

**Title 15: Mississippi Department of Health**

**Part 12: Bureau of Emergency Medical Services**

**Subpart 31: Emergency Medical Services**

**Chapter 3 AERO MEDICAL SERVICES**

**Subchapter 1 Definitions Relative to Aero Medical EMS:**

Rule 3.1.1 Advanced Life Support Care (ALSC) - a sophisticated level of pre-hospital and inter-hospital emergency care which includes basic life support functions including cardiopulmonary resuscitation (CPR), plus cardiac defibrillation, telemetered electrocardiography, administration of anti-arrhythmic agents, intravenous therapy, administration of specific medications, drugs and solutions, use of adjunctive ventilation devices, trauma care and other authorized techniques and procedures. This level of care (quantity and type of staff member(s), equipment and procedures) is consistent with a patient in a pre-hospital emergency or non-emergency incident. In addition, this level of care (quantity and type of staff member(s), equipment and procedures) is consistent with a patient in a inter-hospital incident who is in a non-acute situation and is being cared for in an environment where monitoring of cardiac rhythm, neurological status, and/or continuous infusions of anti-arrhythmic and/or vasopressors, are part of the patient's care needs.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.2 Aeromedical Physiology - (altitude physiology, flight physiology) the physiological changes imposed on humans when exposed to changes in altitude and atmospheric pressure and the physical forces of aircraft in flight. Persons whose physiologic state is already compromised may be more susceptible to these changes and the potential physiologic responses they may experience while in flight in an aircraft. It is directly related to physical gas laws and the physics of flight. See also Stressor of Flight.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.3 Air Ambulance Aircraft - a fixed-wing or rotor-wing aircraft specially constructed or modified that is equipped and designated for transportation of sick or injured persons. It does not include transport of organ transplant teams or organs.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.4 Air Ambulance Service - (service, provider) an entity or a division of an entity (sole proprietorship, partnership or corporation) that is authorized by the Federal Aviation Administration (FAA) and BEMS to provide patient transport and/or transfer by air ambulance aircraft. The patient(s) may be ambulatory or non-ambulatory and may or may not require medical intervention of basic or advanced

nature. It uses aircraft, equipped and staffed to provide a medical care environment on board appropriate to patient's needs. The term air ambulance service is not synonymous with and does not refer to the FAA air carrier certificate holder unless they also maintain and control the medical aspects that make up a complete service.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.5 Air Medical Personnel - a licensed physician, registered nurse, respiratory therapist, State of Mississippi current certified Paramedic, Critical Care Paramedic who has successfully completed a course in aeromedical physiology and flight safety training and orientation.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.6 Air Ambulance Transport System Activation - Formerly referred to as Dispatch, the term was changed to avoid conflict with the meaning in the FAR's - the process of receiving a request for transport or information and the act of allocating, sending and controlling an air ambulance and air medical personnel in response to such request as well as monitoring the progress of the transport.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.7 Authorized Representative - any person delegated by a licensee to represent the provider to county, municipal or federal regulatory officials.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.8 Aviation Crew Member - (pilot, co-pilot, and flight crew) a pilot, co-pilot, flight engineer, or flight navigator assigned to duty in an aircraft cockpit.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.9 Critical Care Life Support (CCLS) - the level of care (quantity and type of staff member(s), equipment and procedures) that is consistent with a patient who may or may not be stable and who is in an acute situation or at high risk of decompensating prior to transport. The following patient categories are included: cardiovascular, pulmonary, neurologic, traumatic injury including spinal or head injury, burns, poisonings and toxicology. These patients are being cared for in an acute care facility such as the emergency department, intensive, critical, coronary or cardiac rhythm, oxygen saturation and maintenance of continuous infusions of IV medications or control of ventilatory functions by artificial means is being performed. This level of care must be rendered by at least two air medical personnel, one of which is a Mississippi Critical Care Paramedic, registered nurse or physician. This level of care requires specific monitoring and diagnostic equipment above the advanced level.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.10 FAA - the Federal Aviation Administration.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.11 FAR - the Federal Aviation Regulation.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.12 FCC - the Federal Communications Commission.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.13 Fixed-wing Air Ambulance - (fixed-wing) a fixed-wing type aircraft that is constructed or modified to transport at least one sick or injured patient in the supine or prone position on a medically appropriate, FAA approved stretcher.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.14 Inter-facility Transfer - (transfer) the transportation of a patient, by an air ambulance service provider, initiating at a health care facility whose destination is another health care facility.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.15 Medical Director - a licensed physician (MD or DO) who is specifically designated by an air ambulance provider and has accepted the responsibility for providing medical direction to the air ambulance service. He or she must be a Mississippi licensed physician, M.D. or D.O., and show evidence of board certification in emergency medicine or board eligibility in emergency medicine. Air Ambulances which operate from or based in Mississippi, must have a System medical director whose primary practice is in Mississippi or at a Mississippi trauma center. (Air Ambulance provided from and based out-of-state must have a system medical director that is board certified in emergency medicine or board eligible in emergency medicine.) The medical director is ultimately responsible for all aspects of a service's operation which effect patient care. The medical director is responsible for assuring that appropriately trained medical personnel and equipment are provided for each patient transported and that individual aircraft can provide appropriate care environments for patients. The Air Ambulance Service Medical Director must be approved by the State EMS Medical Director.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.16 Patient - an individual who is sick, injured, or otherwise incapacitated or whose condition requires or may require skilled medical care for intervention.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.17 Permit - a document issued by BEMS indicating that the aircraft has been approved for use as an air ambulance vehicle by BEMS in the state of Mississippi.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.18 Physician - (doctor) a person licensed to practice medicine as a physician (MD or DO) by the state where the air ambulance service is located.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.19 Pilot - a person who holds a valid certificate issued by the FAA to operate an aircraft.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.20 Public Aircraft - an aircraft used only in the service of a government agency. It does not include government-owned aircraft engaged in carrying persons or property for commercial purposes.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.21 Reciprocal Licensing - (reciprocity) mutual acceptance of an air ambulance service provider's valid license to operate an air ambulance service in a state other than the one in which it is licensed.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.22 Registered Nurse - (RN) an individual who holds a valid license issued by the state licensing agency to practice professional nursing as a registered nurse.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.23 Rotor-wing Air Ambulance - (rotor-wing) a rotor-wing type aircraft that is constructed or modified to transport at least one sick or injured patient in the supine or prone position on a medically appropriate, FAA approved stretcher/litter (as per FAR Section 23.785 and 23.561). It also includes an array of medical equipment and an appropriate number of trained air medical personnel to care for the patient's needs.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.24 Specialty Care Transport (SCS) - the level of care (quantity and type of staff member(s), equipment and procedures) that is consistent with a patient whose condition requires special care specific to their age and/or diagnosis. The patient may or may not be stable or in an acute situation prior to transport. The following patient categories are included: pediatric intensive care, maternal care, neonatal intensive care and burn care. These patients are being cared for in an acute care facility environment such as the emergency department, coronary care unit,

