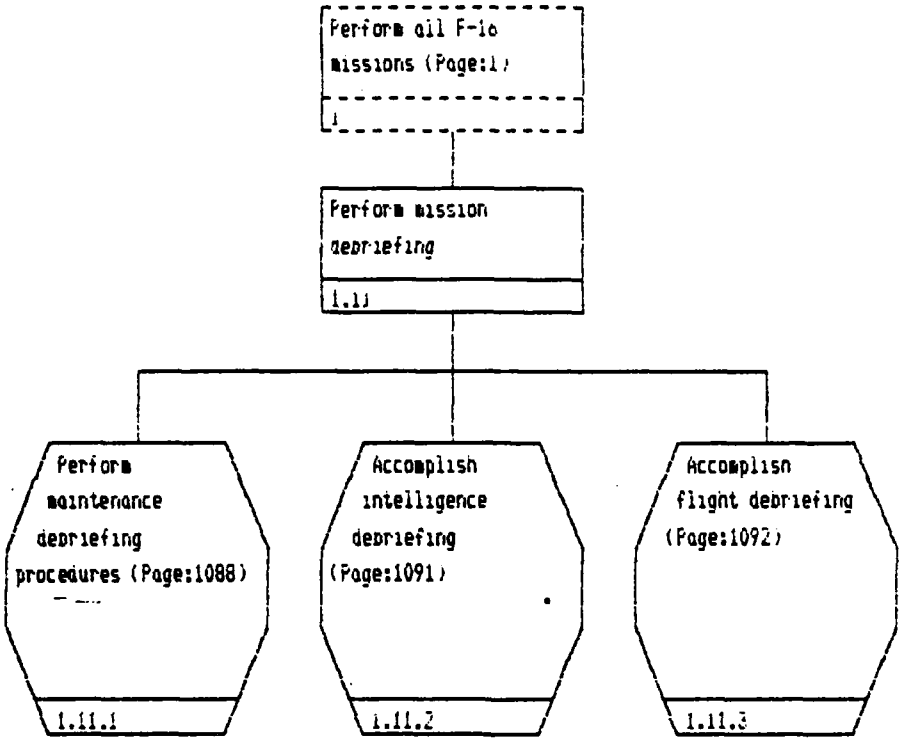
Initiation cues: After flight
Systems presenting cues: N/A

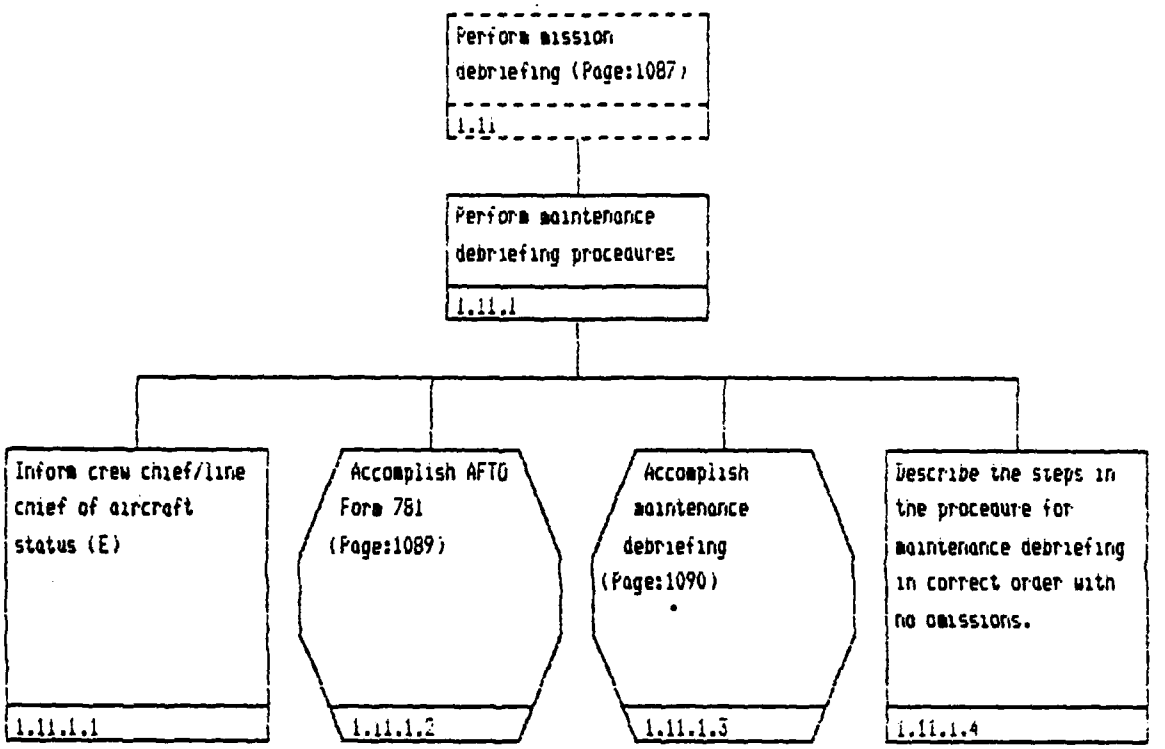
STANDARD:

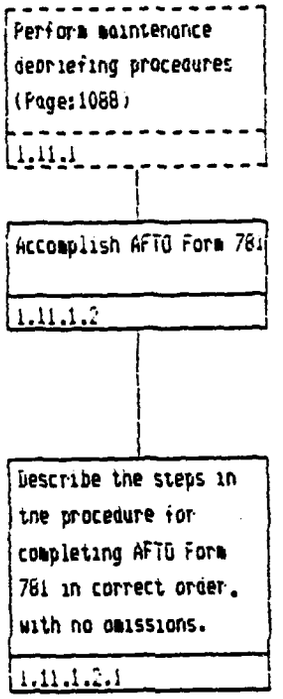
Authority: 60-2 vol III

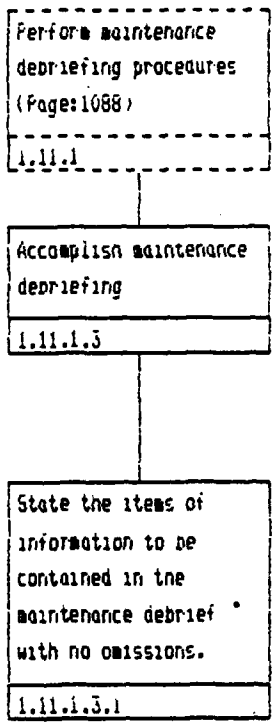
Performance precision: Completely

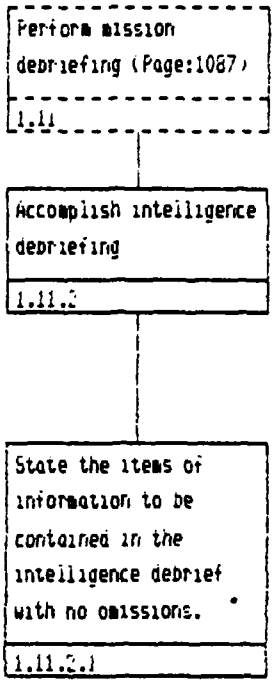
Computational accuracy: N/A

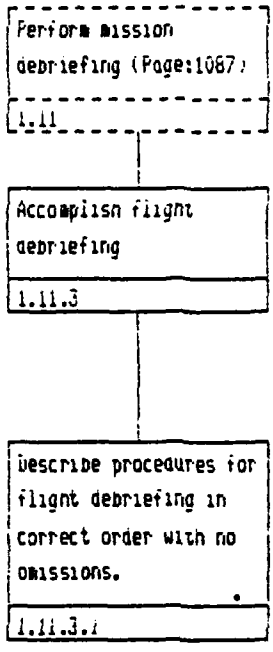

Perform all F-16 missions (Page:1)
1
Perform mission debriefing
1.11
Perform maintenance debriefing procedures (Page:1088)
1.11.1
Accomplish intelligence debriefing (Page:1091)
1.11.2
Accomplish flight debriefing (Page:1092)
1.11.3


Perform mission debriefing (Page:1087)
1.11
Perform maintenance debriefing proceaures
1.11.1
Inform crew chief/line chief of aircraft status (E)
1.11.1.1
Accomplish AFTO Form 781 (Page:1089)
1.11.1.2
Accomplish maintenance debriefing (Page:1090)
1.11.1.3
Describe the steps in the proceaure for maintenance debriefing in correct order with no omissions.
1.11.1.4


Perform maintenance debriefing procedures (Page:1088)
1.11.1
Accomplish AFTO Form 781
1.11.1.2
Describe the steps in the procedure for completing AFTO Form 781 in correct order, with no omissions.
1.11.1.2.1


Perform maintenance debriefing procedures (Page:1088)
1.11.1
Accomplish maintenance debriefing
1.11.1.3
State the items of information to be contained in the maintenance debrief with no omissions.
1.11.1.3.1


Perform mission debriefing (Page:1087)
1.11
Accomplish intelligence debriefing
1.11.2
State the items of information to be contained in the intelligence debrief with no omissions.
1.11.2.1


Perform mission debriefing (Page:1087)
1.11
Accomplish flight debriefing
1.11.3
Describe procedures for flight debriefing in correct order with no omissions.
1.11.3.1

OBJECTIVES - CONVERSION PHASE

WB101 "ENGINE SYSTEM"

OBJECTIVE A (1.2.1.6.1): Match the primary components of the engine fuel control system with a brief description of their function.

OBJECTIVE B (1.2.1.7): Briefly describe the effect of attempting an engine start with the Fuel Master switch in the OFF position.

OBJECTIVE C (1.5.4.3.7): Describe the primary function of the Electronic Engine Control (EEC); the function of the EEC at high mach and at high altitude and low mach.

OBJECTIVE D (1.5.4.3.8): Describe the primary function of the Backup Fuel Control (BUC), the operating characteristics of the engine when using the BUC (regarding throttle movement and postion), the limitations associated with BUC operation, and the BUC ground test procedures.

OBJECTIVE E (1.2.1.7): Describe how the Starting Fuel switch affects engine starts.

OBJECTIVE F (1.2.1.7): Describe the function of the Engine Anti-Ice switch positions and their uses.

OBJECTIVE G (1.2.1.7): Describe the normal function and indications of nozzle operation.

OBJECTIVE H (1.5.4.3.5): State the Oil Pressure system limitations for start, idle, ground and inflight military/afterburner, and flight at less than +1 g.

OBJECTIVE I (1.2.1.6.1): State the FTIT limitations for start, idle, military/afterburner on takeoff roll, and military/afterburner in flight.

OBJECTIVE J (1.2.1.6.1): State the engine operating limitations for the following:

- Maximum rpm allowed on takeoff roll.
- V max prohibition.
- Maximum rpm allowed inflight.
- Nozzle fluctuation limits.
- Afterburner operation and light-off limits.

OBJECTIVE K (1.2.1.6.1): List the components powered by the engine alternator.

OBJECTIVE L (1.5.4.3): Describe the fire and overheat circuitry including power source and associated normal engine start peculiarity.

OBJECTIVE M (1.2.1.6): Briefly describe the Jet Fuel Starter system function, associated preflight considerations, starting procedures, and operating limits on the ground and in the air.

OBJECTIVE N (1.2.1.6.1): Describe with the aid of a checklist the procedures and normal sequence of events during a ground, battery engine start.

