NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Hageland Operations Training Manual (OTM) Excerpts

(9 Pages)

Attachment 5

to the Human Performance Specialist's Factual Report

ANC17MA001

Hageland Operations Training Manual (OTM) Excerpts

Airman General Subjects Module #3
METEOROLOGY

OBJECTIVE   Familiarize candidate and test understanding of basic meteorology, recognition of adverse weather conditions, and weather information sources.

MATERIALS   General Subjects – Aviation Weather
                  General Subjects –Windshear
                  General Subjects – High Altitude Weather and Aerodynamics
                  Or AC 00-6 Aviation Weather, AC 00-45 Aviation Weather Services, METAR Guidelines, AIM

STANDARD   80% (corrected to 100%) on written, oral, computerized or practical test

ELEMENTS
Meteorology (ref: AC 00-6 Aviation Weather)
                  Standard Atmosphere
                  Temperature Variations
                  Density Altitude
                  Atmospheric Pressure and Altimetry
                  Moisture, Humidity and Dew Point
                  Air Masses, Types of Fronts and Frontal Weather
                  LLWS, Wake Turbulence, CAT, Hail
                  Icing
                  Thunderstorm Flying
                  Fog and Common IFR Producers
                  High Altitude Weather
                  Arctic Weather

Operations in or near potentially hazardous weather
Recognition and avoidance procedures
Emergency procedures including escape from LLWS and emergency entry of thunderstorms
Aviation Weather Services (ref: FAA published METAR / TAF Weather Formats Guide;
                  AC 0045 Aviation Weather Services; AIM)
                  Surface Observations – METAR, SPECI, AWOS
                  Terminal Forecasts – TAF
                  Area Forecasts – FA
                  Airmets and Sigmets – WA, WS
                  Winds and Temperatures Aloft – FD
                  Pilot Reports – PIREPS
                  FSS & Information Retrieval Methods (ref. AIM)
                  Company Procedures
                  Retrieval methods
                  Briefings, PIREPS and communications
                  Non-official weather sources
                  Personal observations and village contacts

Airman General Subjects Module #7
CFIT AVOIDANCE

OBJECTIVE   Familiarize candidate and test his or her ability to identify Controlled- Flight-
                   Into-Terrain conditions and avoidance principles, and to additionally teach and
                   test the principles of crew resource management.

MATERIALS   General Subjects – CFIT Controlled Flight into Terrain
                        General Subjects – Runway Safety/Runway Incursion
                   General Subjects – TAWS FAA AC-91-74B/91-73B

STANDARD   80% (corrected to 100%) on written, oral or computerized test

ELEMENTS

Approach and Landing Accident Reduction
        ALAR Overview
        Controlled Flight Into Terrain (CFIT)
        Runway Safety/Runway Incursion

Visual Phenomenon and meteorological conditions
        Flat Light
        White Out
        Deteriorating Visibility
        VFR to IMC Conditions

Review key points of the lesson and solicit any questions
Evaluate candidate understanding with appropriate discussion and test
        Find areas of weakness as revealed by discussion
        Provide any needed clarification and re-check candidate understanding

Summary statement and DOCUMENTATION OF TRAINING

HAGELAND
AVIATION SERVICES

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Airman General Subjects Module #9
CREW RESOURCE MANAGEMENT (CRM)

Crew Resource Management Program
1. Objective - Hageland Aviation's CRM Program seeks to enhance company pilots' awareness and understanding of CRM concepts with the ultimate goal of promoting safe and efficient company operations.
  (a) Classroom training will be integrated with cockpit training to enhance pilots' interpersonal communication, situational awareness, problem solving, decision making, and team- work skills.
  (b) Meets Requirements of FAR 135.330
2. Methodology – Includes lectures, discussions and audiovisual presentations
3. Courseware – Includes handouts, lesson plans

Elements
1. Purpose of CRM
2. Pilot in Command Authority
  a. Definitions
  b. Position
c. Emergency Authority

3. Communication
  a. Errors in Communication and Solutions
  b. Briefings
  c. Inquiry
  d. Assertion
  e. Crew self-critique
  f. Conflict Resolution
  g. Decisions
  h. Communicating with other Groups (MX, Flight Coordinators etc.)

4. Building and Maintaining a Flight Team
  a. Leadership
  b. Concerns for Operations
  c. Interpersonal Climate
  d. Group Climate

5. Workload and Time Management and Situational Awareness
  a. Preparation
  b. Planning
  c. Vigilance
  d. Workload Distribution
  e. Distraction Avoidance
  f. Situational Awareness

6. The Effects of Fatigue and Stress
  a. Proactive solutions to combating Fatigue and Stress

7. Aeronautical decision making and risk management

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Aircraft Ground Module #10
AIRPLANE SYSTEMS AND PROCEDURES
(continued)

Communication Equipment.   Very high frequency (VHF)/high frequency, audio panels, Spider Tracks, in-flight interphone and passenger address (PA) systems, the voice recorder as installed..

Warning Systems.   Aural, visual, and tactile warning systems, including the character and degree of urgency related to each signal, warning and caution annunciator systems, including ground proximity warning system(GPWS) and Terrain Warning System (TAWS) as installed.

Fire Protection.   Fire and overheat sensors, loops, modules, or other means of providing visual and/or aural indications of fire or overheat detection.   Procedures for the use of fire handles, automatic extinguishing systems, agents, and the power sources necessary to provide protection for fire and overheat conditions in engines, the cockpit and cabin as installed.