intensive care unit, pediatric or neonatal unit, burn care or other similar unit where continuous monitoring of vital signs, cardiac rhythm, oxygen saturation and maintenance of continuous infusions of IV medications or control of ventilator functions by artificial means are being performed. This level of care must be rendered by medical personnel of appropriate training. This level of care requires monitoring and diagnostic equipment specific to the patients special care needs. Patients requiring this level of care should be identified during medical screening so that special staffing and equipment requirements can meet the patients potential needs. These patients are considered at risk for de-compensation during transport which may require close attention or intervention.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.1.25 Stressors of Flight - the factors which humans may be exposed to during flight which can have an effect on the individual's physiologic state and ability to perform. The stressors include - hypoxia, barometric changes (expanding and contracting gas), fatigue (sometimes self induced), thermal variations (extremes of temperature), dehydration, noise, vibration, motion and G-forces.

*SOURCE: Miss. Code Ann. §41-59-5*

## **Subchapter 2 Air Ambulance Licensure**

Rule 3.2.1 Licensure as an air ambulance service shall only be granted to a person or entity that directs and controls the integrated activities of both the medical and aviation components. *Note: Air ambulance requires the teaming of medical and aviation functions. In many instances, the entity that is providing the medical staffing, equipment and control is not the certificate aircraft operator but has an arrangement with another entity to provide the aircraft. Although the aircraft operator is directly responsible to the FAA for the operation of the aircraft, one organization, typically the one in charge of the medical functions directs the combined efforts of the aviation and medical components during patient transport operations.*

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.2 No person or organization may operate an air ambulance service unless such person or organization has a valid license issued by BEMS. Any person desiring to provide air ambulance services shall, prior to operation, obtain a license from BEMS. To obtain such license, each applicant for an air ambulance license shall pay the required fee and submit an application on the prescribed air ambulance licensure application forms. Applicant must submit one copy of the plan of medical control at least 30 days prior to service start date for approval by BEMS and State EMS Medical Director. The license shall automatically expire at the end of the licensing period.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.3 Prior to operation as an air ambulance, the applicant shall obtain a permit for each aircraft it uses to provide its service.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.4 Each licensee shall be able to provide air ambulance service within 90 days after receipt of its license to operate as an air ambulance from the licensing authority.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.5 Each aircraft configured for patient transport shall meet the structural, equipment and supply requirements set forth in these regulations.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.6 An air ambulance license is dependent on, and concurrent with, proper FAA certification of the aircraft operator(s) to concurrent with proper FAA certification of the aircraft operator(s) to conduct operations under the applicable parts of the Federal Aviation Regulations. Certificate holder must meet all national authority regulations specific to the operations of the medical service in the country of residence, as applicable. This includes a national authority regulator's certificate (public service medical transport agencies are included in this requirement) and Ambulance Operations Specifications specific to EMS operations. The transport service demonstrates compliance with the legal requirements and regulations of all local, state and federal agencies under whose authority it operates.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.7 Current, full accreditation by the Certified Association of Air Medical Transport Services (CAMTS) or equivalent program will be accepted by BEMS as compliance with the requirements set forth.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.8 A provider's license will be suspended or revoked for failure to comply with the requirements of these regulations.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.9 No licensee shall operate a service if their license has been suspended or revoked.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.10 Any provider that maintains bases of operation in more than one state jurisdiction shall be licensed at each base by BEMS having jurisdiction.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.2.11 The owner, manager or medical director of each publicly or privately owned ambulance service shall inform the State Department of Health, Bureau of EMS of the termination of service in a licensed county or defined service area no less than 30 days prior to ceasing operations. This communication should also be sent by the owner, manager or medical director of each publicly or privately owned ambulance service to related parties and local governmental entities such as, but not limited to, emergencies management agency, local healthcare facilities, and the public via mass media.

*SOURCE: Miss. Code Ann. §41-59-5*

### **Subchapter 3 RECIPROCITY**

Rule 3.3.1 Any provider who is licensed in another jurisdiction whose regulations are at least as stringent as these, and provides proof of such license, and who meets all other regulatory requirements shall be regarded as meeting the specifications of these regulations.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.3.2 Access - Inspection of records; equipment/supply categories, and air ambulance aircraft.

1. BEMS, after presenting proper identification, shall be allowed to inspect any aircraft, equipment, supplies or records of any licensee to determine compliance with these regulations. BEMS shall inspect the licensee at least twice every licensing period.
2. The finding of any inspection shall be recorded on a form provided for this purpose. BEMS shall furnish a copy of the inspection report form to the licensee or the licensee's authorized representative. Upon completion of an inspection, any violations shall be noted on the form.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.3.3 Issuance of Notices.