OBJECTIVE AA (1.2.1.6.1): State the indications of a hot start and the corrective actions to be taken.

OBJECTIVE BB (1.2.1.6.2): State the indications of a hung start and the corrective actions to be taken.

OBJECTIVE CC (1.5.4.3.4): State the corrective actions to be taken in the event of an OVERHEAT caution light illuminating when airborne.

OBJECTIVE DD (1.2.6.1.5): State the corrective actions to be taken in the event of an engine/JFS fire/overheat on start.

OBJECTIVE EE (1.3.2.1, 1.3.2.2, 1.3.2.3): State the corrective actions to be taken for the occurrence of each of the following conditions during takeoff roll: Engine failure, engine fire, and afterburner failure.

OBJECTIVE FF (1.5.4.3.9): State the corrective actions to be taken for an afterburner blowout/failure to light.

OBJECTIVE GG (1.5.4.3.2): List the steps in the UFC airstart procedure and state the airstart envelope and the optimum conditions for a UFC airstart.

OBJECTIVE HH (1.5.4.3.8): List the steps in the BUC airstart procedure

OBJECTIVE II (1.5.4.3.8): State the minimum and maximum BUC airstart airspeeds, the maximum BUC start altitude, the optimum conditions for a BUC airstart, and the situations in which a BUC airstart should be attempted.

OBJECTIVE JJ (1.5.4.3.8): State the restrictions to throttle movement when operating in BUC.

OBJECTIVE KK (1.5.4.3.7): State the restrictions to throttle movement and afterburner operation with the EEC/BUC switch in the OFF position or with the EEC caution light illuminated. (Checklist available.)

OBJECTIVE LL (1.5.4.3.7): State the procedures for EEC caution light illuminated and describe the effect on the nozzle of operating the engine with the EEC/BUC switch in OFF during landing. (Checklist available.)

OBJECTIVE MM (1.5.4.3.4): State the corrective actions to be taken for an engine fire warning light illuminating inflight.

OBJECTIVE NN (1.5.4.3): Describe the characteristics of engine oscillation and state the two probable causes.

OBJECTIVE OO (1.5.4.3): State the two conditions in which BUC should be selected in the event of engine oscillations.

OBJECTIVE PP (1.5.4.3.1): Describe the two types of engine stall and state the corrective procedures for both.

OBJECTIVE QQ (1.5.4.3.1): Describe the characteristics of an engine stagnation and state the corrective action.

OBJECTIVE RR (1.5.4.3): Describe the four possible causes of excessive thrust and state the corrective action. (Checklist available.)

OBJECTIVE SS (1.5.4.3.3): List the possible causes of insufficient thrust, state the corrective action, and describe the possible consequences of selecting BUC if the throttle linkage has failed below BUC idle. (Checklist available.)

OBJECTIVE TT (1.5.4.3.7): Describe the possible symptoms of a closed-nozzle failure and those associated with a full-open nozzle failure and state the corrective actions for nozzle failure. (Checklist available.)

OBJECTIVE UU (1.5.4.3.7): Describe the restriction on afterburner initiation with a failed open nozzle, describe the restriction on BUC operation with the nozzle open, and describe the restriction on operation near MIL or above MIL with a failed closed nozzle.

OBJECTIVE VV (1.5.4.3.5): Describe the symptoms of an oil pressure malfunction and state the corrective action. (Checklist available.)

OBJECTIVE WW (1.5.4.3): Describe the symptoms of rpm signal failure to the EEC including how to differentiate this malfunction from a stagnation; also state the corrective action. (Checklist available.)

OBJECTIVE XX (1.5.4.3): Describe the symptoms of UFC input failure including indications to differentiate this malfunction from a stagnation and state the corrective action. (Checklist available.)

OBJECTIVE YY (1.5.4.3): Describe the most probable cause of inability to control engine rpm and state the corrective action. (Checklist available.)

WB102 "SYSTEM FAMILIARIZATION EMERGENCY POWER UNIT (EPU) SYSTEM" (1.5.4.5)

OBJECTIVE A: Given a photograph or drawing of an F-16A cockpit, correctly locate each control and indicator that affects the EPU.

OBJECTIVE B: Correctly describe the function(s) of each control and indicator that directly affects the EPU.

OBJECTIVE C: Describe the operating modes of the EPU.

OBJECTIVE D: Describe the procedure for accomplishing EPU Ground Test.

WB103 "ENVIRONMENTAL CONTROL AND OXYGEN SYSTEMS" (1.5.4.1, 1.5.4.7)

OBJECTIVE A: Describe the function of each position on the Air Source Selector switch and how MAN differs from AUTO temperature control.

OBJECTIVE B: Given a photo or drawing of an F-16 cockpit/ instrument panel, locate the cabin altimeter, cabin pressure caution light, and the g suit test button. (D)

WB104 "F-16 FUEL SYSTEM" (1.5.4.4, 1.6.3)

OBJECTIVE A: State the total capacity (in pounds) of the F-16 A and B model fuel system clean and with all external tanks, the capacity (in pounds) of the forward and aft reservoirs, internal wing tanks, external wing tanks, and centerline tank for F-16 A and B models.

OBJECTIVE B: State which tanks are included in the Forward and Aft Fuel Systems (including external tanks).

OBJECTIVE C: Given a list of Fuel Quantity Select knob positions, describe their functions.

OBJECTIVE D: Given a Fuel Quantity Indicator reading and a Fuel Quantity Select knob position, interpret the indication.

OBJECTIVE E: State the normal fuel distribution for the F-16 A and B models.

OBJECTIVE F: State the parameters for the FORWARD FUEL LOW and AFT FUEL LOW caution lights for F-16 A and B models.

OBJECTIVE G: State the two methods by which fuel is transferred in the F-16 A and B models.

OBJECTIVE H: Describe the functions of the NORM and WINGS FIRST positions on the External Fuel Transfer switch.

OBJECTIVE I: Describe the effects of selecting each of the Engine Feed knob positions.

OBJECTIVE J: Given an indication of a fuel imbalance, describe the effect of that imbalance on the CG and the procedure used to correct the imbalance including any notes, cautions, warnings, or restrictions.

OBJECTIVE K: Describe the functions of the Vent and Pressurization System.

OBJECTIVE L: Describe the function of the Tank Inerting switch and the events initiated when it is activated.

OBJECTIVE M: State the function of the Fuel Flow Proportioner (FFP) and the Fuel Flow Indicator.

OBJECTIVE N (1.6.3): List the controls and indicators for the air refueling system and describe the function of each.

OBJECTIVE O (1.6.3): Describe the effects of an open slipway door.

OBJECTIVE P (1.6.3): Describe the sequence of fuel distribution during air refueling.

WB105 "PRECAUTIONARY/FLAMEOUT LANDING PROCEDURES"

OBJECTIVE A (1.9.8.16): List the parameters of the precautionary/ flameout landing pattern from high key to landing.

OBJECTIVE B (1.8.7.4): Identify conditions where the precautionary/ flameout landing pattern may/should be employed.

WB106 "ELECTRICAL POWER SYSTEM" (1.2.6.2.6)

OBJECTIVE A: List the four AC power sources and the two sources of DC power.

OBJECTIVE B: State the four main subsystems of the Electrical Power System.

OBJECTIVE C: From a list choose the electrical components not powered by the emergency generator.

OBJECTIVE D: Describe the function of the PMG (permanent magnet generator) located on the emergency generator.

OBJECTIVE E: Describe the procedure for resetting the nonessential AC bus no. 1, the ECM system, and the radar bus.

OBJECTIVE F: Given a list choose the two functions of the aircraft battery.

OBJECTIVE G: State the procedure to follow if an aircraft battery failure occurs and the rationale for this procedure.

OBJECTIVE H: Describe the power source(s) for the Flight Control System.

OBJECTIVE I: Given a list of Electrical System control positions (e.g., Power Switch--OFF) and a list of functions, match the control's position with its function.

OBJECTIVE J: Given a list of Electrical System indicators and indications (e.g., GEN indicator light--EMER) and a list of functions, match the indication with its function.

WB107 "COMMUNICATION/TACAN/ILS/IFF AND INTERIOR LIGHTING SYSTEMS (1.5.1.2)

OBJECTIVE A: Given a picture or model of the interior lighting control panel, identify each control and its function.

OBJECTIVE B: Given a photograph or drawing of the aircraft cockpit, locate and identify the components of the communications (UHF) system.

OBJECTIVE C: State the function of each control and indicator in the communication (UHF) system, given a representation of the appropriate panels.

OBJECTIVE D: Given a representation of the TACAN control panel, identify each control or indicator and state its function.

OBJECTIVE E: Given a represenatation of the instrument landing system control panel, identify each control or indicator and state its function.

OBJECTIVE F: State the locations and functions of IFF controls.

OBJECTIVE G: State the effects of each switch position on the instrument mode select panel.

OBJECTIVE H: State the function and effects of each position on the communications control panel.

WB108 "HYDRAULIC POWER SUPPLY SYSTEM" (Familiarization only) (1.2.6.2.7)

WB109 "LANDING GEAR, NOSEWHEEL STEERING, WHEEL BRAKE, AND ARRESTMENT SYSTEMS"

OBJECTIVE A (1.3.1.4): Given a representation of controls and indicators relating to the landing gear system, identify the function of each.

OBJECTIVE B (1.3.2.4): Describe the normal operation of the landing gear system and state common sources of system failure, including indications and effects.

OBJECTIVE C (1.3.2.4): State the differences in the landing gear system between F-16 A and B.

OBJECTIVE D (1.2.6.2.5): Given a representation of controls and indicators relating to the NWS system, identify the function of each.

OBJECTIVE E (1.2.6.2.5): Describe the normal operation of the NWS system and state common sources of system failure, including indicators and effects.

OBJECTIVE F (1.2.6.2.5): Describe the differences in the NWS system between F-16 A and B.

OBJECTIVE G (1.2.6.2.4): Given a representation of the wheel brake system controls and indicators, identify the function of each.

OBJECTIVE H (1.2.6.2.4): Describe the normal operation of the wheel brake system and state common sources of system failure, including indicators and effects.

OBJECTIVE I (1.2.6.2.4): Describe the differences in the wheel brake system betwwen F-16 A and B.

OBJECTIVE J (1.3.2.10): Given a representation of arrestment system controls and indicators, identify the function of each.

OBJECTIVE K (1.3.2.10): Describe the normal operation of the arrestment system and state common sources of failure, including indicators and effects.

OBJECTIVE L (1.3.2.10): Describe the differences in arrestment systems between F-16 A and B.

WB110 "AIR DATA AND FLIGHT INSTRUMENT SYSTEMS"

OBJECTIVE A (1.5.4.11.4):

(1) State the primary functions of the ADC and CADC.

(2) State the probable cause, implications, and appropriate action for: An ADC caution light; a CADC caution light.

(3) State the indications and implications of, and appropriate action for: Dual static or impact pressure sensing malfunction; dual AOA source malfunction.

OBJECTIVE B (1.5.4.11.4, 1.9.1):

(1) State the implications of the PNEU flag appearing in the altimeter.

(2) State the power source and caging procedure for the standby attitude indicator.

(3) State the approximate usable time for attitude reference from the standby attitude indicator after power loss to the unit.

(4) Describe the indication and meanings of OFF, GS, LOC, and AUX flags on the ADI.

(5) Describe the operation of the AOA indicator and indexes.

