



NAAMTA Global Medical Transport Standards

Version 7.0

NAAMTA Global

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NAAMTA's vision is to create measurable industry standards for Medical Transport providers that result in enhancing quality service, ensuring safety, and providing standardized criteria to attain an elevated level of excellence measured through certification.

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Introduction

NAAMTA Global Medical Transport Accreditation is recognized worldwide for providing industry best practice procedures and a platform for programs to demonstrate a continuous commitment to maintaining the accreditation criteria and compliance.

In 2021, we were approached by members of the helicopter and search and rescue industry to develop Helicopter Hoist Operation standards and an accreditation program.

Hoist Operations consists of a skilled and competent crew of aircraft personnel equipped with specific mission equipment to vertically lift and place individuals into otherwise inaccessible places with other types of transportation. These operations introduce complexities inherent with challenges and risks beyond or not included in general air ambulance medical transport operations.

The fundamental ethos of the SAR/Hoist Medical Transport accreditation standards is to ensure evaluated organizations have the necessary processes, procedures, equipment, oversight, training, and management engagement to ensure the services offered have been reviewed to ensure they are safe, well trained, monitored for compliance and professionally executed.

Engaging subject matter experts from around the world, and implementing regulatory criteria, best practice procedures, quality management procedures, and including processes of safety and risk management, we developed our accreditation standards:

- ✓ NAAMTA Global Medical Transport
- ✓ NAAMTA Global Medical Escort
- ✓ NAAMTA Global Helicopter Hoist Operations
- ✓ NAAMTA Global Hoist Medical Transport
- ✓ NAAMTA Global Rapid Response Mobile Medical



Standard Criteria

The accreditation standards are a compilation of safety, quality, maintenance, and operational standards that focus on operations in such a way that promotes consistency, safety, quality, and continuity for employers, employees, and those they serve.

Compliance with the accreditation criteria awards your organization a certification that carries with it NAAMTA Global Certification recognition. With the incorporation of day-to-day quality control, safety and risk management, the accreditation defines measures of excellence and infuses a comprehensive training program paired with operational procedures that when executed transport after transport, mitigate transport risks to their lowest level becomes inherent. It is the key every operator seeks.

Mission Statement

NAAMTA's Executive team began operations in 2009 with a vision and a mission to serve our customers.

- ✓ We aspire to be an example to the medical transport and helicopter hoist industry by establishing an underlying value system whereby standards are developed, defined, monitored, and enforced.
- ✓ We embrace a higher standard where all who fall under the NAAMTA Global umbrella desire a perfect workplace, a place where safety and quality of care are paramount.
- ✓ We inspire people to be better through education and communication.
- ✓ We establish standards offering professional attitudes, using decision-making processes, evaluating consequences, acting, and continually seeking to improve quality.

Goals

NAAMTA Global's goal in developing this accreditation is to establish standards that set the bar for all organizations by providing a foundation that empowers them to consistently provide services as defined in their mission statement and scope of practice to meet customer needs with exceptional quality services and outstanding safety measures. NAAMTA strives to,

- ✓ Provide defined and documented procedures through the NAAMTA Standards manual that assist each organization by outlining the requirements for adherence to the accreditation process, which includes guidelines from the Civil Aviation Authorities, Occupational Health and Safety, and other regulatory agencies.
- ✓ Exemplify a quality management system (QMS), based on ISO established standards, in creating an organizational culture of quality and safe practices. Additionally, the system will assist organizations to consistently monitor and evaluate processes practiced and provide ways to identify and correct problems.
- ✓ To implement a system that enables clients to perform self-assessments for compliance with NAAMTA Standards.



The NAAMTA Global Standards Manual

This manual contains the criteria identified as standards for organizations that perform medical transport services.

In reviewing the section topics below, you will notice that the accreditation covers the major components for quality business operations, safety management, operational procedures for dispatch, aviation, maintenance, and medical operations.

Compliance with the standards will be based on the type of service you offer, your organization's mission statement, and your scope of service.

This manual contains standards regarding the following:

Section 1: Business Management	Section 10: Safety and Risk Management
Section 2: Organizational Structure	Section 11: Duty Time
Section 3: Administration	Section 12: Operations
Section 4: Human Resources	Section 13: Credentialing and Training
Section 5: Information Management	Section 14: Communication and Transport Coordination
Section 6: Infection Control	Section 15: Medical
Section 7: Compliance	Section 16: Aviation
Section 8: Quality Management	Section 17: Maintenance
Section 9: Utilization Management	Section 18: Transportation Vehicles

How to Use this Manual

Each section in the manual will contain standards relating to the section title.

Each **Section** and **Standard** are referenced by number.

Section 1: Business Management

In this section, you will find standard criteria for:

- Mission Statement and Scope of Service
- Business and Operations Insurance
- Vendor and Third—Party Contracts

Transport Modes

Tables are used to organize the standard with the following 4 elements:

1. **Reference Number (Ref#)** - identifies the standard.
2. **Standard** - identifies the standard criteria.
3. **Additional Guidance** - identifies additional detail, examples, or expectations relating to the standard.
4. **Transport Modes** - identifies the mode of transport the standard is applicable.

Medical Transport modes include:

- Fixed-wing
- Rotor-wing
- Ground
- Aquatic

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
1.01	The medical transport organization must have a documented Mission Statement.		The Mission Statement should: <ul style="list-style-type: none"> • Define the purpose, contribution, and services. • Outline desirable outcomes for customers and the organization. 	x	x	x	x
1.02	The medical transport program must have a documented Scope of Service.	The policy must clearly describe: <ul style="list-style-type: none"> A) The level of care and/or specialties the program is licensed to operate. B) The program's patient population. C) Mode(s) of transport offered. D) Whether Specialty Care teams are company-dedicated or if they are contracted. E) Any use of subcontracted or brokered services. 	For air ambulance operations, the Scope of Service dictates the type of aircraft used; typically, a twin- or single-engine turbine aircraft are essential for providing unencumbered full-body access, with safe and quality patient care.	x	x	x	x

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Transport Modes: F-fixed R-rotor G-ground A-aquatic

In reviewing these standards, you inherently perform an assessment of your organization's policies, procedures, and practices to see if they align with the criteria outlined within this manual to determine if you qualify for accreditation.

Organizations seek NAAMTA Global Accreditation for many reasons, the following are the most popular:

- ✓ The accreditation establishes the expectations for service, quality, and safety recognized by potential customers, insurance companies, and peers.
- ✓ The accreditation criteria provide insight into best-practice principals and provide an opportunity to assess its policies for compliance or improvement.
- ✓ The accreditation provides industry recognition for quality, safety, and best practice procedures.

Naamta Global Accreditation

As an accreditation provider, we pledge to the industry to provide a well-qualified accreditation solution through:

- ✓ Identifying clear, concise, evidence-based accreditation standards.
- ✓ Establishing effective goals to attain recognition of quality, safety practices, and cost-effective processes.
- ✓ Providing auditing processes and reports in line with ISO 9000 Quality Management auditor techniques and processes.
- ✓ Providing processes for demonstrating ongoing commitment and compliance with the NAAMTA Global Standards.
- ✓ Supplying a unified environment for the NAAMTA Global Alliance (our accredited member programs) to interact and drive opportunities for improvement in the industry.

The accreditation process is a measurement of compliance through a set of defined standards. Throughout the phases of accreditation, we work with applicants to understand, and if necessary, assist in incorporating procedures to meet the requirements by which we audit.

NAAMTA Global Accreditation process is comprised of the following phases:

1. Registration/Application
2. Administrative Audit
3. Site Audit Accreditation
4. Completion/Corrective Actions
5. Award of Accreditation



Introduction



NAAMTA Global believes that when performance is measured, performance improves. When the performance of an organization is measured and reported, the efficiency and quality of improvement to that performance accelerates. NAAMTA holds these beliefs to its accreditation and continuous compliance and commitment processes.

Continuous Compliance and Commitment

The Commitment to the NAAMTA Global standards is evaluated during the initial accreditation process and continues throughout the 2-year accreditation. NAAMTA Global incorporates a Continuous Compliance and Commitment Program (CCCP). Accredited members report on their internal audits to monitor, and measure quality and safety management for company policies and procedures. This process takes approximately 15 minutes a month but demonstrates currency in the accreditation requirements.

Getting Started

As partners, we at NAAMTA will guide you through the accreditation process. To begin, fill out the registration form found on the NAAMTA website [Access the Registration Form](#). The registration form can be submitted online or mailed in with a \$1000 non-refundable fee.

When we receive the registration form, a subscriber portal will be created giving your organization's representative access to the NAAMTA Evaluation and Application Tool, the accreditation standards, and the NAAMTA Policies and Procedure manual.

The Policies and Procedures manual will guide you through the first steps of the application process, apply, and expectations as you become accredited.

The duration of the application process varies depending on the resources within your organization dedicated to the process, but you will have up to one year to complete the entire process.

We are excited to have your organization involved with our accreditation program and look forward to working with you as your partner in creating a safer industry.

Sincerely,

NAAMTA Executive Committee



Section 1: Business Management

In this section, you will find standard criteria for

- Mission Statement and Scope of Service
- Business and Operations Insurance
- Vendor and Third—Party Contracts

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
1.01	The medical transport organization must have a documented Mission Statement.		<p>The Mission Statement should:</p> <ul style="list-style-type: none"> • Define the purpose, contribution, and services. • Outline desirable outcomes for customers and the organization. 	x	x	x	x
1.02	The medical transport program must have a documented Scope of Service.	<p>The policy must clearly describe:</p> <p>A) The level of care and/or specialties the program is licensed to operate.</p> <p>B) The program's patient population.</p> <p>C) Mode(s) of transport offered.</p> <p>D) Whether Specialty Care teams are company-dedicated or if they are contracted.</p> <p>E) Any use of subcontracted or brokered services.</p>	For air ambulance operations, the Scope of Service dictates the type of aircraft used; typically, a twin- or single-engine turbine aircraft are essential for providing unencumbered full-body access, with safe and quality patient care.	x	x	x	x
1.03	The organization must present a Federal tax ID number.		<i>(Also known as an Employer and/or Tax Identification Number).</i>	x	x	x	x
1.04	The organization must present applicable state and/or national business license(s) in each locale in which a base/office is maintained.	<p>Business license(s) must include operation:</p> <p>A) As an ambulance service.</p> <p>B) Level of patient care provided by the program (i.e., BLS, ALS, CC, SC).</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
1.05	All air medical transport services shall have a Part 135 Air Operator's Certificate as defined by the country of origin's Civil Aviation Authority (CAA).			x	x		
1.06	The medical transport organization is required to have general liability insurance coverage against loss or damages related to the scope of services offered.	<p>An underwriting company must have at least an "A" rating.</p> <p>All employed or independently contracted personnel are to be covered by insurance while acting on behalf of the organization.</p>	<p>Independent contractor personnel should be aware of what insurance coverage they are personally responsible for and what coverage is provided by the company.</p> <p>Where no regulatory limits are identified, NAAMTA recommends \$300,000/incident and \$500,000 aggregate limits (USD).</p>	x	x	x	x
1.07	Medical malpractice insurance coverage is required for medical staff.	<p>Coverage is consistent with licensing per applicable regulatory requirements.</p> <p>Policy specifies whether malpractice insurance will be provided by the company or is the employee's responsibility.</p>	<p>Where no regulatory limits are identified, NAAMTA recommends:</p> <ul style="list-style-type: none"> \$1,000,000/incident. \$3,000,000 aggregate limits (USD). 	x	x	x	x
1.08	The medical transport organization is required to provide Worker's Compensation insurance. Coverage limits are to be consistent with licensing regulation requirements, as applicable.		Where no regulatory limits are identified, NAAMTA recommends \$1,000,000 limit (USD).	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
1.09	Automobile insurance coverage is required for all company ground vehicles. Coverage limits is to be consistent with licensing regulation requirements, as applicable.		Where no regulatory limits are identified, NAAMTA recommends: <ul style="list-style-type: none"> \$500,000/incident \$1,000,000 aggregate limits (USD). 	x	x	x	
1.10	Air ambulance liability insurance coverage is required for all company aircraft in compliance with applicable state and/or national regulatory requirements.		Where no regulatory limits are identified, NAAMTA recommends: <ul style="list-style-type: none"> Rotor-wing \$10 million (USD) Fixed-wing (Twin) \$10 million (USD) Fixed-wing (Turbo) \$25 million (USD) Fixed-wing (Jet) \$25 million (USD) 	x	x		
1.11	Watercraft liability insurance coverage is required for all company watercraft utilized as ambulances or rescue equipment, including personal watercraft.		Where no regulatory limits are identified, NAAMTA recommends: <ul style="list-style-type: none"> \$500,000/incident \$1,000,000 aggregate limits (USD). 				x
1.12	Helipad premises liability insurance coverage is required for all heliports owned and operated by the company.		Helipad insurance should include: <ul style="list-style-type: none"> Non-company owned aircraft. Portable medical equipment. 		x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
1.13	Organizations utilizing the services of any outsourced vendor(s) are required to have written contract(s) in place.	<p>Contracts must outline:</p> <p>A) The scope of services being provided.</p> <p>B) Duration of contract.</p> <p>C) The individual/role acting as point of contact regarding quality management, safety, and risk management.</p> <p>D) Vendor contracts are to be reviewed and updated on an annual basis.</p>	<p>Vendors include outsourced medical officers and crews, pilots and flight crews, aviation operations, maintenance services, communications and flight coordination, and security details.</p> <p>Processes should define procedures for:</p> <ul style="list-style-type: none"> Vetting and selection of vendors. Ongoing review and evaluation of contracted service providers/vendors. 	x	x	x	x

Notes



Section 2: Organizational Structure

In this section, you will find standard criteria for the Medical Transport organization key management roles. Including, but not limited to:

- Program Director
- Director of Operations
- Director of Maintenance
- Medical Director
- Clinical Operations Manager
- Communications and Transport Coordination Manager

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.01	The medical transport organization shall have a clearly defined organizational structure as detailed on an organizational chart. Key executive and management positions will be identified by the name of the individual assigned to that position.	Organizational structure shall include: A) Program Director B) Medical Director C) Clinical Operations Manager D) Operations Director E) Compliance Officer F) Safety Officer G) Communications and Transport Coordination Manager H) Maintenance Director	Organizational charts should include: <ul style="list-style-type: none">• Lines of authority and chain of command for reporting to upper-level management.• Name identification of executive level personnel who are responsible for any company manual content.• Clearly defined collaborative relationships with contracted vendors.	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.02	The medical transport organization shall have a Program Director who is responsible for leading and administering the daily operations of the organization with a focus on the systems and procedures required to accomplish the company's mission and goals.		<p>The Program Director:</p> <ul style="list-style-type: none"> Ensures operational safety and quality patient care align with company goals. Administers applicable Quality Management processes through: <ul style="list-style-type: none"> Quality Management Plan Utilization Management Processes Safety & Risk Management System Compliance Program Manages and coordinates interdisciplinary effectiveness of patient care, operational logistics, maintenance, and communications. Exemplifies and establishes a culture of transparency, cooperation, safety and teamwork. Maintains professional relationships with referring EMS agencies, hospitals, assist companies, payers and community emergency response leadership. Ensures program compliance with NAAMTA standards and applicable regulatory entities. 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.03	Qualifications for the medical transport organization's Program Director shall be clearly described in the job description.		<p>The organization's Program Director should present with qualifications consistent with:</p> <ul style="list-style-type: none"> • Extensive prior experience in the medical transport and emergency services industry. • Working knowledge of NAAMTA standards and governmental regulatory statutes relating to organization's Scope of Service (<i>i.e., local/federal transportation laws, industry "best-practice" standards, patient care protocols</i>). • Educational degree in health care, business, marketing or related field. • Strong interpersonal and professional communication, problem solving and management skills. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.04	<p>The organization shall have a Medical Director who is responsible and accountable for:</p> <p>A) Maintaining currency of applicable regulations</p> <p>B) Managing and evaluating the quality of patient care provided by the organization.</p>	<p>The Medical Director ensures competency and currency of all medical personnel working for the program by:</p> <p>A) Being familiar with the scope of practice of the transport team members.</p> <p>B) Reviewing patient charts for appropriateness of care.</p> <p>C) Providing feedback and training for clinical personnel as needed.</p>	<p>The Medical Director should:</p> <ul style="list-style-type: none"> Participate in transport medicine CME's and conferences. Collaborate with Clinical Operations Manager in medical crewmember hiring and performance evaluation processes. Collaborate with communications department to identify required patient medical intake information. Collaborate in establishing health and "fit for duty" criteria for crews. <p>For EMS Programs - The Medical Director should participation in community emergency-response planning, outreach education/ training needs, development of community on-call medical system and awareness of current EMS issues and concerns.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.05	<p>The Medical Director shall establish and review the following documents to ensure they align with the organization's scope of service, current standards of medical practice for the transport setting, medical crewmember licenses and scopes of practice.</p> <p>A) Patient Care Guidelines and Protocols.</p> <p>B) Infection Prevention and Control policies.</p>	The Medical Director will ensure transport procedures comply with EMTALA regulations. (<i>United States</i>)		x	x	x	x
2.06	The Medical Director shall ensure that Controlled Substances and other medications are handled, stored, and utilized in compliance with applicable local/ national laws and regulations.			x	x	x	x
2.07	The Medical Director shall actively participate in the organization's Quality Management and Utilization Management processes.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.08	The Medical Director shall collaborate with the Clinical Operations Manager in administering Utilization Management of patient services for all medical personnel.	Parameters for utilization management shall include: A) Identifying patient care performance indicators. B) Reviewing patient charts for appropriateness' of care. C) Providing feedback and training for clinical personnel as needed. D) Infection Prevention and Control policies.	Medical personnel include transport medical crew, online and offline control physicians.	x	x	x	x
2.09	The Medical Director shall provide medical control of patient transports, including consultation with specialty care control physicians as indicated by mission type/acuity.			x	x	x	x
2.10	The Medical Director shall manage and supervise on-line control physicians.	The Medical Director shall: A) Orient physicians of the organization's services, scope of practice, and standard operating procedures. B) Ensure compliance for physician licenses, credentialing, and company education requirements.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.11	The Medical Director qualifications must be consistent with the medical transport organization's Scope of Service and be described in the job description.	<p>Qualifications include:</p> <p>A) Current license as a medical physician in the jurisdiction(s) in which he/she practices and/or functions as Medical Director.</p> <p>B) Board certification (<i>or national equivalent</i>) in area(s) of medicine commensurate with the patient population and scope of services provided by the organization.</p> <p>C) Education and credentials required by state/national civil EMS and medical licensing board's requirements for Medical Directors.</p> <p>D) Extensive experience in patient care related to program's Mission Statement and Scope of Care.</p> <p>E) Current DEA controlled-substance certification (<i>or national equivalent</i>) for each base in jurisdiction of program.</p> <p>F) Active medical practice in and experience relating to the organization's Scope of Service.</p> <p><i>*Alternate or equivalent certifications and/or experience must be submitted and approved by NAAMTA.</i></p>	<p>Using the program's mission statement and scope of care as a guide, the Medical Director should have:</p> <ul style="list-style-type: none"> Experience in aspects of care: <ul style="list-style-type: none"> The capabilities/limitations of patient care in the transport environment. Appropriate utilization of transport services. Applicable statutory laws, rules or regulations impacting patient care. Flight/altitude physiology and clinical stressors. Training in principles of: <ul style="list-style-type: none"> Quality Management Systems. Crew Resource Management (CRM) including Human Factors. Safety and Risk Management. Proficiency in the program's: <ul style="list-style-type: none"> Policies and procedures outlining transport-process SOPs, including hand-off reporting procedures. Protocol for the reporting of medical incidents and unusual occurrences. Documentation of all education, experience, certifications and trainings. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.12	<p>The organization shall have a Director of Aviation Operations who is responsible for:</p> <p>A) Ensuring company flight operations are conducted in accordance with company policies, civil aviation authority guidelines, and regulations.</p> <p>B) Ensuring the certificate holder's system contains the qualifications, duties, responsibilities, and authority to direct individuals in their responsibilities relating to flight and aviation training.</p>	<p>Additional responsibilities include:</p> <p>A) Maintain current knowledge of applicable federal, state, local, and international aviation regulations.</p> <p>B) Operational direction and control of company aviation activities and personnel.</p> <p>C) Participation in the company's SRMS and Quality Management programs.</p> <p>D) Ensure aviation personnel have access to the Operations Specifications manual.</p> <p>E) Establish aviation performance standards and goals driven by the company mission statement and included in the QM Plan.</p> <p>F) Work with the Director of Maintenance in coordinating the review, planning, and resolution of aircraft maintenance, repairs or modifications.</p> <p>G) Liaise with the regulatory civil aviation inspection authorities.</p> <p>H) Oversight of required pilot training and flight competencies.</p> <p>I) Implement and document Crew Resource Management strategies for crewmembers and operational personnel.</p>		x	x		



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.13	<p>The organization's Director of Aviation Operations is required to have:</p> <p>A) Current ATP license. B) Meet Part 119 requirements.</p>	<p>CFR Part 119 management personnel requirements:</p> <p>A) Minimum 3 years supervisory or managerial experience in operational control under Part 121 or Part 135 within the last 6 years of aircraft equivalent to that utilized in company fleet, or B) Minimum 3 years of experience as PIC under Part 121 or Part 135 of aircraft equivalent to that utilized in company fleet.</p>	<p>The Director of Aviation Operations should also have:</p> <ul style="list-style-type: none"> A background in domestic and/or international flight operations as applicable with company focus and services. A commanding knowledge of company General Operating Manual, Ops Specs Manual and FARs pertaining to company aviation operations. Proven experience working with FAA authorities. 	x	x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.14	The Director of Maintenance is responsible for administrative oversight of all scheduled and unscheduled maintenance of company vehicles.	<p>The Director of Maintenance is required to:</p> <ul style="list-style-type: none"> A) Participate on QM Committee and direct department implementation of company QM Plan and SRMS program. B) Collaborate with the Director of Operations in developing budget and accounting systems for aircraft/ vehicle/vessel maintenance and repairs. C) Interface with civil authorities on required inspections of maintenance facilities and performed maintenance/ record-keeping/reporting practices (<i>Flight programs only</i>). D) Manage a maintenance forecasting system as part of the department's utilization management. E) Verify maintenance facilities safety equipment, record-keeping, and operational practices comply with SMRM and occupational safety regulations. F) Supervise procurement and parts inventory for maintenance equipment and supplies. G) Ensure safe handling, disposal, and/or recycling of hazardous and waste materials. H) Ensure maintenance personnel are current with required certificates, and training. 	<p>The Director of Maintenance shall:</p> <ul style="list-style-type: none"> • Provide administrative oversight for all internal and outsourced operations for ambulance and vehicle maintenance, overhauls, repairs, and “return-to-service” processes. • Verify company and outsourced maintenance facilities comply with company policies and NAAMTA standards of safe operations. • Ensure company ambulance and vehicle(s) complete required regulatory maintenance/safety/ emissions inspections with applicable government agencies/entities (<i>i.e., FAA, CAA, local Department of Motor Vehicles, marine/Coast Guard</i>). 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.15	<p>To serve as the organization's aviation Director of Maintenance, a person must:</p> <p>A) Hold a CAA mechanics/engineer certificate with airframe and power plant ratings.</p> <p>B) Minimum of 3 years' experience within the past 6 years CAA requirement.</p>	<p>Experience shall include:</p> <p>A) Maintaining aircraft as a certified mechanic, including, at the time of appointment as Director of Maintenance, experience in maintaining the same category and class of aircraft as the certificate holder uses; or</p> <p>B) Repairing aircraft in a certificated airframe repair station, including 1 year in the capacity of approving aircraft for return to service.</p>	<p>The Director of Maintenance should also have:</p> <ul style="list-style-type: none"> Strong background and knowledge of governmental regulations pertaining to maintenance of ambulances and vehicles as applicable to those utilized by service. Knowledge of occupational and safety regulations. Working knowledge of ambulance medical systems. 	x	x		
2.16	<p>The Director of Maintenance for ground ambulance operations must:</p> <p>A) Hold current ASE, OEM, EVT certification in emergency vehicle maintenance.</p> <p>B) Have a working knowledge of current ambulance technical standards (i.e., NHTSA, NFPA 1917, KKK-A-1822, etc.).</p>		<p>The Director of Maintenance should also have:</p> <ul style="list-style-type: none"> Strong background and knowledge of governmental regulations pertaining to maintenance of ambulances and vehicles as applicable to those utilized by service. Knowledge of occupational and safety regulations. Working knowledge of ambulance medical systems. 			x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.17	The organization shall have a Clinical Operations Manager (COM) responsible for providing administrative management, clinical practice supervision, and evaluation of patient care provided by the organization's medical crews.	<p>The COM shall:</p> <p>A) Ensure full-time staff and contracted clinical personnel's compliance with:</p> <ul style="list-style-type: none"> i) Company policies and procedures. ii) Educational didactic and clinical competency requirements. <p>B) Manage and supervise the activities of full-time staff and contracted clinical personnel (<i>as applicable</i>) to:</p> <ul style="list-style-type: none"> i) Ensure the scheduling model adheres to the Alertness & Fatigue Management Program. ii) Conduct regular department staff meetings to: <ul style="list-style-type: none"> a) Disseminate updated policies, procedures, and company activities. b) Provide mission reviews and instructional training. iii) Administer disciplinary actions and/or terminations. 	<p>The COM responsibilities may also include:</p> <ul style="list-style-type: none"> • Promoting and mentoring a professional patient care model by: • Fostering an environment of collegiate collaboration, open communication, and utilization of best clinical practice. • Encouraging and facilitating professional educational advancement through external scholastic education, credentialing, and industry training. • Training medical personnel in Crew Resource Management skills. • Promoting crewmember professionalism and practice of Fatigue Countermeasures and Education Program. • Supporting outreach clinical education by medical personnel. 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.18	The COM will collaborate with the Medical Director for all department operations.	<p>The COM shall develop clinical department policies and monitoring patient care services as part of utilization management:</p> <ul style="list-style-type: none"> A) Defining educational requirements and clinical competencies for medical crewmember job descriptions. B) Identifying patient care performance indicators. C) Reviewing patient charts for appropriateness of care. D) Determining areas that need improvement. E) Providing feedback and training as needed. F) Hiring and training of medical crew members. G) Establishing guidelines for use of per diem and contracted medical personnel/teams. H) Follow-through on quality of patient care. I) Developing and implementing a Medical Risk Assessment Tool. J) Administering the company's Infection Prevention and Control Program. 		x	x	x	x
2.19	The COM will support the organization's quality and safety management systems.	<p>The COM responsibilities include:</p> <ul style="list-style-type: none"> A) Coordinate clinical implementation of QMS and SRMS policies/tools. B) Participate on the Quality Management committee. 		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.20	The COM is responsible for providing clinical practice supervision and evaluation of medical crewmember's patient care within the scope of practice of the manager's professional license as defined by state and national professional licensing rules and bylaws.	<p>Depending on the clinical crewmember's defined scope of practice, the government authority having jurisdiction (AHJ) and regulations, and the organization by which they are employed:</p> <p>A) Only a Registered Nurse may legally supervise and evaluate the nursing practice of nurse crew members.</p> <p>B) A physician or Registered Nurse may supervise an Emergency Medical Technician (EMT), Paramedic or Respiratory Therapist.</p>	The COM ensures effective delivery of quality patient care and confirms compliance with administrative and clinical policies and procedures.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.21	The COM is required to have prerequisite education, experience, and professional license congruent to the responsibilities of the position as well as the organization's Mission Statement and Scope of Service.	<p>A) Professional License:</p> <p>i) Current professional license to practice in the state/territory or country serviced by transport program.</p> <p>B) Education & Training:</p> <p>i) Currency in all competency courses stipulated for the organization's medical personnel (<i>i.e.</i>, BLS, ACLS, PALS, NRP, etc.).</p> <p>ii) Nationally recognized board certification in advanced emergency, critical care, and/or specialty care congruent with the organization's clinical competency requirements.</p> <p>iii) Pre-hospital trauma course currency.</p> <p>C) Clinical Experience:</p> <p>i) Extensive inpatient and transport critical care experience commensurate with the organization's Scope of Service and patient population.</p> <p>ii) Familiarity with medical transport and company processes.</p>	The COM should have previous management experience or familiarity with the processes of quality/utilization management, safety and risk management, and Crew Resource Management.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.22	<p>The medical transport organization shall have a Communications and Transport Coordination Center (CTCC) Manager whose responsibilities are outlined by senior management.</p> <p>The CTCC Manager is responsible for directing the communications processes by which the organization's transport services can be accessed, mobilized, and coordinated.</p>	<p>The CTCC Manager is responsible:</p> <p>A) Develop department goals and objectives for effective operations.</p> <p>B) Work with management to:</p> <p>i) Establish, administer, and evaluate department policies and procedures.</p> <p>ii) Develop department budget proposals for equipment, staffing, and training.</p> <p>C) Participate in Quality, Safety, and Risk Management Systems.</p> <p>D) Hire, schedule, and evaluate communication specialists and transport coordinators.</p> <p>E) Direct and control activities and transport coordination.</p> <p>F) Ensure personnel complete required training including:</p> <p>i) Transport coordination, dispatch policies, and procedures.</p> <p>ii) Department equipment.</p> <p>iii) Government communications rules and regulations.</p> <p>iv) Crew Resource Management.</p> <p>v) Incident and Emergency Response Plan and drills.</p> <p>G) Maintaining communications records.</p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
2.23	The CTCC Manager is required to have qualifications applicable to the organization's Scope of Service which must be outlined in the job description for this role.	<p>The CTCC manager shall have:</p> <p>A) Strong experience and background in transport medicine communications processes and procedures.</p> <p>B) Knowledge of state, federal, and international communications regulations relating to medical transport services.</p> <p>C) EMS Providers: <i>Current IAMTCS certification or alternate medical communications certification as evaluated and approved by NAAMTA.</i></p>	<p>CTCC Manager should have a working knowledge of:</p> <ul style="list-style-type: none"> State, federal, international communications and regulations. Required domestic and international travel documentation, advisories, and restrictions. 	x	x	x	x