1. Whenever BEMS makes an inspection of an air ambulance aircraft and discovers that any of the requirements of these regulations have been violated or have not been complied with in any manner, BEMS shall notify the licensee of the infraction(s) by means of an inspection report or other written notice.
2. The report shall: Set forth the specific violations found; establish a specific period of time for the correction of the violation(s) found, in accordance with the provisions in Violations.

*SOURCE: Miss. Code Ann. §41-59-5*

#### Rule 3.3.4 Reports

##### 1. Notification

- a. Each holder of a license shall notify BEMS of the disposition of any criminal or civil litigation or arbitration based on their actions as a licensee within 5 days after a verdict has been rendered.
- b. The licensee will notify BEMS when it removes a permitted aircraft from service or replaces it with a substitute aircraft meeting the same transport capabilities and equipment specifications as the out-of-service aircraft for a period of time greater than 7 days but not to exceed 90 calendar days. Upon receipt of notification, BEMS shall issue a temporary permit for the operation of said aircraft.

##### 2. Patient Reports

- a. Each licensee shall maintain accurate records upon such forms as may be provided, and contain such information as may be required by BEMS concerning the transportation of each patient within this state and beyond its limits. Such records shall be available for inspection by BEMS at any reasonable time, and copies thereof shall be furnished to BEMS upon request.
- b. All licensed ambulance services operating in the State of Mississippi must electronically submit electronically, the State of Mississippi Patient Encounter Form and/or information contained on the form via network, or direct computer link, for each ambulance run made and/or for each patient transported.
- c. A completed copy of a Mississippi Patient Encounter Form or Patient Care Report containing the data elements of the Mississippi Patient Encounter Form shall be left with or electronically submitted to hospital staff for all patients delivered to license Hospitals. If in the best interest of the public good, an immediate response to a patient is required of an ambulance delivering a patient to a licensed Hospital, a complete oral report on the patient being delivered will be given to the receiving facility and a completed copy of a Mississippi Patient Encounter Form or Patient Care Report containing the data elements of the Mississippi Patient Encounter Form for that patient shall be delivered to the hospital staff of the licensed Hospital within 24 hours.
- d. All Mississippi Patient Encounter Forms are due in the BEMS office by the seventh day after the close of the preceding month.
- e. All Mississippi Patient Encounter Forms or computer disk information returned to a licensee for correction must be corrected and returned to the BEMS office within two weeks calculated from the date of their return.

- f. Returns to a licensee greater than 3 times may result in a penalty as outlined under Section 41-59-45, paragraph 3.
- g. The licensee shall maintain a copy of all the run records according to statutory requirements, accessible for inspection upon request by BEMS.
- h. A copy of the patient encounter form shall be given to the person accepting care of the patient.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.3.5 Location identification: The Licensee shall identify on the prescribed form any and all physical locations where a function of their operations are conducted. These locations include: permanent business office, aircraft storage, repair, communications/activation facilities, training and sleeping areas.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.3.6 Aero Medical Advertisement

- 1. No person, entity or organization shall advertise via printed or electronic media as an air ambulance service provider in the state of Mississippi unless they hold a valid license in the state of Mississippi or has licensure in another state which is reciprocally honored by BEMS.
- 2. The licensee's advertising shall be done only under the name stated on their license.
- 3. The licensee's advertising and marketing shall demonstrate consistency with the licensee's actual licensed level of medical care capabilities and aircraft resources. Clear identification of the FAA Part 135 Certificate Holder as the identity that is operating the aircraft is one the program's website, in marketing materials, and on the aircraft.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.3.7 Property & Casualty Liability

- 1. Every licensee or applicant shall ensure that the Part 135 Air Carrier Operating certificate holder operating the aircraft carries bodily injury and property damage insurance with solvent insurers licensed to do business in the state of Mississippi, to secure payment for any loss or damage resulting from any occurrence arising out of or caused by the operation or use of any of the certificate holders aircraft. Each aircraft shall be insured for the minimum amount of \$1,000,000 for injuries to, or death of, any one person arising out of any one incident or accident; the minimum amount of \$3,000,000 for injuries to, or death of, more than one person in any one accident; and, for the minimum amount of \$500,000 for damage to property from any one accident.

2. Government-operated service aircraft shall be insured for the sum of at least \$500,000 for any claim or judgment and the sum of \$1,000,000 total for all claims or judgments arising out of the same occurrence. Every insurance policy or contract for such insurance shall provide for the payment and satisfaction of any financial judgment entered against the licensee or any aircraft owner or pilot(s) operating the insured aircraft. All such insurance policies shall provide for a certificate of insurance to be issued to BEMS.

*SOURCE: Miss. Code Ann. §41-59-5*

**Rule 3.3.8 Professional Medical Liability (Malpractice)**

1. Every air ambulance licensee or applicant shall carry professional liability coverage with solvent insurers licensed to do business in the state of Mississippi, to secure payment for any loss or damage resulting from any occurrence arising out of or caused by the care or lack of care of a patient. The licensee or applicant shall maintain professional liability coverage in the minimum amount of \$1,000,000.
2. In lieu of such insurance, the licensee or applicant may furnish a certificate of self-insurance establishing that the licensee or applicant has a self-insurance plan to cover such risks and that the plan has been approved by the State of Mississippi Insurance Commissioner.

*SOURCE: Miss. Code Ann. §41-59-5*

**Subchapter 4 Aircraft Permits Required**

**Rule 3.4.1** BEMS shall issue a permit to the licensee when the licensee initially places the aircraft into service or when the licensee changes the level of service relative to that aircraft. The permit shall remain valid as long as the aircraft is operated or leased by the licensee subject to the following conditions:

1. The licensee submits an aircraft permit application for the aircraft and pays the required fees.
2. Permits issued by BEMS for an aircraft pursuant to this rule shall be carried inboard the aircraft and readily available for inspection.
3. If ownership of any permitted aircraft is transferred to any other person or entity, the permit is void and the licensee shall remove the permit from the aircraft at the time the aircraft is transferred and return the permit to the licensing authority within 10 days of the transfer.