(6) Explain the meaning of the indexer light signals associated with various AOA.

WB111 "FLIGHT CONTROL SYSTEM" (1.3.2.6)

OBJECTIVE A: Describe the function of the Flight Control System limiters.

OBJECTIVE B: Describe the function of the integrated servo actuators.

OBJECTIVE C: Describe the function of the flight control computer.

OBJECTIVE D: List the differences in the Flight Control System between the F-16A and F-16B.

OBJECTIVE E: Describe the function of the secondary flight controls.

OBJECTIVE F: Describe the malfunctions that can occur in the components of the Flight Control System and state the caution light indication of the malfunction.

WB112 "INERTIAL NAVIGATION AND WEAPONS DELIVERY SYSTEM" (1.5.4.13)

OBJECTIVE A: List the kinds of calculations that the FCC performs for you.

OBJECTIVE B: State the effects of incorrect stores management subsystem data on energy management calculations.

OBJECTIVE C: List two advantages and two disadvantages of the INS.

OBJECTIVE D: State the two references the INS is always trying to maintain alignment to.

OBJECTIVE E: Describe the three navigational outputs of the INS.

OBJECTIVE F: Describe the function of the switches and displays on the FCNP.

WB114 "HEAD-UP DISPLAY SYSTEM" (1.9.8.15)

OBJECTIVE A: Locate and state the function of the switches on the HUD control panel.

OBJECTIVE B: Identify HUD symbology in the navigation mode to include landing/ILS configuration display.

OBJECTIVE C: Identify HUD symbology unique to each of the three FCC cruise energy management modes and state what each of the symbols mean.

OBJECTIVE D: State what HUD Fuel Warnings are given, what they mean and how to discriminate between the two.

OBJECTIVE E: State the effect on the HUD of FCC power loss.

OBJECTIVE F: State the effect on the HUD of FCC and INS power loss.

OBJECTIVE G: Explain the use of the standby reticle.

OBJECTIVE H: Given a drawing of a HUD when the aircraft radar is locked on to an airborne target, identify range to target and overtake.

OBJECTIVE I: Explain the relationship of the FPM to the attitude bars.

OBJECTIVE J: Given a drawing of a HUD on ILS final approach, state whether the aircraft is off or on glide path and course; and if off course/glide path state how much deflection would be shown on the CDI and the GSI (within one dot).

OBJECTIVE K: Given a drawing of the HUD with landing configuration symbology displayed, state the AOA (within 1°).

WB115 "RADAR SYSTEM" (1.4.1.3.1)

OBJECTIVE A: Identify the primary cockpit interface between the radar and the pilot and list the other radar related cockpit controls and their location.

OBJECTIVE B: State the function of the REO and describe each REO control.

OBJECTIVE C: Given a diagram of the Radar Electro-Optical display, describe the function of each switch/knob.

OBJECTIVE D: Given a REO display with symbols common to all modes, label each symbol.

OBJECTIVE E: Given a REO display in an Air-to-Air mode, label each additional symbol or target data common to Air-to-Air modes of operation.

OBJECTIVE F: Describe the procedures for performing radar lock-on in:

a. Air mode.
b. ACM mode.

OBJECTIVE G: Describe the function of each Air-to-Air and Air-to-Surface submode of radar operation.

OBJECTIVE H: List the radar modes in the order of their priority.

OBJECTIVE I: Given a list of the radar controls in the F-16 cockpit, state your preferences for each switch position (typical setup for transition sortie).

OBJECTIVE J: Describe the procedure for performing a radar BIT using the FNCP.

OBJECTIVE H: Given a drawing of a HUD when the aircraft radar is locked on to an airborne target, identify range to target and overtake.

OBJECTIVE I: Explain the relationship of the FPM to the attitude bars.

OBJECTIVE J: Given a drawing of a HUD on ILS final approach, state whether the aircraft is off or on glide path and course; and if off course/glide path state how much deflection would be shown on the CDI and the GSI (within one dot).

OBJECTIVE K: Given a drawing of the HUD with landing configuration symbology displayed, state the AOA (within 1°).

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OBJECTIVE I: Given a list of the radar controls in the F-16 cockpit, state your preferences for each switch position (typical setup for transition sortie).

OBJECTIVE J: Describe the procedure for performing a radar BIT using the FNCP.

WB119 "TWO-SHIP FORMATION POSITIONING LINE ABREAST"
(1.7.5.1.1.1)

OBJECTIVE A: State the correct positioning for the two-ship line abreast formation, including lateral, vertical and fore-aft separation.

OBJECTIVE B: Describe methods of correcting lateral, vertical and fore-aft position errors in two-ship line abreast tactical formation.

WB120 "TWO-SHIP LINE ABREAST FORMATION TURNS"

OBJECTIVE A (1.7.5.1.1.2.1): State the verbal cue and describe the considerations for performing a two-ship delayed 90° turn.

OBJECTIVE B (1.7.5.1.1.2.2): State the verbal cue and describe the considerations for performing a two-ship delayed 45° turn.

OBJECTIVE C (1.7.5.1.1.2): State the verbal cues and describe the considerations for performing two-ship in-place turns and check t rns.

OBJECTIVE D (1.7.5.1.1.2.4): State the verbal cue and describe the considerations for performing a two-ship cross turn.

WB121 "TAKEOFF EMERGENCIES"

OBJECTIVE A (1.3.2.9): List situations where performing aborted takeoff may/should be employed with no omissions.

OBJECTIVE B (1.3.2.10): Describe situations where performing departure-end arrestment may/should be employed with no omissions.

OBJECTIVE C (1.3.2.11): Describe situations where performing low altitude ejection immediately after takeoff may/should be employed with no omissions.

WS101 "NORMAL GYROCOMPASS ALIGNMENT AND DESTINATION ENTRY"

OBJECTIVE A (1.2.1.7.3.1): Describe the normal gyrocompass procedure and its special considerations.

OBJECTIVE B (1.2.1.7.3.4.1): Describe the procedure for entering a destination into the FCNP.

WS102 "PROCEDURES FOR LOADING AND VERIFICATION OF THE SMS"

OBJECTIVE A (1.2.1.7.2.1): State the steps in the procedure for stores loading and verification.

WS103 "PREFLIGHT INTERIOR CHECKS"

OBJECTIVE A (1.2.1.2.5.2): Given the checklist and pictures of the cockpit, state whether the appearance of each control/indicator conforms to the Before Entering Cockpit checks.

OBJECTIVE B (1.2.1.4): Given the checklist and pictures of the cockpit, state whether the appearance of each control/indicator conforms to the Cockpit Interior checks.

OBJECTIVE C (1.2.1.2.5.2): Given the checklist, describe the special considerations associated with the Before Entering Cockpit checks.

OBJECTIVE D (1.2.1.4): Given the checklist, describe the special considerations associated with the Cockpit Interior checks.

OBJECTIVE E (1.2.1.5): Given the checklist, describe the special considerations associated with the Before Starting Engine checks.

WS104 "FLCS SELF-TEST" (1.2.1.7.1)

OBJECTIVE A: State the correct position of the following switches prior to initiating the FLCS self-test:

1. SERVO/ELEC LIGHTS
2. TRIM
3. LE FLAPS
4. ALT FLAPS
5. AIR SOURCE

OBJECTIVE B: Using the checklist, complete the FLCS self-test without error or omissions.

OBJECTIVE C: Describe a FLCS malfunction indication with reference to a DOT position, step number, and associated Malfunction lights.

WS105 "INSTRUMENT RECOVERIES IN THE F-16"

OBJECTIVE A (1.1.2.7.1.3): Given a recovery situation determine:

1. Distance at which to begin an enroute descent using a -3° pitch angle

OR

2. Pitch angle to use for a given altitude loss over a given distance.

OBJECTIVE B (1.8.1): State the sources and switchology for the following holding pattern information:

- TACAN
- Wind drift
- Ground speed/track

OBJECTIVE C (1.8.4.2): List the events and critical parameters in a normal penetration.

OBJECTIVE D (1.8.4.3): Describe the special HUD landing symbology and state the conditions under which it is automatically displayed.

OBJECTIVE E (1.1.2.7.1.3): Given approach plate data, compute the minimum required descent angle from the Final Approach Fix (FAF) to the Missed Approach Point (MAP).

OBJECTIVE F (1.8.4.3.2.2): Describe the flight instrument information and switchology for an ILS approach.

OBJECTIVE G (1.8.4.3.2): List the critical airspeeds, angles of attack, and/or key action for each portion of the instrument recovery and pattern.

WS106 "FORMATION DEPARTURE AND VFR REJOIN" (deleted)

OBJECTIVE A: Describe the techniques, considerations, or procedures for safely executing formation departure as flight leader with specific applications to the F-16.

OBJECTIVE B: State the special considerations for safely executing formation departure as wingman with specific applications to the F-16.

OBJECTIVE C: Describe the considerations and techniques for VFR rejoin after takeoff as number two, three, or four with specific applications to F-16.

WS107 "STORED HEADING AND BEST AVAILABLE TRUE HEADING ALIGNMENTS"

OBJECTIVE A (1.2.1.7.3.2): State the procedure for Stored Heading Alignment in accordance with Dash 34 and Dash One.

OBJECTIVE B (1.2.1.7.3.3): State the procedure for BATH alignment in accordance with Dash 34 and Dash One.

AS101 "ENGINE SYSTEMS MALFUNCTIONS" (1.3.2.2, 1.3.2.3, 1.5.4.3, 1.5.4.3.1, 1.5.4.3.3, 1.5.4.3.6, 1.5.4.3.7, 1.5.4.3.8, 1.5.4.3.9)

OBJECTIVE A: Recognize and identify engine malfunctions for which the primary indicators are FTIT readings, RPM readings, abnormal throttle response, and/or abnormal noise or vibration.

OBJECTIVE B: State the limit values for any of these primary indicators.

AS102 "FUEL SYSTEM MALFUNCTIONS" (1.5.4.4, .5.4.4.1, 1.5.4.4.2, 1.5.4.4.3, 1.5.4.4.4)

OBJECTIVE A: Recognize and identify the following malfunctions and state the parameter values associated with each of these: Fuel Hot, Fuel Imbalance, Gravity Feed and Fuel Low.

AS103 "ADC, LE FLAP, FLIGHT CONTROL SYSTEM CAUTION LIGHTS" (1.3.2.6, 1.5.4.11, 1.5.4.11.1, 1.5.4.11.2, 1.5.4.11.6, 1.5.4.11.7)

OBJECTIVE A: Recognize and identify malfunctions for which the primary indicator is the illumination of the MASTER CAUTION light and either the ADC, FLIGHT CONTROL SYSTEM, or LE FLAP lights.

AS104 "DUAL FLIGHT CONTROL WARNING LIGHT" (1.5.4.11.5)

OBJECTIVE A: Recognize and identify malfunctions for which the primary indicator is the illumination of the DUAL FC FAIL warning light.

AS105 "CRUISE ENERGY MANAGEMENT" (1.5.1.3)

OBJECTIVE A: Describe the FCNP cruise energy management switchology.

OBJECTIVE B: Describe the use of each cruise energy management mode.

OBJECTIVE C: List the data displayed in each cruise energy management mode, and describe its presentation.