Notes

Section 3: Administration

In this section, you will find standard criteria for the Medical Transport organization administrative framework. Including:

- Written Policies, Procedures, and Operations Manuals
- Service Operational Requirements
- Employee Criteria
- Marketing and Community Relations
- Internal and External Customer Feedback
- Community Outreach Education
- Staff Meetings
- Crew Medical Care
- Crew Personal Equipment and Supplies

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.01	The medical transport organization shall have written policy requiring all general organizational policies, standard operating procedures, plans, patient care protocols and educational training.	<p>Policy shall include the following elements:</p> <p>A) Review, update for currency, and approval (<i>signed</i>) by management a minimum of every 2 years (<i>or more frequently as required by applicable civil regulatory agencies</i>).</p> <p>B) Accessible to and reviewed by all employees annually and documented.</p> <p>C) Identification of accountable individual/role responsible for ensuring that updates occur, are documented, and disseminated to employees.</p> <p>D) Revisions be itemized in writing to facilitate identification of changes.</p>	<p>Review manuals, policies, procedures, and directives regularly. Include procedures to prevent unintended use of obsolete materials and files.</p> <p>Documents applicable to the standard:</p> <ul style="list-style-type: none"> • Quality Management Plan. • Utilization Management processes, key performance indicators and reporting tools. • Employee handbooks and general operating manuals. • Policy and Procedures Manuals. • Safety & Risk Management Manual. • Patient Care Protocols. • Maintenance manuals. • Fuel quality policies. • Training manuals. • Internal and community-based emergency response plans. • Accident/Incident Response Plan. • PR, customer interaction, and outreach education guidelines. • Hazardous materials protocols. • Crew Resource Management Air Medical Resource Management. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.02	The medical transport organization shall have a policy requiring transport requests be accepted without regard to race, ethnicity, religion, or gender.			x	x	x	x
3.03	The medical transport organization shall have a policy that prohibits participation in the practice of ambulance "shopping."		"Shopping" refers to the practice of sequential calls by EMS agencies or referring facilities to a variety of medical providers in an attempt to secure medical resources for a call response that is limited by weather, distance, landing zone availability (<i>when applicable</i>), or other safety factors.	x	x	x	x
3.04	The medical transport organization shall have a policy clearly describing time zone reckoning.	Policy elements will include: A) Employee duty-time calculations for operational staff (<i>Communications, medical, and maintenance personnel</i>). B) Documentation of departure and arrival times. C) Patient care charting/documentation.		x	x	x	x
3.05	The medical transport organization will require all employees to wear or carry ID badges while on duty. Policy will indicate if badges are to be visibly displayed.	ID badges are to include: A) Official employee photo. B) Employee name. C) Job title.	Policy should outline the process for reporting lost or stolen ID badges. Badges are to be returned to company upon resignation or termination of employee.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.06	Company policy details procedures for implementation of noise abatement measures. Policy will address concerns, such as aircraft flight patterns and guidelines for use of lights and sirens.		Policy should address procedures for handling noise complaints from the community.	x	x	x	
3.07	The medical transport organization shall have a written policy establishing guidelines for marketing collateral, news releases and the use of photographs in printed materials and electronic media.	Policy elements will address: A) Individual(s) responsible for marketing, newsletters, news releases, and the posting of social media. B) The use of employee photographs in marketing materials. C) The use of active or passive consent regarding the use of personal information for business purposes.		x	x	x	x
3.08	The medical transport organization shall have policy prohibiting employees from disclosing/posting any visual or narrative information related to a patient transport or rescue operation on social media without written authorization from accountable company director.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.09	The medical transport organization provides a mechanism for customer feedback on services rendered.		Examples of a feedback may be in the form of a website link, customer survey card, etc.	x	x	x	x
3.10	The medical transport organization shall have a written plan to address and resolve complaints received from customers, medical facilities, EMS entities, regulatory agencies, as well as company employees.	<p>Policy needs to include:</p> <p>A) Time frame in which resolution of complaint is to be initiated.</p> <p>B) Mechanism for tracking progress towards resolution.</p> <p>C) Documentation of all steps taken to resolve the complaint.</p>	<p>Plan should include:</p> <ul style="list-style-type: none"> Instructions on how entities or individuals file a complaint. The process of resolving complaints as outlined by QMS. Identification of individual(s) responsible for the resolution of submitted complaints. 	x	x	x	x
3.11	The medical transport organization shall have a written "Non-Punitive/Non-Reprisal" policy for reporting of unintentional or inadvertent errors by all employees.		This policy shall be supported by the highest level of management. Management shall make every effort to promote a non-punitive working environment. This is referred to as a "Just Culture." A non-punitive environment is fundamental to having an effective safety reporting culture.	x	x	x	x
3.12	The medical transport organization must have a policy that authorizes or prohibits the practice "Ride-Along."	<p>When authorized, policy must clearly define:</p> <p>A) Learning objectives for ride-along experience.</p> <p>B) Liability and insurance releases.</p> <p>C) Evaluation of educational experience as part of QMS processes.</p>	<p>Program should carefully assess and clearly define educational benefits that can only be obtained through participation in Ride-Along program.</p> <p>Ride-Along practices must not interfere with weight/balance requirements, safety protocols, workflow procedures and confidentiality requirements.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.13	The medical transport organization will have a community outreach and education program that provides information and training of hospital staff and regional EMS agencies.	<p>Outreach programs address:</p> <p>A) Landing zone, helipad/ aquatic safety procedures (<i>as applicable</i>).</p> <p>B) Scene triaging and patient handling protocols.</p> <p>C) Strategies for improving patient care.</p>	Participation in outreach education should be tracked and evaluated as part of the organizations overall Quality Management System.		x	x	x
3.14	The organization will conduct staff meetings for all bases.	<p>Policy includes:</p> <p>A) Meetings are to be held at least quarterly.</p> <p>B) Minutes are to be documented and made available to all staff. Minutes are to include:</p> <p>i) Name of department.</p> <p>ii) Names of attendees.</p> <p>iii) Location.</p> <p>iv) Items of discussion.</p> <p>v) Action plans as discussed.</p> <p>vi) Reporting of issues/concerns to Quality Management Committee.</p>	<p>Employees should attend at least 75% of all staff meetings either in person or via conference call.</p> <p>Staff meetings can be used for a variety of administrative purposes.</p> <p>To be effective, staff meetings should be held on a regular basis, have a detailed agenda, a time limit, and a designated moderator to ensure management and staff accountability and participation.</p> <p>Staff meetings provide an opportunity for management to meet face-to-face with department staff, helping to promote communication and support from management.</p> <p>Objectives of a staff meeting might include:</p> <ul style="list-style-type: none"> • Progress and project status reports. • Department updates. • Announcements. • Discussion of issues and action items. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.15	The medical transport organization shall have policy describing criteria for extended stay or personal requests for travel following the completion of a transport, but prior to returning to home base.		<p>Policy should clearly define the responsibilities of the company and the individual regarding any:</p> <ul style="list-style-type: none"> • Travel itinerary. • Lodging and transportation arrangements. • Financial costs. • Insurance liabilities. • "Return-to-Service" and reassignment availability. • Ongoing communication expectations. 	x		x	
3.16	It is required that resource information be available to medical transport crewmembers for use in situations resulting from unscheduled travel delays, diversions, or transport abortion.		<p>All resource accommodations should be vetted to assure appropriate safety and security of mission staff/client prior to initiation of transport.</p> <p>Resource information should include accommodations for:</p> <ul style="list-style-type: none"> • Hotel lodging. • Ground transportation and transfers. • Medical care clinics/hospitals. 	x		x	
3.17	The medical transport organization shall have procedures for assisting crew members in acquiring medical care for illness or injury when traveling, whether inside or outside the country of origin.		<p>Policy is to also describe:</p> <ul style="list-style-type: none"> • Medical insurance coverage that is either provided for or required of medical escort personnel. • Designated resource medical care providers and facilities to be utilized, if necessary. 	x		x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
3.18	The medical transport organization shall have policy requiring crewmembers carry personal supplies for unanticipated travel delays, itinerary changes, etc.		<p>Such supplies might include:</p> <ul style="list-style-type: none"> • Special dietary snacks. • Directory of contact phone numbers. • Travel documents (<i>visa, passport, identification</i>). • International travel assistance contacts. • Translation assistance resources. • Emergency financial resources (<i>including foreign currency exchanges</i>). • Personal medical alert information and insurance coverage. • Personal emergency contact information. 	x	x	x	
3.19	Company policy must provide direction to medical personnel on the procedures for handling requests for non-client medical assistance during a transport.	<p>Policy needs to address:</p> <p>A) Requests for assistance with first-responder CPR/AED or first aid.</p> <p>B) Requests for medications/drugs.</p> <p>C) Compliance with professional scope of practice "by-laws" as well as local/federal laws intended to prevent patient neglect/abandonment concerns.</p>				x	



Notes

Section 4: Human Resources

In this section, you will find criteria relating to activities and responsibilities of the Human Resources department and employee relations. Topics include:

- Employee Handbook
- Company Administration Policies
- Employee Licenses and Background Checks
- Health and Immunization Criteria
- New-Hire Requirements
- Job Descriptions

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.01	The medical transport organization shall have an employee handbook.	Policy shall require employees shall sign an attestation to have received and reviewed the handbook.		x	x	x	x
4.02	The medical transport organization shall have a Code of Ethics stating the obligation to utilize ethical and professional business practices in all aspects of the program's services.		<p>Code of ethical practices should include:</p> <ul style="list-style-type: none"> • Patient/client's rights to full disclosure of an itemized list of services rendered (<i>upon request</i>). • The patient/client's rights with respect to their: <ul style="list-style-type: none"> - Dignity. - Safety. - Personal Security. - Privacy and Confidentiality. - Cultural Values. • Truthful representation of practices involving outsourcing, brokering, or referring of services at the time of transport request and in marketing media/materials. • The notification of employees and patients/clients on the process for reporting unethical practices. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.03	<p>The medical transport organization has a policy addressing and prohibiting all forms of discrimination (<i>gender, sexual orientation, religion, ethnicity, race, etc.</i>). and workplace harassment (<i>verbal, physical, intimidation, bullying, etc.</i>).</p> <p>Policy must outline process for reporting suspected discriminatory incidents.</p>		<p>USA Programs: Must have an anti-discrimination policy per applicable federal and state EEOC laws.</p> <p>International Programs: Refer to national labor laws of the particular country.</p>	x	x	x	x
4.04	<p>The medical transport organization has a written policy relating to illegal, recreational, or unauthorized drug use, substance abuse, and alcohol consumption by employees.</p>	<p>Policy shall:</p> <p>A) Prohibit the use of illicit drugs.</p> <p>B) Establish criteria for physical and mental fitness-for-duty as relating to side effects of all medications and alcohol consumption.</p> <p>C) Include a program for routine random drug and alcohol testing of employees.</p> <p>D) Require drug testing companies be CAA/DOT approved.</p>	<p>Policy elements should address:</p> <ul style="list-style-type: none"> • Identification of those employees who would be included in testing program. • Records maintenance and confidentiality. • Procedure for handling positive tests or self-disclosure of a substance abuse problem. • Provision of Employee Assistance Program (EAP) referrals. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.05	The medical transport organization shall have policy requiring professional and criminal background checks on all employees who have patient care or operational responsibilities, and/or access to client information.		<p>Policy elements should:</p> <ul style="list-style-type: none"> • Be applicable to job description. • Identify person responsible for performing background checks. • Consider employee rights regarding background check information. • Outline information collected through background checks: <ul style="list-style-type: none"> - Fingerprint-based criminal history - Criminal records search for felony conviction relating to controlled substances. - Education credentials - Past work history - Status of professional license(s) - For DEA-registered practitioners (<i>or international equivalent</i>), prior disciplinary action by Drug Enforcement Administration. • Procedures for performing background checks: <ul style="list-style-type: none"> - Consent from individuals should be obtained regardless of country. - Comply with national and local governmental regulations and rules. - Work through official government agencies/embassies for identifying reputable international sources of information. • NAAMTA recommends background checks be performed on all personnel. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.06	The medical transport organization has a written policy regarding required dress code, grooming, and personal protective equipment.	<p>Policy must:</p> <p>A) Detail what items of uniform and/or equipment the employee is required to provided themselves, if any.</p> <p>B) Prohibit necessary company-provided items of uniform or equipment from being used as credited towards employee wages.</p>	<p>Policy should address cultural and/or religious-specific grooming and clothing considerations.</p> <p>Policy details should include:</p> <ul style="list-style-type: none"> • Approved attire for all aspects and departments of business, including outreach education and activities. • To avoid interference with patient care or mission operations: <ul style="list-style-type: none"> - Limit jewelry. - Hair should be maintained off the face. - Beards should be clean-cut. - Perfumes and fragrant hygiene solutions should not be used. • Religious clothing and head covers must be of a style and size that does not interfere with the wearing of uniforms, donning of and function of personal protective/safety equipment. Such clothing items shall not cover the face nor impair security procedures. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.07	Medical transport crew uniforms shall be designed to keep the provider and patient safe while maintaining a professional appearance.	<p>Uniforms shall incorporate:</p> <p>A) Fire-retardant or flame-resistant fabrics and materials.</p> <p>B) Clothing that is adaptable for varying climates and temperatures.</p> <p>C) Waterproof treated Outerwear.</p> <p>D) High-visibility safety apparel during night and/or scene operations (<i>may be permanently attached</i>).</p> <p>E) Program name on uniform including crewmember title.</p> <p>F) Footwear- protective high-top, non-slip.</p>	Reflective apparel material should be ANSI-107(2004) OR ANSI-207(2006) compliant.	x	x	x	x
4.08	All medical transport clinical personnel must hold a current professional license(s) to practice according to the organization's applicable state/national licensing board rules/regulations in which the company is licensed and/or assigned to a base.	<p>Clinical personnel who rotate to company offices/bases in other states/countries must maintain a current license/ certification to practice at those locations as required by each local/national professional licensing board(s).</p> <p>Professional license(s) must be unencumbered and not currently subject to formal discipline, provisions, or conditions.</p>	" Unencumbered" means not revoked, suspended, restricted, or made probationary or conditional by the respective licensing or registering authority as a result of disciplinary action or citation. Encumbered licenses and certifications impose restrictions which prevent/limit clinical staff from working to the full extent of their scope of practice.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.09	The medical transport organization shall have policy requiring new hire and annual verification of all professional licenses, certifications, and credentials with applicable state/national licensing or registering authority(ies) to ensure licenses/certifications are current and unencumbered.	<p>Policy shall:</p> <p>A) Identify persons responsible for conducting verification and documentation in employee file.</p> <p>B) Verification shall be documented in the employee file.</p>		x	x	x	x
4.10	The medical transport organization shall verify and document all new hire education, work experience and other applicable qualifications from primary authenticating entity and/or authority having jurisdiction.			x	x	x	x
4.11	The medical transport organization shall outline new hire and annual health and physical requirements for clinical staff.	<p>Requirements include:</p> <p>A) Health, fitness, and physical exam screenings.</p> <p>B) "Fit-for-Duty" criteria.</p> <p>C) Immunizations (<i>titer levels optional</i>).</p>	<p>The Medical Director should provide recommendations regarding required and recommended employee immunizations.</p> <p>Medical transport organizations should take into consideration those health screening and immunization requirements established by the client for their own medical transport crewmembers and international transport destinations.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.12	Immunization of medical transport personnel are to be documented and monitored for compliance with company, state, and national public health agency immunization requirements for healthcare workers.		Medical transport programs are strongly encouraged to have clinical staff also participate in recommended as well as required vaccination schedules. International operations should additionally comply with any applicable WHO requirements for countries of travel.	x	x	x	x
4.13	The medical transport organization is required to have a new-hire tuberculosis skin testing (PPD) or blood analysis testing (BAMT) or applicable surveillance chest radiographic screening (<i>if positive TB test and according to risk classification</i>) congruent with state/federal health department requirements for healthcare workers.	Clinical personnel are required to have an annual tuberculosis assessment and symptom screening.	NAAMTA recommends that pilots also have an annual tuberculosis assessment and symptom screening.	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.14	The medical transport organization shall maintain complete employee records for clinical staff.	<p>Employee records shall Include:</p> <p>A) Application and letters of recommendation.</p> <p>B) State/national ID or birth certificate (<i>copy</i>).</p> <p>C) Fingerprint and criminal background check.</p> <p>D) Professional background check (<i>pilots, medical crews</i>).</p> <p>E) DOT-approved drug screening.</p> <p>F) Required health screenings and immunizations.</p> <p>G) Professional license(s), credentials, certifications, and clinical experience qualifications.</p> <p>H) Performance evaluations/feedback.</p> <p>I) Company policy and procedure acknowledgement forms.</p> <p>J) Next-of-kin contact information.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.15	The medical transport organization shall have a policy promoting the physical well-being of all employees.		<p>Program fundamentals would:</p> <ul style="list-style-type: none"> • Provide education: <ul style="list-style-type: none"> – Physical fitness strategies to meet physical job demands. – Optimal use of off-duty time in addressing fatigue and proper rest. – Proper body mechanics for lifting patients and heavy equipment. – Effects and use of medications and alcohol on duty-fitness. • Provide back support devices for heavy lifting. 	x	x	x	x
4.16	The medical transport organization shall have a policy for duty guidelines regarding pregnant crewmembers.		<p>This policy should address:</p> <ul style="list-style-type: none"> • Company rules for compliance with state and/or national anti-discrimination laws as applied to employee pregnancy. • Defined company “fit-for-duty” criteria for pregnant transport crewmembers, including clearance requirements by personal physician. 	x	x	x	x
4.17	The medical transport organization shall have a policy that clearly defines any height and weight limitations of crewmembers.	<p>Policy must be:</p> <p>A) Gender neutral.</p> <p>B) Based on space limitations and weight/balance performance criteria of the transport vehicle.</p>	<p>The policy should include:</p> <ul style="list-style-type: none"> • Monitor weight of crew members in uniform and gear. • Frequency of monitoring. • Personnel responsible for monitoring. • Documentation of crew member weight. • Procedure for addressing crew members whose weight exceeds limitations. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
4.18	The medical transport organization shall have written job descriptions and review them annually with the employee.	<p>Applicable positions include:</p> <p>A) Clinical personnel:</p> <ul style="list-style-type: none"> i) Physician, Surgeon ii) Nurse Practitioner, Certified Registered Nurse Anesthetist, Physician Assistant iii) Registered Nurse iv) Paramedic, EMT v) Respiratory Therapist vi) Perfusionist <p>B) Aviation personnel:</p> <ul style="list-style-type: none"> i) Pilot (<i>FW and RW</i>) ii) PIC, SIC (<i>as applicable</i>) <p>C) Maintenance personnel:</p> <ul style="list-style-type: none"> i) Maintenance Technician/Engineer ii) Avionics Technician/Engineer <p>D) Communications personnel:</p> <ul style="list-style-type: none"> i) Communications Specialist/Dispatcher ii) Transport Coordinator iii) Operational Control Specialist <p>E) Administration/Management:</p> <ul style="list-style-type: none"> i) Program Director ii) Medical Director/Chief Medical Officer iii) Director of Aviation Operations iv) Director of Maintenance v) Clinical Operations Manager/Supervisor vi) Clinical Educator iv) Communications Manager 	<p>Well-defined job description elements include:</p> <ul style="list-style-type: none"> • Job title (<i>consistent with industry titles</i>) • Brief description of the function and scope of the position. • List of key duties or tasks performed. • The description identifies correlations with supervisory positions, subordinating roles and other working relationships. • Qualifications and required job skills including academic degree, professional license, experience, additional certifications, credentials, and skillsets. • Required physical abilities to perform the job (<i>weight limitations, lifting abilities</i>). • Job location and working conditions (<i>specific base, administrative office, etc.</i>). • Scheduled duty time or on-call requirement. • Annual employee review may be in-person or by employee attestation statement. 	x	x	x	x

Notes

Section 5: Information Management

In this section, standards specific to the management of information collection, storage, curation, dissemination, archiving, and destruction of documents.

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
5.01	The medical transport organization shall have a written policy for the control, retention and security of documents and records.	Policy will detail how long records shall be retained.	<p>Policy should include:</p> <ul style="list-style-type: none"> Definitions of terminology regarding documents and records information. Approval and authorization procedure for documents. Regular review, updating and revisions notation of company documents. Access to documents by relevant company personnel. Application to both written and electronic documents and records. <p>Applicable company records include:</p> <ul style="list-style-type: none"> Business data, meeting minutes, business plans including proprietary information, finances, and legal information. Internal reports. Client Business Associate Agreements and outsourced vendor service contracts. Emails and instant messages Employee records Occupational injury and infectious exposure reports Transport request calls and intake information Staffing assignment coordination and following Patient health information and patient care records. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
5.02	The organization shall establish procedures for assessing, identifying, and managing documents and records risks.			x	x	x	x
5.03	A written policy addressing the storage and security of sensitive and critical information against unauthorized access, modification, and destruction.	Policy shall: A) Include customer as well as organization information. B) Comply with applicable laws and regulations pertaining to protected consumer information. (<i>HIPAA, HITECH, PCIA, etc.</i>). C) Implement security measures with encryption and password protection. D) Establish procedures for reporting and managing any breach of protected information.	The storage and security of information on electronic devices are particularly vulnerable to breach, including: <ul style="list-style-type: none"> • Computer networks (<i>including web-based servers and document repositories</i>). • Desktop/laptop computers • Smart phones/electronic mobile devices • Magnetic tapes • CD/DVD's • USB external hard-drives and flash drives 	x	x	x	x
5.04	The medical transport organization shall have policy addressing the use, security, and restrictions of transmitting information via electronic messaging platforms.	Policy must identify: A) What information may be transmitted what is prohibited. B) Electronic messaging platforms utilized by the company. *Electronic messaging platforms are required to be HIPAA-compliant.		x	x	x	x
5.05	The organization will have procedures for the disposal of outdated documents and records, including those stored on web-based servers.			x	x	x	x

Section 6: Infection Control

In this section, you will find criteria for policies and procedures for preventing the spread of infection and controlling exposure incidents. Criteria includes, but is not limited to:

- Infection Prevention and Control
- Blood/Body Fluid Management
- Equipment Cleaning
- Post-Exposure Prophylaxis and Immunization Records
- Workplace and Occupational Safety

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
6.01	The organization shall have written policies outlining the implementation of an Infection Prevention and Control Program (IPCP) that reduces the risk of infection cross-exposure between transport crews and patients.	<p>The IPCP will outline policies that:</p> <ul style="list-style-type: none"> A) Identifies employee immunization requirements. B) Establish personal protective equipment (PPE) requirements. C) Describes "sharps safety" measures used in patient care. D) Outline infection control precautions in Patient Care Protocols. E) Outlines cleaning and disinfecting procedures for reusable medical devices/equipment and transport vehicles. F) Address the handling of blood/body fluid specimens during transport. G) Identifies information to be collected as part of transport request intake process regarding active infections/outbreaks. H) Outlines initial and annual employee training on company IPCP. 	<p>The IPCP should include:</p> <ul style="list-style-type: none"> • Policies based on: <ul style="list-style-type: none"> - Recommendations from local, national, and international public health departments and infection control agencies (<i>i.e., CDC, WHO, etc.</i>). - Occupational health and safety regulations (<i>OSHA</i>). • Annual training on: <ul style="list-style-type: none"> - Bloodborne, Body Fluids, and Respiratory pathogen precautions. - Post-Exposure Plan (PEP). • "Sharps safety" measures: <ul style="list-style-type: none"> - Needleless systems and needles with integrated safety features. - Use of plastic based IV, syringe and lab supplies. - Auto-retractable lancets. • Use of disposable, single-user medical devices (<i>as available</i>). • Procedures for: <ul style="list-style-type: none"> - Handling and disposal of blood, body fluids, infectious waste, and contaminated sharps. - Cleaning/decontamination of medical equipment. - PEP reporting, treatment, and monitoring. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
6.02	The medical transport organization shall assign an individual to oversee the implementation of the Infection Prevention and Control Program (IPCP).		<p>This individual:</p> <ul style="list-style-type: none"> Collaborates with the Medical Director and Clinical Operations Manager in monitoring of infection control activities and compliance. Assists with selecting approved protective medical devices/supplies (<i>i.e., sharps containers, self-protective or needleless systems, respiratory masks, eye protection, gloves, gowns</i>). Ensures compliance of appropriate bio-hazardous waste handling and disposal. Develops and provides initial and annual employee training on Bloodborne Pathogens and Standard Precautions that are congruent with company IPCP. 	x	x	x	x
6.03	Initial N95 Mask-fit testing is required for all transport crewmembers and must be documented. Any significant change to the shape of face requires refitting to be performed and documented.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
6.04	The medical transport organization shall have procedures outlining necessary procedures and precautions for transporting blood/body fluid specimens or other potentially infectious materials in a sealed leak-proof container.	Policy shall prohibit the storage of medications, blood, body fluids, and food in the same frig/container.		x	x	x	x
6.05	The medical transport organization shall have procedures outlining the process for the cleaning and sanitizing of transport vehicles and medical equipment.	Processes shall include: A) Cleaning solutions appropriate for specific soiling, microorganisms, surfaces, and materials as recommended by OSHA (<i>or equivalent</i>) guidelines. B) "Return-to-Service" cleaning and disinfecting procedures after each transport. C) Regular deep-cleaning schedules/logs for transport vehicle and medical equipment.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
6.06	The medical transport organization shall have policy outlining Post-Exposure Prophylaxis (PEP) processes for managing employee cross-contamination exposure to patient blood, body fluid, or respiratory particulates infected with documented or suspected communicable diseases during patient care and transport.	<p>Policy must comply with current local health department and CDC (<i>or equivalent</i>) requirements and guidelines, including:</p> <p>A) Confidential documenting, tracking, and reporting of exposure incidents to applicable health department agencies and healthcare providers/facilities.</p> <p>B) Follow-up surveillance screening, evaluation, and care of exposed employees by a licensed healthcare provider.</p> <p>D) Access and availability of post-exposure prophylaxis (PEP) medications and treatment for exposed employee.</p>	Policy should include "Return to Duty" criteria for medical staff and documentation.	x	x	x	x
6.07	Medical transport organizations shall have policy detailing the appropriate handling and disposal of contaminated sharps/medical devices and soiled linens.	<p>Bio-hazardous materials must be disposed of in a secure, biohazard container in accordance with occupational safety regulatory guidelines and International Declaration to Customs requirements (<i>as applicable to international transports</i>).</p> <p>If utilizing a contracted vendor for disposal of hazardous wastes, all disposal transactions are to be document.</p>	<p>Written procedural guidelines should describe how medical sharps and biohazardous materials are to be handled and disposed of:</p> <ul style="list-style-type: none"> • While onboard any commercial carrier. • In transportation terminals/stations. • At hotel/lodging accommodations. 	x	x	x	x

Section 7: Compliance

In this section, compliance criteria are outlined for:

- HIPAA/HITECH Compliance
- Compliance Officers
- Tele-medicine
- Information Technology Security

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
7.01	The medical transport organization shall have a policy requiring all patient information be kept confidential as per regulations applicable to the program's country of origin. U.S. programs must comply with HIPAA and HITECH requirements.			x	x	x	x
7.02	The medical transport organization shall have policies and procedures that monitor the company to ensure compliance with laws, rules, regulations, and accrediting body(ies) criteria.	Policies will: A) Define the agencies, regulatory bodies and organizations that require compliance. B) Identify the role or individual(s) responsible for submitting required reports.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
7.03	The medical transport organization must appoint a Compliance Officer that will be responsible for maintaining compliance records and reports.	Ensure that required reports are filed with internal management and external regulatory/accreditation entities as required by laws, rules, and regulations.	<p>Compliance responsibilities may be delegated to respective department administrators, i.e.,</p> <ul style="list-style-type: none"> • Director of Operations - Aviation operations • Director of Maintenance - Aircraft maintenance and inspections • Medical Director - Medical/EMS reporting <p>Compliance reporting examples:</p> <ul style="list-style-type: none"> • Reporting of actual/potential violations of non-compliance to enforcement agencies. • Maintaining work-related injuries/illness logs. • Reporting of work-related injuries/illness to regulatory administrations/agencies. • Reporting of continuous compliance records to accrediting entities. 	x	x	x	x
7.04	The medical transport organization will have a policy to address transmissions using tele-medicine devices.	<p>Policy must require:</p> <p>A) Implementation of security software to assure HIPPA and HITECH regulatory compliance.</p> <p>B) Ownership and access rights to photos and video files obtained during transport/mission operations.</p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
7.05	The medical transport organization shall have policies and procedures for ensuring safety and security of electronic data and files.	<p>Policy shall outline:</p> <p>A) Technology devices and data that require security protection.</p> <p>B) Controls, rules, and authorization for accessing protected information.</p> <p>C) Adherence to applicable data security regulations (<i>HIPAA, HITECH, GDPR, PCI</i>).</p>	<p>It is important that an organization's information technology system is resilient to outside attack and internal component failures.</p> <p>Company procedures should require frequent and routine backup of critical information as a safety precaution against loss of data.</p>	x	x	x	x



Notes

Section 8: Quality Management

In this section, you will find the following additional information.