*SOURCE: Miss. Code Ann. §41-59-5*

**Rule 3.4.2** If a substitute aircraft is in service for longer than 90 days, this aircraft shall be required to be permitted. An un-permitted aircraft cannot be placed into service,

nor can an aircraft be used unless it is replacing aircraft that has been temporarily taken out of service. When such a substitution is made, the following information shall be maintained by the licensee and shall be accessible to BEMS: Registration number of permitted aircraft taken out of service; Registration number of substitute aircraft; The date on which the substitute aircraft was placed into service and the date on which it was removed from service and the date on which the permitted aircraft was returned to service.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.4.3 Aircraft permits are not transferable.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.4.4 Duplicate aircraft permits can be obtained by submitting a written request to BEMS. The request shall include a letter signed by the licensee certifying that the original permit has been lost, destroyed or rendered unusable.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.4.5 Each licensee shall obtain a new aircraft permit from BEMS prior to returning an aircraft to service following a modification, change or any renovation that results in a change to the stretcher placement or seating in the aircraft's interior configuration.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.4.6 The holder of a permit to operate an air ambulance service shall file an amended list of its permitted aircraft with BEMS within 10 days after an air ambulance is removed permanently from service.

*SOURCE: Miss. Code Ann. §41-59-5*

## **Subchapter 5 Medical Direction**

Rule 3.5.1 The medical director(s) of the program is a physician who is responsible and accountable for supervising and evaluating the quality of medical care provided by the medical personnel. The medical director ensures, by working with the clinical supervisor and by being familiar with the scope of practice of the transport team members and the regulations in which the transport team practices, competency and currency of all medical personnel working with the service.

1. Qualifications: Each air ambulance service shall designate or employ an off-line medical director. The off-line medical director shall meet the following qualifications:

- a. The off-line medical director shall be a physician (MD or DO) currently licensed and in practice.
- b. The physician shall be licensed to practice medicine in the state(s) where the service is domiciled.
- c. Services having multiple bases of operation shall have an off-line medical director for each base. If the off-line medical director for the service's primary location is licensed in the state where the base(s) is/are located, they may function as the off-line medical director for that base in place of a separate individual.
- d. Must be a Mississippi licensed physician, M.D. or D.O., and show evidence of board certification in emergency medicine or board eligibility in emergency medicine. Air Ambulances which operate from or based in Mississippi, must have a System medical director whose primary practice is in Mississippi or at a Mississippi trauma center. (Air Ambulance provided from and based out-of-state must have a system medical director that is board certified in emergency medicine or board eligible in emergency medicine.) The medical director is ultimately responsible for all aspects of a service's operation which effect patient care. The medical director is responsible for assuring that appropriately trained medical personnel and equipment are provided for each patient transported and that individual aircraft can provide appropriate care environments for patients. The Air Ambulance Service Medical Director must be approved by the State EMS Medical Director.
- e. The off-line medical director shall have knowledge and experience consistent with the transport of patient's by air.
- f. Beginning January 2013, all Mississippi Off-Line Medical Directors shall take Medical Director's course as prescribed by the Mississippi State Department of Health, Bureau of Emergency Medical Services and the Medical Direction, Training and Quality Assurance Committee.

*SOURCE: Miss. Code Ann. §41-59-5*

**Rule 3.5.2** Responsibilities: The physician shall be knowledgeable in aeromedical physiology, stresses of flight, aircraft safety, patient care, and resource limitations of the aircraft, medical staff and equipment. The medical director shall be actively involved in the care of the critically ill and/or injured patient.

1. The off-line medical director shall have access to consult with medical specialists for patient(s) whose illness and care needs are outside his/her area of practice. The medical director must have education experience in those areas of medicine that are commensurate with the mission statement of the medical transport service or utilize specialty physicians as consultants when appropriate.

2. The off-line medical director shall ensure that there is a comprehensive plan/policy to address selection of appropriate aircraft, staffing and equipment.
3. The off-line medical director shall be involved in the selection, hiring, training and continuing education of all medical personnel. The medical director is actively involved in the hiring process, training and continuing education of all medical personnel for the service that includes involvement in skills labs, medical protocol or guideline changes or additions.
4. The off-line medical director shall be responsible for overseeing the development and maintenance of a quality assurance or a continuous quality improvement program. The medical director is actively involved in the quality management program for the service.
5. The off-line medical director shall ensure that there is a plan to provide direction of patient care to the air medical personnel during transport. The system shall include on-line (radio/telephone) medical control, and/or an appropriate system for off-line medical control such as written guidelines, protocols, procedures patient specific written orders or standing orders. The medical director should maintain an open communication system with referring and accepting physicians and be accessible for concerns expressed by referring and accepting physicians regarding controversial issues and patient management.
6. The off-line medical director shall participate in any administrative decision making processes that affects patient care. The medical director is actively involved in administrative decisions affecting medical care or the service.
7. The off-line medical director will ensure that there is an adequate method for on-line medical control, and that there is a well defined plan or procedure and resources in place to allow off-line medical control. The medical director is actively involved in orienting physicians providing online medical direction according to the policies, procedures and patient care protocols of the medical transport service.
8. In the case where written policies are instituted for medical control, the off-line medical director will oversee the review, revision and validation of them annually. The medical director sets and annually reviews medical guidelines for current accepted medical practice, and medical guidelines are in a written format.
9. The plan for medical control must be submitted to BEMS at least 30 days prior to the service start date for approval by BEMS and the State EMS Medical Director.
10. Revisions in the medical control plan must be submitted prior to implementation. At a minimum, medical control plans shall be resubmitted to BEMS every three (3) years.
11. The transport service will know the capabilities and resources of receiving facilities and will transport patients to appropriate facilities within the service

region based on direct referral, approved EMS plan, or services available when no direction is provided. Whenever possible, services that respond directly to the scene will transport patients to the nearest appropriate hospital.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.3 On-line Medical Control:

1. The licensee's off-line medical director shall ensure that there is a capability and method to provide on-line medical control to air medical personnel on board any of its air ambulance aircraft at all times. If patient specific orders are written, there shall be a formal procedure to use them. In addition to on-line medical control capabilities, the licensee shall have a written plan, procedure and resources in place for off-line medical control. This may be accomplished by use of comprehensive written, guidelines, procedures or protocols.
2. All Mississippi On-Line Medical Directors are recommended and encouraged to take Medical Director's course as prescribed by the Mississippi State Department of Health, Bureau of Emergency Medical Services and the Medical Direction, Training and Quality Assurance Committee.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.4 Quality Management process

1. The licensee shall have an ongoing collaborative process within the organization that identifies issues affecting patient care.
2. These issues should address the effectiveness and efficiency of the organization, its support systems, as well as that of individuals within the organization.
3. When an issue is identified, a method of information gathering shall be developed. This shall include outcome studies, chart review, case discussion, or other methodology.
4. Findings, conclusions, recommendations and actions shall be made and recorded. Follow-up, if necessary, shall be determined, recorded, and performed.
5. Training and education needs, individual performance evaluations, equipment or resource acquisition, safety and risk management issues all shall be integrated with the ~~CQI~~ Performance Improvement process.
6. The QM program has written objective evidence of actions taken in problem areas and the evaluation of the effectiveness of that action.

7. The QM program must be integrated and include activities related to patient care, communications and all aspects of transport operations and equipment maintenance pertinent to the service's mission statement.
8. QM plan should include the following components:
  - a. Responsibility/assignment of accountability;
  - b. Scope of care;
  - c. Quality metrics that are identified, measured and compared to metrics/outcomes of evidence based standards;
  - d. Indicators;
  - e. Thresholds for evaluation, which are appropriate to the individual service;
  - f. Methodology – the QI process and QI tools utilized; and
  - g. Evaluation of the improvement process.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.5 Certification of Air Medical Personnel: There shall be at least one certified air medical provider on board an air ambulance to perform patient care duties on that air ambulance as certified by the Bureau of EMS. The requirements for air medical personnel shall consist of not less than the following:

1. A valid license or certificate to practice their level of care (MD, DO, RN, Advanced Practice Provider – Licensed Nurse Practitioner and Physician's Assistant, Critical Care Paramedic, Paramedic, RT) in the state-
2. *Note: The requirements of this section are established in regard to scope of practice for air medical personnel and the mission of the air ambulance service. The medical director of the service will outline requirements in the medical control plan of the service and upon approval of BEMS, verification of these requirements will required.*
3. The licensee shall maintain documentation of each clinician's training and qualifications and shall insure that the attendant meets the continuing education requirements for their licensed specialty.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.6 Staffing must be commensurate with the mission statement and scope of care of the medical transport service. The aircraft or ambulance, by virtue of medical staffing and retrofitting of medical equipment becomes a patient care unit specific

to the needs of the patient. A well-developed position description for each discipline is written.

1. Advanced level care (ALS) – Paramedic: An advanced life support (ALS) mission is defined as the transport of a patient from emergency department, critical care unit or scene who receives care commensurate with scope of practice of a Paramedic.
  - a. Fixed-wing aircraft requires at least two personnel, one of which must be at least a state of Mississippi current certified Paramedic.
  - b. Rotor-wing aircraft requires at least a state of Mississippi current certified Paramedic.
2. Critical care (CCLS): A critical care mission is defined as the transport of a patient from a scene or clinical setting whose condition warrants care commensurate with the scope of practice of critical care transport professionals. (i.e. physician or registered nurse)
  - a. The medical team must – at minimum – consist of at least two patient care givers, one of which must be at least a Mississippi current certified Critical Care Paramedic, registered nurse, or physician.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.7 Additional medical staff not certified as air medical personnel can be added to or in place of licensed air medical personnel as long as at least one certified air medical personnel with the highest level of certification (EMT-P, RN) required to care for the patient is also on board.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.8 Air medical personnel will not assume cockpit duties when it may interfere with patient care responsibilities.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.9 The aircraft shall be operated by a pilot or pilots certified in accordance with applicable FAR's. The captain or pilot in command will meet the following requirements:

1. Fixed-wing air ambulance:
  - a. The pilot-in-command must possess airplane flight hours, as outlined in the tables below, prior to assignment with a medical service. If the aircraft is to be operated using a single pilot-in-command, with no second in command, the following applies:

Cat/Class of Aircraft	Total Flight Exp	Multi Engine Exp	PIC Exp	Make/Model
Single Engine Turbo Prop	2500	N/A	1000	50
Multi Eng Piston	2500	500	1000	50
Multi Eng Turbo Prop	2500	500	1000	100

b. Must possess airplane flight hours as outline in the table below if the aircraft is to be operated with two fully trained and qualified pilots:

Cat/Class of Aircraft	Total Flight Exp	Multi Engine Exp	PIC Exp	SIC Total Exp
Single Engine Turbo Prop	2000	N/A	1000	500
Multi Eng Piston	2000	500	1000	500
Multi Eng Turbo Prop	2000	500	1000	800
Multi Eng Turbo Jet	2000	500	1500	1000

c. Possess an Airline Transport Pilot (ATP) certificate.