AS106 "SINGLE SHIP TAKEOFF" (1.3.1.1)

OBJECTIVE A: State the steps in each variety of single ship takeoff, including:

1. Military power takeoff
2. Instrument/Night takeoff
3. Crosswind takeoff
4. Maximum AB takeoff.

AS107 "ENGINE START PROCEDURES" (1.2.1.6.1, 1.2.1.6.2, 1.2.1.6.3, 1.2.1.6.4, 1.2.1.6.5, 1.2.6.1.2, 1.2.6.1.3, 1.2.6.1.4, 1.2.6.1.5, 1.2.1.6.6, 1.2.6.1.1)

OBJECTIVE A: Describe each step to be accomplished during engine start, including necessary alternate steps or corrective actions.

OBJECTIVE B: State the notes, cautions, warnings, critical value tolerances and limits associated with each engine start procedure.

AS109 "EXTERIOR AIRCRAFT INSPECTION CHECKLIST PROCEDURES" (1.2.1.2.2)

OBJECTIVE A: Locate the inspection areas and items to be checked during the exterior aircraft inspection and identify unacceptable conditions for each item.

AS110 "FORMATION TAXI AND LINEUP"

OBJECTIVE A (1.2.1.9.3): Describe the procedures and techniques for formation taxi in the F-16.

OBJECTIVE B (1.2.1.13.2): Describe the procedures and techniques for formation lineup in the F-16.

AS113 "ENGINE FIRE/OVERHEAT" (1.2.6.1.4, 1.2.6.1.5, 1.3.2.1, 1.5.4.3.4)

OBJECTIVE A: Recognize and identify overheat and engine fire emergencies.

AS116 "ELECTRICAL SYSTEM MALFUNCTION IDENTIFICATION" (1.2.6.2.6, 1.3.2.8, 1.5.4.5.1, 1.5.4.5.2, 1.5.4.5.3, 1.5.4.5.5, 1.5.4.5.6, 1.5.4.6.2)

OBJECTIVE A: Recognize and identify malfunctions for which the primary indicators are the illumination of the Master Caution Light and Electrical System Caution Light.

AS117 "MALFUNCTIONS INDICATED BY THE HYDRAULIC/OIL PRESSURE WARNING LIGHT" (1.2.6.2.7, 1.5.4.3.5, 1.5.4.6, 1.5.4.6.1, 1.5.4.6.3, 1.5.4.6.4, 1.9.8.13)

OBJECTIVE A: Recognize and identify malfunctions for which the primary indicator is the illumination of the HYD/OIL PRESS warning light, and state the parameter values associated with each malfunction.

SME101 "PROCEDURES FOR FCNP/AVIONICS SETUP AND NAVIGATION TO STEERPOINTS"

OBJECTIVE A (1.2.1.7.3.1): Review the INS normal alignment sequence.

OBJECTIVE B (1.2.1.7.3.1.2): Describe the steps in the procedure for entering manual variation on FCNP.

OBJECTIVE C (1.2.1.7.3.7): Describe the procedure for clearing the MFL.

OBJECTIVE D (1.2.1.7.3.8): Describe the procedure for D-value altitude calibration.

OBJECTIVE E (1.2.1.7.3.4): Describe the procedure for destination data entry.

OBJECTIVE F (1.2.1..7.3.11.1): Describe the steps in the procedure for entering BINGO fuel.

OBJECTIVE G (1.2.1.7.3.4): Describe the steps in the procedure for configuring FCNP for steerpoint selection.

OBJECTIVE H (1.5.1.1.3): Describe the steps in the procedure for using INS as a navigation aid.

OBJECTIVE I (1.5.1.1.3): Describe situations where INS may/should be employed.

OBJECTIVE J (1.2.1.7.3.5): Describe the steps in the procedure for checking current OFP and computer time select.

OBJECTIVE K (1.2.1.7.9): Describe the steps in the procedure for initiating Built In Test (BIT) sequences via the FCNP.

OBJECTIVE L (1.10.1.7): Describe the procedures for PFL/MFL recording and INS shutdown.

SM104 "AIRCRAFT HANDLING, FLIGHT CHARACTERISTICS, AND CONVERSION MANEUVERS"

OBJECTIVE A (1.5.5): Describe the basic flight characteristics of the F-16 in all phases of flight under normal conditions.

A1. MIL and AB turn.
A2. Sustained turn.
A3. Vertical recovery/confidence maneuvers.
A4. Roll.
A5. AOA/g limit turn.
A6. Pitchback.
A7. Sliceback.
A8. Reversal.

OBJECTIVE B (1.5.4.12): Given indications occurring during abnormal flight, correctly identify the specific problem.

B1. Aircraft out-of-control.
B2. Upright spin.
B3. Inverted spin.

OBJECTIVE C (1.5.4.12): State the steps in the corrective procedure for responding to abnormal flight conditions.

C1. Aircraft out-of-control.
C2. Upright spin.
C3. Inverted spin.

OBJECTIVE D (1.5.4.9): Given indications occurring during structural damage, identify the specific problem.

OBJECTIVE E (1.5.4.9): State the steps in the corrective procedure for responding to structural damage, including controllability check.

SMV105 "PROCEDURES FOR NORMAL, TOUCH-AND-GO, CROSSWIND, LOW RCR, AND SHORT FIELD LANDINGS INCLUDING NIGHT CONSIDERATIONS"

OBJECTIVE A (1.9.1): Describe the procedure and special considerations (including notes, cautions, and warnings) for a normal landing.

(1.9.6): [illegible]
considerations (including notes, cautions, and [illegible]
crosswind landing.

(1.9.7): [illegible]
[illegible] (including [illegible]
[illegible]ing.

(1.9.4): [illegible]
considerations (including notes, cautions, and [illegible]
[illegible] landing.

1.9.3: [illegible]
[illegible] (including [illegible] cautions, and [illegible]
[illegible] landing.

1.9.5: [illegible]
[illegible] (including [illegible]
night landing.

SMV108 "OVERHEAD VFR STRAIGHT-IN [illegible]"

1.8.3: [illegible]
the normal landing [illegible]

1.8.4.1 [illegible]
[illegible] landing

[illegible]

OBJECTIVE [illegible] 1.8.4.3.1.[illegible]
straight-in approach [illegible]

1.8.4.3.1.[illegible]
[illegible] the F-[illegible]

OBJECTIVE 1.8.4.3.1.[illegible]
pattern [illegible]
F-16.

SM107 "CLIMB[illegible] AND CRUISE [illegible]"

OBJECTIVE [illegible] (1.1.2.3.1): Calculate [illegible]
climb fuel, time, and distance for [illegible]
Time values must be correct within +/- 1 minute, [illegible]
within +/- 50 lbs, and distance values within +/- [illegible]

OBJECTIVE B (1.1.2.3.3): Compute military thrust climb performance data. Time values must be correct within +/- 1/2 minute, fuel values within +/- 50 lbs, and distance values within +/- 2 NM.

OBJECTIVE C (1.1.2.3.4): Compute maximum AB climb performance data. Time values must be correct within +/- .2 minutes, fuel values within +/- 100 lbs, and distance values within +/- 2 NM.

OBJECTIVE D (1.1.2.3.2): Compute best cruise altitude and combat, cruise, and service ceiling altitudes. Altitude values must be correct within +/- 1,000 ft.

OBJECTIVE E (1.1.2.4.3): Compute altitude factor within +/- 0.2.

OBJECTIVE F (1.1.2.4.4): Convert altitude factor into altitude within +/- 500 ft.

OBJECTIVE G (1.1.2.4.6): Determine optimum mach/constant altitude cruise data from Subsonic Cruise, Altitude Factor, Specific Range Conversion, and Fuel Flow Conversion charts: Altitude factor within +/- .2, range factor within +/- .05, optimum mach number within +/- .01, specific range within +/- .0025 NM/lb, fuel flow within +/- 250 lbs/hr.

OBJECTIVE H (1.1.2.4.9): Determine aircraft specific range within +/- .0025 NM/lb.

OBJECTIVE I (1.1.2.4.10): Determine aircraft fuel flow within +/- 250 lbs/hr.

OBJECTIVE J (1.1.2.4.5): Determine optimum mach/optimum altitude cruise data from Subsonic Cruise, Altitude Factor, Specific Range Conversion, and Fuel Flow Conversion charts: Altitude factor within +/- 1, range factor within +/- .05, mach number within +/- .01, optimum altitude within +/- 500 ft, specific range within +/- .0025 NM/lb, fuel flow within +/- 250 lbs/hr.

OBJECTIVE K (1.1.2.4.7): Determine constant mach/constant altitude cruise data from Subsonic Cruise, Altitude Factor, Specific Range Conversion, and Fuel Flow Conversion charts: Altitude factor within +/- .2, range factor within +/- .05, specific range within +/- .0025 NM/lb, fuel flow within +/- 250 lbs/
hr.

OBJECTIVE L (1.1.2.4.8): Determine constant mach/optimum altitude cruise data from Subsonic Cruise, Altitude Factor, Specific Range Conversion, and Fuel Flow Conversion charts: Altitude factor within +/- 1, range factor within +/- .05, altitude within +/- 500 ft, specific range within +/- .0025 NM/lb, fuel flow within +/- 250 lbs/hr.

OBJECTIVES - INTERCEPT PHASE

WB201 "DETERMINING COLLISION COURSE GEOMETRY" (1.7.5.2.4.3.1)

OBJECTIVE A: Given your heading, target heading, radar contact point and co-airspeeds, calculate collision course geometry within aircraft's tactical limitations.

WB202 "INTERCEPT CONSIDERATIONS"

OBJECTIVE A (1.7.5.2.5.1.2): Describe techniques and considerations for
Head-on conversions to stern intercepts.

OBJECTIVE B (1.7.5.2.5.1.2): Describe techniques and considerations for front quarter conversions to stern intercepts.

OBJECTIVE C (1.7.5.2.5.1.2): Describe the considerations and techniques for beam conversion to stern intercepts.

OBJECTIVE D (1.7.5.2.5.2.3.2): Describe techniques and considerations for vertical/tactical intercepts from above or below the target's
altitude.

WB203 "AIM-9J/L SET UP AND SWITCHOLOGY" (1.7.5.2.11.1)

OBJECTIVE A. State why SMS power should not be turned off when carrying AIM-9 missiles (live/captive) until the seeker head covers are in place.

OBJECTIVE B. Describe how you can get AIM-9 missile displays on the HUD for training purposes when there are no actual AIM-9's loaded on the aircraft.

OBJECTIVE C. Describe the two conditions necessary for the missile audio volume control to be functional.

OBJECTIVE D. Name the three SMS modes which enable you to fire Air-to-Air missiles.

OBJECTIVE E. State how you can tell which missile audio tone is being monitored when carrying more than one missile of the same type.

OBJECTIVE F. Describe how to cool the AIM-9L missile in the AAM mode.

OBJECTIVE G. Describe the significance of the AUTO legend on the SCP for an AIM-9L and the method for changing it to MAN.

OBJECTIVE H. Describe how to select a different type of missile in AAM mode when both AIM-9J's and AIM-9L's are carried.

OBJECTIVE I. Describe how to get a RDY indication on the SCP for an AIM-9J and for an AIM-9L.

OBJECTIVE J. Match a list of functional descriptions of AAM HUD symbology with a representative HUD display in AAM mode.

OBJECTIVE K. From a description of a pilot's actions in attempting to launch an AIM-9J or AIM-9L in AAM mode, describe the cause(s) for the unsuccessful launch and/or the incorrect avionics presentations.