- Quality Management Systems (QMS)
- QMS Plan
- QMS Goals
- QMS Committee
- QMS Quarterly Meetings
- QMS Quarterly Mtg Minutes

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.01	The medical transport organization shall have a Quality Management System (QMS) aimed at improving patient care and maintaining safe operations.		<p>Quality management is a critical element of the medical transport business, and requires:</p> <ul style="list-style-type: none"> • Policies and procedures ensuring quality patient care and operational safety. • Implementation, monitoring, and evaluation of operational performance. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.02	The medical transport organization shall have a Quality Management Plan that describes implementation of the company's QMS.	<p>The Quality Management Plan and Utilization Management must address:</p> <p>A) Reviews of policies and processes.</p> <p>B) Performance indicators and quality metrics for--</p> <ul style="list-style-type: none"> i) Business development and operations management ii) Quality of patient care and outcomes iii) Transport vehicle/aircraft operations iv) Maintenance services v) Communications and transport coordination vi) Safety and Risk Management vii) Customer service and outreach education <p>C) A QM committee.</p> <p>D) The integration of Safety and Risk Management processes with QMS.</p> <p>E) Requirements for QM documentation and records maintenance.</p> <p>The QM Plan shall be approved, dated, and signed by the accountable executive officer.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.03	The medical transport organization shall have written goals aligning with the program's Mission Statement and Scope of Service.	<p>Goals must be:</p> <p>A) Specific and realistic in addressing identified areas for improvement.</p> <p>B) Measurable with criteria for evaluating progress.</p> <p>C) Reviewed and updated as needed on an annual basis.</p>	<p>Organization goals should:</p> <ul style="list-style-type: none"> Focus company's resources on the needs of the patients, families, and collaborating agencies, hospitals, and payers. Utilize effective leadership that creates and maintains a working environment that fully engages all employees in achieving the mission and goals of the program. Enables employees to advance and utilize their professional skills and abilities for the benefit of the patients and customers. Involve Utilization Management principles to assure company practices align with established industry standards and regulatory requirements. Engage all levels of the organization in behaviors that improve the safety and quality of services provided. Allow flexibility to respond to changing needs of customers. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.04	The medical transport Quality Management Committee shall be comprised of leadership management from all organizational departments (<i>as applicable to Scope of Service</i>).	<p>Roles to include:</p> <ul style="list-style-type: none"> A) Program Director B) Medical Director C) Clinical Operations Manager D) Director of Operations E) Director of Maintenance F) Director of Communications G) Safety & Risk Management Officer 	<p>Additional QM committee members should be included if part of the organization's structure:</p> <ul style="list-style-type: none"> • Compliance Officer • Aviation Quality Auditor • IT Systems and Data Security Officer • Finance Officer • Director of Marketing • Human Resources Manager <p>Representative(s) of any sponsoring institutions or agencies should be invited to participate on the Committee.</p>	x	x	x	x
8.05	Quality Management Committee members will receive training in quality management processes, guidelines, and strategies.		<p>It is important for the organization to train the QMS Committee with a high-level overview of the Quality Management System and the roles they play within that system.</p> <p>Training should address:</p> <ul style="list-style-type: none"> • Basic concepts of a quality management system. • Terms and definitions. • Company quality management plan. • Management responsibility, authority, and communication. • Process control (<i>P, D, C, A cycle</i>). • Utilization Management processes. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.06	The medical transport Quality Management Committee is responsible for administering processes of QMS, Safety and Risk Management System (SRMS), Utilization Management, patient care and customer satisfaction.	<p>QM Committee will:</p> <p>A) Develop and review QMS policies & procedures.</p> <p>B) Develop Utilization Management processes and key performance metrics.</p> <p>C) Apply Root Cause Analysis principles in:</p> <p>i) Identifying system problems.</p> <p>ii) Reviewing sentinel events.</p> <p>iii) Define and implement corrective action processes.</p> <p>D) Ensure proper maintenance of records.</p>	<p>Key Performance Indicators, quality metrics threshold and reporting tools are essential for measuring and evaluating data related to:</p> <ul style="list-style-type: none"> Quality patient care. Safety and risk management. Quality Assurance/Improvement Business development and operations. Transport vehicle and equipment maintenance. Communications effectiveness. Outreach education and customer relations. 	x	x	x	x
8.07	The medical transport Quality Management Committee shall meet quarterly to review their processes, evaluate effectiveness, and present suggestions for improved outcomes.		Meetings should utilize the QM Plan as the structure for discussions.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
8.08	Quarterly QM Committee meetings minutes shall be documented and retained per medical transport organization policy.		<p>Meeting minutes need to include:</p> <ul style="list-style-type: none"> • Meeting date. • Name and respective department of Individuals in attendance. • Review and discussion of reported data through each department's internal Utilization Management processes. <ul style="list-style-type: none"> - Based on quality metrics identified by organization and individual departments. - Quality metrics must apply to all aspects of the transport program and departments. • Analysis of data collected. • Identified customer needs and discussions addressing desired improvements and changes. • Outlined action plans and goals with clearly defined time frames for monitoring and evaluating effectiveness of plans. • Follow-up and assessment of existing corrective actions through resolution. • Assigned committee member accountable for management action plan(s). 	x	x	x	x



Notes

Section 9: Utilization Management

In this section, you will find the following additional information.

- Utilization Management
- Reporting Utilization to QMS Committee
- Tracking and Reporting Tools
- Performance Indicators

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
9.01	The medical transport organization shall have a Utilization Management (UM) or Internal Evaluation Program (IEP) to report, track, monitor and evaluate data reflecting the company's effectiveness and trends.	<p>Data that can be related:</p> <p>A) Business practices and growth.</p> <p>B) Appropriate use of personnel and company assets in providing medical transport services.</p> <p>C) Communications and transport coordination.</p> <p>D) Operational processes and logistics.</p> <p>E) Operational safety, risk assessment and management practices.</p> <p>F) Patient care quality, safety, and outcomes.</p> <p>G) Transport aircraft/vehicle maintenance activities.</p>	<p>Utilization Management (UM) is the implementation and evaluation component of the company Quality Management System.</p> <p>Utilization Management is an Internal Evaluation Program (IEP) that allows for documentation, tracking, monitoring, and evaluation of internal data points related to the organization's Key Performance Indicators (KPI).</p> <p>The goal of UM (or IEP) should be to proactively identify deficiencies in the organization's management systems, operational processes, procedures, and employee training, thus, allowing for an effective, efficient, and targeted strategy of continual improvement.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
9.02	Utilization Management (or Internal Evaluation Program) data will be reported to the medical transport QM committee on a quarterly basis. "Serious Reportable Events" or sentinel events shall be reported immediately to department management as well as QM Committee.		Trend findings, issues, errors, and deficiencies identified through UM procedures shall be documented and forwarded to the QM Committee or responsible department manager for corrective action.	x	x	x	x
9.03	The medical transport organization shall identify Key Performance Indicators (KPI) to be monitored through Utilization Management (UM) as determined by the QMS Committee.	At a minimum, the following aspects of care and service will be monitored: A) Business development and contract management. B) Medical transport program-identified performance indicators. C) Industry-established patient care and operational safety quality metrics indicators (<i>as applicable to Mission Statement and Scope of Service</i>). D) Critical service/Clinical-related skills and competencies. E) Performance Indicators are tracked and reviewed to identify areas of improvement in outcomes.	Examples of performance indicators: <ul style="list-style-type: none"> • AMPA Ground & Air Medical Quality in Transport (GAMUT) metrics • AAP Quality Metrics for Neonatal/Pediatric Transport • Patient care hand-off procedures • Fluid therapy • Pain management • Intubation success rates • Average scene or bedside time of transport team • Effectiveness of Risk assessment tools • Unscheduled maintenance trends • Scene times • Transport volumes 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
9.04	The medical transport organization shall develop and implement tools and mechanisms for tracking, reviewing, and evaluating performance indicator data and unusual occurrences for areas of improvement throughout all departments.		<p>Examples of tracking and reporting tools include:</p> <ul style="list-style-type: none"> • Internal Operational Report (IOR). • Occurrence Report. • Utilization Management reporting form. • Risk Assessment Tools (RAT). • Clinical skills competency logs. • Response times. • Client satisfaction/complaints • Forms may be electronic or hard copy. 	x	x	x	x
9.05	The medical transport organization shall have policy addressing the process of reporting, tracking and management of unusual occurrences.	<p>Policy will address:</p> <p>A) "Serious Reportable Event" resulting in hazardous material exposure, individual injury, deterioration in patient status, or death.</p> <p>B) Unexpected transport delays, abortions, or diversions.</p> <p>C) Equipment, supply or transport vehicle malfunctions or accident.</p> <p>D) Communication breakdowns.</p> <p>E) Problematic deviations from standard operating procedures.</p> <p>F) Crew configuration or scheduling variation from established policy.</p> <p>G) Safety or security issues/ events involving transport crews and patient care.</p>		x	x	x	x



Notes

Section 10: Safety and Risk Management

A Safety and Risk Management System (SRMS) is a systematic approach to managing safety. Proactive safety policies, risk assessment tools, and decision-making capabilities assist personnel in avoiding and mitigating risks and potential threats.

- Safety & Risk Management Components
- Safety & Risk Management Manual
- Officer Training
- Safety Meetings and Minutes
- Alertness & Fatigue Management
- Risk Assessment Tools
- Crew Resource Management
- Workplace and Occupational Safety
- Hazardous Materials
- Personal Protection Equipment
- Community Emergency Response Plans
- Accident/Incident Response Plans

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.01	The medical transport organization shall have a Safety and Risk Management System (SRMS) that works in conjunction with the organization's Quality Management System.	<p>The SRMS will include:</p> <ul style="list-style-type: none"> A) Workplace and occupational safety. B) Facilities, equipment, and personnel security. C) Operational Risk Assessment and Management. D) SRMS education program for employees. E) Defined safety and risk reporting procedures. 	<p>A Safety and Risk Management System (SRMS) is a systematic approach to operational safety, including the necessary organizational structures, accountabilities, policies, and procedures. An integral part of an organization's Safety Management System is identifying and managing threats and risks that can compromise overall transport operations.</p> <p>An effective comprehensive Safety and Risk Management System (SRMS) should include elements such as:</p> <ul style="list-style-type: none"> • Communication and promotion of safety policies and behaviors at the highest level of management. • Promotion of employee participation. • Timely dissemination of company safety information and ongoing employee training. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.02	The medical transport organization shall have defined safety and risk management objectives that support the company's QMS goals.		Safety objectives define what the organization wishes to achieve as part of their Safety and Risk Management program.	x	x	x	x
10.03	Programs providing air ambulance transport must have a Safety and Risk Management System (SRMS) that complies with applicable CAA SMS regulations.			x	x		
10.04	The medical transport organization shall have a Safety and Risk Management System (SRMS) Manual that describes and outlines company policies, procedures, reporting, and training processes necessary for safe operations.	<p>The Manual must include:</p> <ul style="list-style-type: none"> A) Company safety and security policies for transport operations, personnel, company assets and facilities. B) Duties and responsibilities of the SRMS Officer and Committee. C) Emergency plans. D) Crew Resource Management/Air Medical Resource Management. E) Safety and risk assessment, reporting and management policies and tools. F) Safety and risk management education. G) (<i>Flight programs</i>) The SRMS Manual must comply with applicable Civil Aviation Authority (CAA)'s SMS requirements. H) Accountable Executive signature. 		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.05	The medical transport organization shall have a Safety and Risk Management Officer to assure the implementation of the overall Safety and Risk Management System.		<p>The SRMS Officer should:</p> <ul style="list-style-type: none"> • Participate with the QM committee in establishing SRMS goals and policies. • Collaborate with SRMS Committee on safety and risk issues in all departments. • Monitor operational safety and risk management processes. • Develop broad-based risk assessment tools that address risk components inherent to operations. • Evaluate effectiveness of risk assessment practices. • Establish a reporting mechanism for safety and risk management issues. • Manage incident reports and assign responsibility for resolution of issues. • Provide safety and risk management training for all employees. • Participate in the development of emergency, accident, and incident response plans. • Collaborate with community public safety and EMS agencies (<i>as applicable to EMS providers</i>) as part of the overall community Emergency Response Plan. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.06	The SRMS Officer will receive training in the SRMS: A) Principles, processes, strategies, and tools. B) Policies and procedures. C) NAAMTA standards requirements.		Training should include: <ul style="list-style-type: none">The benefits of a Safety and Risk Management Program.The company Safety and Risk Management Program.Occupational Safety and Health regulatory requirements.Leadership and communication skills.	x	x	x	x
10.07	The medical transport organization will have a Safety and Risk Management Committee that works with the SRMS Officer in implementing the SRMS throughout the organization.	The Safety and Risk Management Committee will include a representative from each department and/or base.		x	x	x	x
10.08	The medical transport organization's Safety and Risk Management Committee is required to meet quarterly and document the discussions of the committee in meeting minutes.	Meeting minutes must include: A) Names of attendees. B) Date of meeting. C) Current and follow up safety and risk management discussion topics, including action items and assignment of accountable individual. D) Meeting minutes will be submitted to the QMS Committee.	Quarterly Safety and Risk Management Committee meetings are to be open to all employees and staff who desire to attend and provide input to the committee.	x	x	x	x
10.09	The organization shall have a communication process where pertinent safety information can be distributed in a timely manner to all employees.		Safety communication tools can be: <ul style="list-style-type: none">A Safety Bulletin BoardAccident Prevention BulletinsSafety BulletinsSafety NewsletterSafety Library	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.10	The medical transport organization is required to have risk assessment and management processes to identify, prevent, and mitigate risks involving patient care and overall operational safety throughout the organization.	<p>Elements of risk assessment and management must include:</p> <ul style="list-style-type: none"> A) Alertness and Fatigue Management. B) Pre-transport risk assessment procedures, tools and “Go/No-Go” matrix. C) Policies and procedures for mitigating high-risk transport conditions and ongoing re-evaluation of risk status throughout the transport. 	<p>A company-wide SRMS assists personnel in avoiding and mitigating risks and threats.</p> <p>A well-designed system:</p> <ul style="list-style-type: none"> • Describes operational processes. across departments and locations. • Identifies, monitors, and documents threats, hazards, and historical events. • Analyzes risk data (<i>impact, severity, probability, and effects</i>). • Implements corrective measures to minimize or prevent recurrence. <p>Risk assessment tools and matrix objectively assess the level of risk, and the required management approval for risk level thresholds.</p> <p>Risk assessment tools and matrices have a common objective to define potential consequences and/or severity of the hazard versus the hazard probability or likelihood.</p> <p>Defining terms for risk assessment, levels, and required management approvals improves the effectiveness of the matrix.</p> <p>It is important that every risk receives an analysis to determine the incorporation into the overall risk perspective.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.11	The organization will implement an Alertness & Fatigue Management program.	<p>The program shall incorporate:</p> <p>A) Evidence-based fatigue risk assessment elements into overall “fit-for-duty” scoring.</p> <p>B) A non-retaliatory “Time-out/Stand-down” policy.</p> <p>C) Allowance for rest periods during on-site duty-time.</p> <p>D) Established maximum duty-time hours per day and per week.</p> <p>E) Implementation of transport vehicle configuration to minimize physical stressors and fatigue (<i>i.e., seating layout, design & padding, window placement, hearing protection, lighting, etc.</i>).</p> <p>F) Employee participation in Alertness & Fatigue Management and Crew Resource Management education.</p>	<p>Company Responsibilities—</p> <ul style="list-style-type: none"> Monitoring “Time-out, Stand-down, and overtime trends. Fatigue Countermeasures Crew Resource Management: <ul style="list-style-type: none"> Fatigue and sleep deprivation signs and symptoms. Use of off-duty sleep time, requirements, and safety. Sleep science and circadian rhythm disturbances. Effective sleep hygiene. Nutritional eating habits. Physical fitness. Patterns of medication and stimulant use. <p>Employee Responsibility—</p> <ul style="list-style-type: none"> Professional responsibility of fitness-for duty, include: <ul style="list-style-type: none"> Manage off-duty time and sleep requirements. Implement effective sleep hygiene habits. Nutritional eating habits. Regular physical fitness activities/routines. Responsible use of alcohol and medications. Recognition of fatigue and sleep deprivation. Timing of on-duty non-scheduled tasks (<i>work projects, education, etc.</i>). <p>Strategies to minimize fatigue:</p> <ul style="list-style-type: none"> Avoid shifts longer than 12 hrs. Limit shifts per week Minimize frequent day-to-night rotations. 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.12	The medical transport organization must establish Risk Assessment Tools (RATs) for assessing the level of risk prior to each transport.	<p>Policy must define:</p> <p>A) Risk assessment indicators based upon program's scope of service and include elements addressing operations, patient care needs and crew fitness-for-duty and fatigue.</p> <p>B) Scoring tools and matrix for determining "Go/No-Go" status.</p> <p>C) Procedures for mitigating high-risk mission conditions and ongoing re-evaluation of risk status throughout transport.</p>	<p>Risk assessment indicators should be developed and selected using evidence-based and industry-established "best practice" indicators. NAAMTA recommends inclusion of the following components:</p> <ul style="list-style-type: none"> • Crew experience. • Crew "fitness-for-duty" and critical fatigue factors. • Cumulative crew duty time. • Additional crew/personnel requirements. • Patient acuity and medical care/equipment requirements. • Weather/travel conditions and time of day/night. • Anticipated transport length. • Geographical and airport/helipad familiarity (<i>including domestic and international operations</i>). • International civil and political conditions (international only). • Communications needs and transport limitations. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.13	The organization is required to implement a comprehensive Crew Resource Management (CRM) program (or <i>Air Medical Resource Management – AMRM</i>). All communications, transport crew, and maintenance personnel are to be trained in principles of CRM/AMRM.	<p>Training shall include all of the following components:</p> <ul style="list-style-type: none"> A) Information processing & decision-making B) Human error & error management C) Attention & Alertness D) Operational distractions & workload management E) Stress management <ul style="list-style-type: none"> i) Sleep deprivation & circadian rhythms ii) Fatigue countermeasures iii) Alcohol & medication use iv) Operational stress management v) Situational awareness vi) Automation in transport systems F) Communication strategies G) Threat & risk management H) Leadership I) CRM for single pilot and/or driver configurations. 	<p>Crew Resource Management/Air Medical Resource Management should be integrated into all aspects of the company operations:</p> <ul style="list-style-type: none"> • Transport and pre-/post-transport briefings. • QMS, Risk Management, Utilization Management. • Employee and outreach training curriculums. • Maintenance processes. <p>Effective training utilizes both didactic presentations as well as group scenario discussions.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.14	<p>The medical transport organization will implement policies and procedures ensuring a safe and clean work environment that is compliant with occupational safety and transportation regulatory requirements.</p> <p>Policies must address company offices, base facilities, ambulance hangars/bays/docks and storage units as part of the overall SRMS.</p>	<p>Occupational health and safety elements include:</p> <p>A) Adequate ventilation.</p> <p>B) Sufficient lighting to perform necessary work.</p> <p>C) Safe use of electrical outlets and extension cords.</p> <p>D) Informational signs visible throughout facility:</p> <p>i) Using most common language(s) or OSHA/ANSI safety symbols.</p> <p>ii) Including minimum postings indicating exits, evacuation maps and fire extinguishers.</p> <p>iii) First aid kits in employee-occupied facilities.</p> <p>E) Clean and tidy work facilities.</p> <p>F) Easily accessible eye wash station in areas where hazardous materials are handled.</p> <p>G) Appropriate number and placement of fire extinguishers.</p>	<p>Other important elements of a safe and clean work environment should include:</p> <ul style="list-style-type: none"> Waste containers clearly marked and managed to minimize cross-contamination of the environment and employees. Daily disposal of trash containing food. Monitor and control insects and vermin. Company smoking policy. (<i>If allowed, smoking must be away from facility buildings, ventilation systems and flammable materials/chemicals</i>). <p>It is recommended that a safety assurance and audit program be proactively implemented on a regular basis (<i>i.e., monthly, quarterly</i>). This is to ensure compliance to occupational safety policy, seek out potential hazards based on available data as well as evaluate the organization's safety program.</p> <p>Safety audit checklists should be utilized for each audit so that a report can be submitted to the Safety Committee for each completed audit.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.15	A policy shall address security measures of the physical environment including properties utilized by the organization for offices, bases, maintenance, fueling, and storage facilities.	<p>The policy must detail:</p> <ul style="list-style-type: none"> A) Locking of all company— B) Buildings and facilities. C) Fuel supplies. D) Equipment, machinery, and supplies. E) Direct visual or closed-circuit video monitoring of facilities and transport vehicles with recording capabilities. F) Routine checking of facilities and equipment for tampering or vandalism and the reporting of suspicious activity. G) *Alternate security measures must be evaluated and approved by NAAMTA. 		x	x	x	x
10.16	The medical transport organization shall have policy procedures addressing security measures of the transport vehicle (<i>aircraft, ground, watercraft</i>).	<p>Include in the policy:</p> <ul style="list-style-type: none"> A) Security of ambulance within locked perimeter fencing, mooring dock, hangar, or garage. B) Locking of ambulance doors, fuel tanks, access panels, and fastening of tie-downs. C) Procedures for securing the ambulance when left unattended. D) Routine checking of ambulance for tampering or vandalism and the reporting of suspicious activity. 		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.17	The medical transport organization shall have policies and procedures for use and disposal of hazardous materials compliant with applicable occupational and transportation safety regulations.	<p>Policies shall address:</p> <p>A) Procedures for maintaining inventory of hazardous materials and compressed gases, including labeling, storage, and hazards signage.</p> <p>B) Storage and use of compressed gases at company facilities and during transport.</p> <p>C) Pre-transport risk analysis of transport requests involving hazardous materials on scene.</p> <p>D) Preventative environmental controls, PPE use and cleaning procedures.</p> <p>E) Procedures for managing accidental hazardous materials spills and exposures.</p> <p>F) Proper hazardous waste storage containment, disposal, reuse, reclamation, and/or recycling.</p> <p>G) Documentation and records maintenance of hazardous materials inventory and disposal.</p> <p>H) Policy must detail content to be included in hazardous materials training for each department.</p>	<p>Important policy components include:</p> <ul style="list-style-type: none"> Utilization of labeling, storage, and signs compliant with OSHA or GHS (<i>Globally Harmonized System of Classification and Labelling of Chemicals</i>). Process for identifying and packaging mismanaged and unnecessary chemicals for removal. Post-exposure plan and medical care follow-up for crewmembers. “Return to service” cleaning and decontamination criteria for transport vehicle and equipment. Laws & regulations for handling & storage of dangerous and hazardous materials during transport, including: <ul style="list-style-type: none"> International Declaration to Customs (<i>as applicable</i>). Chemical irritants (<i>i.e., pepper spray</i>), firearms, munition, emergency flares, etc. Transport of deceased patients (<i>no restrictions for cremation remains</i>). Biological containers and contents. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.18	The organization shall have hazardous chemical MSDS/SDS reference information onsite and readily available to all employees for all hazardous materials utilized in transport operations. MSDS/SDS information must be in the language preferred by employees accessing them.		<p>OSHA Materials Safety Data Sheets (MSDS) or GHS Safety Data Sheets (SDS) provide critical information about:</p> <ul style="list-style-type: none"> Chemical identification and properties Personal protective equipment, safe handling, and storage practices Disposal and transport considerations Emergency control and containment measures Post-exposure first aid measures 	x	x	x	x
10.19	The medical transport organization shall have policy requiring the use of personal protective equipment (PPE) for transport crews and maintenance personnel to prevent contamination from infectious or biohazardous substances and protect against personal injury.	<p>Applicable PPE shall be provided and utilized:</p> <p>A) During the transport of individuals with known infections or exposure to communicable diseases.</p> <p>B) During patient care and handling of potentially infectious substances.</p> <p>C) Disposal and handling of biohazard-soiled materials and medical supplies.</p> <p>D) Ambulance patient compartments and equipment cleaning and disinfecting practices.</p> <p>E) During maintenance tasks.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.20	The company will develop a Hearing Conservation Program per OSHA requirements. The policy will outline company as well as employee responsibilities.	<p>Program will include:</p> <p>A) Annual employee audiometric monitoring and record keeping.</p> <p>B) Provision of hearing protection devices appropriate for environmental setting or task performed.</p> <p>C) Communication headsets or helmets with earmuffs worn by transport crews.</p> <p>D) Training provided to employees on hearing conservation and signs of hearing loss.</p>		x	x		
10.21	The medical transport organization shall have policy requiring hearing protection be worn by employees.	<p>Hearing protection is to be worn:</p> <p>A) During flight operations.</p> <p>B) When sirens are activated.</p> <p>C) During loud maintenance activities.</p> <p>D) Policy must also require provision of patient hearing protection.</p>		x	x	x	x
10.22	The organization shall require protective eyewear to be worn during maintenance procedures and during transport operations that present potential eye injury from physical, chemical, or infectious agents.	The organization will provide protective eyewear appropriate for task performed.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.23	Rotor-wing and ground medical transport organization will have a policy that outlines involvement in community disasters such as earthquakes, fire, flood, terrorism, etc.	<p>Policy elements will include:</p> <p>A) Company involvement in public emergency response planning.</p> <p>B) Company responsibility in community or national disasters.</p> <p>C) Employee who acts as liaison between organization and public officials.</p> <p>D) Communication plan and activation phone numbers for company personnel.</p>			x	x	
10.24	The medical transport organization has a policy that outlines procedures for internal emergencies that occur at the company office, bases, and storage facilities.	<p>The policy will include:</p> <p>A) Evacuation maps with marked with utility shut-off valves and any AED.</p> <p>B) An annual emergency drill and evaluation of plan effectiveness.</p>	<p>Internal emergency plans should address events, such as:</p> <ul style="list-style-type: none"> Disasters (<i>man-made or natural</i>). Intruder on premises. Active shooter. Hazardous materials. Terrorism. Fire. Medical emergency. Utilities emergency. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.25	The medical transport organization must have a written Accident/Incident Response Plan (AIRP).	<p>The plan shall include:</p> <p>A) Role and responsibility of each department during and/or following an accident/incident.</p> <p>B) Step-by-step procedures for activating the Accident/Incident Response Plan.</p> <p>C) Notification of governmental regulatory agencies.</p> <p>D) Activation of EMS.</p> <p>E) Notification of medical control.</p> <p>F) Forms and documentation required for live accidents/incidents and drills.</p> <p>E) Accident/Incident Response Plan must be readily accessible to all employees.</p>	<p>The AIRP needs to be easily identifiable and understood by all communications personnel; and should include:</p> <ul style="list-style-type: none"> • Definitions of key terms. • Employee and department contact information. • Description of the events or circumstances that merit activation of the AIRP. • Communication processes with non-involved employees during/following an accident/incident. • Interaction and communication with family members. • Involvement of crisis intervention support personnel. • Required ambulance and crew preparedness. • Evaluation and updating process of AIRP. • Notification of accreditation service. • Critical Incident Stress Debriefing (CISD) and Employee Assistance Program (EAP) should be made available to staff. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
10.26	The medical transport organization must conduct annual drills simulating missing or overdue transport, mayday calls, etc.	<p>Drills are to be scenario-based and include:</p> <p>A) Transport crews, communications personnel, mechanics, and administrative personnel.</p> <p>B) Debriefing and summary documentation of drill, describing—</p> <p>i) Date.</p> <p>ii) Scenario.</p> <p>iii) Participants.</p> <p>iv) Evaluation of drill.</p> <p>C) Action plan to address any identified changes to AIRP or follow-up employee training.</p>	<p>Testing of the emergency response plan will evaluate the effectiveness of the response plan and ensure appropriate corrective actions are completed to improve their emergency response readiness.</p> <p>A summary of the drill should be made available to all operational employees and any participating EMS agencies.</p>	x	x	x	x
10.27	The medical transport organization shall have policies and procedures for transport crews responding to enroute emergencies. (<i>i.e., fire, transport vehicle accident, loss of cabin pressure or electrical power, pilot/driver medical emergency, medical equipment or radio failure, patient emergency, etc.</i>).			x	x	x	x



Notes

Section 11: Duty Time

In this section, you will find the following additional information.

