

Docket No. SA-530

Exhibit No. 7-C

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

NAACS CFC Course Outline

(6 Pages)

NAACS CFC Course Outline (Curriculum)

1) Customer Service and Telephone Communications

- a. Controlling a call
- b. Listening out loud
- c. Importance of “Last Words”
- d. Establishing Priorities
- e. Ending the Call
- f. Phone etiquette
- g. Documenting Communications

2) Radio Communications

- a. Conventional Radio Systems
 - i. Continuous Tone Coded Squelch System
 - ii. PTT
 - iii. Frequency Bands
 1. VHF Low Band
 2. VHF Air
 3. VHF High Band
 4. UHF
- b. Trunked Radio Systems
 - i. 800 Mhz
 - ii. Project 25
- c. Supplemental Equipment
 - i. Dispatch Consoles
 - ii. Console Telephones
 - iii. Voice Logging Recorders
- d. System Troubleshooting and Redundancy Planning
 - i. Individual Radios incorporated into the console
 - ii. Telecom systems
 - iii. Individual Telephone lines
 - iv. Computers
 1. CAD systems
 2. Aircraft Tracking Systems
 3. Weather Reporting Systems

3) Flight Following / Map Skills

- a. Flight Following
 - i. Time intervals
 - ii. Information obtained (Coordinates, Speed, ETE)
 - iii. Overdue / Missing considerations
 - iv. Unit Conversions
 1. Nautical Miles to Statute Miles (vice-versa)
 2. Knots per hour to Statute MPH (vice-versa)
 - v. Navigational Systems
 1. GPS systems
 2. Loran
 3. Maps (Road, Topo, Sectional, Terminal Control, etc.)

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- 4. Sectional Maps
- 5. Computerized Map Programs
- vi. Sterile Cockpit Discussion
- b. Map Skills Hands on Session w/ Sectional Maps

4) Federal Aviation Administration / Federal Aviation Regulations

- a. Overview of FAA & FARs
- b. Overview of Air Traffic Control Systems and how ATC can assist the Communications Specialist
- c. Differences between Part 91 regulations & Part 135 regulations
- d. FAR Part 91 in depth discussion. Includes outlining:
 - i. 91.3 Pilot in Command
 - ii. 91.105 Seat belted crew during takeoff, landing, etc.
 - iii. 91.123 Compliance with ATC clearances and instructions.
 - iv. 91.151 Fuel requirements for flight in VFT conditions
 - v. 91.203 Civil Aircraft: Certifications Required
- e. FAR Part 135 in depth discussion. Includes outlining:
 - i. 135.67 Reporting of hazardous meteorological conditions and irregularities of communications or navigations facilities.
 - ii. 135.71 Airworthiness Check.
 - iii. 135.93 Autopilot: Minimum altitudes for use
 - iv. 135.100 Flight Crewmember Duties
 - v. 135.161 Radio and Navigational equipment
 - vi. 135.205 (b) VFR: Visibility Requirements
 - vii. 135.351 (c) Recurrent Training

5) Safety and the Air Medical Communications Specialist

- a. Objectives
 - i. Importance of training and continuing education for Air Medical Communicators
 - ii. Primary goal of safety for the entire program
 - iii. Clear goals within the communications center.
- b. Content includes
 - i. Management Commitment to Safety
 - ii. Responsibility & Accountability for all employees
 - iii. Communicated Expectations of Zero Accidents
 - iv. Auditing & Measuring for Improvement
 - v. Safety Officer
 - vi. Safety Committee
 - vii. Dedicated Safety Bulletin Boards
 - viii. Reporting processes for operational hazards
 - ix. Annual Safety Trainings that include:
 - x. Semi-annual Safety Seminars
 - xi. Safety Culture
 - xii. Scene & LZ Safety

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6) Communications Specialist Resource Management (CRSM)

- a. Components of CRSM
- b. Communication / Communications Skills
- c. Listening / Listening Techniques
- d. Receipt and Handling of Information
- e. Effective Decision Making
- f. CRSM Concepts in Training