OBJECTIVE L. Describe the radar scans available in the Missile Override and Dogfight modes and how to change scans.

OBJECTIVE M. Describe the function of the Target Locator Line on the HUD, including when it is present.

OBJECTIVE N. From a description of a pilot's actions in attempting to launch an AIM-9J or AIM-9L in Missile Override mode, describe the cause(s) for the unsuccessful launch and/or the incorrect avionics presentations.

OBJECTIVE O. Given a picture of an SCP when Dogfight is selected, describe the SMS SCP information available.

OBJECTIVE P. Match a list of functional descriptions of AIM-9J and AIM-9L symbology with a representative HUD display in Dogfight mode.

OBJECTIVE Q. From a description of a pilot's actions in attempting to launch an AIM-9J or AIM-9L in DOGFIGHT mode, describe the cause(s) for the unsuccessful launch and/or the incorrect avionics presentations.

OBJECTIVE R. Describe the HUD symbology available with an FCC failure, an INU failure, and a failure of both the FCC and INU.

AS201 "AIR-TO-AIR RADAR SEARCH AND LOCK-ON (1.7.5.2.2)

OBJECTIVE A: Given a list of switches/knobs located on the RCP indicate the positions recommended for setting up the RCP as part of the fence check. Also describe the recommended position of the Antenna Elevation knob and the acquisition symbol on the REO.

OBJECTIVE B: State the rationale for keeping the acquisition symbol inside the target range.

OBJECTIVE C: Describe how to discriminate between real and false targets.

OBJECTIVE D: Describe how to perform radar lock-on.

OBJECTIVE E: Given a drawing of the REO during radar search and after lock-on correctly label the symbology presented.

OBJECTIVE F: Describe the procedure for "sampling" a target.

SMV201 "AIM-9J/9L LAUNCH PARAMETERS AND RULES OF THUMB (AAM, MISSILE OVERRIDE, AND DOGFIGHT"

OBJECTIVE A (1.7.2.10): Perform the external preflight inspection of the AIM-9J/9L missiles IAW the -34 checklist.

OBJECTIVE B (1.7.5.2.11.1.1.1): State the rules of thumb/special considerations for employing the AIM-9J missile.

OBJECTIVE C (1.7.5.2.11.1.1.2): State the rules of thumb/special considerations for employing the AIM-9L missile.

OBJECTIVE D (1.7.2.10): Describe the HUD symbology and audio indications for an AIM-9J missile in the AAM, Missile Override and Dogfight modes when the attacking F-16 is in a valid launch envelope.

OBJECTIVE E (1.7.2.10): Describe the HUD symbology and audio indications for an AIM-9L missile in the AAM, Missile Override, and Dogfight modes when the attacking F-16 is in a valid launch envelope.

SMV202 "VARIETIES OF SINGLE-SHIP TACTICAL INTERCEPTS"

OBJECTIVE A (1.7.5.2.1): Name the varieties of tactical intercepts.

OBJECTIVE B (1.7.5.2.13.1): State the special considerations for tactical intercept using GCI/AWACS.

OBJECTIVE C (1.7.5.2.1): Given initial Air-to-Air target information, describe the correct response in accordance with current tactical considerations.

OBJECTIVE D (1.7.5.2.2.3): State the types of radar displayed information to be relayed and describe the relay message format.

OBJECTIVE E (1.7.5.2.8.1): Given bull's-eye location, own position, own heading, and GCI bull's-eye call, state the area of visual search within 90°.

OBJECTIVE F (1.7.5.2.4.3): Given an appropriate scenario, determine intercept geometry.

SM203 "PROCEDURES FOR DETERMINING TARGET HEADING, ALTITUDE, AND AIRSPEED WITHOUT LOCK-ON OR WITH DEGRADED RADAR/JAMMING"

OBJECTIVE A (1.7.5.2.2.2.3): Describe the steps in the procedure for determining target heading, altitude, and airspeed without radar lock-on.

OBJECTIVE B (1.7.5.2.13.2): List considerations and alternatives in performing tactical intercepts with degraded radar.

OBJECTIVE C (1.7.5.2.13.2): State the special considerations for tactical intercepts on a jamming target(s).

SM204 "INTERCEPT EXAM"

OBJECTIVES - BFM PHASE

WB301 "AIR-TO-AIR GUN ATTACKS AND THE TRACKING PROBLEM"

OBJECTIVE A (1.7.5.2.9.2.9): Describe the following four errors present in a gun tracking situation: Kinematic Lead, Trajectory Shift, Gravity Drop and Parallax.

OBJECTIVE B (1.7.5.2.9.2.9): Given a drawing of a turning aircraft including all pertinent information, correctly designate the aircraft's Plane of Motion.

OBJECTIVE C (1.7.5.2.11.2): Name the varieties of gun attack and identify the situations where each may or should be employed.

WB302 "COMPUTED GUN ATTACK MODES: LCOS AND SS"

OBJECTIVE A (1.7.5.2.11.2): State the switchology procedures for selecting and arming the gun in the LCOS mode, and identify the mode's gun associated HUD symbology.

OBJECTIVE B (1.7.5.2.11.2.2): State the switchology procedures for selecting and arming the gun in the Snapshoot mode, and identify the mode's gun associated HUD symbology.

OBJECTIVE C (1.7.5.2.11.2.2): State the switchology procedure for selecting and arming the gun in the DOGFIGHT/OVERRIDE mode, and identify the mode's gun associated HUD symbology.

OBJECTIVE D (1.7.5.11.2.1): Describe the procedure for a gun attack in LCOS and state whether gun firing parameters have been met.

OBJECTIVE E (1.7.5.2.11.2.1): State the special considerations for employing the gun in the LCOS mode.

OBJECTIVE F (1.7.5.2.11.2.2): Describe the procedure for gun attack in Snapshoot and state whether gun firing parameters have been met.

OBJECTIVE G (1.7.5.2.11.2.2): State the special considerations for employing the gun in the Snapshoot mode.

WB303 "FENCE CHECK" (1.7.2)

OBJECTIVE A: Describe the purpose of a Fence Check.

OBJECTIVE B: Given a switch, panel, system, etc. to be checked during a Fence Check, describe the associated recommended setting(s) and/or consideration(s).

WB304 "ENERGY MANEUVERABILITY AND HUD ENERGY MANAGEMENT SYMBOLOGY" (1.7.5.2.10)

OBJECTIVE A: Define specific energy (Es) and specific excess power (Ps) IAW TACM 3-1.

OBJECTIVE B: Given appropriate Turn Performance Diagrams (maneuver diagrams) find the following:

1. Tightest Turn (instananeous and sustainable) and state airspeed, g-loading, turn rate and turn radius associated with each.

2. Quickest Turn (instantaneous and sustainable) and state airspeed, g-loading, turn rate and turn radius associated with each.

OBJECTIVE C: Given appropriate Turn Performance Diagrams (maneuver diagrams) and a specific airspeed find the maximum g-loading (instantaneous and sustainable) and specify turn rate and turn radius associated with each.

OBJECTIVE D: Given a HUD diagram of the Combat Energy Management display, define and locate the symbol for each of the following:

1) Energy Rate Indicator

2) Specific Energy Level

3) Upper Combat Arena Boundary

4) Current Relative Altitude

5) Quickest Turn Altitude

6) Fastest Climb Altitude

7) Max Energy Rate at Limit g

8) Lower Combat Arena Boundary

9) Current G

10) Maximum Available G

11) Maximum Sustainable G

12) Fixed G Scale

SMV301 "BASIC FIGHTER MANEUVERS: PURSUIT CURVES, LOW AND HIGH YO-YO'S, AND QUARTER PLANE MANEUVERS"

OBJECTIVE A (1.7.5.2.9.2.4): Describe lead pursuit, pure pursuit, and lag pursuit, and their respective effects on non-maneuvering and maneuvering targets.

OBJECTIVE B (1.7.5.2.9.2.1): Describe the purpose and proper execution of the acceleration maneuver.

OBJECTIVE C (1.7.5.2.9.2.13): Describe the purpose and proper execution of the low yo-yo.

OBJECTIVE D (1.7.5.2.9.2.7): Describe the purpose and proper execution of the high yo-yo.

OBJECTIVE E (1.7.5.2.9.2.8): Describe the purpose and proper execution of the quarter plane maneuver.

SM302 "BFM: BARREL ROLL/IMMELMANN/LAG ROLL"

OBJECTIVE A (1.7.5.2.9.2.2): Describe the purpose and proper execution of the barrel roll attack and identify situations in which it would be used.

OBJECTIVE B (1.7.5.2.9.2.3): Describe the purpose and proper execution of the Immelmann turn maneuver and identify situations in which it would be used.

OBJECTIVE C (1.7.5.2.9.2.6): Describe the purpose and proper execution of the lag roll maneuver and identify situations in which it would be used.

SM303 "PRINCIPLES AND TECHNIQUES FOR MAKING A GUN ATTACK" (1.7.5.2.9.2.9)

OBJECTIVE A: State the characteristics of tracking and snapshoot gun attacks.

OBJECTIVE B: Given a tactical scenario, analyze the attack situation and describe actions to take to achieve a tracking or snapshoot attack in LCOS, snapshoot, stadiametric (manual), or HUD backup modes.

OBJECTIVE C: Evaluate tactical considerations that require the use of tracking or snapshoot and state the pros and cons of each.

SM304 "APPLICATIONS OF OFFENSIVE BFM" (1.7.5.2.9.2)

OBJECTIVE A: Given a tactical situation, choose the approriate offensive BFM.

SM305 "ZONE DEFENSE AND CONSIDERATIONS FOR OFFENSIVE AND COUNTEROFFENSIVE MANEUVERS AND PURPOSE, PROCEDURES AND APPLICATIONS OF DEFENSIVE TURN, EXTENSION MANEUVERS, AND BREAK TURNS" (1.7.5.2.9.1)

OBJECTIVE A: Describe the purpose and proper execution of the extension maneuver and identify situations in which it would be used.

OBJECTIVE B: Describe the purpose and proper execution of the defensive turn and identify situations in which it would be used.

OBJECTIVE C: Describe the purpose and proper execution of the missile break and identify situations in which it would be used.

OBJECTIVE D: Describe the purpose and proper execution of the gun break and identify situations in which it would be used.

OBJECTIVE E: Given a zone defense diagram, describe the considerations and goals of the defender and attacker for each zone.

SMV306 "PRINCIPLES AND APPLICATIONS OF CLOSE-IN MANEUVERS: REVERSAL, LEAD TURN AND SCISSORS"

OBJECTIVE A (1.7.5.2.9.3.3): Given relevant information, identify appropriate opportunities for reversal.

OBJECTIVE B (1.7.5.2.9.3.6): Describe flight profiles generated in scissors maneuver and appropriate maneuvering required to gain/regain offensive position in a scissors.

SM307 "DISENGAGEMENT AND LAST DITCH MANEUVERS"

OBJECTIVE A (1.7.5.2.9.3.7): Describe the purpose and proper execution of the high g roll and identify situations in which it would be used.

OBJECTIVE B (1.7.5.2.9.3.9): Describe the purpose and proper execution of the jinkout maneuver and identify situations in which it would be used.

OBJECTIVE C (1.7.5.2.12.3.4): Describe the purpose and proper execution of the defensive spiral maneuver and identify situations in which it would be used.