- Scheduling and Hours-of-Duty
- Time-Out and Stand-Down Policies
- Duty Time Limitations and Rest Periods
- Pilot Schedules and FAA Recordkeeping
- 24-hour Shifts

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
11.01	The medical transport organization is required to have a Scheduling and "Hours-of-Duty" policy for all employee positions.	<p>Policy shall:</p> <p>A) Define schedule versus "duty" and administration-task time.</p> <p>B) Be based on the needs of the program as it pertains to transport volumes and patterns at each base/office.</p> <p>C) Comply with applicable state/national labor laws and/or applicable government contractual requirements.</p>	<p>Policy should include:</p> <ul style="list-style-type: none"> Clearly defined scheduling and rest period models for medical, aviation, ground, communications, and maintenance personnel. Establish consistent calculations of time periods using either a Coordinated Universal time/calendar or local time. Staffing models to provide adequate coverage for peak demand-period scenarios and "Time-out/Stand-down" occurrences. Integration of company Alertness & Fatigue Management Program, incorporating critical principles and practices of fatigue countermeasures and employee wellness education. Quality management monitoring and analysis of "Time-out/Stand-down" or overtime trends. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
11.02	The medical transport organization will have a written, non-retaliatory policy permitting employees to “time-out” or “stand-down” due to duty-time fatigue or illness.	<p>Policy will:</p> <p>A) Outline time allotment for rest before being required to return to duty.</p> <p>B) Allow employees who feel unfit or unsafe for work to be granted a “reasonable rest period” without duress or threat of retaliation.</p> <p>C) Include mechanism for documenting, tracking, and evaluating “time-out/stand-down” trends using Utilization Management processes.</p>	Whether tracked by paper or electronic means, the process should have a method of escalation to management when crew members feel they do not meet the organization's minimum threshold for “fit-for-duty” and need a rest period.	x	x	x	x
11.03	The medical transport organization shall have policies establishing required “hours of service” (<i>on-site, on-assignment duty-time</i>) limitations for Medical Crews/Attendants, Drivers, Helmsmen, Communication Specialists, Operational Control Specialists and Maintenance personnel.	<p>Policy must require:</p> <p>A) Shifts must never exceed 24 consecutive hours.</p> <p>B) No more than three (3) 24-hour shifts per 7-day period.</p> <p>C) Schedules to allow for at least ten (10) consecutive hours of rest within a 24-hour period.</p> <p>For scheduled transports where duty time is projected to be greater than 14 consecutive hours, scheduling must allow for additional assigned crewmembers to provide continued patient care and allow for adequate crew rest periods.</p>	<p>**NAAMTA strongly recommends the following scheduling practices:</p> <ul style="list-style-type: none"> Shifts are limited to 12 consecutive hours. Schedules with 12-hour shifts occur no more than four (4) days per 7-day period. Schedules with 8-hour shifts occur no more than five (5) days per 7-day period. Day/night shift rotations - The program should integrate a “slow-rotation” schedule (<i>rotation of shifts no more frequently than every 1-2 weeks</i>). 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
11.04	<p>Pilot rest and duty-time policies, schedules and practices must comply with:</p> <p>A) Applicable CAA regulatory requirements, flight and duty time, limitations, and recordkeeping.</p> <p>B) Company Alertness & Fatigue Management Program.</p>		For programs providing 24-hour consecutive coverage, NAAMTA recommends that no less than four pilots per aircraft be assigned. Programs with high activity levels or those with unusual circumstances may require a higher pilot-to-aircraft ratio. Sufficient staffing levels should be established to promote operational safety standards.	x	x		
11.05	<p>The medical transport organization shall have a policy outlining scheduling requirements for shifts exceeding 12 hours.</p>	<p>The policy shall include:</p> <p>A) Clear integration of company Alertness & Fatigue Management Program policies and practices.</p> <p>B) Provision for uninterrupted rest after shift duties and other administrative assignments are fulfilled.</p> <p>C) Established crew quarters with secluded areas for rest.</p> <p>D) Provision of on-call or back-up personnel in the event of "time-out/stand-down" situations.</p>		x	x	x	x



Notes

Section 12: Operations

In this section, you will find criteria for the following operational criteria:

- Briefings & Meetings Shift Change
- Transport Planning
- Transport Vehicle Inspection
- Hot Loading/Unloading
- Carry-on Baggage
- Seatbelts/Restraints
- Securing Medical Equipment
- Weight/Balance, Add-on Equipment
- Passenger Briefing
- Transport Oxygen

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.01	The medical transport organization shall have a policy requiring formal shift change briefings.	Policy will: A) Outline items to be discussed during briefing. B) Include all on-duty crewmembers and communication specialists. C) Documentation of completed briefing. D) Procedures to mitigate/escalate relevant safety concerns. E) If briefings are pre-recorded, policy needs to outline mechanism for ensuring that all on-duty personnel have listened to the briefing.	Shift-change briefings and discussion should always include a safety topic.	x	x	x	x
12.02	The medical transport organization shall have policy defining minimum weather and visibility operating conditions for all modes of transport as applicable to organization's Scope of Service.					x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.03	The medical transport organization policy shall require pilot/driver to conduct a thorough assessment of current and projected weather/road/tide conditions prior to accepting a transport.			x	x	x	x
12.04	The medical transport organization shall provide transport crews with current and relevant transport planning tools, space, and information allowing them to plan the transport.		<p>Although not an all-inclusive list, the following should be made available to assist with transport planning purposes:</p> <ul style="list-style-type: none"> • Weather data and weather turndown information. • Situational scene hazard conditions. • Enroute hazard and obstruction information. • Frequencies of applicable EMS entities and healthcare facilities. • Base locations. <p>Flight</p> <ul style="list-style-type: none"> • Aircraft Engine Performance Data. • Aircraft weight and balance information. • Locations of airfields and controlled airspace. • Flight NOTAMS and restricted/ prohibited areas. • On and off airfield refueling capabilities and tasking procedures. <p>Aquatic</p> <p>Local sea conditions, seasonal significant tidal and current flow predictions.</p>	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.05	The medical transport organization shall ensure a work area be readily available to pilots to minimize distractions and errors while: A) Planning and filing flight plans. B) Maintaining Civil Aviation Authority (CAA)-required pilot recordkeeping. C) Pilot training.			x	x		
12.06	The medical transport organization shall have a "Weather Turndown" policy in place requiring interaction with other medical transport services in the same coverage area to alert them that a transport was turned down due to adverse weather conditions.		All transports declined due to adverse weather conditions should be documented and reviewed through UM processes.	x	x	x	x
12.07	The medical transport organization shall have policy allowing any crew member the ability to raise concerns and ultimately turn down transport based on safety or operational concerns.		In an effective Safety and Risk Management System, an organization must embrace the ability for crew members to raise concerns regarding safe conduct of a transport without the fear of retribution from management.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.08	The medical transport organization shall have a policy requiring pre-/post-transport briefings and be documented.	<p>Briefing policy shall require:</p> <p>A) Full complement of transport crew, communications, and pilot/driver.</p> <p>B) Completion of risk assessment tool(s).</p> <p>C) Period of time defining how long documented briefings are to be maintained on file.</p>	<p>Pre-transport briefing discussions are to incorporate:</p> <ul style="list-style-type: none"> Essential transport plan (<i>i.e., refueling stops, travel restrictions</i>). Risk assessment: <ul style="list-style-type: none"> Operational considerations (<i>i.e., weather, road or sea conditions, advisories, daylight, etc.</i>). Transport vehicle/aircraft considerations (<i>fuel, air temperature, scheduled maintenance, etc.</i>). Staff fatigue/hours-of-service concerns Patient needs and additional equipment or staff needed, etc. Additional passengers Crew Resource Management discussion and adjustments as identified. <p>Post-transport briefing discussions are to incorporate:</p> <ul style="list-style-type: none"> Crew Resource Management discussion and suggestions/concerns as identified. Feedback from referring/receiving entities and personnel. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.09	The medical transport organization shall have policies outlining operational considerations for patient needs, crew configuration, and transport vehicle.	<p>Policy shall address the following elements:</p> <p>A) Patient weight and size.</p> <p>B) Anticipating choice of transport mode and equipment needs for requested transports.</p> <p>C) Aircraft or vessel operation, performance, and limitations (<i>weight and balance calculations, weather/temperature, fuel requirements</i>).</p> <p>D) Crew configuration requirements as determined by patient acuity and level of medical care required.</p> <p>E) Patient loading requirements (<i>patient weight limitations, stretcher weight limitations, lift and patient maneuvering requirements, including additional personnel for bariatric patients</i>).</p> <p>F) Passenger, ride-along and baggage limitations and storage.</p> <p>G) Transport risk assessment scoring and safety mitigation processes.</p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.10	The organization shall have policy and procedures requiring the pilot/driver/helmsman perform an inspection of the transport vehicle at the beginning of each shift. Inspections are to be conducted, documented, and signed utilizing a company and/or manufacturer-defined checklist.			x	x	x	x
12.11	The medical transport organization shall have a procedure in place for "hot loading/unloading" procedures of patients.		<p>Procedure should outline:</p> <ul style="list-style-type: none"> • Defined criteria for performing a hot loading/unloading of a patient. • Procedure for performing a hot loading/unloading of a patient and LZ safety. • Inclusion of hot loading/unloading in pre-/post-flight crew briefings. • Description of outreach education for support EMS agencies and referring facilities in hot loading/unloading procedures and LZ safety. • Training program for flight crews in hot loading/unloading procedures and LZ safety. 	x	x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.12	The medical transport organization shall have policy requiring the checking of carry-on baggage for hazardous materials before loading the transport vehicle.	Policy is to include itemization of pre-approved, add-on compressed medical gases, and other hazardous materials.		x	x	x	x
12.13	The medical transport organization shall have policy requiring passengers be seated in an area of the transport vehicle that will not interfere with care of the patient.			x	x	x	x
12.14	From a seat-belted position, medical crews must have full access to patient(s) and space to provide patient care.	Patient access includes: A) Maintaining patient airway and necessary ventilatory support. B) Unencumbered access to the patient to provide all necessary care. C) CPR D) Maternal delivery care (if warranted).		x	x	x	x
12.15	The medical transport organization shall have policy requiring patients and passengers be securely restrained with seat belts during all transports, including manual or power wheelchairs.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.16	The medical transport organization shall have policy requiring seatbelt restraint systems/devices.	Restraint systems and devices shall: A) Be appropriately sized for patient age, weight, and size: i) <u>Adults</u> : Including onboard availability of seatbelt extenders. ii) <u>Pediatrics</u> : < 45 kg (100 lbs.) iii) <u>Neonates</u> : Birth – 1 month of age (or) < 4.5 kg (10 lbs.) B) Utilize quick release buckles. C) Include at least three (3) strap restraints (<i>chest, hip, legs</i>) and incorporate upper torso (<i>over the shoulder</i>) restraints.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.17	Pediatric-specific restraint systems/devices must provide safety elements applicable to pediatric and neonatal patients.	<p>Pediatric restraint systems/devices shall incorporate the following elements:</p> <p>A) Incubators:</p> <p>i) Have an internal patient restraint.</p> <p>ii) Head protection</p> <p>B) Car Seats:</p> <p>i) Be secured per manufacturer's recommendations and applicable state/national laws—</p> <p>ii) <u>Rear-facing position:</u> Until maximum height and weight limit of seat.</p> <p>C) Recumbent Pediatric Restraints:</p> <p>i) Have 5-point restraint.</p> <p>ii) Be secured to transport stretcher.</p> <p>D) Be approved and manufacturer-labeled for use in motor vehicles and aircraft.</p> <p>E) Complies with the current expiration date.</p>		x	x	x	x
12.18	The Medical transport organization shall have a policy that prohibits the holding of neonatal and pediatric patients by crew or passengers while transport vehicle is in motion.	<p>Additionally:</p> <p>A) Policy must stipulate instances in which holding the patient would be medically necessary to prevent deterioration of patient condition, as determined by medical control.</p> <p>B) Variation from policy must be documented and reviewed through Utilization Management.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.19	Medical transport organizational policy must outline the protocols, equipment and procedures used when transporting bariatric patients.	<p>The policy must:</p> <p>A) Define transport request protocols that identify any alternate transport vehicle or equipment needs.</p> <p>B) Establish the use of bariatric equipment including:</p> <p>i) Expanded-capacity stretcher, restraints, life vests, loading ramps/hydraulic lifts.</p> <p>ii) Special lifting gear, patient transfer slides.</p> <p>C) Define procedures to provide appropriate patient care of the bariatric patient and protect transport personnel from injury during loading/unloading of patient.</p>	<p>Transporting the bariatric patient may require additional considerations to assure operational, patient and crew safety throughout the mission. It is important that:</p> <ul style="list-style-type: none"> • Patient dimensions do not exceed that of the stretcher and sled tie-down platform. • Patient dimension does not impede walking aisle(s) of transport vehicle. • Hard-mounted doors, stairs, hand grips are not removed for loading of patient(s) or equipment. • Patient loading/unloading be performed: <ul style="list-style-type: none"> - Using assistive devices, such as transfer boards, hydraulic lifts, or ramps. - Avoiding lateral tipping of patient litter. • Using a minimum of 3 crew members for lifting patients or equipment 265-350 lbs. (120-160 kg) and a minimum of 4 crew members for lifting of patient or equipment > 350 lbs. (160 kg). 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.20	The medical transport organization shall have policy addressing procedures relating to simultaneous transport of two or more patients.	<p>Policy shall include:</p> <ul style="list-style-type: none"> A) Maintaining medical crew staff to provide the level of care required by all patients. B) Equipment and supplies commensurate with simultaneous monitoring and patient care needs required for all patients. C) Complete unencumbered full-body access for maintaining patient airway(s) and providing full patient care required by all patients. D) All patients must be securely restrained per NAAMTA Standards. E) All crew members and passengers must be restrained per NAAMTA Standards. F) All stretchers and/or infant car seats must be securely restrained per NAAMTA Standards. G) All considerations and preparations for simultaneous transport of multiple patients must be maintained for duration of transport in its entirety. 		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.21	The medical transport organization shall have a policy requiring all medical equipment, supplies, wheelchairs, and cargo be secured in the transport vehicle while in motion.	<p>Equipment and cargo must be secured in a manner that:</p> <p>A) Does not interfere with the safe operation of the transport vehicle or commercial carrier.</p> <p>B) Does not obstruct exits or walkways.</p> <p>C) Does not pose a hazard to crew or passengers.</p> <p>D) Prevents movement or displacement of equipment during an abrupt stop or accident.</p> <p>E) Allows medical personnel:</p> <p>i) Continuous visual monitoring of equipment displays.</p> <p>ii) Complete access to medical supplies, equipment, and pumps while in use.</p>		x	x	x	x
12.22	Mounting brackets and/or tie-down restraints must be available to secure all portable equipment and supplies. All swing-out or dropdown brackets or hangers must be secured when not in use.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.23	The medical transport organization shall have a policy prohibiting the securing of any medical monitors or equipment on or between patient legs while transport vehicle is in motion.			x	x	x	x
12.24	The medical transport organization shall have procedures for managing weight and balance requirements of the transport vehicle.	<p>The procedures will address:</p> <p>A) Weight of patient, crew, and equipment.</p> <p>B) Factors that affect aircraft/vessel performance (<i>i.e., weather, temperature, fuel requirements, and hoist limitations</i>).</p> <p>C) Additional passengers and baggage.</p>		x	x	x	x
12.25	The medical transport organization shall have policy requiring all mission-specific add-on equipment information and weight be relayed to the pilot or helmsman for proper weight and balance calculations.	<p>The policy shall require:</p> <p>A) Annual weighing of add-on equipment and supplies.</p> <p>B) Documentation of equipment weight.</p>	<p>Policy should indicate:</p> <ul style="list-style-type: none"> Personnel responsible for calibration of scale and weighing of equipment. Equipment to be weighed, including delineation between fixed and variable weight equipment. 	x	x		x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.26	The medical transport organization shall have a written policy requiring a passenger safety briefing prior to movement of the transport vehicle <i>(as adapted to specific mode of transport)</i> .	<i>(Flight programs)</i> : Air ambulance passenger briefings must comply with applicable Civil Aviation Authority (CAA) requirements.	Briefings should address: <ul style="list-style-type: none"> • Seatbelt and Safety Harness use. • Seat positions. • No smoking on/around transport vehicles. • Emergency exits and evacuation procedures <i>(including land and water as applicable)</i>. • Fire extinguisher location and use. • Oxygen equipment and use procedures. • Survival equipment location and use <i>(including flotation devices for over-water operations)</i>. • Following crew instructions. • Prohibited areas/equipment on/around the transport vehicle. • Sterile cockpit/cab conditions. • Use of communication headsets. • Passenger safety briefings may be given by the pilot/driver/helmsman or as delegated to qualified transport personnel. 	x	x	x	x
12.27	The medical transport organization shall have a policy requiring ambulance operations are conducted in accordance with applicable government regulations.	Policy needs to require: <ul style="list-style-type: none"> A) Adherence to traffic requirements for emergency vehicles <i>(including speed, traffic signals and stop signs)</i>. B) Identification of conditions in which operating with lights and sirens may be used. 				x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.28	The medical transport organization's policy must clearly outline procedures for minimizing distractions to operators of the transport vehicle while en route.	<p>Policy shall address:</p> <p>A) "Sterile cockpit/cab" conditions and practices during critical phases of transports.</p> <p>B) Emphasis on Crew Resource Management practices.</p> <p>C) Elimination of pilot/driver/helmsman distractions while operating the transport vehicle, including:</p> <p>i) Operation of hand-held devices (<i>text messaging, cell phone use</i>).</p> <p>ii) Protection of operator from bright lights inside transport vehicle during night operations.</p>	<ul style="list-style-type: none"> Transport crewmember should only perform duties during a critical phase of transport that are required for the safe operation of the transport vehicle. No transport crewmember may engage in, nor shall a pilot/driver/helmsman permit, any activity during a critical phase of transport which could distract from the performance of their duties, or which could interfere in any way with the proper conduct of those duties. Ground ambulance cabs should be laid out in a manner that allows discretionary workflow use of GPS, mobile data terminals (MDTs) and other technology devices in forward cab compartments during critical phases of operations with minimal distractions. Minimize dispatch communications to pilots/drivers/helmsman while vehicle is in motion. 	x	x	x	x
12.29	The medical transport organization shall have policy requiring engaging the emergency parking brake when in the transport vehicle is in "NEUTRAL" or "PARK."			x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.30	The medical transport organization shall have a policy to address the carrying and securing of firearms and/or explosives on the transport vehicle.		<p>The policy should address:</p> <ul style="list-style-type: none"> • Law enforcement or military personnel carrying firearms. • Concealed carry weapons (CCW) • Emergency flare devices. Where allowed and appropriate, NAAMTA recommends the use of non-pyrotechnic EPIRBs (<i>Emergency Position Indicating Radio Beacons</i>), SARTs (<i>Search and Rescue Transponders</i>) or LED flares for emergency signaling. 	x	x	x	x
12.31	The medical transport organization shall have procedural guidelines outlining contingency plans for transport personnel in handling unanticipated en route non-vehicle/aircraft difficulties or emergencies.	<p>Such circumstances include:</p> <p>A) Delays in departure from referring facility due to--</p> <p>i) Delayed/cancelled carrier departures.</p> <p>ii) Deterioration of patient medical status during transport.</p> <p>B) En route medical equipment failure.</p> <p>C) Communication device failure.</p> <p>D) Medical attendant illness or emergency during mission.</p> <p>E) Civil unrest abroad.</p> <p>F) "Timing-out" of medical attendant duty time beyond 14 hours.</p>	<p>Situations that could delay departure from referring facility or during transport might include:</p> <ul style="list-style-type: none"> • Change in patient status upon arrival to referring facility that requires a change in level of care (<i>i.e., from medical escort to ambulance service transport</i>). • Medical crew configuration is inappropriate for the level of patient care required. • Inadequate or malfunction of equipment/supplies for patient needs. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
12.32	The medical transport organization shall ensure compressed oxygen and other medical gases are stored in facilities in accordance with applicable regulatory requirements.		<p>Applicable U.S. regulatory requirements and international restrictions may vary by country. i.e., generally defined by Occupational Safety and Health Administration (OSHA), the Compressed Gas Association (CGA), US Department of Transportation (DOT) and Food and Drug Administration (FDA).</p> <ul style="list-style-type: none"> Compress gas cylinders should be: In an upright or angled position within a compressed gas cylinder cart or rack with a chain or strap restraint. In a location away from foot traffic where cylinders will not fall or be tipped over. In a dry, well-ventilated area. At least 20 feet from fuel gas cylinders, other combustible materials. At least 20 feet from any heat source or electrical circuits. Empty cylinders are to be clearly labelled and stored separate from full cylinders to avoid confusion. 	x	x	x	x
12.33	The medical transport organization shall have procedures requiring compressed medical gas tanks-be changed out or trans-filled only by certified personnel.	<p>This includes:</p> <p>A) Tanks mounted in transport vehicle.</p> <p>B) "Cascade" trans-fill systems.</p> <p>C) Specialty medical gas tanks.</p>		x	x	x	x



Notes

Section 13: Credentialing and Training

In this section, training and credentialing criteria is identified and will be included:

- General Training Requirements
- Managing Training Records
- Safety-, Risk-, and Quality-Management Training
- Department Specific training:
 - Medical
 - Communications
 - Aviation
 - Maintenance Factory School

NOTES:

- The acronym NREMT refers to the U.S. National Registry of Emergency Medical Technicians.
- All references for medical attendants' license, certifications, and training must correspond to the medical transport organizations applicable missions and scope of services.

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.01	The medical transport organization shall have a written training program outlining new-hire and recurrent training for all employees (<i>including contracted vendor employees</i>).	Training program shall include: <ul style="list-style-type: none"> A) Policies and standard operating procedures. B) Job-specific didactic content, psychomotor skills, and applicable equipment competency validation. C) The frequency and schedule for recurrent training. 	Principles of quality management should be used to evaluate and develop the company-training curriculum. The following should be considered: <ul style="list-style-type: none"> • Align with organizational scope of service, company goals and mission statement. • Identify training needs, based on: <ul style="list-style-type: none"> - Mode(s) of transport utilized by program. - Travel regulations and professional certification requirements. • Specific knowledge- (<i>didactic</i>) and psychomotor skill-based competency components. • Person(s) responsible for coordinating and tracking employee training. • Evaluate skill competencies and training effectiveness. • <i>The organization is responsible to verify the currency of required training for inhouse and contract employees.</i> 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.02	The medical transport organization's training program shall include components as defined by applicable entities and agencies.	<p>Training content shall relate to:</p> <ul style="list-style-type: none"> A) The company. B) NAAMTA Global requirements. C) Applicable federal and state laws and regulations. D) Occupational Safety and Health regulations. E) Civil Aviation Authority regulations. F) Professional license and renewal requirements. G) Client contract-specific (<i>as applicable</i>). 	<p>Medical transport organizations often operate a hybrid business model integrating department components from outsourced vendors with internal operations. For example, medical and communications operations may be inhouse while aviation and maintenance operations are provided by a third-party contracted vendor.</p> <p>Regardless of whether an individual is employed by the medical transport organization or a contracted vendor, all personnel participating in transport operations are required to comply with credentials and initial/recurrent training as required by the organization and NAAMTA Global Accreditation Standards.</p> <p>NAAMTA training requirements are outlined in the <i>NAAMTA Training Checklists</i> and include company-wide and department-specific topics.</p> <p>The <i>NAAMTA Training Checklists</i> establish the training standards and are used to verify compliance.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.03	<p>The medical transport organization shall have policy requiring documentation and maintenance of training records required by the organization and NAAMTA Global Standards.</p> <p>Training, credentials, licenses, and qualification records are to be maintained in a manner that is easily accessible to the respective employee and immediate supervisor <i>(or designee)</i>.</p>		Supervisors are expected to ensure that employees performing safety-sensitive functions specific to their duty assignments are current on their training and credentials before performing their assigned duties.	x	x	x	x
13.04	<p>(USA only) Medical transport organizations who are contracted EMS providers for U.S. FEMA National Incident Management System are required to complete FEMA-ICS trainings as applicable (<i>i.e., IS-100.B, IS-200.B, IS-700.A, IS-800.B</i>).</p>				x	x	x
13.05	<p>All aviation-related training must be CAA-approved.</p>			x	x		



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.06	The medical transport organization shall develop and implement Safety and Risk Management training for all personnel.	<p>Safety and Risk Management shall include components addressing:</p> <ul style="list-style-type: none"> A) Hazardous Materials and occupational safety-defined regulations. B) Safety and security strategies C) Risk assessment processes and tools. D) Transport vehicle and scene operations safety. E) Crew Resource Management (or) Air Medical Resource Management. F) Alertness strategies and Fatigue Countermeasures. G) Company Emergency and Incident Response Plans. H) Maintenance operations and facilities safety <i>(as applicable)</i>. I) International travel safety precautions <i>(as applicable)</i>. 		x	x	x	x
13.07	<p>All patient care-related clinical certification coursework shall incorporate:</p> <ul style="list-style-type: none"> A) Scenario-based didactic instruction. B) Psychomotor skills competency evaluation. 			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.08	All medical transport attendants are required to present and maintain professional and clinical qualifications/credentials as outlined in policy.	<p>Clinical crew qualifications shall correspond to the medical transport organization's—</p> <p>A) Scope of Service (<i>pre-hospital EMS and/or interfacility transports</i>)</p> <p>B) Patient population (<i>adult, pediatric, neonate</i>)</p> <p>C) Professional scopes of practice/license.</p>		x	x	x	x
13.09	The medical transport organization shall outline required credentials and qualifications for Basic Life Support (BLS) medical attendants.	<p>Required Basic Life Support medical attendant qualifications:</p> <p>A) Professional Credentials:</p> <p>i) <u>EMTs, AEMTs, Paramedics:</u> NREMT certification.</p> <p>B) Education & Training:</p> <p>i) Certification in BLS-level CPR/AED for healthcare providers.</p> <p>C) Clinical Experience:</p> <p>i) Minimum 4000 hours in the past 3 years of BLS experience providing direct patient care in a high-volume pre-hospital EMS, clinic, hospital, or CASEVAC/MEDEVAC setting.</p> <p>Additional certifications, credentials, and experience as required by applicable state/ national regulatory entities and applicable client contract specifications.</p> <p><i>*Alternate or equivalent licenses, courses, certifications, and experience must be submitted and approved by NAAMTA</i></p>	<p>Further BLS-level certification/ credentials, training, and experience should include:</p> <ul style="list-style-type: none"> Maintaining a minimum 4000 hours of BLS-level experience in the pre-hospital EMS, clinic, hospital, or CASEVAC/MEDEVAC setting for all modes of transport. TECC or TCCC certifications are recommended for those organizations involved in law enforcement or military operations. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.10	The medical transport organization shall outline required credentials and qualifications for Advanced Life Support (ALS) medical attendants.	<p>Required Advanced Life Support medical attendant qualifications:</p> <p>A) Professional Credentials:</p> <ul style="list-style-type: none"> i) <u>AEMTs, Paramedics:</u> NREMT certification. ii) Nationally recognized board certification: <ul style="list-style-type: none"> a) <u>Paramedics:</u> CCP-C, TP-C, or TR-C b) <u>Nurses:</u> CTRN or CCRN c) <u>Resp Therapists:</u> RRT, RRT-ACCS d) <u>(Neonatal/Pediatric):</u> C-NPT, RRT-NPS e) <u>(Flight Programs):</u> FP-C or CFRN <p>B) Education & Training:</p> <ul style="list-style-type: none"> i) BLS CPR, ACLS, PALS, and NRP. ii) Nationally recognized pre-hospital trauma course-- <ul style="list-style-type: none"> a) PHTLS, TPATC, ITLS, ATLS, TNCC (or) b) TECC/TCCC trauma course. <p>C) Clinical Experience:</p> <ul style="list-style-type: none"> i) Minimum 4000 hours in the last 3 years of ALS-level experience. <p>Additional certifications, credentials, and experience as required by applicable state/ national regulatory entities and applicable client contract specifications.</p> <p><i>*Alternate or equivalent licenses, courses, certifications, and experience must be submitted and approved by NAAMTA.</i></p>	<p>Further ALS-level certification/ credentials, training, and experience should include:</p> <ul style="list-style-type: none"> • ALS-level clinical experience within the pre-hospital EMS, hospital (<i>ER</i> or <i>ICU</i>), or CASEVAC/MEDEVAC setting for all modes of transport. • TP-C or TR-C certifications are recommended for programs involved in law enforcement or military operations. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.11	The medical transport organization shall outline required credentials and qualifications for Critical Care (CC) medical attendants.	<p>Required Critical Care medical attendant qualifications:</p> <p>A) Professional Credentials:</p> <ul style="list-style-type: none"> i) <u>Paramedics:</u> <ul style="list-style-type: none"> a) NREMT certification. b) Critical Care Endorsement (<i>as applicable under respective state/ national licensing board</i>). ii) Nationally recognized board certification/ endorsement <ul style="list-style-type: none"> a) <u>Paramedics:</u> CCP-C, TP-C, or TR-C b) <u>Nurses:</u> CTRN or CCRN c) <u>Resp Therapists:</u> RRT, RRT-ACCS d) (Neonatal/Pediatric): C-NPT, RRT-NPS e) (Flight Programs): FP-C or CFRN <p>B) Education & Training:</p> <ul style="list-style-type: none"> i) BLS CPR, ACLS, PALS, and NRP. ii) Nationally recognized pre-hospital trauma course-- <ul style="list-style-type: none"> a) PHTLS, TPATC, ITLS, ATLS, TNCC, (<i>or</i>) b) TECC/TCCC trauma course. <p>C) Clinical Experience:</p> <ul style="list-style-type: none"> i) Minimum 4000 hours within the last 3 years of CC-level experience. <p>Additional certifications, credentials, and experience as required by applicable state/ national regulatory entities and applicable client contract specifications.</p> <p><i>*Alternate or equivalent licenses, courses, certifications, and experience must be submitted and approved by NAAMTA.</i></p>	<p>Further CC-level certification/ credentials, training, and experience should include:</p> <ul style="list-style-type: none"> • CC-level clinical experience within the pre-hospital EMS, hospital (<i>ER or ICU</i>), or CASEVAC/MEDEVAC setting for all modes of transport. • TECC or TCCC certifications and training are recommended for organizations involved in military operations. 	x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.12	The medical transport organization shall outline required credentials and qualifications for Specialty Care (SC) medical attendants.	<p>Required Specialty Care (SC) medical attendant qualifications:</p> <p>A) Professional Credentials:</p> <ul style="list-style-type: none"> i) <u>Paramedics</u>: <ul style="list-style-type: none"> a) NREMT certification. b) Critical Care Endorsement (<i>as applicable under respective state/national licensing board</i>). ii) Nationally recognized board certification in specialty care <ul style="list-style-type: none"> a) Physicians, NPs, PAs: Specialty/ Subspecialty-specific b) Paramedics: CCP-C, TP-C, or TR-C c) Nurses: CTRN or CCRN d) Resp Therapists: RRT, RRT-ACCS e) Perfusionists: CCP f) (Neonatal/Pediatric): C-NPT, RRT-NPS g) (Flight Programs): FP-C or CFRN <p>B) Education & Training:</p> <ul style="list-style-type: none"> i) BLS CPR, ACLS, PALS, and NRP. ii) Nationally recognized pre-hospital trauma course-- <ul style="list-style-type: none"> a) PHTLS, TPATC, ITLS, ATLS, TNCC, (or) b) TECC or TCCC trauma course. c) Completion of advanced specialized training course. <p>C) Clinical Experience:</p> <ul style="list-style-type: none"> i) Minimum 4000 hours within the past 3 years of CC experience, including 2000 hours in the area of specialty. ii) <u>Adult Specialty Care</u>: ICU, CCU, Shock Trauma ICU, or ER iii) <u>Pediatric Critical Care</u>: PICU or Pediatric ER iv) <u>High-Risk Maternal-Fetal Specialty Care</u>: Level III/IV High-Risk Labor and Delivery v) <u>Neonatal Specialty Care</u>: Level III/IV NICU. 	<p>SC-level clinical staff should maintain a minimum 2000 hours in the past 3 years of specialty care-level experience in the clinic, hospital, or CASEVAC/MEDEVAC setting.</p>	x	x	x	