7) Post Accident / Incident Plans

- a. Basics of a PAIP
- b. 30 minute clock
- c. Initial Development of PAIP
- d. PAIP Drills
- e. Crew Phone lists
- f. Crew information sheets
- g. Ride-a-long Individuals Emergency Contact Information
- h. Definitions
 - i. Precautionary Landings
 - ii. Overdue Aircraft
 - iii. Mayday
 - iv. Post Crash
 - v. Ground Ambulance Accident / Incident
 - vi. Special Emergencies
 - vii. Bomb Threats
- i. Aircraft Emergency Categories
 - i. Land As Soon As Practical
 - ii. Land As Soon As Possible
 - iii. Land Immediately
- j. Examples of Aircraft Emergencies
- k. Activation of the PAIP
 - i. General guidelines for all activations
 - ii. Specific to Medical Precautionary Landings
 - iii. Specific to Mechanical or Weather Related Precautionary Landings
 - iv. Specific to Overdue Aircraft / Lost Communications – Rotor Wing
 - v. Specific to Overdue Aircraft / Lost Communications – Fixed Wing
 - vi. Specific to Mayday
 - vii. Specific to Post Crash
 - viii. Specific to Ground Ambulance Accident / Incident
 - ix. Specific to Special Emergencies (i.e. Hijackings, forced to a new destination, etc.)
 - x. Administrative Responsibilities in a PAIP Activation
- l. Management Team Follow Up guidelines after a PAIP Activation

8) Aviation Weather

- a. Weather Conditions

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- i. Fronts
- ii. Winds
- iii. Fog
- iv. Thunderstorms
 - 1. Anvils
 - 2. Bow Echo
 - 3. Convection
 - 4. Funnel Clouds
 - 5. Hood Echo
 - 6. Outflow boundary
- v. Shear
- vi. Super Cells
- vii. Tornados
- viii. Wall Clouds
- ix. Watches
- x. Warnings
- b. Temperature Factors
 - i. Heat Index
 - ii. Wind Chill Factor
- c. Weather Tools
 - i. Doppler Radar
 - ii. NEXRAD
 - iii. PIREPS
 - iv. METARS
 - v. TAFS

9) Medical Terminology

- a. Report Taking Basics
- b. General Terminology
 - i. Directional Terms and Abbreviations
 - ii. Anatomical Postures
 - iii. Direction of Movement
 - iv. Normal Vital Signs
 - v. IVs and Solutions
- c. Head to Toe vs. Systems Approach
 - i. Head and Spine – Neuro System
 - 1. Brain
 - a. Anatomical Terminology
 - b. Diseases and Injuries of the Brain
 - 2. Spine and Vertebrae Anatomical Terminology
 - 3. Other terms and Abbreviations associated with the Neuro system.
 - ii. Chest and Lungs (Respiratory System)
 - 1. Thorax Anatomical Terminology
 - 2. Diseases and Injuries of the Thorax

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3. Other terms and Abbreviations associated with the Respiratory System
- iii. Cardiac (Heart) – (CV or Cardiovascular System)
 1. Cardiac Rhythms
 2. Cardiac Rhythms – Treatments
 3. Other terms and Abbreviations associated with the Cardiovascular System
 4. Useful Lab Values
- iv. Abdomen and Mid-Section – (GI/GU System)
 1. Anatomical Terminology
 2. Miscellaneous GI Terms and Diseases
 3. Useful Lab Values

10) Fixed Wing Transport

- a. Different types of fixed wing providers
- b. Different types of fixed wing aircraft
- c. Requirements for operating a fixed wing
- d. Role of the Communicator/Coordinator

11) Utilization of Ground Transport Services

- a. Origin and Development of Ground Ambulance Services
- b. COBRA and its significance
- c. Utilization of ground ambulances with air transport programs

12) Public Relations and the ACS

- a. Role of Public Relations Representative and the flight team
- b. Strategies for interfacing with the media
- c. Role of the Communications Specialist in program specific total public relations effort

13) Stress Management

- a. Stages of Stress
- b. Stress Responses
- c. Symptoms of Stress
- d. Stress Management
- e. Critical Incident Stress
 - i. Air Medical Response related to Critical Incident Stress
 - ii. Debriefings
 - iii. Defusing
 - iv. Critiques

14) History of Air Medical Transport Services (Optional Topic)

- a. Military origins of air medical transport
- b. Development of the role of helicopters in air emergency evacuation
- c. Basic model followed by hospitals in air ambulance transport services

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15) Commission on Accreditation of Medical Transport Systems – CAMTS (Optional Topic)

- a. CAMTS Sixteen Member Organizations
- b. CAMTS Mission Statement
- c. Goals
- d. Communications Equipment on Aircraft and Ambulances
- e. Communications Specialist Training
- f. Communications Policies to Reflect
- g. Transport Coordination Communications Standards
- h. Fixed-Wing Communications Standards
- i. Flight Following Standards
- j. Communications Center Equipment Standards