OBJECTIVE D (1.7.5.2.12.1): Describe the purpose and proper execution of the disengagement maneuver and identify situations in which it would be used.

SMV351 "PRINCIPLES AND FACTORS IN FIGURE-8 DART FIRING PATTERNS AND RULES OF ENGAGEMENTS" (1.7.5.2.9.2.11, 1.7.5.2.9.12)

OBJECTIVE A: Identify and prevent an infraction of the rules of engagement or safety precautions governing DART firing.

OBJECTIVE B: State the procedures to perform a tactical intercept on the DART tow to within AIM-9J missile parameters.

OBJECTIVE C: Define the recommended spacing from the DART at the beginning of an up-hill DART firing pass and the maneuvers to accomplish firing during up-hill pass.

OBJECTIVE D: Define the correct position and spacing for the start of a DART down-hill pass and the maneuvers to accomplish DART firing during down-hill pass.

OBJECTIVE E: Define the maneuvers to be able to accomplish a DART reattack to within firing parameters prior to cease fire call.

SM308supII "ALR-69 RADAR WARNING RECEIVER TURN-ON AND BIT CHECKS" (1.7.8)

OBJECTIVE A: Given a drawing of the ALR-69's two Indicator Control (IC) threat panels and Azimuth Indicator (AI), state the turn on procedure.

OBJECTIVE B: State the steps required to initiate the ALR-69 BIT checks.

SM308supI "FUNDAMENTAL RADAR CONCEPTS" (1.7.8)

OBJECTIVE A: Given the following list of radar terms select the correct definition for each radar term.

Radar Frequency (RF)
Pulse Recurrence Frequency (PRF)
Constant PRF
PRF Stagger
PRF Jitter
Pulse Width (PW)
Beam Width
Resolution Cell (RC)
Pulse Amplitude (PA)
Pulsed Radar
Continuous Wave (CW) Radar
Pulsed Doppler Radar

OBJECTIVE B: Given a list of 10 radar frequencies in the range 0 MHz to 20,000 MHz, label each listed frequency with the correct frequency band letter designator IAW AFR 55-44.

OBJECTIVE C: Given 5 illustrations of radar pulse packages, select the correct descriptive radar term for each illustration.

a. Pulsed Radar with Constant PRF.
b. Pulsed Radar with PRF Stagger.
c. Pulsed Radar with PRF Jitter.
d. CW Radar.
e. Pulsed Doppler Radar.

OBJECTIVE D: Given a list of 7 radar antenna scan pattern types and 7 scan pattern illustrations, label each illustration with the correct type.

a. Conical
b. TWS
c. Monopulse
d. LORO
e. Circular
f. Linear
g. Raster

OBJECTIVE E: Given the description of Radar Scan Pattern tones, match each tone description to the correct scan pattern.

OBJECTIVES - ACM PHASE

SM401 "PROCEDURES AND CONSIDERATIONS FOR SEQUENTIAL ATTACK AND SHOOTER COVER" (1.7.5.1.4, 1.7.5.2.7.1, 1.7.6.4.5.1.1.2)

OBJECTIVE A: Describe procedures and special considerations for each fighter during sequential attack.

SM402 "PROCEDURES AND CONSIDERATIONS FOR FREE AND ENGAGED FIGHTERS IN TWO-SHIP COUNTEROFFENSIVE COMBAT" (1.7.5.2.7.2)

OBJECTIVE A: Describe procedures and special considerations for each fighter during two-ship counteroffensive maneuvering, including initial moves.

SM403 "AIR-TO-AIR ATTACK FEASIBILITY AND WEAPON SELECTION"

OBJECTIVE A (1.7.5.2): Of those factors affecting the feasibility of Air-to-Air attack, describe those that the fighter can control.

OBJECTIVE B (1.7.5.2.3): Discuss the variables affecting the fighter that impact the feasibility of Air-to-Air attack.

OBJECTIVE C (1.7.5.2): Describe variable facts about the enemy that should be considered in determining feasibility of Air-to-Air attack.

OBJECTIVE D (1.7.5.2): Describe external factors, conditions, and intangibles that affect feasibility of air attack.

OBJECTIVE E (1.7.5.2.4.2): Select the appropriae weapon and mode of operation for various Air-to-Air tactical situations.

SM404 "TWO-SHIP FORMATION INTERCEPT"

OBJECTIVE A (1.7.5.2.13.8.1): Describe planning considerations for two-ship formation intercept.

OBJECTIVE B (1.7.5.2.13.8.1): Describe procedures for performing a two-ship formation intercept.

OBJECTIVE C (1.7.5.2.8.2.1, 1.7.5.2.8.2.2, 1.7.5.2.8.2.3): Describe special procedures for performing the Hook ID, The Offset ID, and the Vertical Stern formation intercept.

SM405 "PRINCIPLES AND CONSIDERATIONS FOR THE COMBAT AIR PATROL (CAP) MISSION" (1.1.2.6.2.3)

OBJECTIVE A: Describe the primary objective of any Combat Air Patrol mission.

OBJECTIVE B: Name four CAP missions as described by TACM 3-1.

SM406 "PROCEDURES AND PLANNING FACTORS FOR A FIGHTER SWEEP MISSION WITH AND WITHOUT GCI/AWACS"

OBJECTIVE A (1.7.5.3.1): Discuss planning factors for a Fighter Sweep Mission with GCI/AWACS available IAW TRICOM Manual 3-1, Fighter Weapons School texts, and current directives.

OBJECTIVE B (1.7.5.3.1): Describe the steps in the procedure for sweep with GSI/AWACS available.

OBJECTIVE C (1.7.5.3.2): Given a tactical scenario, determine the best action to take in performing sweep with GCI/AWACS available.

OBJECTIVE D: Discuss planning factors, procedures, and scenarios for a Fighter Sweep Mission with GCI unavailable IAW TRICOM Manual 3-1, Fighter Weapons School texts, and current directives.

SM407 AIR-TO-AIR EXAM

OBJECTIVES - NAV PHASE

WB501 "PROCEDURES FOR SMS AIR-TO-SURFACE OPERATIONS INCLUDING MODIFICATION OF PROFILE OPTIONS AND ARMING TRAINING ORDNANCE"

OBJECTIVE A (1.2.1.7.2.3.1): Paraphrase the steps in the following procedures:

1) Attack profile modification.

2) Delivery mode modification.

3) Release pulse modification.

4) Impact separation modification.

5) Modifying the number of weapons released.

6) Arming option selection.

7) Pre-selection of a specific weapon and profile.

OBJECTIVE B (1.7.2.8): Paraphrase the steps in the procedure for arming training ordnance.

OBJECTIVE C (1.7.2.8): State the SCP display differences between tactical and training ordnance.

WB502 "PROCEDURES FOR STORES JETTISON AND APPROACH WITH ASYMMETRIC STORES DIAGNOSIS FOR ORDNANCE FAILURE TO RELEASE"

OBJECTIVE A (1.7.8.1.2.4): State the procedure and list considerations for emergency ground jettison of stores.

OBJECTIVE B (1.7.8.1.2.4): State procedures and list considerations for emergency stores jettison while airborne.

OBJECTIVE C (1.7.8.1.2.4): State the procedure and list considerations for selective jettison of external stores.

OBJECTIVE D (1.7.8.1.2.4): Diagnose and analyze failure to release of stores after jettison attempt.

OBJECTIVE E (1.9.8.7): List the considerations for flight and landing with asymmetric stores.

WB503 "INERTIAL NAVIGATION AND WEAPONS DELIVERY SYSTEM: SURFACE ATTACK" (1.7.6)

OBJECTIVE A: List at least three operations or FCS inputs provided by each of the following subsystems: FCC, INS, HUD, Radar, REO, FCNP, SMS, Side stick switches, and throttle switches.

OBJECTIVE B: Given a diagram of a computed dive bombing problem, correctly state/identify the data that is supplied by radar ranging and barometric ranging.

OBJECTIVE C: For each subsystem listed in Objective A, state the effect on the FCS if that system is inoperative. Specifically, describe at least one indication of system failure; state whether or not weapon delivery is possible; and state whether or not computed weapons delivery is possible, and, if so, what mode(s).

WB504 "PROCEDURES FOR VERIFYING POSITION USING INS DATA AND PERFORMING ALL INS UPDATES, RADAR ALTITUDE CALCULATIONS, AND OFFSET AIMPOINTS"

OBJECTIVE A (1.5.1.1.1.2.2): State how to verify position using INS navigation data.

OBJECTIVE B (1.5.1.1.3.3): List the four types of INS updates and describe their application.

OBJECTIVE C (1.5.1.1.3.3.4): Describe the procedures and special considerations for Overfly Fix Update.

OBJECTIVE D (1.5.1.1.1.3.3.3): Describe the procedure and special considerations for HUD Fix Update of the INS.

OBJECTIVE E (1.5.1.1.3.3.1): Describe the procedure and special considerations for Radar Fix Update of the INS.

OBJECTIVE F (1.5.1.1.3.3.2): Describe the procedure and special considerations for TACAN Fix Update of the INS.

OBJECTIVE G (1.5.1.1.3.3.5): Describe the procedure and special considerations for Radar Altitude Calibration.

OBJECTIVE H (1.5.1): Describe the procedues and special considerations for mark points.

OBJECTIVE I (1.5.1): Describe the procedrues and special considerations for offset aimpoints.

SM501 "CONSIDERATIONS FOR PLANNING A NUCLEAR MISSION" (1.1.2.6.3, 1.1.2.4, 1.7.4.3)

OBJECTIVE A: Discuss the planning considerations for a nuclear strike mission.

SM502 "PRINCIPLES, PROCEDURES, AND CONSIDERATIONS OF ENROUTE MISSION PLANNING INCLUDING SELECTION OF ENROUTE NAVIGATION MODES, AIDS TO NAVIGATION, ALTITUDE/AIRSPEED PROFILES, AND RULES-OF-THUMB FOR ADJUSTING PROFILES TO MAKE A TOT"

OBJECTIVE A (1.1.2.4): Given a tactical scenario including weather, operations, and target data, as well as intelligence estimates of enemy capabilities, use the provided outline and tell how those factors impact enroute navigation planning.

OBJECTIVE B (1.7.4.3): Given a planned route describe how to adjust
flight parameters to achieve a TOT.

SMV503 "PRINCIPLES, PROCEDURES, AND APPLICATIONS OF LEVEL/LAYDOWN ATTACK USING CCRP, CCIP, VIP, AND MANUAL MODES"

OBJECTIVE A (1.7.6.4.2.1): Describe the steps to obtain a weapon release in CCRP mode in a level attack profile.

OBJECTIVE B (1.7.6.3.4): Describe the steps to obtain a weapon release in CCIP mode in a level attack profile.

OBJECTIVE C (1.7.6.4.1.2.2): Describe the steps to obtain a weapon release in VIP mode in a level attack profile.

OBJECTIVE D (1.7.6.3.4): Describe the steps to obtain a weapon release in
Manual mode in a level attack profile.

SMV504 "PROCEDURES, CONSIDERATIONS, AND PARAMETERS FOR A LADD ATTACK USING LADD AND VLAD MODES" (1.7.6.3.3.4, 1.7.6.4.1.2.3)

OBJECTIVE A: Describe procedures, considerations, and parameters for LADD and VLAD attack.