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.12 <i>Cont'd</i>		<p>Where applicable, training and certifications, criteria must be consistent with the specialty/subspecialty treatment modalities, therapies, and Patient Care Protocols/Guidelines.</p> <p>Additional certifications, credentials and experience as required by applicable state/ national regulatory entities and applicable client contract specifications.</p> <p><i>*Alternate or equivalent licenses, courses, certifications, and experience must be submitted and approved by NAAMTA.</i></p>					

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.13	The medical transport organization shall outline required credentials and qualifications for on-line Control Physicians.	<p>On-line Control Physician qualifications:</p> <p>A) Professional Credentials:</p> <ul style="list-style-type: none"> i) Current jurisdictional Medical Physician license serves as a base(s) for medical transport. ii) Board certified/Board eligible* in area(s) of medicine related to the organization's patient population and specialty care provided. ** iii) Current DEA/Controlled-substance certification. <p>B) Education & Training:</p> <ul style="list-style-type: none"> i) Current in education, certification, and credentials per medical licensing board and applicable EMS regulations. ii) ACLS and PALS. iii) Nationally recognized pre-hospital trauma course— <ul style="list-style-type: none"> a) PHTLS, TPATC, ITLS, ATLS, TNCC, (or) b) TECC/TCCC trauma course, (or) c) Active medical practice in ER, trauma surgery, or CASEVAC/MEDEVAC setting. <p>C) Clinical Experience:</p> <ul style="list-style-type: none"> i) Active medical practice in the care of ill/injured patients relevant to the organization's Scope of Service. <p>Additional certifications, credentials and experience as required by applicable state/ national regulatory entities and applicable client contract specifications.</p> <p><i>*Alternate or equivalent certifications and experience must be approved by NAAMTA.</i></p> <p><i>**If clinical experience and certification in a specialty that is not routine to physician's current scope of practice, consultation with a specialist must be utilized throughout the mission.</i></p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.14	The medical transport organization shall have policy requiring contracted medical transport personnel to receive safety training for the respective transport vehicle-specific configurations.	<p>Training must include general orientation to:</p> <ul style="list-style-type: none"> A) Transport vehicle configuration. B) Onboard medical equipment and supplies. C) Patient loading/unloading procedures. D) Passenger safety briefings. E) Transport vehicle approach/depart precautions. F) Transport vehicle security procedures. G) Enroute emergency procedures. H) Use of communication headsets/radios/phones and communications procedures. I) Personal protective equipment and safety gear. 		x	x	x	
13.15	The medical transport organization shall ensure all medical crew members receive ongoing instruction/review of the program's <i>Patient Care Guidelines</i> . In-services shall be guided by the Medical Director.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.16	<p>The medical transport organization will define and stipulate requirements for maintaining on-going clinical experience and skills-competency/performance for all medical crewmembers.</p> <p>Requirements shall be congruent with the organization's Scope of Service.</p>		<p>Establishing required clinical experience time is directed by routine clinical settings, hours of patient care experience and skill competencies. The following elements should also be considered when determining necessary supplemental clinical hours requirements:</p> <ul style="list-style-type: none"> • Patient population (<i>adult and/or pediatric</i>). • Disease processes and pathophysiology (<i>i.e., stroke, trauma, arrhythmias, etc.</i>). • Patient acuity levels (BLS, ALS, CC, SC) • Additional civil licensing by-laws, national EMS Model Standards that define the scopes of practice for medical crewmembers. <p>Ongoing experience providing hands- on patient care keeps critical thinking and proficiency sharp.</p> <p>Logging and evaluating clinical experience as a Key Performance Indicator (KPI) can be useful in developing crewmember in-services and training.</p> <p>Clinical hours providing direct patient care should be documented, tracked, and data evaluated as part of the organization's Utilization/Quality Management program.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.17	The medical transport organization shall have policy requiring clinical psychomotor skills competency verification for all critical medical procedures and medical equipment/devices utilized by medical transport crewmembers.	<p>Policy will include the following elements:</p> <p>A) Skill types B) Success-rate threshold C) Recurrent verification frequency.</p> <p>Policy shall require skills competency verifications be documented by both the crewmember and authorized personnel.</p>	<p>Verification of competency for clinical skills is defined by the Scope of Service, frequency to perform specific skills, and evaluation of Key Performance Indicators (KPI). All should be documented, tracked, and evaluated as part of UM and QM.</p> <ul style="list-style-type: none"> • Skill types include procedures such as chest tubes, intubations/supraglottic airways, IVs, IOs, etc. <ul style="list-style-type: none"> - Include proper set-up, management, and troubleshooting of mechanical ventilators, defibrillator, cardiac monitors, IABP, point-of-care testing devices, fetal monitoring, etc. • Success rate thresholds define the required level of competency when performing procedures; (e.g.) <i>advanced airway placement 90% on first attempt.</i> • Frequency of recurrent verification is how often a skill must be completed and the number of required successful completions; (e.g.) <i>competency in proper set-up, management and troubleshooting of a mechanical ventilator for various patient populations every 6 months.</i> <p>In settings where opportunities are limited to demonstrate skill competency during patient transports or other clinical shifts, mock scenario trainings using human patient simulators/ mannikins are needed to ensure competency.</p>	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.18	As part of the clinical psychomotor skills competency program, the medical transport organization shall require all ALS, CC, and SC crewmembers demonstrate competency in advanced airway placement.	<p>Clinical providers shall:</p> <p>A) Perform a minimum of three (3) successful intubations per quarter reflecting all patient populations included in the program's Scope of Service (<i>adult and pediatric</i>).</p> <p>B) Have a 90% success endotracheal intubation placement rate per crewmember.</p>	<p>Intubations can be performed live, on a cadaver or mannequin, or by using a Human Patient Simulator (HPS). However, all initial training intubations must be performed live.</p> <p>Utilization Management process will require monitoring, documentation, and evaluation of success rates for all live intubations.</p> <p>For example, if a crewmember transports:</p> <ul style="list-style-type: none"> • Adult, pediatric, and neonatal patients, then their quarterly total must include at least 1 adult, 1 pediatric, and 1 neonatal intubation. • Adult and pediatric patients, they must have either— <ul style="list-style-type: none"> - 2 adult and 1 pediatric intubation, or - 1 adult, and 2 pediatric intubations - Pediatric and neonatal patients, they must have either— <ul style="list-style-type: none"> - 2 pediatric and 1 neonatal intubation, or - 1 pediatric and 2 neonatal intubations 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.19	Medical transport organizations that utilize Human Patient Simulators for medical crewmember training must comply with criteria as detailed in <i>"High-Fidelity Human Patient Simulation Requirements"</i> .		High-fidelity Human Patient Simulation (HPS) training is recommended as an important component of the organization's comprehensive training and education program for medical crew members. HPS is also a valuable clinical outreach service for referring agencies and clinical institutions. (For details on using HPS, see Appendix C Human Patient Simulator Usage Requirements.)	x	x	x	x
13.20	The medical transport organization shall outline required qualifications for all crewmembers whose duties include driving a ground ambulance.	Ambulance drivers shall maintain the following qualifications: A) Emergency Vehicle Operation Course (EVOC). B) <u>License</u> : State-issued Ambulance Driver license.				x	
13.21	The medical transport organization shall outline required qualifications for all crewmembers whose duties include driving an aquatic ambulance vessel.	Aquatic ambulance drivers shall maintain the following qualifications: A) Education & Training: i) A NASBLA-approved Safe Boating Education Card. B) License: i) Boating license for the state where aquatic ambulance operations are conducted. C) Boating Experiences: i) Minimum 100 hours as Operator in Command (OIC).	National Association of State Boating Law Administrators (NASBLA) "BOAT" Boat Operations and Training Program is the accepted national standard for training and certification. • Most U.S. states require boat operators to complete a NASBLA-approved education course to obtain a boat license to operate in that state. • NASBLA education card and boating licenses carry reciprocity to other states and must always be carried onboard the vessel.				x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.22	The medical transport organization shall require all Communications and Transport Coordination Center Specialists complete company-wide and department-specific initial and recurrent training specific to the organization's Scope of Service and NAAMTA requirements.		Required credentials, certifications and training concepts are outlined in the <i>NAAMTA Training Checklist</i> for communications and operational control specialists.	x	x	x	x
13.23	The medical transport organization shall require all pilots complete company-wide and department-specific initial and recurrent training specific to the medical transport organization's Scope of Service and NAAMTA requirements.	In addition to Civil Aviation Authority required training, pilots are expected to demonstrate compliance with required training as outlined in the <i>NAAMTA Training Checklist</i> for pilots.		x	x		
13.24	The medical transport organization shall have policy stipulating a fixed-wing Pilot in Command (PIC) meet the following minimum requirements for hours and type rating.	Pilots must have 2000 flight hours, comprised of the following: A) A minimum of 1000 of the 2000 hours as PIC. B) A minimum of 500 of the 2000 hours as PIC in a multi-engine airplane. C) A minimum of 100 hours as PIC on nighttime flights.	Minimum logged hours and type rating are based on applicable Civil Aviation Authority (CAA) guidance.	x			



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.25	The medical transport organization shall have policy stipulating a rotor-wing Pilot in Command (PIC) meet the following minimum requirements for hours and type rating.	<p>Pilots must have 2000 flight hours, comprised of the following:</p> <ul style="list-style-type: none"> A) A minimum of 1500 of the 2000 hours in rotorcraft. B) A minimum of 1000 of the 2000 hours as PIC. C) A minimum of 200 hours of nighttime flights. 	Minimum logged hours and type rating are based on applicable Civil Aviation Authority (CAA) guidance.		x		
13.26	The medical transport organization shall have policy stipulating Second in Command (SIC) pilots have a minimum 500 flight hours and type rating for specific aircraft utilized by the organization.		Minimum logged hours and type rating are based on applicable Civil Aviation Authority (CAA) guidance.	x			
13.27	The medical transport organization shall implement a pilot training program based on the organization's Scope of Service.	<p>Pilot training is to be customized to:</p> <ul style="list-style-type: none"> A) Aircraft utilized by organization. B) Operational considerations (<i>i.e., day v. night, meteorological conditions, NVG/D, etc.</i>). C) Service area's terrain features and environmental characteristics. D) Individual pilot experience, flight time, etc. 		x	x		



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.28	A policy shall define required training of Night Vision Goggles/Devices (NVG/D) for transport crew.	<p>Training shall require:</p> <p>A) Completion of training within 12 months of hire or initial use of NVG/D.</p> <p>B) Training instructor certified “Proficient” in NVG/D instructing.</p> <p><u>Flight Programs</u></p> <p>C) ENVG/D training must be approved by Civil Aviation Authority (CAA).</p> <p>D) Training conducted by check airman certified “Proficient” in ENVG/D instructing.</p> <p>E) Initial pilot and crew qualifications and currency requirements per CAA.</p> <p><u>Aquatic Programs</u></p> <p>F) Training must be conducted by a crewmember who has received high-fidelity “train-the-trainer” instruction in NVG/D.</p>			x		x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
13.29	The organization shall require all Maintenance Technicians/Engineers to maintain qualifications and complete company-wide and department-specific initial and recurrent training applicable to the organization's types of ambulance (<i>aircraft, ground vehicle</i>), applicable regulations, and NAAMTA accreditation requirements.	<p>Required Maintenance Technician/Engineer qualifications:</p> <p>A) Professional Certifications:</p> <p>ii) <u>Aviation</u>: Civil Aviation Authority (CAA) Airframe & Powerplant Certification.</p> <p>iii) <u>Ground</u>:</p> <p>a) Chassis -- OEM or ASE Certificate (<i>or national equivalent</i>)</p> <p>b) Ambulance Vehicle Systems -- Ambulance Technician Certificate (<i>or national equivalent</i>).</p> <p>B) Education & Training:</p> <p>iv) <u>Aviation</u>: Aircraft type and airframe-specific manufacturer/ factory training (<i>or equivalent</i>).</p>	Required credentials, certifications, and training concepts are outlined in the <i>NAAMTA Training Checklist</i> for Maintenance Technicians/Engineers.	x	x	x	



Notes



Section 14: Communication and Transport Coordination

The Communications section outlines details on:

- Communications Center Requirements
- Communication Policies and Procedures
- Information Management Tools
- Communication Equipment
- Dispatch Procedures
- Passenger Documentation

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.01	The medical transport organization shall have a Communications and Transport Coordination Center (CTCC) to provide real-time operational communications support where all transports are initiated, coordinated, dispatched, and followed.		<p>The CTCC is responsible for activities relating to dispatch and continuous monitoring of transport status, involving:</p> <ul style="list-style-type: none"> • Awareness of crew schedules and transport vehicle availabilities/maintenance. • Documentation and processing of requests for patient transport. • Communication of patient/transport details to transport crew, EMS agencies, and receiving facility. • Coordination with assistance services. • Facilitation of flight clearances and personnel travel documents. • Arranging for aircraft refueling and ground support. • Arranging patient and crew ground transfers, and any overnight lodging (<i>as applicable</i>). • Documentation of any deviations in transport (<i>i.e., abort, delay, etc.</i>). • Implementing emergency accident/incident procedures and drills. 	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.02	The organization's communications center must be configured to optimally support communications for EMS and/or inter-facility transports.	<p>The configuration shall:</p> <p>A) Allow for uninterrupted and clear communication between Communications Specialists, transport coordinators, transport crews, EMS agencies, and customers requesting or receiving transports.</p> <p>B) Have the capability to be isolated with a locked door from non-essential communications personnel during accidents/incidents and implementation of critical emergency response procedures.</p>	The CTCC should be free of foot traffic, ambient noise, and non-essential conversations.	x	x	x	x
14.03	The medical transport organization shall have procedures for maintaining transport communications during a power failure, including a back-up electrical power source for CTCC.	<p>Policy shall:</p> <p>A) Require back-up power source (<i>generator</i>) to be checked on a monthly basis and documented.</p> <p>B) Identify accountable individual for conducting monthly checks and ensuring necessary maintenance is performed.</p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.04	A mechanism must be in place and visible to CTCC Specialists enabling quick access and dissemination of information relating to transports.	Operational transport information will include: A) Scheduled on-duty and on-call medical transport personnel. B) Transport vehicle(s) location and availability(ies). C) Tracking transport operational status real-time. D) Scheduled transports or community outreach events. E) Real-time weather and forecast updates. F) Scheduled transport vehicle maintenance.	Information can be disseminated by using visual displays such as electronic monitors, computer-assisted dispatch (CAD) software, message boards, etc.	x	x	x	x
14.05	The medical transport organization shall have a dedicated phone line for CTCC to receive transport requests and disseminate transport-related information.			x	x	x	x
14.06	The CTCC must have the ability to contact operational personnel via radio, telephone, or portable electronic device (PED) as utilized by the organization.	CTCC Specialists must be able to contact: A) Transport crew members. B) On-line medical control or Medical Director. C) Requesting/receiving agency, facility or assist services. D) Aviation or Maritime services. E) "Wing-to-wing" or hand-off transport personnel (<i>as applicable</i>). F) Maintenance personnel.		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.07	CTCC directories must detail approved radio frequencies and telephone numbers utilized by applicable stakeholder entities.	Applicable entities include: A) Local EMS agencies. B) Aviation services. C) Local health care facilities. D) Marine services and Coast Guard entities.	Communications directories should be updated on a regular basis to ensure accuracy of information.	x	x	x	x
14.08	The medical transport organization shall ensure all radio frequencies and telephone numbers utilized by the program are onboard the transport vehicles and available to transport crews.			x	x	x	x
14.09	The CTCC shall have the equipment and procedures necessary to track all transports during all legs of a transport.			x	x	x	x
14.10	The medical transport organization shall hold an FCC license for radio communications as required by applicable local or national regulations.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.11	The medical transport organization shall have a CTCC Policies and Procedures Manual. The manual shall be available to all Communications Center Specialists and Transport Coordinators.			x	x	x	x
14.12	The medical transport organization shall have a policy addressing the use of communication devices and medical equipment onboard the aircraft in a manner that does not cause electro-magnetic frequency (EMF) interference with avionics equipment.			x	x		✖

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.13	The medical transport organization shall have a policy outlining the use and limitations of cellular phones and portable electronic devices (PED) as part of transport communications.	<p>Policy must require:</p> <ul style="list-style-type: none"> A) Cell phones and PEDs be used in accordance with FCC regulations (<i>or national equivalent</i>). B) Cell phones or PEDs to not be used near equipment sensitive to electro-magnetic frequency (EMF) interference. C) Hands-free communication devices be used by drivers while maneuvering a ground transport vehicle. D) Use of radio/telecommunication device complies with principles of a “sterile cockpit/cab” while the transport vehicle is in motion. <p>Policy shall indicate if cell phones or PEDs will be provided by organization or employees.</p>	If contact with CTCC is necessary in-flight to relay medical information, the service should comply with applicable national, international and air carrier communications regulations and policies.	x	x	x	x
14.14	The medical transport organization shall have a policy requiring all two-way communications with CTCC be recorded and retained for a minimum of 30 days.	<p>Policy will also outline:</p> <ul style="list-style-type: none"> A) Who may access communication recordings. B) The procedure for requesting and documenting access to recordings. 	Audio recordings are often an effective and integral part of scenario-based training for communications personnel. Audio recordings also provide critical information for Utilization Management processes.	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.15	The medical transport organization shall have a policy outlining procedures for communications with EMS scene personnel and landing coordination of aircraft at uncontrolled landing zones.				x		
14.16	The medical transport organization is required to define communication procedures for coordinating safe use of a helipad or landing zone by multiple aircraft.				x		
14.17	The medical transport organization shall outline procedures for receiving and processing requests for transport. Procedures shall include documentation of critical information pertinent to patient and details of transport requests.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.18	The medical transport organization shall have procedures for activation and dispatching of transports.	<p>Procedures shall include:</p> <p>A) Patient care needs—</p> <p>i) Particular medical equipment.</p> <p>ii) Level of patient care required (<i>BLS, ALS, CC, SC</i>).</p> <p>iii) Infectious disease exposure and management/handling.</p> <p>iv) Appropriate medical crew configuration.</p> <p>B) Determination of appropriate mode of transport.</p> <p>C) Handling of requests—</p> <p>i) Outside the organization's Scope of Care, or</p> <p>ii) Unavailability of team.</p> <p>D) Completion and documentation of pre-transport risk assessment tool (RAT).</p>		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.19	The organization shall outline information to be obtained and documented when a request for transport is received.	<p>Request information will include:</p> <ul style="list-style-type: none"> A) Date/time of initial request. B) Caller name/phone number. C) Patient name, age, weight, and diagnosis/injury. D) Medical Control physician's name and phone number. E) Patient care needs — <ul style="list-style-type: none"> i) Medical equipment. ii) Mode of transport. iii) Medical crew configurations. iv) Confirmed or suspected infectious disease or exposure. <p>Additional required information:</p> <ul style="list-style-type: none"> F) <u>EMS Transports</u> <ul style="list-style-type: none"> i. Incident location and coordinates. ii. Point-of-contact information (<i>radio frequency and EMS entity</i>). iii. Any known/suspected hazardous material concerns at scene. iv. Destination facility. G) <u>Inter-facility Transports</u> <ul style="list-style-type: none"> i. Requested transport date and time. ii. Referring facility (<i>include floor or unit</i>), address, contact person, and phone number. iii. Referring physician's name and phone number. iv. Receiving physician and phone number. v. Receiving facility (<i>floor or unit</i>). vi. Accompanying family members. 		x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.20	All medical transport intake requests are to include the collection of information regarding any confirmed infections and suspected patient/family exposure to communicable diseases.			x	x	x	x
14.21	Medical transport organizations utilizing an answering service for receiving transport requests shall outline information to be obtained and documented when a request is received.	As part of the organization's Utilization Management program, requests received through an answering service shall be continuously monitored.	<p>Information obtained through an answering service should minimally include:</p> <ul style="list-style-type: none"> • Date and time of initial transport request. • Name and phone number of caller. • Patient name, age, weight, and diagnosis/injury. • Referring physician and facility or patient location. • Receiving physician, facility, and destination details. • Requested date and time of transport. • Number of travel companion(s) accompanying the patient, including their names. <p>Programs providing EMS services should not utilize answering services for transport request calls.</p>	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.22	The medical transport organization's CTCC shall provide and document "bedside-to-bedside" transport following.	<p>Documentation will include:</p> <ul style="list-style-type: none"> A) Mode of transport, including identifying vehicle number. B) Crew configuration and level of care. C) Names of all personnel aboard the ambulance. D) Names of additional passengers. E) Amount of fuel on board (<i>FW/RW transports</i>). F) Departure and arrival times of each segment of transport G) ETA to destination(s), along with updated communications with referring and receiving facilities. H) Waypoint crew check-in times. I) "Return-to-service" availability time of crew and transport vehicle. J) Any diversion or abort of transport. 	<p>The CTCC should notify referring/receiving hospital personnel with ETA of any helicopter inbound to the helipad.</p> <p>Compliance to this standard may include:</p> <ul style="list-style-type: none"> • Hand-written or electronic forms. • Software/web-based documentation and tracking. 	x	x	x	x
14.23	The medical transport organization shall have a policy requiring identification and documentation of all non-transport crew passengers.	<p>This includes:</p> <ul style="list-style-type: none"> A) Family members that accompany the patient. B) Non-transport employees or individuals participating in "Ride-A-Long" (RAL) programs. 	Only essential or relevant individuals should be authorized to ride in transport ambulances as defined by company policy.	x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
14.24	Medical transport policy shall define minimum communications during transport between transport crew and Communications and Transport Coordination Center.	<p>Policy shall establish:</p> <p>A) Required minimum time frames for communication during transport. Time frames are to be based on the type of transport and known conditions or zones where communication access is limited.</p> <p>B) Acceptable “lag” times when alternate agencies are used to relay communications.</p>	<p>Compliance to this standard may include:</p> <ul style="list-style-type: none"> Hand-written or electronic forms. Software/web-based documentation and tracking. 	x	x	x	x

Notes

Section 15: Medical

In this section, you will find the following additional information.

- Medical Policies & Protocols
- Patient Care Charting
- Medical Crew Configuration
- Medications and Controlled Substances
- Drug/IV Shortages
- Blood Products Administration
- Medical Equipment
- Medical Oxygen and Gases