2. Rotor-wing air ambulance:

a. The pilot must possess at least a commercial rotorcraft-helicopter and instrument helicopter rating.

b. If not exceeded by applicable national authority regulations, the pilot in command must possess 2000 total flight hours prior to an assignment with a medical service with the following stipulations

i. A minimum of 1200 helicopter flight hours

ii. At least 1000 of those hours must be as Pilot in Command in rotorcraft.

iii. 100 hours unaided (if pilot is NOT assigned to a Night Vision Goggles (NVG) base/aircraft)

- iv. 100 hours unaided or 50 hours unaided as long as the pilot has 100 hours aided (if assigned to an NVG base aircraft)
- v. A minimum of 500 hours of turbine time – 1000 hours of turbine time strongly encouraged.

c. ATP certificate and instrument currency is strongly encouraged.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.5.10 A First Officer or co-pilot, if used, will meet the following requirements:

1. Fixed-wing air ambulance; Has accumulated at least 500 hours total time as a pilot; Must have accumulated at least 100 hours as pilot of a multi-engine aircraft; Has accumulated at least 25 hours as pilot in command of the specific make and model of aircraft being used as an air ambulance; Possess a Commercial Pilot certificate;
2. Rotor-wing air ambulance: Has accumulated at least 500 rotor craft flight hours total time as a pilot; Factory school or equivalent in aircraft type (ground and flight); Must possess at least a commercial rotor craft-helicopter rating.

*SOURCE: Miss. Code Ann. §41-59-5*

## **Subchapter 6 Training**

Rule 3.6.1 The orientation, training and continuing education must be directed and guided by the transport program's scope of care and patient population, mission statement and medical direction.

1. Initial - The licensee shall ensure that all full-time and part-time Critical Care and ALS providers successfully complete a comprehensive training program as approved by the Bureau. Air medical personnel successfully complete initial training and orientation to their position including adequate instruction, practice and drills.
2. Didactic Component of Initial Training must be specific and appropriate for the mission statement and scope of care of the medical transport service. Measurable objectives need to be developed and documented for each experience.
3. Continuing Education/Staff Development – must be provided and documented for all full time and part time Critical Care and ALS providers. These must be specific and appropriate for the mission statement and scope of care of the medical transport service.
  - a. Didactic continuing education must include an annual review of Human factors; Infection Control; “Just Culture”; Sleep Deprivation; State EMS

rules and regulations; Stress recognition and management; safety and risk management training.

- b. Clinical and laboratory continuing education must be developed and documented on an annual basis as pertinent to scope of care.
4. Drills - The licensee shall make provisions for actual practice of those procedures that require complicated physical work or those that are technically complex such as enplaning and deplaning of patients, emergency evacuation, medical equipment identification, and mock situational problem annually.
5. Documentation - The licensee will document the completed training for each air medical staff member.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.6.2 Flight Crew Member: The licensee shall have a structured program of initial and recurrent training for the aviation personnel specific to their function in the medical transport environment. The aviation specific requirements of FAR (section 135.345) are controlling, however, BEMS recommended guidelines are listed below:

1. Initial - The licensee shall ensure that all cockpit crew members successfully complete initial training and orientation to the skills and knowledge necessary to perform their functions in air medical transport operations. Training shall include the following topics:
  - a. Pre-flight planning to accommodate special patient needs including weather considerations, altitude selection, fuel requirements, weight and balance, effective range and performance and selection of alternate airports appropriate for a medial or aviation diversion.
  - b. Flight release - effective communication between communications specialist, air medical personnel and pilot(s). Aviation considerations for release (approval to proceed) based on the latest weather and aircraft status.
  - c. Ground ambulance handling in direct vicinity of aircraft; Baggage and equipment handling (pressurized and non-pressurized compartments) (fixed-wing pilots); Patient enplaning - passenger briefing. (fixed-wing pilots); Coordination of aircraft movement with air medical personnel activities prior to taxi to ensure their safety; Smooth and coordinated control of the aircraft when maneuvering, transition of control surface configurations and ground operations for patient, air medical personnel and passenger comfort; Intermediate stop procedures - (fueling, fire equipment standby, customs); Medical emergencies during flight; Aircraft

emergency procedures - evacuations including patient; Cabin temperature control to maintain comfortable cabin temperature for the occupants.

2. Recurrent - The licensee shall ensure that all aviation personnel receive recurrent training - at least annually –on the topics included in their initial indoctrination as well as any changes or updates made to policies or procedures.
3. Drills - The licensee shall make provisions for actual practice of those procedures that require complicated physical work or that is technically complex such as enplaning and deplaning of patients, emergency evacuation, medical equipment identification, and mock situational problem solving.
4. Documentation - The licensee will document the completed training for each air medical staff member.

*SOURCE: Miss. Code Ann. §41-59-5*

### **Subchapter 7 Communications**

#### **Rule 3.7.1 Activation Capability:**

1. The licensee shall have facilities and plans in place to provide the telephonic and radio systems necessary to carry verbal communication. The system should be consistent with the services scope of care and includes three elements: receipt of incoming inquiries and transport requests; activation and communications with aircraft flight crews and air medical personnel during transport operations; and medical control communications.
2. Pilot is able to control and override radio transmission from the cockpit in the event of an emergency situation.
3. Medical Team must be able to communicate with each other during flight.
4. If cellular phones are part of the onboard communications equipment, they are to be used in accordance with FCC regulations.

*SOURCE: Miss. Code Ann. §41-59-5*

#### **Rule 3.7.2 Initial contact/coordination point - The licensee shall have a plan to receive requests for service and assign resources to handle the transport requests.**

*SOURCE: Miss. Code Ann. §41-59-5*

#### **Rule 3.7.3 Contact data resources - The licensee shall maintain an information file available to the person handling communications that contains the necessary contact person's phone numbers and other pertinent data to manage routine and emergency communication needs.**

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.7.4 Documentation - The licensee shall record the chronological events of each transport. The following data elements shall be included: Time of initial request; Time of aircraft liftoff; Time of aircraft arrival at pickup point; Time of aircraft liftoff; Time of any intermediate aircraft stops; Time of aircraft arrival at destination; and Time aircraft and crew are returned to service and available.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.7.5 Communications Continuity and Flight Following Capability: There shall be a well defined process to track transport activities and provide the necessary support to efficiently follow aircraft, flight crews and air medical personnel movement. The licensee shall have a written emergency plan which addresses the actions to be taken in the event of an aircraft incident or accident, breakdown or patient deterioration during transport operations.