SMV505 "NUCLEAR WEAPONS DELIVERY CALCULATIONS AND ESTIMATED MANUAL RELEASE (EMR) PROCEDURES" (1.1.2.6.3)

OBJECTIVE A: Given preflight conditions, use the Dash 25 to calculate the following parameters for a Laydown delivery:

a. Approach Indicated airspeed (+/- 10 KTS).
b. Approach Indicated altitude
   (1) ELEC MODE (+/- 10 ft)
   (2) PNEU MODE (+/- 10 ft)
c. Angle of Attack (+/- 2 dgs)
d. Crosswind Aimpoint (+/- 10 ft)
e. TOTAL Sight depression angle
   (1) +/- 5 MR when less than 200 MR
   (2) +/- 10 when greater than 200 MR
f. Time to Fly, TP to Release, (+/- .1 Sec)

OBJECTIVE B: Describe the considerations for an EMR Laydown.

OBJECTIVE C: Given preflight conditions, use the Dash 25 to calculate the following parameters for a LADD delivery:

a. Approach Indicated airspeed (+/- 10 KTS)
b. Approach Indicated altitude
   (1) ELEC MODE (+/- 10 ft)
   (2) PNEU MODE (+/- 10 ft)
c. Time to fly, TP to pullout, (+/- .1 sec)
d. Time, pull-up to release, (+/- 0 sec)
e. Release Indicated altitude
   (1) ELEC MODE (+/- 10 ft)
   (2) PNEU MODE (+/- 10 ft)

OBJECTIVE D: Describe the considerations for an EMR LADD.

SM506 "PREPARATION OF ENROUTE MAP" (1.1.2.4.19)

OBJECTIVE A: Given a mission assignment and relevant mission information, prepare an enroute chart.

SM507 "PROCEDURES FOR NAVIGATION USING GROUND MAPPING RADAR INCLUDING RADAR INTERPRETATION AND EFFECTS OF RADAR JAMMING" (1.1.2.4.18, 1.5.1.1.4, 1.7.6.2.1.2.1)

OBJECTIVE A: Review the factors affecting radar scope presentation.

OBJECTIVE B: Describe the effect of errors present in radar ground mapping operations and state considerations in overcoming those effects.

OBJECTIVE C: Describe techniques for navigation using the aircraft ground mapping radar to identify and discern various types of radar-significant features.

OBJECTIVE D: Describe the procedure for locating a known target using radar under normal conditions.

OBJECTIVE E: Describe the purposes and considerations for use of Snowplow (SP), Cursor Zero (C/Z) and Radar Freeze functions.

OBJECTIVE F: Describe the purposes and considerations for use of Expand, DBS, SEA-1 and SEA-2 modes.

OBJECTIVE G: Describe the steps in the procedure for setting up radar for ground mapping mode.

OBJECTIVE H: Given a route map and photographs of enroute and target area radar returns, prepare radar predictions and identify terrain features and targets.

OBJECTIVE I: Describe the effects of and considerations for ground mapping in a jamming/radar degraded environment.

OBJECTIVE J: Describe the steps in the procedure for an airborne radar approach (ARA).

SMV508 "NUCLEAR WEAPONS: DESCRIPTION, OPERATION, EFFECTS AND PREFLIGHT PROCEDURES" (1.2.5.1.3)

OBJECTIVE A: Describe in basic terms, how a nuclear device functions.

OBJECTIVE B: Describe the effects of a nuclear detonation.

OBJECTIVE C: Given a picture of the suspension equipment for the MAU-12 Bomb Ejector Rack and a Dash 25 checklist, describe this equipment and its preflight procedures.

OBJECTIVE D: Given a picture of the B43 Bomb and a Dash 25 checklist, describe the B43 and its preflight procedures.

OBJECTIVE E: Given a picture of the B57 Bomb and a Dash 25 checklist, describe the B57 and its preflight procedures.

OBJECTIVE F: Given a picture of the B61 Bomb and a Dash 25 checklist, describe the B61 and its preflight procedures.

SM509 "NUCLEAR STRIKE MISSION GROUND ALERT, LAUNCH, AND INFLIGHT PROCEDURES WITH SPECIAL EMPHASIS ON COCKPIT TASKS" (1.7.6.5)

OBJECTIVE A: Given a Dash 25 checklist, describe the procedure for bomb monitoring and bomb programming.

OBJECTIVE B: Given a Dash 25 checklist, describe the procedure for bomb enabling.

OBJECTIVE C: Given a Dash 25 checklist, describe the procedure for bomb arming and release.

SM510 "RADAR/NAV/NUC EXAM"

AS501 "EXTERNAL STORES INSPECTIONS INCLUDING WING AND CENTERLINE PYLONS: SUU 20 AND M-61 A1" (1.2.1.2.3)

OBJECTIVE A: Given an F-16 loaded with appropriate stores and a Dash 34 checklist, state the procedures for inspection of SUU 20 bomb dispenser, MAU-12 C/A weapons rack and pylon, and M61 A1 internal gun; identify unacceptable conditions.

OBJECTIVES - SA PHASE

WB601 "MANUAL WEAPONS DELIVERY CALCULATIONS"

OBJECTIVE A (1.1.2.6.1.1.12): Given a planned delivery profile and desired calibrated airspeed, determine release true airspeed within +/- 10 kts.

(For OBJECTIVES B through D and F through H, a planned delivery profile is given.)

OBJECTIVE B (1.1.2.6.1.1.11): Compute altitude loss during recovery within +/-50 ft.

OBJECTIVE C (1.1.2.6.1.1.14.1): Determine MIL setting within -+ MILS and wind correction within +/- .1 MIL.

OBJECTIVE D (1.1.2.6.1.1.14.2): Determine bomb range and slant range from release within +/- 50 ft.

OBJECTIVE E (1.1.2.6.1.1.14.5): Given a planned delivery profile, wind speed, and wind direction, calculate crosswind correction within
+/- 1 ft/kt.

OBJECTIVE F (1.7.6.5.1.3): Determine aim-off distance within +/- 100 ft.

OBJECTIVE G (1.7.6.5.1.3): Calculate Initial Pipper Placement (IPP) within +/- 5 MILS.

OBJECTIVE H (1.7.6.5.1.3): Calculate Release Aim Point (RAP) within
+/- 10 ft.

WB602 "PROCEDURES, PARAMETERS, AND ERROR ANALYSIS FOR MANUAL DELIVERY OF ORDNANCE" (1.7.6.8.1.1)

OBJECTIVE A: Describe the techniques and list two considerations for using manual dive bomb weapons delivery.

OBJECTIVE B: Describe the rules of thumb for adjusting release altitudes for errors in preplanned dive angle, airspeed, etc. during manual deliveries.

OBJECTIVE C: Describe wind correction for headwind, tailwind, crosswinds, and combinations thereof.

WB603 "SPECIAL CONSIDERATIONS FOR NIGHT GROUND OPERATIONS" (1.2.2)

OBJECTIVE A: State the procedures and special considerations for performing night exterior and interior preflight inspection including personal equipment.

OBJECTIVE B: Given a blank table of ground operation phases, takeoff phases, and weather conditions, fill in the appropriate exterior lighting configuration.

OBJECTIVE C: State the procedures and special considerations for single-ship and formation night taxi.

OBJECTIVE D: Given a blank table of night postflight phases (taxi, dearm, in chocks), indicate the appropriate lighting configuration and state the special considerations for taxiing in the parking area.

SM601 "PRINCIPLES AND PROCEDURES FOR LOW ALTITUDE TACTICAL FORMATIONS INCLUDING COMM OUT PROCEDURES" (1.7.5.1.1.2, 1.7.5.1.2.2, 1.7.6.1.1, 1.7.6.1.2)

OBJECTIVE A: When given a number of aircraft (2-4), target, and a threat, choose the applicable low level formation and state why you chose it.

SMV602 "CCIP AND DTOS DELIVERY OF FREE FALL MUNITIONS"

OBJECTIVE A (1.7.6.4.1.2.1.1): Describe the procedure to select the CCIP mode for delivery of free-fall ordnance.

OBJECTIVE B (1.7.6.4.1.2.1.1): Given a HUD CCIP presentation, identify the symbology associated with the CCIP mode.

OBJECTIVE C (1.7.6.4.1.2.4): Describe the procedure for both non-delayed and delayed CCIP delivery of free-fall ordnance.

OBJECTIVE D (1.7.6.4.2.4): Describe the procedures to select the DTOS mode for delivery of free-fall ordnance.

OBJECTIVE E (1.7.6.4.1.2.4): Given a HUD DTOS presentation, identify the symbology associated with the DTOS mode.

OBJECTIVE F(1.7.6.4.1.24): Describe the procedure for DTOS delivery of free-fall ordnance including:

1. Pointblank aiming
2. Pre-designate slewing, and
3. Post-designate slewing

SMV603 "PRINCIPLES AND PROCEDURES FOR STRAFING USING CCIP AND MANUAL MODES" (1.7.6.4.1.2.1.3)

OBJECTIVE A: Describe the procedure and special considerations for performing low angle strafe manual and computed, including HUD symbology.

OBJECTIVE B: Describe the procedure and special considerations for performing high angle strafe manual and computed, including HUD symbology.

SM604 "COMPUTED DELIVERY ERROR ANALYSIS" (1.7.6.7.1.2)

OBJECTIVE A: State the sources of error and their effect during computed weapons delivery.

OBJECTIVE B: Given initial aim point and impact error data following a computed delivery, state the proper aiming correction for the next pass.

SM605 "RULES AND PROCEDURES FOR POP-UP ATTACKS" (1.7.6.3.2.1)

OBJECTIVE A: List the pop-up abort criteria and describe the effect of violating each criterion.

OBJECTIVE B: Match from a list of terms and definitions the correct definition for terms applicable to the pop-up profile.

OBJECTIVE C: State the rule-of-thumb for climb angle in the pop-up pattern.

SMV606 "CONSIDERATIONS FOR NIGHT SURFACE ATTACK WITH AND WITHOUT FLARES" (1.7.6.8.1)

OBJECTIVE A: Familiarize the student with:

1) Flare preflight, procedures, and delivery.

2) Night range procedures.

3) Night surface attack deliveries and special considerations.

SM607 "BAM/SA/SAN EXAM"

OBJECTIVES - SAT PHASE

WB701 "SAFE ESCAPES AND FRAG PATTERN PARAMETERS"

OBJECTIVE A(1.1.2.6.1.1.6.1): Given all relevanat weapons and mission information, compute minimum safe escape parameters.

OBJECTIVE B (1.1.2.6.1.1.6.2): Given all needed weapons information, compute frag pattern size and duration within +/- 250 ft and +/- 5 seconds.

WB702 "MISSION PLANNING: DAY INTERDICTION" (1.1.2.6.1.3)

OBJECTIVE A: Identify the tactical considerations and factors necessary for planning a day interdiction mission.

WB703 "CHAFF/FLARE PREFLIGHT AND SET UP" (1.2.1.2.3.2)

OBJECTIVE A: State the function of each knob, switch or indicator lamp on the Chaff/Flare Programmer and the Chaff/ Flare Control Panel.

OBJECTIVE B: Given a description of the knob settings on the Chaff/Flare Control Panel, choose, from a list provided, the correct description of how the chaff and/or flares will be dispensed.

OBJECTIVE C: State the three load options available to the F-16 Chaff/Flare system.

OBJECTIVE D: State the recommended Chaff/Flare Control Panel settings for the ingress, weapons delivery, and egress portions of an air-to-ground mission.