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.01	Under the direction of the Medical Director, the organization shall establish and implement operational policies and protocols outlining medical logistics and procedural aspects of the transport service.	<p>Policies and protocols shall address, but not be limited to:</p> <p>A) Patient Care Protocols.</p> <p>B) Infection Prevention and Control Program.</p> <p>C) Required medical equipment and supplies for various transport types.</p> <p>D) Procedures for checking medical equipment/supplies.</p> <p>E) Drug formulary and Controlled Substances inventory control, handling, records control, and reporting requirements.</p> <p>F) Medical crew configuration and qualifications.</p> <p>G) Control Physician requirements.</p> <p>H) Medical crew clinical didactic training and skills competency requirements.</p> <p>I) Patient care documentation and hand-off procedures.</p> <p>J) Considerations for different diseases, traumas, and medical conditions (<i>i.e., communicable diseases, altitude limitations, specialty team, equipment, etc.</i>).</p> <p>K) EMTALA Compliance (<i>United States only</i>).</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.02	The medical transport organization shall have written <i>Patient Care Guidelines</i> .	<p><i>Patient Care Guidelines</i> shall include:</p> <p>A) Care of patients with medical and trauma conditions relevant to the organization's Scope of Service and patient population.</p> <p>B) Specific legal scopes of practice for clinical crewmembers and company's crew configuration model.</p> <p>C) Any extenuating patient care circumstances or decision points that would require on-line medical control consultation.</p> <p>D) Medical Director signature and date representing the review and/or update to the Patient Care Guidelines. As a minimum, reviews shall be conducted every 2 years or when change requests are made.</p>		x	x	x	x
15.03	The medical transport organization shall have policy requiring all transports provide "bedside-to-bedside/home" service.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.04	The medical transport organization shall have policy requiring all patient care provided during a medical transport be documented.	<p>The patient care chart shall reflect:</p> <ul style="list-style-type: none"> A) Level of care provided. B) Patient name and age. C) Pertinent medical history and present illness or injury. D) Allergies. E) Medical care interventions and patient response to treatments. F) Current medications/IV fluids. G) Any deviations from established Patient Care Protocols as approved by online medical control. H) Signature(s) of medical crewmembers who provided patient care. I) Identification of licensed healthcare professional assuming care of patient. 	<p>The patient care chart's primary function is to provide continuity in communicating information about a patient's medical treatment and care.</p> <p><u>The patient chart:</u></p> <ul style="list-style-type: none"> • May be electronic or paper format. • Represents a legal permanent record for accountability of care. • Validates the level of care provided for billing purposes. • Source of data collection for quality assurance. • Potential use for educating medical crew members. <p><u>Medication documentation should reflect:</u></p> <ul style="list-style-type: none"> • Medication name. • Route of administration. • Indication for administration. • Dose. • Time of administration. • Patient response to medication. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.05	The medical transport organization shall have policy outlining procedures and documentation required when care is assumed from or turned over to a subsequent transport team (<i>wing-to-wing transfer</i>) or healthcare facility.		<p>When handing off care of a patient to another transport team or healthcare provider, the patient report and documentation should reflect:</p> <ul style="list-style-type: none"> • Verbal report to receiving facility/staff. • Patient name and age. • Pertinent medical history. • Present illness history. • Medical care interventions and response to treatments. • Trauma (<i>include mechanism of injury, timing, etc.</i>). • Allergies. • Current medications and/or IV fluids. • Identification of urgent medical needs at time of handoff. • Family contact information. • Name and title of person assuming care of patient. • Signature(s) of medial crew. • Copy of patient care record should be given to receiving facility, team, or health care provider. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.06	The organization shall establish a medical crew configuration model for each mission type that correlates to the medical transport's Mission Statement and Scope of Service.	<p>Policy shall:</p> <p>A) Identify the level of clinical expertise and skill set required by the patient.</p> <p>B) Specify procedures that will ensure an appropriate level of patient care is provided and maintained throughout the transport.</p> <p>C) Ensure professional clinical licenses, credentials, ongoing clinical experience, and education comply with applicable accreditation, federal, local regulatory requirements, and bylaws.</p> <p>D) Provide the appropriate mode of transport vehicle/environment, equipment, and supplies.</p>	<p>Transport missions are based on the individual patient's medical needs.</p> <p>The medical transport industry aligns specific professional licenses and titles with the type of mission being conducted.</p> <p>Medical crew configuration is dictated by the type of mission (<i>BLS, ALS, CC, SC</i>), patient clinical acuity and care needs.</p> <p>NAAMTA recognizes that EMS vocabulary and professional titles/license for medical transport personnel vary globally. However, programs will be expected to align medical transport personnel and team configuration to the mission type, based on clinical expertise and skill sets necessary to provide the required level of patient.</p>	x	x	x	x
15.07	A policy shall require full medical crew configuration be maintained onboard the transport vehicle from the time patient care is initiated until the patient is released to another medical provider (<i>i.e., transport team, hospital, care facility, etc.</i>).	Any transport that is completed without the crew configuration established at the onset of the transport shall be reviewed through program's Quality Management procedures.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.08	The organization shall require aquatic medical crew members to maintain control and provide medical care while the patient is onboard the vessel. Hand-off of patient care will occur once patient has departed the vessel.						x
15.09	Basic Life Support (BLS) transports require a minimum of two (2) crew members.	<p>BLS transports must include:</p> <p>A) A minimum of one (1) primary medical attendant with—</p> <p>i) A scope of practice of an EMT or higher.</p> <p>ii) The sole duty of attending to the patient throughout the entire transport.</p> <p>B) Transport vehicle operator acting as the second crew member without primary medical attendant responsibilities.</p>	<p>Basic Life Support (BLS) missions involve the transport and care of a patient requiring a basic foundational level of knowledge and skilled care within the scope of practice of at least an Emergency Medical Technician (EMT).</p> <p>BLS consists of non-emergent or emergent care involving essential non-invasive life-saving intervention.</p> <p>BLS missions entails:</p> <ul style="list-style-type: none"> • Rapid recognition of injury, illness, or respiratory/cardiac arrest. • First aid, non-invasive airway and breathing support, initiation of CPR (<i>manual or automated</i>) or application of an automated external defibrillator (AED). • Patient care consistent with U.S. National EMS Scope of Practice Model for an EMT. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.10	Advanced Life Support (ALS) transports require two (2) primary medical attendants whose sole responsibility is to attend to the patient throughout the entire transport.	<p>ALS transports must include:</p> <p>A) Both medical attendants with a scope of practice of an Advanced-EMT or higher.</p> <p>B) At least one primary medical attendant with a scope of practice of a Paramedic or higher.</p> <p>C) The transport vehicle operator with no clinical responsibilities during the transport.</p> <p><i>*Alternate or equivalent licenses must be submitted and approved by NAAMTA.</i></p>	<p>Advanced Life Support (ALS) missions involve the care and transport of a patient whose condition requires a greater depth and level of knowledge and skills, involving both non-invasive and invasive interventional procedures and monitoring.</p> <p>ALS patients require a higher level of emergency care to support and sustain life.</p> <p>ALS care involves protocol-driven treatments including:</p> <ul style="list-style-type: none"> • Advanced airway management and respiratory/ ventilatory support. • Advanced vital sign monitoring, interpretation, and cardiac defibrillation. • Intravenous solutions or drug therapy to support circulation. • Emergent trauma care procedures and techniques. <p>ALS transports involve patient care provided at a level consistent with the scope of practice of a Paramedic, as established by the <i>U.S. National EMS Scope of Practice Model</i>.</p> <p>If a Respiratory Care Provider is utilized as a third crewmember, NAAMTA strongly recommends they have nationally recognized certification in advanced airway management and mechanical ventilation.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.11	Critical Care (CC) transports must be configured with a minimum of two (2) critical care-level primary medical attendants whose sole responsibility is to attend to the patient throughout the entire transport.	<p>CC transports must include:</p> <p>A) At least one (1) medical attendant with a scope of practice of an RN, NP/PA, or Physician.</p> <p>B) A second medical attendant with a scope of practice of a—</p> <ul style="list-style-type: none"> i) RN, NP/PA, or Physician, (or) ii) Paramedic with a state/nationally recognized critical care endorsement/certification, (or) iii) Respiratory Therapist with a nationally recognized certification in advanced airway management and alternate mechanical ventilation therapies. <p>C) Transport vehicle operator with no clinical responsibilities during the transport.</p> <p><i>*Alternate or equivalent licenses must be submitted and approved by NAAMTA.</i></p>	<p>A CC transport involves the care of a patient whose illness or injuries are life threatening and requires comprehensive critical care and constant monitoring congruent with that received in a hospital Intensive Care Unit.</p> <p>CC transports require a medical team with requisite psychomotor decision-making skills of high complexities to assess, manipulate, and support body functions to prevent further life-threatening deterioration or vital organ system failure.</p> <p>The following situations warrant the classification of critical care:</p> <ul style="list-style-type: none"> • Vasoactive medications requiring frequent (<i>Q15 minutes or less titration in order to maintain vital signs within desired parameters</i>). • Medications being administered via continuous IV infusion for the purpose of sedation or pain control. • Transcutaneous/Transvenous pacing. • Invasive line hemodynamic monitoring. (<i>Placement without need for monitoring does not meet this criterion</i>). <p>CC transports correspond with the scope of practice of a highly trained and ICU-experienced critical care Registered Nurse (RN), Physician's Assistant (PA), Nurse Practitioner (NP) or Physician.</p>	x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.12	In conjunction with board-certified/board-eligible specialists, the transport organization shall establish clear and objective written criteria for identifying critical care patients that require a higher level of expertise congruent with Specialty Care transport personnel and services.		<p>A Specialty Care (SC) Mission is the interfacility transport of a patient who is highly vulnerable, unstable, and complex, thereby requiring specialized life-sustaining critical care.</p> <p>SC transports require a scope of practice provided by crewmembers who have received advanced, specialized critical care training, and have demonstrated clinical expertise in the area of specialty/subspecialty treatment modalities required to meet the patient's critical care needs.</p> <p>SC transports include:</p> <ul style="list-style-type: none"> • High-Risk Maternal-Fetal Specialty Care. • Level III/IV Neonatal Specialty Care. • Pediatric Intensive Critical Care. • Complex Cardiac Circulatory Support (<i>i.e.</i>, IABP, VAD, ECMO, REBOA, <i>etc.</i>). • Advanced Respiratory Support (<i>i.e.</i>, Complex ventilatory support, Nitric Oxide, Liquid Ventilation, <i>etc.</i>). • Surgery performed in the pre-hospital setting or during the transport of the patient. 	x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.13	Specialty Care (SC) transports must be configured with a minimum of two (2) specialty care-level primary medical attendants whose sole responsibility is to attend to the patient throughout the entire transport.	<p>SC transports must include:</p> <p>A) At least one (1) medical attendant with a scope of practice of an RN, NP/PA, or Physician.</p> <p>B) A second medical attendant with a scope of practice of a—</p> <ul style="list-style-type: none"> i) RN, NP/PA, or Physician, (or) ii) Paramedic with a state/nationally recognized critical care endorsement/certification, (or) iii) Respiratory Therapist with a nationally recognized certification in advanced airway management and alternate mechanical ventilation modalities/therapies. <p>C) A vehicle operator with no clinical responsibilities during the transport.</p>	Due to the highly specialized and expert care required by the patient, NAAMTA strongly recommends that both medical attendants be at the level of an RN or higher.	x	x	x	
15.14	The medical transport organization utilizing contracted Specialty Care transport personnel must have clearly defined roles and policies to ensure operational safety and quality patient care.			x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.15	The medical transport organization shall have procedures for maintaining inventory control and use of controlled substances in compliance with applicable federal statutes, regulatory and NAAMTA requirements.	<p>Policy shall:</p> <ul style="list-style-type: none"> A) Designate a medication control officer. B) Require certification with applicable drug enforcement authority having jurisdiction (AHJ) to administer and store controlled substances within the organization's Scope of Service. C) Outline procedures for the ordering, inventory control and reverse distribution of controlled substances. D) Ensure all controlled substances are stored, secured, and transferred in compliance with statutes and regulatory requirements. E) Limit the access and handling of controlled substances to authorized medical personnel only. F) Ensure accurate documentation and maintenance of controlled substance records. G) Outline procedures for the carry and security of controlled substances during all segments of transport operations. 	<p>Transport operations conducted within the U.S.A and its territories are accountable to the U.S. Department of Justice Drug Enforcement Agency and must comply with CFR Title 21 requirements.</p> <p>International regulatory requirements vary according to national regulations.</p> <p>Additionally, organizations are expected to abide by control measures and law enforcement policies established by the International Narcotics Control Board and U.N. Commission on Narcotic Drugs.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.16	The medical transport organization shall outline procedures for ensuring all medications are stored according to manufacturer's temperature recommendations.	<p>Procedures shall require:</p> <p>A) Continuous monitoring and shift/daily documentation of medical supply storage and refrigerator temperatures.</p> <p>B) Procedures for addressing storage temperatures that fall outside of recommended range and corrective action documentation.</p>		x	x	x	x
15.17	The medical transport organization shall have policy outlining the procedures and documentation of controlled substances that are expired, damaged, lost or stolen.	<p>Policy will include:</p> <p>A) The handling of discrepancies in medication inventory, including review by a designated medication control officer.</p> <p>B) Checking expiration dates on a monthly basis and logged.</p> <p>C) How long expired medications can be stored on base pending disposal.</p> <p>D) The documentation of all broken or non-recoverable medications was witnessed by 2 medical personnel and reported to a designated medication control officer.</p> <p>E) The reporting of all lost or stolen drugs to local police and federal drug enforcement authority.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.18	The medical transport organization shall have procedures requiring the disposal/wasting of controlled substances.	<p>Procedures shall include:</p> <p>A) Conducted in a manner that does not allow for retrieval of the drug.</p> <p>B) Witnessed and documented with the signature of 2 medical personnel.</p> <p>C) Not to be wasted in sink drains or toilets.</p>	<p>Procedure should describe acceptable methods of wasting medications, including the following options:</p> <ul style="list-style-type: none"> Absorbent materials (<i>i.e., cat litter, slurry solutions, etc.</i>). Sharps container. Outdoor ground or gravel. <p>Used absorbent material and sharps container must be disposed of per company hazardous waste policy.</p>	x	x	x	x
15.19	The medical transport organization shall have a policy regarding medications and IV fluid administration.	<p>The policy shall include:</p> <p>A) A process to calculate all medication dosages and IV fluid infusion rates.</p> <p>B) Outlining those medications and/or IV fluids requiring double-checking prior to administration.</p> <p>C) Patient hand-off reporting and documentation to avoid medication errors.</p>		x	x	x	x
15.20	The medical transport organization shall have procedures outlining the process for expired medications.	<p>Procedures shall include:</p> <p>A) Checking expiration dates on all medications, IV fluids and medical supplies.</p> <p>B) Removing and disposing of expired medications, IV fluids and medical supplies from primary and back-up stocks.</p> <p>C) Documentation of expired medical supplies, medications and IV fluids.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.21	<p>The medical transport organization shall have a proactive policy for dealing with intermittent industry-wide drug and IV solution shortages.</p> <p>The Medical Director will collaborate with the Clinical Operations Manager on the integration of alternate medication solutions.</p>	<p>Policy shall:</p> <p>A) Ensure substitute medication solutions remain within the scope of practice and level of experience of medical crews.</p> <p>B) Provide training on new medications/solutions to ensure medical crew competencies.</p> <p>C) Outline process for the stocking of all medication/supply bags with alternate therapies as determined by Medical Director.</p> <p>D) Assure that substitute controlled substances must be processed and accounted for in accordance with company <i>Controlled Substance</i> policy.</p>		x	x	x	x
15.22	<p>The medical transport organization shall have procedures outlining security and quality control measures for all blood products.</p>	<p>Outlined procedures shall include:</p> <p>A) Storage at a company-owned facility with real-time monitoring.</p> <p>B) Accessible only to medical personnel.</p> <p>C) Defined par levels of blood availability for transport.</p> <p>D) Strict maintenance of "Cold Chain" temperature control procedures per accredited blood bank requirements onsite and during transport.</p> <p>E) Documentation of compliance to established quality control requirements.</p>	<p>Procedures shall comply with U.S. Food and Drug Administration (FDA) or equivalent national regulatory requirements.</p>	x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.23	The medical transport organization's protocol shall require: A) Blood products are warmed to near body temperature prior to transfusion. B) The use of irradiated blood for neonatal populations.			x	x	x	
15.24	The medical transport policy shall outline procedures for the disposal/wasting of unusable/unused blood products as well as recycling of unused, unexpired blood products to blood bank or storage refrigerator.	All wasted blood products must be reviewed through Utilization Management processes.		x	x	x	
15.25	Medical transport patient care protocols must outline altitude restrictions specific to particular medical conditions.	Patient chart must document on-line medical control approval to deviate from policy if necessary.		x	x		
15.26	The organization shall require primary, and back-up medical supplies and equipment be inspected, verified, and documented each shift/ day by medical personnel to ensure they are complete and in working order.	Supply and equipment checks shall be conducted: A) Using company-approved checklists. B) Signed by the on-duty medical crewmembers.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.27	BLS transports are required to have minimum medical equipment and supplies in accordance with NAAMTA requirements (See "BLS Equipment List") and applicable local/national EMS, Health Department, or other regulatory agency requirement.			x	x	x	x
15.28	ALS transports are required to have minimum medical equipment and supplies in accordance with NAAMTA requirements (See "ALS Equipment List") and applicable local/national EMS, Health Department, or other regulatory agency requirements.	ALS equipment supplies must include both adult- and pediatric-appropriate sizes and capabilities.		x	x	x	x
15.29	Critical Care transports are required to have minimum medical equipment and supplies.	<p>Minimum CC equipment and supplies shall be:</p> <p>A) Dictated by the program's Scope of Service and patient population.</p> <p>B) In accordance with NAAMTA requirements (See "CC Equipment List") and applicable local/national EMS, Health Department, or other regulatory agency requirements.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.30	In addition to CC equipment requirements, the medical transport organization shall detail minimum medical equipment and supplies for Specialty Care (SC) transports as dictated by the organization's Scope of Service and patient population.			x	x	x	x
15.31	The medical transport organization shall have policy requiring the use of single-use (<i>disposable</i>) patient care supplies.		Where not commercially available, re-usable patient care equipment/supplies may be used as long as written policy outlines procedures for proper cleaning and decontamination between patient use.	x	x	x	x
15.32	All medical supplies shall be latex free.			x	x	x	x
15.33	Backup power sources must have the capacity to support all medical equipment for a minimum of 1.5 times the length of the transport.		Medical equipment power supplies should include any necessary chargers and international electrical adapters.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.34	The medical transport organization shall have a policy requiring all biomedical equipment/devices be inspected, tested, and maintained.	<p>The policy shall include:</p> <p>A) By ICC-certified Biomedical Equipment Technicians (BMETs).</p> <p>B) In accordance with Original Equipment Manufacturer (OEM) preventative maintenance requirements, including:</p> <p>i) Scheduled bench testing and calibration.</p> <p>ii) Repairs as identified.</p> <p>Records shall be kept on all inspections and maintenance performed on service's durable biomedical equipment/devices for as long as they are utilized by the service.</p>		x	x	x	x
15.35	The medical transport organization shall have a system in place to track the return of the transport vehicle to service.	<p>The system shall define processes related to:</p> <p>A) Tracking of maintenance of biomedical equipment/devices from initiation to completion and "Return-to-Service."</p> <p>B) Notifying the medical staff when biomedical equipment is taken out and returned to service for repairs or maintenance.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.36	Electrically powered suction devices utilized by the medical transport organization must be fitted with in-line HEPA filters <i>(or equivalent)</i> to minimize onboard transmission of airborne contaminants.			x	x	x	x
15.37	The medical transport organization shall have policy outlining procedures for the use of all compressed medical gases.	<p>The policy will include procedures for:</p> <p>A) Installation.</p> <p>B) Calibration of administration devices.</p> <p>C) Operational safety, handling, and monitoring.</p> <p>D) Emergency shutdown procedures.</p>		x	x	x	x
15.38	The medical transport organization shall have written procedures for handling compressed medical gas tanks/cannisters onboard the transport vehicle.	<p>Procedures shall include:</p> <p>A) Defined acceptable minimal levels before changing tanks.</p> <p>B) Identification of personnel responsible for changing tanks.</p> <p>C) Securing of onboard tanks/ cannisters per regulations and in a manner to avoid displacement and movement of tanks while transport vehicle/carrier is in motion.</p> <p>D) Easy access to allow tanks/ cannisters to be removed as needed.</p>	<p>The transport vehicle should have a minimum:</p> <ul style="list-style-type: none"> Hospital-grade medical oxygen system. 3,000 liters (<i>"M"-size tank</i>) onboard oxygen supply. 		x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.39	<p>All compressed medical oxygen must have the following capabilities:</p> <p>Pressure gauges and flow meters readily accessible to medical crewmembers.</p> <p>Ability to control the flow at or near the oxygen and medical gas sources.</p>			x	x	x	x
15.40	<p>The medical transport organizational shall have policy requiring medical crewmembers perform pre-transport calculations to determine the necessary medical oxygen or other medical gas supply required to meet patient needs and ensure it is onboard and secured.</p>			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.41	The medical transport <i>organization's Patient Care Guidelines</i> shall require the use of an incubator for transporting neonatal patients.	<p>Patients who require and incubator for transport include:</p> <p>A) An external heat source to maintain core body temperature and a neutral thermal environment.</p> <p>B) Infant to be undressed for continuous monitoring and observation of skin color and ventilatory/ respiratory status.</p> <p>C) Critical care-level medical intervention, such as—</p> <ul style="list-style-type: none"> i) Mechanical ventilatory support. ii) Inotrope infusions. iii) Chest tubes. iv) Specialty therapies (<i>i.e., ECMO, Nitric Oxide</i>). v) Wound care (<i>i.e., gastroschisis/omphalocele, neural tube defects</i>). vi) Intracranial fluid drainage/pressure monitoring. vii) Phototherapy administration. <p>D) Isolation for known infection or the potential of developing sepsis, including exposed bowel.</p> <p>E) Preterm infants.</p> <p>F) Small for gestational age (SGA).</p> <p>G) Surgical bowel emergencies.</p>		x	x	x	

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
15.42	Neonatal incubators must allow full access to patients at all times for airway management and other medical procedures.			x	x	x	
15.43	Neonatal transport incubators must be equipped with specialized components to meet the needs of critical neonates.	Incubators must incorporate: A) Removable 4-point internal restraint system. B) Continuous monitoring systems— i) Temperature (<i>body core and environmental</i>). ii) ECG. iii) Respirations. iv) Invasive/Non-invasive blood pressures. v) Oxygen saturations. C) Integrated electrical heat source with ability to adjust environmental temperature. D) Double-wall structure. E) Air flow circulation. F) Ability to be secured to transport medical deck or stretcher utilized by the organization per state/national regulatory standards.		x	x	x	
15.44	The medical transport organization shall have policy requiring the use of warmed and humidified medical oxygen/gases for all neonatal patients to avoid iatrogenic hypothermia.			x	x	x	



Section 16: Aviation

In this section, you will find the following additional information.

- Operation Specifications Manual
- Vendor Pilots
- Flight Plans
- Aircraft Walk-Around
- Helmets: Inspections, Operations, Logistics
- Night Vision Goggles
- Helipads
- Fire Suppression
- Landing Zones

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.01	The medical transport organization shall have an applicable Civil Aviation Authority (CAA) approved Operations Specifications (OpSpecs) manual. All aircraft utilized for air ambulance services must be identified in the OpSpecs Manual.			x	x		
16.02	The medical transport organization shall have a policy for utilizing non-regularly scheduled vendor pilots by the certificate holder.	<p>Policy must require the vendor pilot:</p> <p>A) Hold the requisite category and class rating as well as current competency for the service's given aircraft.</p> <p>B) Review the company's Policy and Procedures Manual, Op Specs Manual, and General Operations Manual (GOM).</p> <p>C) Receive an orientation to expected on-duty activities and tasks.</p> <p>D) Document all orientation received.</p>		x	x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.03	The medical transport organization shall require a flight plan to be filed for all flights prior to take-off, regardless of whether or not a patient is onboard.	Filing flight plans includes: A) Instrument Flight Rule (IFR) flight plans are to be filed with the applicable Civil Aviation Authority (CAA). B) Visual Flight Rule (VFR) flight plans are to be provided to the CTCC.		x	x		
16.04	The medical transport organization shall ensure that the Pilot-In-Command (PIC) perform a pre-flight walk-around inspection of the aircraft to confirm airworthiness as defined in the OpSpecs Manual.		Pre-flight walk-around inspections should be performed by the PIC assigned to the flight.	x	x		
16.05	The medical transport organization shall have policy requiring the use of flight helmets by all rotor-wing crewmembers.	Policy will require: A) Each helmet be fitted with— i. Dual Visors ii. Ear cups and earphones iii. Microphone B) Defined fitting and maintenance responsibilities as follows— i) Assigned individual responsible for helmet fitting, inspection, maintenance and repairs. ii) Employees will provide routine care and washing of removable liner. C) Individual helmet and padded storage bag for each crewmember approved by the organization.	Selection of flight helmets should be guided by the following: <ul style="list-style-type: none">Ensure the vendor is recognized by the manufacturer.Ensure the vendor can accurately explain the data on the safety features of their products.Examine the specifications. Training should be provided in proper helmet fitting and inspection.		x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.06	The medical transport organization will conduct an annual inspection of all flight helmets.	<p>Company shall:</p> <p>A) Define inspection criteria for helmets.</p> <p>B) Document helmet inspections.</p>	<p>Helmet inspections should assess the integrity of the following components:</p> <ul style="list-style-type: none"> • Shell • Retention straps • Knobs • Dual Visors • Liner • Foam protection • Ear cups and earphone • Microphone • Communication cable • NVG/D mounts (<i>if used by program</i>). 		x		



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.07	The medical transport organization shall have policy addressing the use of Night Vision Goggles/Devices (NVG/D) during night operations.	<p>Policy shall require:</p> <p>A) NVG/D-compliant minimum equipment list (MEL) outlined in the OpSpecs and/or General Operating Manual. MEL must include specific make and model of NVG/D utilized by the company.</p> <p>B) Night Vision Imaging System (NVIS) with compatible lighting installed in aircraft or watercraft. Aircraft NVIS must be approved by Civil Aviation Authority (CAA).</p> <p>C) Carry a spare pair of NVG/Ds and extra batteries easily accessible by crew members.</p> <p>D) NVG/D logs including:</p> <ul style="list-style-type: none"> i) Make and model of each device/goggle. ii) Inspections and maintenance logs. iii) All flights/transport completed by each crewmember under NVG/D. 	<p>NAAMTA strongly recommends that:</p> <ul style="list-style-type: none"> • All rotor-wing and aquatic night operations are conducted under NVG/D. • NVG/D be made available for all rotor-wing pilots regardless of whether or not the aircraft is IFR-capable. 	x	x		x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.08	The medical transport organization shall ensure base helipads meet FAA requirements outlined in AC 150/5390-2D - Heliport Design .	<p>Include the following elements:</p> <p>A) Landing area marked with a circle, white cross and/or the letter “H” to be visible from the air.</p> <p>B) The perimeter safety barrier is high enough to keep operational areas clear of people, animals, and vehicles without presenting a hazard to aircraft maneuvers.</p> <p>C) Perimeter safety netting around elevated helipads.</p> <p>D) Perimeter lighting around helipad.</p> <p>E) Windsock/vane unobstructed by surrounding structures and visible within 500 feet of the helipad.</p> <p>F) Final Approach and Takeoff Area (FATO) with at least 1.5 times the overall length of the helicopter.</p> <p>G) Hazard markers and/or lights on all structures over 200 feet and “difficult-to-see” objects within 5,000 feet of helipad airspace.</p> <p>If helipad is intended to support more than one helicopter, appropriate accommodations must be provided and described in policy.</p>	<p>Additional recommendations for helipads include:</p> <ul style="list-style-type: none"> Positioning of helipad away from ventilation intakes Non-skid construction materials for surfaces of ramps, and stairs. Grading and proper water flow drainage. Clearly marked “Marshalling line” to indicate “do not pass” without pilot or flight crew clearance. Perimeter lighting that flush with the helipad surface. Flood lights directed only towards the ground. Beacon light positioned to provide unobstructed identification to incoming aircraft. Warning signs of electromagnetic devices nearby that can create EMF interferences (<i>i.e., magnetic resonance imaging, large elevator/ventilator motors, etc.</i>). Caution signs posted in the vicinity of the helipad to warn pedestrians. Method to control access to helipad (<i>gate, lock, etc.</i>). Storage of flammable liquid or gas tanks at least 50 feet from helipad. 	x			

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.09	The organization shall have a policy requiring a risk inspection of each base helipad and surrounding area at the beginning of each shift to identify any objects, obstacles, trash receptacles, debris or landscaping materials that may pose a hazard risk to rotor-wing operations.		Flight programs are encouraged to list helipad information with local/regional helipad database to provide updated helipad safety and operational information to other rotor-wing operators.		x		
16.10	Helipads and hangars designated as an organizational base/facility shall have minimal fire suppression equipment and chemicals within 50 feet of the landing zone.	Fire suppression shall be defined as: A) Applicable to type of landing port (<i>ground-level or elevated</i>). B) Required by state or local fire codes.		x	x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
16.11	The medical transport organization shall have defined procedures for landing at a temporary scene or unsecured landing site.	Procedure must include: A) Implementation of Crew Resource Management strategies. B) Communication procedures with ground EMS personnel. C) Establish safe and secure landing zone. D) Guidelines for implementing safe visual landing zone markers and lighting. E) Procedures for securing the landing zone and aircraft while on scene. F) Approach and departure procedures when loading a patient.		x	x		
16.12	The medical transport organization shall have procedure for contacting scene ground personnel and coordinating use of uncontrolled landing zones.			x	x		



Notes

Section 17: Maintenance

In this section, you will find criteria for maintenance operations, such as

- Maintenance Manual
- Maintenance Library
- Advisories and Service Bulletins
- Maintenance Technicians
- Maintenance Records
- Forecasting and Scheduling,
- Out of and Return-to Service
- Outsourced Maintenance
- Maintenance Tools
- Tool Calibration and Maintenance
- Maintenance Inventory
- Maintenance Facilities
- Fueling Procedures
- Waste Disposal

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.01	The medical transport organization shall have a written Maintenance Manual approved by the relevant Civil Aviation Authority or other Authority Having Jurisdiction (AHJ) for the applicable mode of transport.	<p>The Maintenance Manual shall:</p> <p>A) Outline policies and procedures specific to the maintenance and inspection of the transport vehicle.</p> <p>B) Be compliant with applicable government regulations.</p> <p>C) Be accessible to all maintenance personnel.</p>	<p>Maintenance Manual policies and procedures should include:</p> <ul style="list-style-type: none"> • Maintenance Programs/Reliability • Maintenance Control/Planning • Equipment Calibration • Deferred Maintenance • Maintenance Staff Functions • Maintenance Training • Maintaining Integrity of Fuel Quality • Transport Vehicle Inspection (<i>as applicable to mode of transport</i>) • Transport Vehicle Maintenance Records and Compliance Reports • Quality Assurance • Unscheduled Maintenance • Quality Assurance/Control • Vendor Files • Transport Vehicle Appearance <p>Air Ambulances</p> <p>The civil aviation authority has published requirements for aircraft Maintenance Manual to gain its approval.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.02	The medical transport organization shall have an established library/ repository where all maintenance manuals are available and kept current.		Library/repository may be digital, or paper based.				
17.03	The medical transport organization shall have a compliance process for monitoring, reviewing, and managing published Service Bulletins and Airworthiness Directives (AD).	Policy shall identify individual(s) responsible for reviewing ADs for applicability and making final decisions regarding the inclusion and scheduling of the associated work.		x	x		
17.04	All medical transport vehicles shall be inspected, calibrated, and maintained in accordance with manufacturer's recommendations/ directives and applicable civil regulatory agency preventative maintenance program requirements.	Maintenance needs to incorporate elements involving: A) Routine daily checks. B) Scheduled bench testing. C) Scheduled overhauls.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.05	All medical transport vehicle inspections and maintenance must be performed by mechanics and/or technicians certified and experienced to perform such inspections and maintenance on the specific make and model of transport vehicle.	<p>Ground Programs</p> <p>Maintenance technicians must be Emergency Vehicle Technicians (EVT) certified in the inspection, calibration and repair of ground ambulance medical equipment and systems.</p> <p>Flight Programs</p> <p>Aviation technicians/engineers must be certified as an airframe and power plant mechanic in accordance with applicable CAA regulations, and qualified to maintain the aircraft.</p>		x	x	x	x
17.06	The organization must assign a primary maintenance technician to each specified transport vehicle.			x	x	x	x
17.07	During inspections and maintenance, the primary Maintenance Technician shall be required to be onsite and provide supervision to the Technicians performing maintenance.			x	x	x	x
17.08	The medical transport organization shall require all medical transport vehicle inspections, testing, calibrations, and maintenance be documented and kept on file.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.09	The medical transport organization shall have a maintenance forecasting process to ensure all required maintenance and/or inspections are scheduled for completion.		<p>Maintenance Control should include the following functions:</p> <ul style="list-style-type: none"> Plan and schedule transport vehicles through all phases of maintenance. Initiate maintenance tasks for scheduled and unscheduled maintenance as required and assign priorities and completion times. Track and monitor maintenance work assigned. Maintain awareness of current transport vehicle status and keep pilots, drivers, medical crews, and communications center informed of the status of the vehicles and related equipment. Maintain aircraft logs according to current directives. Ensure that maintenance instructions are prepared when required and provide the necessary control to ensure compliance by maintenance technicians. Assign a job control number for each maintenance job. Receive completed and processed source documents from the quality assurance/analysis division and file for historical purposes. Take necessary actions for reporting aircraft accounting data, aircraft engine accounting data, and other required reports. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.10	The medical transport organization shall establish a process to notify the Medical Crews, Pilots/drivers, Communications and Transport Coordination Center, and Maintenance personnel when a transport vehicle is taken out of service for repairs or maintenance.			x	x	x	x
17.11	The medical transport organization shall establish procedures for completing a series of documented inspections of the transport vehicle prior to returning the transport vehicle to service.	"Return-to-service" checks are to be completed by maintenance, pilots/drivers, and medical personnel.	Procedure should utilize checklists and visual markers to indicate completion of inspections. This is to ensure all required maintenance, safety, equipment, and medical supply checks are performed, completed, and verified.	x	x	x	x
17.12	The medical transport organization shall have a system in place to track all "in-house" and any outsourced maintenance performed on transport vehicle(s) from initiation to completion and "Return-to-Service."			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.13	The medical transport organization shall establish a policy addressing the storage and accounting of tools.	<p>The policy will stipulate that:</p> <p>A) Tools will be stored in an orderly fashion, and clear of all doors and fire hazards.</p> <p>B) Following maintenance, a double-check process is in place to ensure that tools are not left in the transport vehicle.</p>		x	x	x	x
17.14	The medical transport organization shall have a calibrated tool inspection program.		The calibrated tool inspection program should be part of the organization's maintenance quality management system. There should be a monthly review of precision measurement and calibrated tools in the inventory to verify their current calibration status.	x	x		
17.15	The organization shall have a policy outlining the requirements and procedures used for tool calibration.	<p>Policy shall require:</p> <p>A) All precision equipment has its accuracy traceable to the appropriate calibration standard.</p> <p>B) Precision tools and test equipment be labeled with calibration date.</p>		x	x		
17.16	The medical transport organization shall designate an individual responsible for monitoring and coordinating all tool calibrations.			x	x		



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.17	The medical transport organization shall require precision test equipment to be calibrated by approved vendors having adequate facilities to perform tests and calibration.			x	x		
17.18	The medical transport organization shall maintain records tracking calibration dates and upcoming due dates.			x	x		
17.19	The medical transport organization shall establish an inventory program to track timed maintenance parts and expiration dates on shelf items.			x	x	x	x
17.20	As parts are received, the medical transport organization shall require parts to be: A) Supplied by an approved vendor (<i>as listed in policy</i>). B) Inspected for required certification documentation (<i>where applicable</i>).			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.21	The medical transport organization shall have a policy requiring all maintenance parts to meet company requirements.	<p>The policy shall define that parts are:</p> <p>A) Properly tagged.</p> <p>B) Protected to prevent damage or contamination (<i>wrapped, boxed, covered and/or capped</i>).</p> <p>C) Identified as “serviceable” or “unserviceable” and kept in separate areas.</p>		x	x	x	x
17.22	<p>Maintenance facility(ies) used by the organization are required to provide:</p> <p>A) Routine transport vehicle inspection and maintenance.</p> <p>B) Heavy aircraft maintenance (<i>flight programs only</i>).</p>	<p>Facility(ies) must:</p> <p>A) Be adequate in size to accommodate the transport vehicle, maintenance equipment/tools and necessary working space.</p> <p>B) Allow for monitoring of non-maintenance personnel and visitors.</p> <p>C) Be equipped with all necessary maintenance tools and machinery, including applicable:</p> <p>i) Lifts</p> <p>ii) Maneuvering tugs</p> <p>iii) Trailers</p> <p>D) Have floodlights available for necessary outside repairs.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.23	The medical transport organization shall have a policy requiring maintenance areas be protected from activities that create hazardous distractions to Maintenance Technicians/Engineers and interruptions in maintenance operations.	<p>This includes activities such as:</p> <p>A) Non-essential or non-urgent phone calls.</p> <p>B) Non-maintenance personnel in vicinity of ongoing maintenance activity.</p>		x	x	x	x
17.24	The medical transport organization shall have a policy outlining fuel quality assurance procedures.	<p>Policy shall outline:</p> <p>A) Steps for checking aircraft fuel and company-owned fuel farm supply for contamination.</p> <p>B) Frequency of fuel quality checks.</p> <p>C) Documentation of fuel quality checks.</p>	The organization shall outline in the Operations Manual the necessary steps needed to test the quality of the fuel to be dispensed into the aircraft planeside.	x	x		
17.25	The medical transport organization shall have written re-fueling procedures based on the manufacturer's guidance and safety regulations that may apply.		<p>Safety guideline shall ensure:</p> <ul style="list-style-type: none"> No passengers remain onboard the transport vehicle while refueling is being conducted. No smoking within 50 feet of the refueling operation. A fire extinguisher is available within 50 feet of the transport vehicle during refueling. The transport vehicle is properly grounded prior to refueling. 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.26	The medical transport organization shall have policy requiring an individual be responsible for attending the transport vehicle while fueling and verifying fuel type and dispensed amount.			x	x	x	x
17.27	Fuel-dispensing equipment (tanks, hoses, pumps, etc.). utilized by the medical transport organization must comply with national environmental protection regulations.			x	x	x	x
17.28	The medical transport organization shall have procedures for securing transport-owned fuel tanks against tampering and contamination. Procedures must address both fuel supplies and transport vehicle fuel tanks.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
17.29	In accordance with government regulatory requirements, fuel-dispensing equipment and supplies are required to include: A) An emergency fuel shutoff valve. B) Fire extinguishing equipment. C) Procedures must be in place outlining how to handle refueling emergencies.			x	x	x	x
17.30	The medical transport organization shall have a procedure defining the methods for disposing of waste oil, contaminated fuel and any materials deemed hazardous by governmental regulatory agencies.		The procedure should identify the required use of personal protective equipment for handling waste oil, fuel and any hazardous materials.	x	x	x	x



Notes

Section 18: Transport Vehicles

In this section, you will find the following additional information.