A readily accessible post accident/incident plan must be part of the transport following protocol so that appropriate search and rescue efforts may be initiated in the event the aircraft is overdue, radio communications cannot be established nor location verified. There must be a written plan to initiate assistance in the event the ambulance is disabled.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.7.6 Communications Equipment: on the aircraft and ambulance – All communications must be maintained in full operating condition and in good repair. Radios on aircraft (as range permits) must be capable of transmitting and receiving the following:

1. Medical Control Communications: The licensee shall have a means of providing communications between the aircraft, the coordination point, medical control personnel and other agencies by telephonic or radio as appropriate. This shall be accomplished by local or regional EMS radio systems; and/or radio or flight phone as available inboard the aircraft. All aircraft shall have 155.340 statewide hospitals net available for air crew member(s) in the patient area.
2. Communications Center
3. Air Traffic Control
4. Emergency Medical Services.

Rule 3.7.7 There is a policy designed to discourage “shopping” by first responders and other requesting agents that specifically addresses how the program interfaces with other air medical services in the same coverage area to alert them of a weather turn-down. It is recognized that programs in a common geographic area may

experience differing weather conditions and that programs may have differing capabilities.

*SOURCE: Miss. Code Ann. §41-59-5*

### **Subchapter 8 Requirements For Aircraft**

Rule 3.8.1 When being used as an air ambulance, in addition to meeting other requirements set forth in these rules, and aircraft shall:

1. The aircraft should be a twin-engine or turbine single engine aircraft appropriate to the mission statement and scope of care of the medical service and listed on the air carrier's Operations Specifications.
2. Pressurized aircraft with air conditioning are strongly preferred for medical transports. A physician familiar with altitude physiology must be consulted or written policies address altitude limits for specific disease processes of the patient to be transported in an unpressurized cabin.
3. Be equipped for Instrument Flight Rules (IFR) flight.
4. *Note: Fixed-wing aircraft should be equipped and rated for IFR operations in accordance with Federal Aviation Regulations (FAR)s. Rotor-wing aircraft should be equipped for inadvertent IFR if operating as a Visual Flight Rules (VFR) operator.*

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.2 Have a door large enough to allow a patient on a stretcher to be enplaned without excessive maneuvering or tipping of the patient which compromises the function of monitoring devices, IV lines or ventilation equipment.

The aircraft/ambulance configuration and patient placement allows for safe medical personnel egress. Doors must be fully operable from the interior. Doors must be capable of being opened fully and held by a mechanical device.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.3 Be designed or modified to accommodate at least 1 stretcher patient.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.4 Have a lighting system which can provide adequate intensity to illuminate the patient care area and an adequate method (curtain, distance) to limit the cabin light from entering the cockpit and impeding cockpit crew vision during night operations. Use of red lighting or low intensity lighting in the patient care area is

acceptable if not able to isolate the patient care area from effects on the cockpit or on a driver.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.5 The interior of the aircraft must be climate controlled to avoid adverse effects on patients and personnel on board. Cabin temperatures must be measured and documented every 15 minutes during a patient transport until temperatures are maintained within the range of 50 – 95 degrees F (10 - 35 degrees C) for aircraft and range of 68-78 degrees F (20-25.5 degrees C) for ground vehicles. Thermometer is to be mounted inside the cabin.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.6 Have an interior cabin configuration large enough to accommodate the number of air medical personnel needed to provide care to the patient in accordance with Required Staffing, as well as an adult stretcher in the cabin area with access to the patient. The configuration shall not impede the normal or emergency evacuation routes.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.7 Have an electrical system capable of servicing the power needs of electrically powered on-board patient care equipment. Electric power outlet must be provided with an inverter or appropriate power source of sufficient output to meet the requirements of the complete specialized equipment package without compromising the operation of any electrical aircraft/ambulance equipment. Extra batteries are required for critical patient care equipment.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.8 All aircraft equipment (including specialized equipment) and supplies must be secured according to national aviation regulations.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.9 Have sufficient space in the cabin area where the patient stretcher is installed so that equipment can be stored and secured with FAA approved devices in such a manner that it is accessible to the air medical personnel.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.8.10 A fire extinguisher – fully charged with valid inspection - must be accessible to medical transport personnel and pilot/driver while in motion. If not accessible, two fire extinguishers are required.

*SOURCE: Miss. Code Ann. §41-59-5*

## **Subchapter 9 Medical Equipment and Supplies**

Rule 3.9.1 Medical transport personnel must ensure that all medical equipment is in working order and all equipment/supplies are validated through documented checklists for both the primary and backup aircraft/ambulance. Each air ambulance aircraft shall carry the following minimum equipment set forth in the following section unless a substitution is approved by BEMS and an off-line medical director.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.2 Medical Equipment for All Levels of Care Shall Include:

1. **STRETCHER** - The aircraft/ambulance design and configuration must not compromise patient stability in loading, unloading or in-flight operations. There shall be 1 or more stretcher(s) installed in the aircraft cabin which meets the following criteria:
  - a. The stretcher must be large enough to carry the 95th percentile adult patient, full length in the supine position. (Estimated 95th percentile adult American male is 6 ft. and 232 lbs. and may differ internationally.) Patients under 40 pounds must be provided with an appropriately sized restraining device (for patient's height and weight), which is further secured by a locking device. All patients from 10 to 40 pounds must be secured in a five-point safety strap device that allows good access to the patient from all sides and permits the patient's head to be raised at least 30 degrees. For infants up to 10 pounds, a baby pod or commercial equivalent may be used.
  - b. Shall have at least two shoulder harnesses and three cross-body patient restraining straps, one of which secures the chest area and the other about the area of the knee and thigh area.
  - c. The stretcher shall be installed in the aircraft cabin so that it is sufficiently isolated by distance or physical barrier from the cockpit so that the patient cannot reach the cockpit crew from a supine or prone position on the stretcher.
  - d. Attachment points of the stretcher to the aircraft, the stretcher itself, and the straps securing the patient to the stretcher, shall meet FAR restraint requirements.
  - e. The aircraft must have an entry that allows loading and unloading without excessive maneuvering (no more than 45 degrees about the lateral axis and 30 degrees about the longitudinal axis) of the patient, and does not compromise functioning of monitoring systems, intravenous lines, and manual or mechanical ventilation.