SM701 "NON-NUCLEAR ALERT/SCRAMBLE PROCEDURES (1.2.4.1)"

OBJECTIVE A: Describe the considerations which apply to alert/scramble procedures.

SME702 "NON-NUCLEAR ORDNANCE PREFLIGHT" (1.2.1.2.3.4.3)

OBJECTIVE A: State general preflight requirements for non-nuclear ordnance.

OBJECTIVE B: Follow normal aircrew procedures for preflighting MK-82 and MK-84 General Purpose bombs (High and Low Drag).

OBJECTIVE C: Follow normal preflight inspection procedures for the GBU-8 and GBU-10.

OBJECTIVE D: Preflight the CBU-type bomb using correct inspection procedures.

OBJECTIVE E: Properly preflight the MK-20 MOD-4 Anti-Tank Cluster Bomb.

OBJECTIVE F: Preflight the BLU-27/B Fire Bomb using checklist.

OBJECTIVE G: Preflight the LAU 3/A Rocket Launcher.

OBJECTIVE H: Be able to preflight the AGM-65 A/B Air-to-Ground Guided Missile using a checklist.

SM703 "COMM JAMMING AND ECM SUPPORT" (1.2.1.7.7)

OBJECTIVE A: State special considerations for responding to communications jamming.

OBJECTIVE B: State the considerations for EW including threat analysis and ECM support.

SM704 "PENETRATION AIDS: ALQ-119 ECM POD AND ALR-69" (1.7.8)

OBJECTIVE A: Describe the functions and indications of the the following C-6631 control box components.

1. Operate switch
2. Standby (STBY) lights
3. Transmit (XMIT) lights
4. AI light
5. Reset light
6. Reset button
7. RF DET/XMIT switch

OBJECTIVE B: State the pod fault indications and interpret the information displayed by the following C-6631 control box components:

1. Reset light
2. AI light
3. Transmit (XMIT) lights

OBJECTIVE C: State the procedures for setting up and operating the ALR-69.

SM705 "DEFENSES AGAINST SPECIFIC THREATS" (1.1.2.4.12.1)

OBJECTIVE A: Given a list of AAA threats, state the considerations for identifying, evading, and defeating each one.

OBJECTIVE B: Given a list of SAM threats, state the considerations for identifying, evading, and defeating each one.

SM706 "ORDNANCE SELECTION: TARGET CHARACTERISTICS, WEAPONS EFFECTS, AND JMEMS"

OBJECTIVE A (1.1.2.6.1.1.2): State the three major sources of target information, and state the type of information categories that are contained in each.

OBJECTIVE B (1.1.2.6.1.1.4): State at least one major source of weapons effects data and briefly describe the nature of the information given in this source.

OBJECTIVE C (1.1.2.6.1.1.4): Given ordnance types, describe at least one situation where each may or should be employed.

OBJECTIVE D (1.1.2.6.1.1.2): Given a target description, assigned weapon effect (damage, destroy, etc.), and a list of weapons, correctly select the weapon that has the highest probability of achieving the stated effect.

SM707 "ATTACK PLANNING CONSIDERATIONS" (1.7.6.3)

OBJECTIVE A: From the following list of ten attack parameter planning factors, explain the interrelationships of each factor to the others in the formulation of an optimum attack plan.

SM708 "HIGH THREAT INTERDICTION ATTACK PROFILES"

OBJECTIVE A (1.1.2.6.1): Describe the major considerations for selecting
an attack profile.

OBJECTIVE B (1.1.2.4.12): Draw and label the Pop-Up Echelon Attack from IP thru egress and state this attack's advantages, disadvantages, and coordination considerations.

OBJECTIVE C (1.1.2.4.12): Draw and label the Pop-Up Split Attack from IP thru egress and state this attack's advantages, disadvantages, and coordination considerations.

OBJECTIVE D (1.1.2.4.12): Draw and label the Pop-Up B'NAI attack from IP thru egress and state this attack's advantages, disadvantages,
and coordination considerations.

SM709 "PRACTICAL EXERCISE: PLANNING A DAY INTERDICTION MISSION" (1.1.2.6.1.3.5)

OBJECTIVE A: Given a mission assignment and relevant mission data, plan a day interdiction mission lAW current tactical doctrine.

SMV710 "PRINCIPLES AND PROCEDURES FOR CLOSE AIR SUPPORT (CAS)"

OBJECTIVE A (1.1.2.6.1.3.2): State the key elements of a Tactical Air Control System and describe how those elements are combined.

OBJECTIVE B (1.1.2.6.1.3.2): State the tactical considerations for planning a high threat Close Air Support mission.

OBJECTIVE C (1.1.2.6.1.3.2): State the ground situation which necessitates employment of tactical airpower using high threat CAS tactics.

OBJECTIVE D (1.1.2.6.1.3.2): State the special considerations for coordinated Air-to-Surface attacks with supporting artillery/naval gunfire.

OBJECTIVE E (1.7.6.2.2.5.1): Describe the high threat CAS briefing format and communications procedures employed by the FAC/FIST.

OBJECTIVE F (1.7.6.2.2.5.1): Describe the method(s) of target identification employed by the FAC/FIST.

OBJECTIVE G (1.7.6.2.2.5.2): Describe the methods used to identify friendly positions employed by the FAC/FIST.

OBJECTIVE H (1.7.6.2.2.5.2): Describe the method(s) used by the FAC/FIST for final control and/or abort procedures.

OBJECTIVE I (1.7.6.6): Describe special considerations for performing and reporting bomb damage assessment (BDA) with and without the FAC/FIST.

SM711 "MEDIUM/LOW THREAT ATTACK PATTERNS" (1.7.6.3.1)

OBJECTIVE A: Describe the conditions that characterize a medium/low threat environment.

OBJECTIVE B: State the medium/low threat mission procedures, particularly those involving FAC.

OBJECTIVE C: Describe general attack patterns in the medium/low threat environment including formation considerations.

SM712 "PRINCIPLES AND PROCEDURES OF TWO/FOUR SHIP ROUTE RECCE" (1.7.6.2.1.1.2)

OBJECTIVE A: Identify and discuss the planning considerations for an armed recce mission.

OBJECTIVE B: Describe position of flight members and responsibilities of each in the basic two and four ship route recce tactical formations.

OBJECTIVE C: State the formation and search procedures used during armed recce including maneuvering and attack tactics.

SM713 "SPECIAL CONSIDERATIONS FOR PLANNING AND PERFORMING AN ESCORT MISSION IN A SURFACE-TO-AIR THREAT ENVIRONMENT" (1.1.2.6.1.3.4)

OBJECTIVE A: Review operational and tactical considerations unique to planning escort missions.

OBJECTIVE B: Discuss operational and tactical procedures (including patterns and formations) uised for escorting various type aircraft.

OBJECTIVE C: Review the operational and tactical considerations (including coordination requirements) for escorting helicopters and ground convoys.

SM714 "SPECIAL MISSIONS--SCAR, HUNTER-KILLER, ASRT, SAR, AND SHIP ATTACK"

OBJECTIVE A (1.1.2.6.1.3.1): Define the Strike Control And Reconnaissance (SCAR) mission and explain its typical profile.

OBJECTIVE B (1.1.2.6.1.3.3): Describe the Hunter-Killer mission as it is applicable to the F-16.

OBJECTIVE C (1.7.6.2.2.3): Explain the Air Support Radar Team (ASRT) concept and how the F-16 would be employed for this special mission.

OBJECTIVE D (1.7.9): Describe the Search and Rescue (SAR) mission and the F-16's role as RESCAP.

OBJECTIVE E (1.7.6.9.2): Explain the planning, operational, and tactical considerations for ship attack.

SMV715 "AGM-65 MAVERICK AND GBU-8 HOBO PROCEDURES, HUD/REO SYMBOLOGY, AND SPECIAL CONSIDERATIONS" (1.7.6.4.1.1.1)

OBJECTIVE A: Correctly describe the switchology for set-up, arming, and delivery of the AGM-65 A and B Maverick Missile.

OBJECTIVE B: Correctly describe the HUD/REO presentation for employment of the AGM-65 A and B Maverick Missile.

OBJECTIVE C: Given an SMS fault indication, describe the appropriate corrective action for employment of the AGM-65 A and B Maverick Missile.

OBJECTIVE D: Describe the AGM-65 A and B hardward capabilities including limitations, employment considerations, planning factors and operational limitations.

OBJECTIVE E: Correctly describe the switchology for set-up, arming, and delivery of the GBU-8 Hobo Bomb.

OBJECTIVE F: Correctly describe the HUD/REO presentation for employment of the GBU-8 (Hobo) Bomb.

OBJECTIVE G: Given an SMS fault indication, describe the appropriate corrective action for employment of GBU-8 Hobo Bomb.

OBJECTIVE H: Describe the GBU-8 hardware capabilities including employment considerations, planning factors and operational limitations.

SMV716 TISL/PAVE PENNY" (1.7.6.4.1.1.3)

OBJECTIVE A: Describe TISL operations.

OBJECTIVE B: Describe the TISL system.

OBJECTIVE C: Describe TISL Operating Procedures.

SM717 "BEACON: PROCEDURES, MUD/REO SYMBOLOGY AND SPECIAL CONSIDERATIONS" (1.2.1.7.3.9)

OBJECTIVE A: Correctly describe the four types of beacon data that must be entered into the FCNP.

OBJECTIVE B: Correctly describe the switchology required to select and employ the Beacon mode.

OBJECTIVE C: Given a REO presentation containing more than one beacon return and an assigned beacon code, correctly identify the beacon transmitting the assigned code.

OBJECTIVE D: Given a beacon return, correctly locate the place on the return where the REO cursors should be positioned.

OBJECTIVE E: Given an appropriate HUD presentation, correctly locate and define the beacon-related symbology.

OBJECTIVE F: Correctly describe the procedure for delivering Air-to-Surface ordnance using the beacon mode.

OBJECTIVES - INTERCEPT

WB901 "TRAIL DEPARTURE WITH AND WITHOUT RADAR"

OBJECTIVE A (1.4.1.3.1): Describe the set-up, sequence of events, and techniques for performing a radar trail departure.

OBJECTIVE B (1.4.1.3.2): Describe the sequence of events and techniques for performing a trail departure without radar.

WB902 "FORMATION TAKEOFF"

OBJECTIVE A (1.3.1.2.1): Describe the procedure and considerations for formation takeoff (MIL) as flight lead.

OBJECTIVE B (1.3.1.2.2): Describe the procedure and considerations for formation takeoff (MIL) as wingman.

WB903 "AIR-TO-AIR REFUELING" (1.6.1.2)

OBJECTIVE A: List the steps in the operational ground check of the Air Refueling System for A and B models of the F-16.

OBJECTIVE B: Describe the procedure for Point Parallel Rendezvous.

OBJECTIVE C: Name the four things that should happen when the AR switch is moved to the OPEN position.

OBJECTIVE D: Describe automatic, manual, and pressure disconnect procedures.

OBJECTIVE E: Describe the Breakaway procedures.

OBJECTIVE F: Describe the Lost wingman procedures on the tanker.

WB904 "FORMATION APPROACH AND LANDING (LEAD AND WING)"

OBJECTIVE A (1.9.2.1): Describe the procedures and considerations for formation approach and landing as lead.

OBJECTIVE B (1.9.2.2): Describe the procedures and considerations for formation approach and landing as wingman.