Oxygen.   Installed passenger, crew, and portable systems. Other elements include sources of oxygen, flow and distribution networks, pressure levels, gauges, and servicing requirements.

Lighting.   Cockpit, cabin, and external lighting systems, including power sources, switch positions, and spare light bulb locations.

Emergency Equipment.   Type, location, and purpose of each item of emergency equipment such as fire and oxygen bottles, first aid kits, life rafts, life preservers, crash axes, and emergency exits and lights.

Cessna 208 Flight Training

Flight Module 2: C-208 Normal Procedures

1. *Objective* – To familiarize the trainee with the interior and preflight inspection of a C-208 aircraft.

2. *Instructional Delivery Method* – Discussion, Demonstration and Hands-on exercises, or any combination thereof.

3. *Courseware* – C-208 Pilots Operating Handbook, Airplane Checklist, C-208 airplane checklist

Elements
Briefing to discuss equipment differences, paperwork, external power, airstair door operation, prefight and cockpit orientation.
(a) Airplane Documents Can and Paperwork
  (1) Weight & Balance
  (2) Deferrals
  (3) Carry-over
  (4) Deicing Procedure
(b) External Power
  (1) Switches Off and Flap Setting
  (2) Hook-up and Indications
  (3) External Power Switch
(c) Door and window Operation
  (1) Opening/Securing
  (2) Cleaning (Broom)
(d) Preflight/Expanded Checklist
  (1) Manuals and Documents
  (2) Cargo Tie Down/Cargo nets
  (3) Oil Type and Adding
  (4) Securing Doors & Caps
  (5) Sumping Tanks
  (6) Survival Gear

See Maneuvers and Procedures Manual page 5-1-1 for specific maneuver pictorials

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Cessna 208 Flight Training

C-208 Flight Module 2 continued

(e) Cockpit Orientation
  (1) Seat and Rudder Adjustments
  (2) Sun Visor Operation
  (3) Parking Brake Operation
  (4) Auto Brief Orientation
  (5) Radar Altimeter Test
  (6) TCAS Test and Function
  (7) TAWS/GPWS Test
  (8) Marker Beacons
  (9) Compass System (Slave & Free)
  (10) Radar System (If installed)
  (11) Environment Controls and Cabin Heating
  (12) De Ice/ Anti Ice
  (13) Alt. Static Switch (and corrections)
  (14) Clock Operation
  (15) Instrument Lighting/Map Light
  (16) Windshield Wiper Operation
  (17) GPS
  (18) Audio Panel
  (19) Flight Instrument Malfunctions
a. Overhead Speaker
b. Hot Interphone
c. Volume Controls
d. PA
  (19) NAV & COMM Radios
a. Access & Transfer Presets
b. Saving Presets
c. Active Only Selection
d. DME Select Options
e. ADF & Transponder
f. Hand Held Mic/Radio Phone
g. Abnormals

See Maneuvers and Procedures Manual page 5-1-1 for specific maneuver pictorials

Simulator Training

C-208 Flight Training-Pre-Flight

Module 5: C-208 Pre-Flight and Equipment Differences.

1. *Objective* - To familiarize the trainee with the interior and preflight inspection of an actual company aircraft and to train differences in equipment that cannot be addressed in the AATD or simulator.

2. *Instructional Delivery Method* - Discussion, Demonstration and Hands-on exercises, or any combination thereof.

3. *Courseware* - C-208 Pilots Operating Handbook, Airplane Checklist, C-208 airplane checklist

Elements
Briefing to discuss equipment differences, paperwork, external power, airstair door operation, prefight and cockpit orientation.
(a) Airplane Documents Can and Paperwork
  (1) Weight & Balance
  (2) Deferrals
  (3) Carry-over
  (4) Deicing Procedure
(b) External Power
  (1) Switches Off and Flap Setting
  (2) Hook-up and Indications
  (3) External Power Switch
(c) Door and window Operation
  (1) Opening/Securing
  (2) Cleaning (Broom)
(d) Preflight/Expanded Checklist
  (1) Manuals and Documents
  (2) Cargo Tie Down/Cargo nets
  (3) Oil Type and Adding
  (4) Securing Doors & Caps
  (5) Sumping Tanks
  (6) Survival Gear

Simulator Training

C-208 Flight Training-Pre-Flight (continued)

(e) Cockpit Orientation
 (1) Seat and Rudder Adjustments
 (2) Sun Visor Operation
 (3) Parking Brake Operation
 (4) Auto Brief Orientation
 (5) Radar Altimeter Test
 (6) TCAS Test and Function
 (7) TAWS/GPWS Test
 (8) Marker Beacons
 (9) Compass System (Slave & Free)
 (10) Radar System (If installed)
 (11) Environment Controls and Cabin Heating
 (12) Alt. Static Switch (and corrections)
 (13) Clock Operation
 (14) Instrument Lighting/Map Light
 (15) Windshield Wiper Operation
 (16) GPS
 (17) Audio Panel
   a. Overhead Speaker
   b. Hot Interphone
   c. Volume Controls
   d. PA
 (18) NAV & COMM Radios
   a. Access & Transfer Presets
   b. Saving Presets
   c. Active Only Selection
   d. DME Select Options
   e. ADF & Transponder
   f. Hand Held Mic/Radio Phone