- License/Registration
- Cleaning and Maintaining
- Loading/Unloading
- Minimum Equipment
- Hazard Equipment
- Add-on Equipment
- Survival Equipment
- Compartment Lighting
- Medical Gases
- Communication Equipment
- Climate Control
- Medication Locks
- Seatbelts
- Stretcher Brackets
- Cockpit/Cab Configuration
- Equipment Mounting
- Flashing Lights

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.01	The medical transport organization shall provide verification that the transport vehicle, including all operational component systems, has been inspected and certified compliant for use as an ambulance by the applicable regulatory agencies.	<p>Applicable agencies include:</p> <p>A) Air ambulances—Civil Aviation Authority (CAA) air ambulance.</p> <p>B) Ground ambulances—State EMS and Department of Transportation (DOT) (or equivalent international standards, health department and transportation regulatory agencies).</p> <p>C) Aquatic ambulances—State EMS Bureau and/or USCG National Maritime Center (<i>or equivalent international standards, health department and/or maritime regulatory agencies</i>).</p>	<p>Medical transports are conducted utilizing various transport modes. The transport vehicle may be a ground ambulance, aquatic vessel, helicopter, or airplane. Standards in this section include:</p> <ul style="list-style-type: none"> • Identifying Licensing and Registration Requirements • Outlining Operational Policies • Defining Transport Vehicle Requirements • Itemizing Transport Vehicle Safety and Hazard Equipment • Reviewing Transport Vehicle Condition and Sanitation 	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.02	Transport vehicle and systems must be certified to meet Original Equipment Manufacturer (OEM) specifications without conditional, temporary, or partial certification of test results.			x	x	x	x
18.03	Aircraft intended for the use of transporting and providing patient care shall be: A) Approved and certified as an air ambulance by the applicable CAA. B) Identified in the company OpSpecs Manual including make, model, and tail number.			x	x		
18.04	The transport vehicle must be licensed and registered according to the requirements of the state in which the vehicle is based.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.05	The interior of the transport vehicle must be kept clean and well maintained. The interior is to be free of defects, cracks, and corrosion. All panels and joints are to be sealed against water, exhaust fumes, and dust.		Interior surfaces of the patient care area should not have cloth or absorbent coverings that impede thorough cleaning and decontamination of body fluids and infectious organisms.	x	x	x	x
18.06	Transport vehicle seats are to be constructed of fluid-resistant, non-absorbent material (<i>non-cloth</i>) without vent hole designs to facilitate cleaning and infection control. Seats are to be free of cracks or worn surfaces that exposes fabric underlay.		<p>Transport vehicles should incorporate seat styles and seating configuration that minimize the physical stressors, back/muscle strain, and fatigue inherent with riding in an ambulance. Such considerations include:</p> <ul style="list-style-type: none"> • The integration of individual contoured, high-back seats, preferably captain's chairs. • Improved seat and headrest padding. • Adjustable positioning to maintain seat belted security while providing patient care. • Mildew and fire-resistant seat, bench, and stretcher coverings. 	x	x	x	x
18.07	All interior and exterior storage, patient and passenger compartments shall be weather resistant and free of any environmental water flow or leakage.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.08	The “maximum usable payload” must be documented for each transport vehicle.	<p>The organization must verify that:</p> <p>A) The weight of combined equipment, supplies, personnel, and passengers are within the manufacturer’s GVWR limitations.</p> <p>B) Flight Operations: A weight and balance calculation has been performed on all aircraft a minimum of every 3 years <i>(or more frequently as needed)</i>.</p>			x	x	x
18.09	The transport vehicle is required to have 2 exits from the patient compartment.			x	x	x	x
18.10	<p>The transport vehicle entry must allow:</p> <p>A) Unencumbered loading and unloading of a recumbent patient on a stretcher without tilting the patient greater than thirty (30) degrees.</p> <p>B) Easy access to supporting equipment.</p>			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.11	The transport vehicle must have the capability to open all passenger/ patient doors from both inside and outside of the ambulance. Exterior door hinges of patient compartment must have the capability to lock in the open position against wind and vibration.			x	x	x	x
18.12	Patient compartment shall have at least 2 windows. If transport vehicle is equipped with electric privacy glass capability, policy must define any limitations on use during transport or repositioning operations.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.13	The medical transport organization shall have a policy detailing minimum equipment and supplies that must be onboard the transport vehicle.	<p>The policy shall describe:</p> <p>A) Equipment and supplies must align with the program's Scope of Service and applicable regulatory requirements.</p> <p>B) A "Minimum Equipment List (MEL)" approved by the Civil Aviation Authority (CAA) or another agency having jurisdiction as applicable to mode of transport.</p>	<p><u>Flight Operations</u></p> <p>A minimum equipment list (MEL) is a document generated and approved for a specific airframe serial number, or a group of aircraft that are identical (<i>fleet</i>).</p> <p>It is a list of equipment that must be installed and operable for the aircraft to be considered airworthy.</p> <p>It is aircraft-specific and spells out which pieces of equipment may be inoperable while maintaining airworthiness.</p> <p>If something is found to be inoperative, the pilot uses the MEL to find the entry for that item and determines if the airplane must be grounded until that piece of equipment is fixed.</p> <p><u>Ground Operations</u></p> <p>Minimum equipment for ground ambulances is outlined by local civil EMS/Health Department regulations.</p>	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.14	All fixed-wing transport vehicles shall be equipped with emergency and hazard/safety equipment consistent with the aircraft, service area and environmental conditions.	<p>Minimum requirements include the following:</p> <ul style="list-style-type: none"> A) Emergency Locator Transmitter (ELT), hard mounted to vehicle. B) Flashlight and spare batteries. C) Fire extinguisher. D) Gloves. E) Various utility hand tools. F) Signaling devices. G) Personal flotation device (PFD) for each occupant (<i>as applicable to Civil Aviation Authority overwater operations' regulations</i>). H) Life raft 	<p>Additional safety equipment should include:</p> <ul style="list-style-type: none"> • Personal flotation devices equipped with waterproof 406 MHz GPS-enabled locator beacon. • Non-pyrotechnic signaling devices. 	x			
18.15	All rotor-wing transport vehicles shall be equipped with emergency and hazard/safety equipment consistent with the aircraft, service area and environmental conditions.	<p>Minimum requirements include the following:</p> <ul style="list-style-type: none"> A) Emergency Locator Transmitter (ELT), hard mounted to aircraft. B) Flashlight and spare batteries. C) Fire extinguisher. D) Gloves. E) Various utility hand tools. F) Signaling devices. G) Spotlight. H) Reflective clothing/vests. I) Personal flotation device (PFD) for each occupant (<i>as applicable to FAA/CAA overwater operations regulations</i>). J) Life raft (<i>as applicable to CAA overwater operations' regulations</i>). 	<p>Additional safety equipment should include:</p> <ul style="list-style-type: none"> • Non-pyrotechnic signaling devices. • Personal flotation devices equipped with waterproof 406 MHz GPS-enabled locator beacon. 	x			

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.16	All ground transport vehicles are to be equipped with emergency and hazard/safety equipment consistent with the vehicle, service area and environmental conditions.	<p>Minimum requirements include the following:</p> <ul style="list-style-type: none"> A) GPS location transmission, hard mounted in vehicle. B) Flashlight and spare batteries. C) Fire extinguisher. D) Gloves. E) Various utility hand tools. F) Signaling devices. G) Reflective clothing/vests. H) Carbon monoxide monitor with audible and optic alarm (<i>with spare batteries</i>). I) Reflective and lighted hazard markers. J) Battery jumper cables. K) Spare tire and tools for changing a tire. L) Snow tires and/or snow chains (<i>winter conditions</i>). 	<p>Additional safety equipment should include:</p> <ul style="list-style-type: none"> • Emergency location capability. • Non-pyrotechnic signaling devices. • Radiator coolant during extreme seasonal temperatures. 			x	
18.17	All aquatic transport vehicles shall be equipped with emergency and hazard/safety equipment consistent with the vehicle, service area and environmental conditions.	<p>Minimum requirements include the following:</p> <ul style="list-style-type: none"> A) Emergency Locator Transmitter (ELT), hard mounted to vessel. B) Flashlight and spare batteries. C) Fire extinguisher. D) Gloves. E) Various utility hand tools. F) Signaling devices. G) Spotlight. H) Reflective clothing/vests. I) Personal flotation device (PFD) for each occupant. J) Safety lines and access ladder. K) Mooring equipment. 	<p>Additional safety equipment should include:</p> <ul style="list-style-type: none"> • The Emergency Locator Transmitter (ELT) be a 406 MHz beacon with a 121.5 MHz-homing device. • Personal flotation devices equipped with waterproof 406 MHz GPS-enabled locator beacon. • Non-pyrotechnic signaling devices. 				x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.18	The medical transport organization shall have policy requiring all transport vehicle safety/hazard equipment be inspected weekly and prior to returning the transport vehicle to service.	<p>Policy shall require:</p> <p>A) Identification of accountable individual(s).</p> <p>B) Documentation of all inspections.</p>	Procedure should utilize checklists and visual markers to indicate completion of inspections. This is to ensure all required maintenance, safety, equipment, and medical supply checks are performed, completed, and verified.	x	x	x	x
18.19	The medical transport organization shall have policy detailing required survival equipment to be maintained in the transport vehicle and on crewmembers consistent with service area climate and geography.	<p>Policy will identify:</p> <p>A) Contents of survival kit and checklist.</p> <p>B) Individual(s) responsible for stocking the survival kit.</p> <p>C) Individual(s) responsible for ensuring the survival kits are in the transport vehicle.</p> <p>D) Individual(s) responsible for checking for expired items.</p>		x	x	x	x
18.20	The medical transport organization shall have policy requiring over-/on-water operations comply with applicable regulatory-defined use personal flotation devices (PFDs).	<p>PFD policy shall include:</p> <p>A) USCG-approved (<i>or equivalent</i>), in good and serviceable condition, and of the appropriate size for the intended user.</p> <p>B) Worn by all crewmembers and passengers during over-/on-water portion of mission (<i>as applicable and defined by CAA/USCG regulations</i>).</p> <p>C) Case-by-case evaluation to determine if patient is able to don/doff PFD.</p>		x	x		x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.21	The medical transport organization shall ensure transport crewmembers are issued a Helicopter Emergency Egress Device (HEED) for all overwater operations.				x		
18.22	The medical transport organization shall require the transport vehicle exterior be kept clean and free of sharp edges, defects, corrosion, seal/joint cracks and window/windshield chips and cracks.			x	x	x	x
18.23	Ground and aquatic ambulance vehicle exterior must include regulatory lettering, emblems, and markings.	<p>These ambulance exteriors shall include:</p> <p>A) The name of the medical service or logo is clearly visible on the sides and rear of the ambulance using a color that contrasts with the surrounding vehicle background.</p> <p>B) The word “AMBULANCE” on both sides and on either the front or rear of the ambulance.</p> <p>C) Star-of-Life emblem.</p> <p>D) Reflective markings on all sides of the ambulance.</p> <p>E) “No Smoking” signage.</p>	<p>Front lettering on ground ambulances should be in mirror-image.</p> <p>Signs may utilize universal symbols or written language.</p>			x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.24	Transport vehicle lettering, emblems, and markings shall include "No Smoking" signage.		Signs may utilize universal symbols or written language. The name of the medical service or logo is clearly visible on the sides of the ambulance using a color that contrasts with the surrounding vehicle background.	x	x		
18.25	The transport vehicle be equipped with exterior flood and load lights to provide safe loading and unloading of patient and all passengers.					x	x
18.26	All exterior access doors and storage compartments shall have internal lighting.		Internal lights in the helicopter exterior aft storage compartments.			x	x
18.27	The transport vehicle will have a rotatable external search light which is movable 180 degrees and capable of being controlled from inside the aircraft.				x		x
18.28	Exit doors and storage compartments shall have latches with locks per manufacturer's standards.			x	x	x	x
18.29	The medical transport organization shall ensure transport vehicle has back-up medical gas supply on board.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.30	The organization shall be able to supply and manage the delivery of medical gases on the transport vehicle.	<p>Delivery of medical gasses include:</p> <p>A) A variety of administration devices (<i>i.e., nasal cannula, face masks</i>).</p> <p>B) Pressure gauges are readily accessible to crew members.</p> <p>C) Labeled gas outlets.</p> <p>D) Ability to control the flow at or near the medical gas source. Any shut-off tools required must be stored near the shut-off point.</p>		x	x	x	x
18.31	<p>The medical gas storage compartment shall:</p> <p>A) Be free of electrical connections and/or terminals except as required for the delivery of medical gases (<i>i.e., medical gas supply switches or solenoids</i>).</p> <p>B) Not be used for storage of any other equipment and must be labeled to indicate the gases that are onboard.</p>			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.32	Transport vehicle interior must be equipped and medically configured for patient care.	<p>The interior of the vehicle shall be:</p> <p>A) Fully operated as an ambulance.</p> <p>B) Allow medical crew full access to the patient in providing all required patient care as defined by the organization's Scope of Service, including—</p> <p>i) Airway stabilization and management.</p> <p>ii) Maternal birthing procedures (<i>as applicable</i>).</p> <p>C) Allow medical crew to remain securely restrained while providing patient care.</p>		x	x	x	x
18.33	<p>The transport vehicle shall be equipped with a dual battery source providing back-up electrical power to both the vehicle and the medical equipment.</p> <p>Backup power sources, such as batteries and charging cables must be available for all portable equipment used in transport.</p>			x	x	x	x
18.34	All external auxiliary power outlets on the transport vehicle must incorporate an outlet cover.		Outlet covers protect against exposure of electrical outlets to water, snow, dust, etc. Outlet covers should be either spring-loaded or locking.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.35	The transport vehicle shall be equipped with an AC inverter and electrical outlets necessary to charge and operate any portable medical equipment.	<p>The inverter must be:</p> <p>A) Tested and certified capable of charging or operating the equipment within the designated amperage load of the vehicle electrical system.</p> <p>B) Approved by the applicable regulatory agencies (<i>i.e., FAA/CAA, EMS agency, Coast Guard or authority having jurisdiction</i>).</p>		x	x	x	x
18.36	The transport vehicle must be equipped with an alternator and battery capable of operating for two (2) hours at full output with inverter.			x	x	x	x
18.37	All transport vehicle switches, controls and instrument displays shall be labeled and have backlighting to allow for ease of function and identification.			x	x	x	x
18.38	The transport vehicle shall be equipped with visual or audible warning indicators for any open exterior compartment or entrance door.			x	x	x	
18.39	A backup lighting system and power source must be available in the event of a power failure on the transport vehicle.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.40	The transport vehicle must provide enough interior lighting to appropriately assess the patient (<i>vital signs, skin color and pupillary reflexes</i>), see monitor/equipment displays, and provide needed medical care.	<p>Interior lights must be:</p> <p>A) Controllable from both the patient compartment and/or cockpit/forward cab compartment.</p> <p>B) Compliant with the light spectrum specified by applicable regulatory requirements.</p> <p>C) (<i>Rotor</i>) Operations utilizing Night Vision Goggles/Devices (NVG/D) must be NVG/D-compatible.</p>		x	x	x	x
18.41	The transport vehicle shall be equipped with a carbon monoxide (CO) monitor in the patient compartment.	<p>The organization shall have policy requiring:</p> <p>A) Monthly check of CO monitor to ensure proper function.</p> <p>B) Documentation of checks.</p> <p>C) Identify accountable individual(s) for performing checks.</p>		x		x	
18.42	The transport vehicle must have partitioning curtains or a door available between the patient and operator compartments to preserve the pilot/driver/helmsman's night vision capabilities and provide for "sterile cockpit/cab" conditions.	<p>If a door partition is utilized, the door must:</p> <p>A) Have an opening or window to allow communication between forward cab and patient compartment.</p> <p>B) Be able to be opened from both sides.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.43	The transport vehicle must have communications equipment compliant with state/local/national regulatory requirements.	<p>Communications equipment must:</p> <p>A) Include both hard-mounted (fixed) and portable devices.</p> <p>B) Include 2 alternate forms of FCC-licensed communication devices (<i>i.e.</i>, 2-way radios, telephones).</p>		x	x	x	x
18.44	The organization shall ensure each transport vehicle and crews have the means of rapid and reliable two-way communication with area (<i>as applicable to scope of service</i>).	<p>As applicable:</p> <p>A) Communications or dispatch centers.</p> <p>B) Air traffic controllers.</p> <p>C) EMS and law enforcement agencies.</p> <p>D) Medical Directors or Control Physicians.</p> <p>E) Harbor masters.</p>		x	x	x	x
18.45	The transport vehicle shall have an onboard intercom system that allows all crewmembers to communicate freely with each other.			x	x	x	x
18.46	The medical transport organization shall ensure headsets are available onboard fixed-wing transports for each crewmember and patient.	<p>Headsets must:</p> <p>A) Have microphones and earphones to allow communication between crewmembers.</p> <p>B) Be clean and well-maintained.</p>	Passengers should also be provided with headsets to facilitate communication with medical crew.	x			x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.47	The transport vehicle must be equipped with a radio antenna compliant with FCC regulations (<i>or national equivalent</i>).			x	x	x	x
18.48	The medical transport organization shall obtain a Maritime Mobile Service Identity (MMSI) number.						x
18.49	The organization shall ensure fixed-wing ambulance aircraft be equipped with navigational instruments and weather detection equipment approved by, and in compliance to applicable Civil Aviation Authority (CAA).	<p><u>Fixed-wing</u> equipment includes:</p> <p>A) Sensitive Altimeter Adjustable for Barometric Pressure</p> <p>B) Cockpit Voice Recorder (CVR)</p> <p>Additional <u>Rotor-wing</u> equipment includes:</p> <p>A) Radio Altimeter</p> <p>B) Helicopter Terrain Awareness and Warning System (HTAWS)</p> <p>C) Installed Flight Data Monitoring System (FDMS)</p>	<p>Where not required by relevant Civil Aviation Authority (CAA) provisions, best practices for fixed-wing flight operations should also incorporate:</p> <ul style="list-style-type: none"> Global Navigation Satellite System (GNSS) Airborne Collision Avoidance System (ACAS), ADS-B Terrain Awareness and Warning System (TAWS) Cockpit Voice Recorder (CVR) <p>Additional for Rotor-wing operations:</p> <ul style="list-style-type: none"> Airborne Thunderstorm Detection Equipment or Weather Radar Equipment. Night Vision Imaging System (NVIS). <p>Organizations are encouraged to incorporate <i>Flight Operations Quality Assurance (FOQA)</i> processes as part of the organization's Risk and Safety Management System.</p>	x	x		

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.50	Aquatic ambulances must be equipped with navigational aids.	<p>Navigational aids will include:</p> <ul style="list-style-type: none"> A) USCG-approved navigational lighting markers. B) Lighted Compass C) Navigational Radar D) Depth Sonar E) Automatic Directional Finder (ADF) 	<p>NAAMTA recommends the use of navigational aids, such as:</p> <ul style="list-style-type: none"> • Side-scanning style depth sonar • Global Navigation Satellite System (GNSS). 				x
18.51	The transport vehicle must be equipped with climate control capabilities to maintain internal temperatures and ventilation for proper comfort and safe care.	<p>Climate control capabilities must include:</p> <ul style="list-style-type: none"> A) Air flow ventilation. B) Adjustable directional air flow vents. 	<p>Interior transport vehicle temperatures should be maintained between 60-75 (15-24 <i>Celsius</i>) degrees to:</p> <ul style="list-style-type: none"> • Optimize patient medical status, comfort, and well-being. • Minimize passenger and crew physical stressors and fatigue. 	x	x	x	x
18.52	The transport vehicle interior configuration shall integrate covered storage compartments to secure supplies and equipment and protect against cross contamination. Interior surfaces are to be smooth to facilitate cleaning.		Interior storage compartments should have transparent doors to facilitate easy identification of contents.	x	x	x	x
18.53	The medical transport organization shall have a policy requiring a locking interior storage compartment for medications within the patient compartment.			x	x	x	x



Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.54	The transport vehicle shall be equipped with a minimum of 3-point restraints in all permanent seat positions. Seat belt extenders must be available onboard.		Over-the-shoulder 4-point restraint systems should be utilized for crewmembers in the patient compartment.	x	x	x	
18.55	The medical transport organization shall have policy requiring all passengers and crewmembers wear seatbelts while transport vehicle is in motion.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.56	The transport stretcher must comply with state/national laws, and regulatory entities.	<p>Transport Stretchers shall:</p> <p>A) Be constructed of material that allows for proper cleaning and disinfection of dirt and biohazardous substances.</p> <p>B) Provide adequate support and rigidity for performing CPR (<i>or have a backboard readily available</i>).</p> <p>C) Be designed for use in company's transport vehicle(s).</p> <p>D) Be certified and labeled with the manufacturer's weight limitation.</p> <p>E) Be able to lock the head of stretcher in elevated position for patient care and comfort.</p> <p>F) Have a multi-level locking and quick-release mechanism designed for ambulances.</p> <p>G) Secured with patient head forward. (<i>If unable to have the head forward, a foot block must be utilized to prevent patient from sliding in the event of a sudden stop or crash</i>).</p> <p>H) Comply with local or national EMS, Department of Transportation, and ambulance regulatory requirements.</p>		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.57	The transport vehicle shall have locking, crash-stable fastener mechanism of the quick-release type utilized to secure patient stretcher to ambulance floor or medical deck. Fasteners must prevent any movement of stretcher when ambulance in motion.			x	x	x	x
18.58	All steps and walkways are required to be: A) Constructed with non-absorbent, anti-slip floor coverings and step edges. B) Free of peeling, cracks, and loose step edging.			x	x	x	x
18.59	Transport vehicle walkways must remain clear of obstacles and be wide enough to allow crew to walk unencumbered from head to foot of the stretcher.			x		x	x
18.60	All passenger and patient compartments must have "Fasten Seatbelts" signs visible from each seated position.		Signs may utilize universal symbols or written language.	x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.61	The transport vehicle is required to label the following for easy identification: A) All controls, switches, gauges, and instrument displays are necessary for the operation of the ambulance. B) Interior storage compartments.			x	x	x	x
18.62	The transport vehicle is required to have stabilizer grab rails/handles.	Grab rails and handles must be located: A) At each entrance/exit. B) Near steps and climbing locations. C) In patient compartment and walk-ways.				x	x
18.63	The cockpit/forward cab must provide the pilot/driver/helmsman a minimum 180-degree unobstructed view of surroundings while maneuvering the transport vehicle.			x	x	x	x
18.64	All partitions, radios, electronic navigational and record-keeping devices must be mounted in a manner so as not to interfere with operating the transport vehicle.			x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.65	All maneuvering controls, navigation devices and operational system switches will be within easy reach of the seat-belted pilot, driver, or helmsman.	Navigational and operational system switches to Include: A) Radio and communication devices. B) Navigational devices, lights, and markers. C) Interior/exterior lights. D) Emergency lights. E) Electronic audible warning sirens, horns, and public-address system. F) Fuel, oxygen, and electrical/inverter shut-off switches.	NAAMTA recommends installing a hands-free capability to allow for manipulating the siren tone.	x	x	x	x
18.66	The head-strike envelope in the transport vehicle shall be clear of hard objects that could cause injury.		Head-strike zone should allow 20 inches (50 cm) in front of the head and 14 inches (35 cm) to the side.	x	x	x	x
18.67	The transport vehicle must have disposable waste receptacles. Waste containers must be secured and covered.			x	x	x	x
18.68	The transport vehicle must have disposable, puncture-proof sharps containers.	Sharps containers must be secured and covered to: A) Prevent spillage in the event of an accident. B) Inhibit access to contents.		x	x	x	x

Ref#	Standard	Requirements	Additional Guidance	F	R	G	A
18.69	All electrical sirens, horns and public address speakers on transport vehicles are to be: A) Housed in directional shrouds to minimize internal noise levels. B) Audible from 360-degrees at all times.					x	x
18.70	The transport vehicle is required to be equipped with emergency warning lights on all sides of the ambulance and visible from 360 degrees at all times.	Emergency lights (<i>rotating or flashing</i>) must comply with state/local regulations (<i>or national equivalency</i>).				x	x

Notes

Appendix A: Human Patient Simulator Training

In Human Patient Simulators (HPS) may be substituted for live-or cadaver-training requirements as part of the medical transport organization's comprehensive training program. Any training utilizing HPS shall comply with the following expectations.

GENERAL CRITERIA

- A) HPS shall be utilized in conjunction with the company's approved training program incorporating curriculum and skills-assessment processes, including —
 - i) Written course syllabus with:
 - a) Summary overview
 - b) Measurable learning objectives
 - c) Outline of concepts to be taught and reviewed, and
 - d) Detailed written patient training scenarios.
 - ii) Patient care scenarios that are:
 - a) Realistic, complex, and multifaceted.
 - b) Applicable to patient population as defined in company's scope of services; (*i.e., adult, pediatric, specialty care, multiple-patient transports, etc.*).
 - c) To provide opportunities for participants to practice and develop critical-thinking skills in patient assessment, identification of medical conditions, administration of patient care treatments/procedures, and evaluation of patient outcomes.
 - iii) Didactic resource materials as well as tools for evaluating knowledge and psychomotor skill competency of concepts taught. Written materials are to be provided to each student.
- B) HPS-based training courses shall allow participants time to become familiar with the HPS in the transport environments relevant to the organization's scope of services and modes of transport.
- C) HPS training shall be conducted under the supervision of personnel trained in the operation of HPS equipment, software platform, scenario algorithms, and educational processes.
- D) HPS training shall be documented and retained on file in accordance with the organization's records retention policy.



HPS EQUIPMENT

- A) HPS mannequins and peripheral equipment are to be stored and maintained in good working condition such as to provide realistic and real-time interaction with course participants.
- B) Annual evaluation and maintenance of HPS equipment with current evidence-based standard of care algorithms (*as made available by manufacturer*).
- C) HPS shall have an integrated software platform capable of creating variable clinical scenarios and real-time physiologic responses based on student's clinical decision-making and input, including—
 - i) **Real-time Monitoring:** Vital signs, cardiac rhythm, breath sounds, pulse, oxygen saturation, end-tidal CO₂, etc.
 - ii) Positioning of patient
 - iii) Cardio-pulmonary resuscitation (CPR), defibrillation, and cardiac pacing.
 - iv) Rescue breathing (*BVM or mouth-mouth*), and advanced mechanical ventilatory support
 - v) **Invasive procedures:** Advanced airway placement and management, IVs, chest tubes, central venous lines.
 - vi) Pharmacologic and fluid therapies.

Appendix B: Medical Equipment Lists

Medical Equipment Requirements – BLS Transports

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1. Medical equipment and supplies required for Basic Life Support (BLS) transports must align with a BLS-level of care as defined NAAMTA Global. Equipment and supplies must be provided for the patient population as described in program's Scope of Service.
2. Additional medical equipment and supplies must comply with applicable local/national EMS, Department of Health, other regulatory agency, or government contractual requirements.

(Single-use, disposable items are marked in blue).

Basic Life Support – Transport	
GENERAL EQUIPMENT	
Stretcher (<i>FAA/CAA-approved</i>)	
Car seat (<i>FAA/CAA-approved</i>)	
Flashlight & batteries	
Heavy-duty bandage scissors	
Linens	
▪	Blankets
▪	Sheets
▪	Towels
Pillows (<i>disposable or vinyl covered</i>)	
Pediatric length/weight-based calculation tape	
Pediatric reference materials	
Toileting & hygiene containers	
▪	Emesis basin
▪	Urinals (<i>1 male, 1 female, or universal</i>)
▪	Bedpan
Obstetric Kit	
Ring cutters	
Safety razor	
Battery supply w/ charger for 1.5 x length of transport	
Electrical outlet adapters/converters (<i>as applicable for international transports</i>)	
IMMOBILIZATION DEVICES	
Cervical collars, rigid	
Head immobilization device (<i>not sandbags</i>)	
Rigid short- & full-body backboard w/ restraints (<i>wood must be coated or sealed</i>)	
Splints, assorted sizes	

Basic Life Support – Transport	
Traction device, lower extremity	
Upper and lower extremity immobilization device	
MONITORING & DEFIBRILLATION	
Blood pressure monitor, non-invasive (<i>digital or manual</i>) and cuffs	
Defibrillator (<i>AED or Heart rate monitor/defibrillator unit</i>) with electrodes, cables, pads	
Glucometer w/ lancets and reagent strips	
Heart rate monitor	
Oxygen saturation monitor/pulse oximetry w/ patient probes	
Stethoscope	
Thermometer (<i>non-mercury</i>)	
CIRCULATION & VASCULAR ACCESS	
Antiseptic prep wipes	
Tourniquet	
Tuberculin syringes/needles	
AIRWAY & VENTILATION	
Airways	
▪ Oropharyngeal (<i>size 0-5</i>)	
▪ Nasopharyngeal (<i>16F-34 Fr</i>)	
Suction	
▪ Electric vacuum-powered suction apparatus w/ adjustable regulator	
▪ (<i>0 - ≥ 300mmHg of suction</i>), (<i>wall-mount and portable</i>)	
▪ Power/charger cord	
▪ Wide-bore extension suction tubing	
▪ Disposable suction cannister	
▪ Rigid pharyngeal suction tip	
▪ Bulb syringe w/ saline drops	
Ventilation	
▪ Bag-valve masks	
▪ Self-inflating resuscitation bag with reservoir “tail”	
• Adult: >1000ml	
• Pediatric: 450-750ml	
▪ Pressure manometer	
Oxygen Administration	
▪ Hospital-grade, metered, compressed oxygen apparatus (<i>fixed and portable</i>)	
▪ Regulator shut-off key	
▪ Variable-flow regulators (<i>1-5 L/minute flow meter</i>)	
▪ Oxygen extension tubing	

Basic Life Support – Transport	
▪	Oxygen masks (<i>non-rebreather</i>)
▪	Nasal cannulas
INFECTION CONTROL	
	Disinfectant solutions, OSHA-approved (<i>for cleaning transport vehicle</i>)
	Eye protection (<i>for each crewmember</i>)
▪	Goggles/glasses
▪	Face shield
	Face protection/shield (<i>for each crewmember</i>)
	Hand sanitizer
	Gloves, non-latex (<i>sterile and non-sterile</i>)
	Gowns or coveralls
	Masks
▪	Simple surgical masks
▪	N95 masks (<i>N100 for hemorrhagic diseases</i>)
	Shoe covers
	Sharps container
	Trash bags (<i>biohazard-labeled</i>)
MEDICATIONS	
	Activated Charcoal 25gm
	Aspirin, chewable 81 mg (<i>minimum 8 tablets</i>)
	Epinephrine auto-injectors twin-pak (<i>one standard and one junior</i>)
	Intranasal mucosal atomizer adapter/syringe
	Irrigation Solution, sterile 500cc
	Lubricating jelly (<i>water-based</i>)
	Naloxone HCL 2mg (<i>Intranasal use only</i>)
	Oral Glucose tablets/gel concentrated
WOUND CARE	
	Adhesive tapes (<i>assorted sizes, hypoallergenic, non-latex</i>)
	Dressings of assorted sizes (<i>Commercially-packaged, sterile</i>)
	Gauze pads and rolls
	Occlusive transparent dressings (<i>i.e., Opsite®, Tegaderm®</i>)
	Self-adhesive bandages, assorted sizes (<i>i.e., Band-aids®</i>)
	Self-adhering dressings (<i>i.e., Coban®</i>)
	Triangular bandages
	Universal sterile dressings/ABD (<i>small, medium and large</i>)

Basic Life Support – Transport	
TEMPERATURE CONTROL	
	Ice packs
	Heat packs
	Mylar blanket
OPTIONAL BLS EQUIPMENT/SUPPLIES*	
	Automated/mechanical chest compression device*
	Direct pressure hemorrhage control device*
	Inflatable back raft or whole-body vacuum splint*
	Medications: *
	▪ Acetaminophen (elixir or 325mg pills) *
	▪ Hemostatic gauze or agent*
	▪ Ibuprofen (elixir or 200mg pills) *
	▪ Nerve Antidote Kits (Mark I Kits® or DuoDote®) *
	Pneumatic anti-shock garment*
	Post-mortem bag*
	Transcutaneous carbon monoxide detector*
	Variable-flow regulators, <1 L/minute flow*

Medical Equipment Requirements – ALS Transports

1. Medical equipment and supplies required for Advanced Life Support (ALS) transports must align with an ALS-level of care as defined NAAMTA Global. Equipment and supplies must be provided for the patient population as described in program's Scope of Service.
2. Additional medical equipment and supplies must comply with applicable local/national EMS, Department of Health, other regulatory agency, or government contractual requirements.

(Single-use, disposable items are marked in blue).

Advanced Life Support – Transport	
GENERAL EQUIPMENT	
Stretcher (FAA/CAA-approved)	
Car seat (FAA/CAA-approved)	
Pediatric restraint device (i.e., <i>Pedi-Mate®</i>)	
Flashlight & batteries	
Heavy-duty bandage scissors	
Linens	
▪ Blankets	
▪ Sheets	
▪ Towels	
Pillows (<i>disposable</i> or vinyl covered)	
Pediatric length/weight-based calculation tape	
Pediatric reference materials	
Toileting & hygiene containers	
▪ Emesis basin	
▪ Urinals (<i>1 male, 1 female, or universal</i>)	
▪ Bedpan	
Obstetric Kit	
Ring cutters	
Safety razor	
Battery supply w/ charger for 1.5 x length of transport	
Electrical outlet adapters/converters (<i>as applicable for international transports</i>)	
IMMOBILIZATION DEVICES	
Cervical collars, rigid	
Full-body pediatric immobilization device	
Head immobilization device (<i>not sandbags</i>)	
Rigid short- & full-body backboard w/ restraints (<i>wood must be coated or sealed</i>)	
Splints, assorted sizes	
Traction device, lower extremity	
Upper and lower extremity immobilization device	

Advanced Life Support – Transport	
MONITORING & DEFIBRILLATION	
	Blood pressure monitor, non-invasive (<i>digital or manual</i>) and cuffs
	Defibrillation/Cardioversion/Transcutaneous pacing device with paddles, cable, electrodes, pads
	ECG monitor, multi-lead with rhythm strip recorder, cable, electrodes w/ patches , ECG paper
	Glucometer w/ lancets and reagent strips
	Oxygen saturation monitor/pulse oximetry w/ patient probes
	Stethoscope
	Thermometer (<i>non-mercury w/ hypothermia temperature capability</i>)
CIRCULATION & VASCULAR ACCESS	
	Arm boards
	Antiseptic prep wipes
	IV start kits
	Over-the-needle catheters (14-24G)
	Needles (14-24G)
	IO needles (15/16, 18G)
	IO device (<i>i.e., EZ-IO®</i>) *
	Syringes:
	▪ Luerlock and non-Luerlock (1cc, 3cc, 10cc, 60cc)
	▪ Cath-tip syringes (30cc and 60cc)
	▪ Tuberculin w/ needles
	IV fluid administration tubing
	▪ IV pump tubing
	▪ IV drip tubing (macro and micro drip)
	▪ Extension tubing
	IV solutions
	▪ Normal Saline (injection and inhalation)
	▪ Normal Saline 4000cc
	▪ Ringers Lactate 4000cc
	IV infusion pumps, portable w/ charger cord (<i>combo or individual pumps, minimum 3 simultaneous infusions</i>)
	IV fluid pressure bags
	3-way stopcocks
	Luerlock hub adapters
	Tourniquet
AIRWAY & VENTILATION	
	Airways
	▪ Oropharyngeal (size 0-5)

Advanced Life Support – Transport	
▪	Nasopharyngeal (16F-34 Fr)
▪	Endotracheal
•	Laryngoscope handle (with spare batteries and bulbs)
•	Laryngoscope blades
–	Straight (sizes 0-4)
–	Curved (sizes 2-4)
•	Magill forceps
•	ETTs with stylets/bougie device
–	Uncuffed (2.5-5.5mm)
–	Cuffed (3.5-8mm)
▪	Supraglottic airways (sizes 1-6)
▪	Cricothyrotomy kit
	ETT tape or clamp device
	End-tidal CO ₂ detector (colorimetric and quantitative capnography), cable, in-line adapters
	Suction
▪	Electric vacuum-powered suction apparatus w/ adjustable regulator
▪	(0 - ≥ 300 mmHg of suction)
▪	Power/charger cord
▪	Disposable suction cannister
▪	Wide-bore extension suction tubing
▪	Rigid pharyngeal suction tip
▪	Suction catheters (5-14Fr)
•	Sterile suction catheter/glove kits
•	In-line, closed system suction catheters
▪	Bulb syringe w/ saline drops
▪	Meconium aspirator adaptor
	Ventilation
▪	Bag-valve masks
▪	Self-inflating resuscitation bag with reservoir “tail”
•	Adult size (≥ 1000 ml)
•	Pediatric size (450-750ml)
▪	Pressure manometer
▪	Transport ventilator, charger cord, pressure circuits
▪	PEEP valves
▪	Humidifier adapters (neonatal)
	Oxygenation administration
▪	Hospital-grade, metered, compressed oxygen apparatus (fixed and portable)

Advanced Life Support – Transport	
▪ Regulator shut-off key	
▪ Variable-flow regulators	
• 1-5 L/minute flow meter	
• < 1 L/minute low-flow meter	
▪ Oxygen extension tubing	
▪ Oxygen masks	
• Non-rebreather	
• Partial-rebreather	
• Simple	
• Venturi	
▪ Nasal cannulas	
▪ Humidifiers	
Oro-gastric tubes (6-18 Fr)	
Nebulizer/aerosolized administration chamber/circuit	
Needle thoracentesis kit	
Tongue blades	
INFECTION CONTROL	
Disinfectant solutions, OSHA-approved (<i>for cleaning transport vehicle</i>)	
Eye protection (<i>for each crewmember</i>)	
▪ Goggles/glasses	
▪ Face shield	
Face protection/shield (<i>for each crewmember</i>)	
Hand sanitizer	
Gloves, non-latex (<i>sterile and non-sterile</i>)	
Gowns or coveralls	
Masks	
▪ Simple surgical masks	
▪ N95 masks (<i>N100 for hemorrhagic diseases</i>)	
Shoe covers	
Sharps container	
Trash bags (<i>biohazard-labeled</i>)	
MEDICATIONS	
Activated Charcoal 25gm	
Albuterol Sulfate 2.5mg (<i>premixed</i>)	
Aspirin, chewable 81 mg (<i>minimum 8 tablets</i>)	
Atropine Sulfate 1mg	
Benzodiazepine (<i>midazolam, diazepam or lorazepam</i>)	

Advanced Life Support – Transport
Dextrose 50% (<i>preload</i>)
Diphenhydramine IV 50mg
Dopamine HCL 400mg <i>or</i> 2mcg/ml Epinephrine drip (<i>2cc Epinephrine 1:1,000 in 1000cc LR or NS</i>)
Epinephrine 1:1000 15mg
Epinephrine 1:10,000 1mg
Glucagon 2mg
Intranasal mucosal atomizer adapter/syringe
Irrigation Solution, sterile 500cc
Lidocaine <i>or</i> Amiodarone (<i>or both</i>)
Lubricating jelly (<i>water-based</i>)
Naloxone HCL 2mg (<i>Intranasal use only</i>)
Nitroglycerine bottle 0.4mg (<i>tablets or spray</i>)
Oral Glucose 15grams (<i>tablets or gel concentrate</i>)
Pain medication (<i>nitrous oxide, morphine, nalbuphine, fentanyl, hydromorphone or meperidine</i>)
Promethazine HCL 25mg <i>or</i> Ondansetron 8mg (<i>or both</i>)
Sodium Bicarbonate 50mEq
WOUND CARE
Adhesive tapes (<i>assorted sizes, hypoallergenic, non-latex</i>)
Burn sheets
Dressings of assorted sizes (<i>Commercially-packaged, sterile</i>)
Gauze pads and rolls
Occlusive transparent dressings (<i>i.e., Opsite®, Tegaderm®</i>)
Self-adhesive bandages, assorted sizes (<i>i.e., Band-aids®</i>)
Self-adhering dressings (<i>i.e., Coban®</i>)
Triangular bandages
Universal sterile dressings/ABD (<i>small, medium and large</i>)
TEMPERATURE CONTROL
Ice packs
Heat packs
Mylar blanket

OPTIONAL ALS EQUIPMENT/SUPPLIES*	
Automated/mechanical chest compression device*	
BiPAP/CPAP device*	
Demand valve, manually triggered ventilatory device*	
Direct pressure hemorrhage control device*	
Full-body substance isolation protection (<i>for each crewmember</i>)*	
Impedance threshold device*	
Inflatable back raft*	
Lab supplies:*	
▪ Vacutainer holder*	
▪ Vacutainer multiple sample luer adapters*	
▪ Vacutainer tubes*	
Medications:*	
▪ Acetazolamide*	
▪ Acetic acid (<i>vinegar</i>)*	
▪ Acetaminophen*	
▪ Acetylcysteine*	
▪ Adenosine*	
▪ Amiodarone*	
▪ Calcium Chloride*	
▪ Calcium Gluconate*	
▪ Cimetidine*	
▪ CyanoKit*	
▪ Dexamethasone*	
▪ Diazepam*	
▪ Diltiazem*	
▪ Droperidol*	
▪ Famotidine*	
▪ Fentanyl*	
▪ Furosemide*	
▪ Haloperidol*	
▪ Heliox*	
▪ Hemostatic gauze or agent*	
▪ Hydralazine*	
▪ Hydrocortisone Succinate*	
▪ Hydromorphone*	
▪ Ibuprofen*	
▪ Ipratropium bromide (<i>nebulized</i>)*	
▪ Ketamine*	

OPTIONAL ALS EQUIPMENT/SUPPLIES*	
▪ Ketoralac*	
▪ Labetalol*	
▪ Lidocaine (<i>IV for cardiac use</i>)*	
▪ Lorazepam*	
▪ Magnesium Sulfate*	
▪ Meperidine*	
▪ Methylprednisone*	
▪ Metoclopramide*	
▪ Metoprolol*	
▪ Midazolam*	
▪ Morphine Sulfate*	
▪ Nalbuphine*	
▪ Nerve agent antidote kit *	
▪ Nifedipine*	
▪ Nitrous oxide (<i>w/ administration equipment</i>)*	
▪ Norepinephrine*	
▪ Olanzapine*	
▪ Ondansetron*	
▪ Oxymetazoline*	
▪ Oxytocin*	
▪ Potassium iodide*	
▪ Pralidoxime chloride (<i>2-PAM</i>)*	
▪ Procainamide*	
▪ Prochlorperazine*	
▪ Propofol*	
▪ Sildenafil*	
▪ Sodium Bicarbonate*	
▪ Sorbitol*	
▪ Tadalafil*	
▪ Vasopressin*	
▪ Vecuronium*	
▪ Ziprasidone*	
Morgan lens (<i>or equivalent</i>)*	
Needless IV system*	
Pneumatic anti-shock garment*	
Point-of-Care blood chemistry testing device <i>w/ cartridges</i> *	
Portable ultrasound device*	
Post-mortem bag*	



OPTIONAL ALS EQUIPMENT/SUPPLIES*	
Sonographic doppler*	
Transcutaneous carbon monoxide detector*	
Video laryngoscope*	

Medical Equipment Requirements – Critical Care Transports

1. Medical equipment and supplies required for Critical Care Life Support (CC) transports must align with a CC-level of care as defined NAAMTA Global. Equipment and supplies must be provided for the patient population as described in program's Scope of Service.
2. Additional medical equipment and supplies must comply with applicable local/national EMS, Department of Health, other regulatory agency, or government contractual requirements.

(Single-use, disposable items are marked in blue).

Critical Care – Transport	
GENERAL EQUIPMENT	
Stretcher <i>(FAA/CAA-approved)</i>	
Car seat <i>(FAA/CAA-approved)</i>	
Pediatric restraint device <i>(i.e., Pedi-Mate®)</i>	
Flashlight & batteries	
Heavy-duty bandage scissors	
Linens	
▪ Blankets	
▪ Sheets	
▪ Towels	
Pillows <i>(disposable or vinyl covered)</i>	
Pediatric length/weight-based calculation tape	
Pediatric reference materials	
Toileting & hygiene containers	
▪ Emesis basin	
▪ Urinals <i>(1 male, 1 female, or universal)</i>	
▪ Bedpan	
▪ Foley catheters <i>(12-18 Fr)</i>	
▪ Rectal tube	
Obstetric Kit	
Ring cutters	
Safety razor	
Battery supply w/ charger for 1.5 x length of transport	
Electrical outlet adapters/converters <i>(as applicable for international transports)</i>	
IMMOBILIZATION DEVICES	
Cervical collars, rigid	
Full-body pediatric immobilization device	
Head immobilization device <i>(not sandbags)</i>	
Rigid short- & full-body backboard w/ restraints <i>(wood must be coated or sealed)</i>	
Splints, assorted sizes	

Critical Care – Transport
Traction device, lower extremity
Upper and lower extremity immobilization device
MONITORING & DEFIBRILLATION
Blood pressure monitor
<ul style="list-style-type: none"> Non-invasive (<i>digital or manual</i>) and cuffs Invasive central line pressure monitoring w/ cable, transducers, pressure lines
Defibrillation/Cardioversion/Transcutaneous pacing device with paddles, cable, electrodes, pads
Trans-venous pacemaker w/ adjustable rate and milliamp settings
ECG monitor, multi-lead with rhythm strip recorder, cable, electrodes w/ patches, ECG paper
Glucometer w/ lancets and reagent strips
Oxygen saturation monitor/pulse oximetry w/ patient probes
Stethoscope
Thermometer (<i>non-mercury w/ hypothermia temperature capability</i>)
Temperature probe for esophageal or rectal use
Point-of-Care blood chemistry testing device w/ cartridges
CIRCULATION & VASCULAR ACCESS
Arm boards
Antiseptic prep wipes
IV start kits
Over-the-needle catheters (14-24G)
Needles (14-24G)
Filter needles
IO needles (15/16, 18G) and Intraosseous device
IO device (<i>i.e., EZ-IO®</i>)*
Syringes:
<ul style="list-style-type: none"> Luerlock and non-Luerlock (1cc, 3cc, 10cc, 60cc) Cath-tip syringes (30cc and 60cc) Tuberculin w/ needles
IV fluid administration tubing
<ul style="list-style-type: none"> IV pump tubing IV drip tubing (<i>macro and micro drip</i>) Extension tubing IV filters “Y” IV tubing connectors Central line transducer pressure tubing Blood infusion sets and filters
IV solutions

Critical Care – Transport	
▪	Normal Saline (<i>injection and inhalation</i>)
▪	Normal Saline 4000cc
▪	Ringers Lactate 4000cc
	IV infusion pumps, portable w/ charger cord (<i>combo or individual pumps, capable of 6 simultaneous infusions</i>)
	IV fluid pressure bags
	3-way stopcocks
	Luerlock hub adapters
	Direct pressure hemorrhage control device
	Tourniquet
AIRWAY & VENTILATION	
	Airways
▪	Oropharyngeal (<i>size 0-5</i>)
▪	Nasopharyngeal (<i>16F-34 Fr</i>)
▪	Endotracheal
	• Laryngoscope handle (<i>with spare batteries and bulbs</i>)
	• Laryngoscope blades
	– Straight (<i>sizes 0-4</i>)
	– Curved (<i>sizes 2-4</i>)
	• Magill forceps
	• ETTs with stylets/bougie device
	– Uncuffed (<i>2.5-5.5mm</i>)
	– Cuffed (<i>3.5-8mm</i>)
▪	Supraglottic airways (<i>sizes 1-6</i>)
▪	Cricothyrotomy kit
	ETT tape or clamp device
	End-tidal CO ₂ detector (<i>colorimetric and quantitative capnography</i>), cable, in-line adapters
	Suction
▪	Electric vacuum-powered suction apparatus w/ adjustable regulator (<i>0 - ≥300mmHg of suction</i>), (<i>wall-mount and portable</i>)
▪	Power/charger cord
▪	Disposable suction cannister
▪	Wide-bore extension suction tubing
▪	Rigid pharyngeal suction tip
▪	Suction catheters (<i>5-14 Fr</i>)
	• In-line, closed-system suction catheters
	• Sterile suction catheter/glove kits

Critical Care – Transport	
▪	Bulb syringe w/ saline drops
▪	Meconium aspirator adaptor
Ventilation	
▪	Bag-valve masks
▪	Self-inflating resuscitation bag with reservoir “tail”
•	Adult size ($\geq 1000\text{ml}$)
•	Pediatric size (450-750ml)
▪	Pressure manometer
▪	Transport ventilator, charger cord, pressure circuits
▪	PEEP valves
▪	Humidifier adapters (<i>neonatal</i>)
Oxygenation administration	
▪	Hospital-grade, metered, compressed oxygen apparatus (<i>fixed and portable</i>)
▪	Regulator shut-off key
▪	Variable-flow regulators
•	1-5 L/minute flow meter
•	< 1 L/minute low-flow meter
▪	Oxygen extension tubing
▪	Oxygen masks
•	Non-rebreather
•	Partial-rebreather
•	Simple
•	Venturi
▪	Nasal cannulas
▪	Humidifiers
Oro-gastric tubes (6-18 Fr)	
Nebulizer/aerosolized administration chamber/circuit	
Needle thoracentesis kit	
Pneumothorax kit	
Chest tubes (<i>adult and pediatric sizes</i>)	
Heimlich valves	
Tongue blades	
INFECTION CONTROL	
Disinfectant solutions, OSHA-approved (<i>for cleaning transport vehicle</i>)	
Eye protection (<i>for each crewmember</i>)	
▪	Goggles/glasses
▪	Face shield
Face protection/shield (<i>for each crewmember</i>)	

Critical Care – Transport
Hand sanitizer
Gloves, non-latex (<i>sterile and non-sterile</i>)
Gowns or coveralls
Masks
▪ Simple surgical masks
▪ N95 masks (<i>N100 for hemorrhagic diseases</i>)
Shoe covers
Sharps container
Trash bags (<i>biohazard-labeled</i>)
MEDICATIONS
Activated Charcoal 25gm
Adenosine
Albuterol Sulfate 2.5mg (<i>premixed</i>)
Aspirin, chewable 81 mg (<i>minimum 8 tablets</i>)
Atropine Sulfate 1mg
Benzodiazepine (<i>midazolam, diazepam or lorazepam</i>)
Dextrose 50% (<i>preload</i>)
Diphenhydramine IV 50mg
Dopamine HCL 400mg <i>or</i> 2mcg/ml Epinephrine drip (<i>2cc Epinephrine 1:1,000 in 1000cc LR or NS</i>)
Epinephrine 1:1000 15mg
Epinephrine 1:10,000 1mg
Glucagon 2mg
Intranasal mucosal atomizer adapter/syringe
Irrigation Solution, sterile 500cc
Lidocaine <i>or</i> Amiodarone (<i>or both</i>)
Lubricating jelly (<i>water-based</i>)
Naloxone HCL 2mg (<i>Intranasal use only</i>)
Nitroglycerine bottle 0.4mg (<i>tablets or spray</i>)
Oral Glucose 15grams (<i>tablets or gel concentrate</i>)
Pain medication (<i>nitrous oxide, morphine, nalbuphine, fentanyl, hydromorphone or meperidine</i>)
Promethazine HCL 25mg <i>or</i> Ondansetron 8mg (<i>or both</i>)
Sodium Bicarbonate 50mEq
WOUND CARE

Critical Care – Transport
Adhesive tapes (<i>assorted sizes, hypoallergenic, non-latex</i>)
Burn sheets
Dressings of assorted sizes (<i>Commercially-packaged, sterile</i>)
Gauze pads and rolls
Occlusive transparent dressings (<i>i.e., Opsite®, Tegaderm®</i>)
Self-adhesive bandages, assorted sizes (<i>i.e., Band-aids®</i>)
Self-adhering dressings (<i>i.e., Coban®</i>)
Triangular bandages
Universal sterile dressings/ABD (<i>small, medium and large</i>)
TEMPERATURE CONTROL
Ice packs
Heat packs
Mylar blanket

OPTIONAL CC EQUIPMENT/SUPPLIES*
Automated/mechanical chest compression device*
BiPAP/CPAP device*
Demand valve, manually triggered ventilatory device*
Full-body substance isolation protection (<i>for each crewmember</i>)*
Impedance threshold device*
Inflatable back raft*
Lab supplies:*
▪ Vacutainer holder*
▪ Vacutainer multiple sample luer adapters*
▪ Vacutainer tubes*
Medications:*
▪ Acetazolamide*
▪ Acetic acid (<i>vinegar</i>)*
▪ Acetaminophen*
▪ Acetylcysteine*
▪ Adenosine*
▪ Amiodarone*
▪ Calcium Chloride*
▪ Calcium Gluconate*
▪ Cimetidine*
▪ CyanoKit*

OPTIONAL CC EQUIPMENT/SUPPLIES*	
▪	Dexamethasone*
▪	Diazepam*
▪	Diltiazem*
▪	Droperidol*
▪	Famotidine*
▪	Fentanyl*
▪	Furosemide*
▪	Haloperidol*
▪	Heliox*
▪	Hemostatic gauze or agent*
▪	Hydralazine*
▪	Hydrocortisone Succinate*
▪	Hydromorphone*
▪	Ibuprofen*
▪	Ipratropium bromide (<i>nebulized</i>)*
▪	Ketamine*
▪	Ketoralac*
▪	Labetalol*
▪	Lidocaine (<i>IV for cardiac use</i>)*
▪	Lorazepam*
▪	Magnesium Sulfate*
▪	Meperidine*
▪	Methylprednisone*
▪	Metoclopramide*
▪	Metoprolol*
▪	Midazolam*
▪	Morphine Sulfate*
▪	Nalbuphine*
▪	Nerve agent antidote kit *
▪	Nifedipine*
▪	Nitrous oxide (<i>w/ administration equipment</i>)*
▪	Norepinephrine*
▪	Olanzapine*
▪	Ondansetron*
▪	Oxymetazoline*
▪	Oxytocin*
▪	Potassium iodide*
▪	Pralidoxime chloride (<i>2-PAM</i>)*
▪	Procainamide*

OPTIONAL CC EQUIPMENT/SUPPLIES*	
▪	Prochlorperazine*
▪	Propofol*
▪	Sildenafil*
▪	Sodium Bicarbonate*
▪	Sorbitol*
▪	Tadalafil*
▪	Vasopressin*
▪	Vecuronium*
▪	Ziprasidone*
	Morgan lens (or equivalent)*
	Needless IV system*
	Medical oxygen supply (for neonatal transports)*
	Pneumatic anti-shock garment*
	Portable ultrasound device*
	Post-mortem bag*
	Sonographic doppler*
	Suture kit*
	Transcutaneous carbon monoxide detector*
	Video laryngoscope*