- f. The stretcher shall be positioned in the cabin to allow the air medical personnel clear view of the patient's body.
  - g. Air medical personnel shall always have access to the patient's head and upper body for airway control procedures as well as sufficient space over the area where the patient's chest is to adequately perform chest compressions on the patient. *Note: The licensee may be required to demonstrate to the licensing authority that airway control procedures and cardiac compressions/abdominal thrusts can be adequately performed on a training manikin in any of its aircraft.*
  - h. The stretcher mattress must be sealed to prevent absorption of blood and other body fluids, easily cleanable and disinfected according to OSHA blood borne pathogens requirements.
  - i. The stretcher must be sturdy and rigid enough that it can support cardiopulmonary resuscitation. If a backboard or equivalent device is required to achieve this, such device will be readily available.
  - j. A supply of linen for each patient.
2. Use of occupant restraint devices:
- a. Air medical personnel must be in seat belts (and shoulder harnesses if installed) that are properly worn and secured for all takeoffs and landings according to FAA regulations. A policy should be written that defines when seat belts/ shoulder harnesses can be unfastened.
  - b. Patients transported by air are restrained with a minimum of three cross straps. Cross straps are expected to restrain the patient at the chest, hips and knees. Patients that are loaded head forward must additionally be restrained with a shoulder harness restraint.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.3      Respiratory Care

- 1. OXYGEN - Oxygen is installed according to FAA regulations. Medical transport personnel can determine how oxygen is functioning by pressure gauges mounted in the patient care area.
  - a. There shall be an adequate and manually controlled supply of gaseous or liquid medical oxygen, attachments for humidification, and a variable flow regulator for each patient. A humidifier, if used, shall be a sterile, disposable, one-time usage item.

- b. The licensee shall have and demonstrate the method used to calculate the volume of oxygen required to provide sufficient oxygen for the patients needs for the duration of the transport. The licensee will have a plan to provide the calculated volume of oxygen plus a reserve equal 1000 liters or the volume required to reach an appropriate airport whichever is longer. All necessary regulators, gauges and accessories shall be present and in good working order. The system shall be securely fastened to the airframe using FAA approved restraining devices.
  - c. Each gas outlet is clearly identified.
  - d. Oxygen flow can be stopped at or near the oxygen source from inside the aircraft.
  - e. The following indicators are accessible to medical transport personnel while enroute:
    - i. Quantity of oxygen remaining
    - ii. Measurement of liter flow
  - f. A separate emergency backup supply of oxygen of not less than one E cylinder with regulator and flow meter. *Note: "D" cylinder with regulator and flow meter is permissible for rotor-wing aircraft in place of the "E" cylinder requirement.*
  - g. 1 adult and 1 pediatric size non-rebreathing oxygen mask; 1 adult size nasal cannula and necessary connective tubing and appliances.
2. SUCTION - As the primary source, an electrically powered suction apparatus with wide bore tubing, a large reservoir and various sizes suction catheters. Two suction units are required, one of which is portable and both of which must deliver adequate suction. (Minimum required suction 300 mm Hg)
  3. BAG-VALVE-MASK - Hand operated bag-valve-mask ventilators of adult, pediatric and infant size with clear masks in adult, pediatric and infant sizes. It shall be capable of use with a supplemental oxygen supply and have an oxygen reservoir.
  4. AIRWAY ADJUNCTS
    - a. Oropharyngeal airways in at least 5 assorted sizes, including adult, child, and infant.
    - b. Nasopharyngeal airways in at least 3 sizes with water soluble lubricant.

SOURCE: Miss. Code Ann. §41-59-5

Rule 3.9.4 Patient Assessment Equipment:

1. Automatic blood pressure device, sphygmomanometer, doppler or arterial line monitoring capability onboard or immediately available to determine blood pressure of the adult, pediatric and infant patient(s) during flight, as appropriate.
2. Stethoscope.
3. Penlight/Flashlight.
4. Bandage scissors, heavy duty.
5. Pulse oximetry
6. Bandages & Dressings
7. Sterile Dressings such as 4x4's, ABD pads.
8. Bandages such as Kerlix, Kling.
9. Tape - various sizes.
10. Devices for decompressing a pneumothorax and performing an emergency cricothyroidotomy available if applicable to scope of care of the medical transport service
11. Fetal (Doppler heart rate) monitoring required for high risk OB transports

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.5 Miscellaneous Equipment and Supplies

1. Potable or sterile water.
2. Container(s) and methods to collect contain and dispose of body fluids such as emesis, oral secretions and blood consistent with OSHA blood borne pathogens requirements.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.6 Infection control equipment. The licensee shall have a sufficient quantity of the following supplies for all air medical personnel, each flight crew member and all ground personnel with incidental exposure risks according to OSHA requirements, but is not limited to:

1. Protective gloves.
2. Protective gowns.

3. Protective eyewear.
4. Protective face masks.
5. There shall be an approved bio-hazardous waste plastic bag or impervious container to receive and dispose of used supplies.
6. Hand washing capabilities or antiviral towellets.
7. An adequate trash disposal system exclusive of bio-hazardous waste control provisions.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.7 Survival Kit: The licensee shall maintain supplies to be used in a survival situation. It shall include, but not be limited to, the following items which are appropriate to the terrain and environments the licensee operates over: Instruction manual; water; shelter - space blanket; knife; signaling device - mirror, whistle, flares, dye marker; compass; fire starting items - matches, candle, flint, battery.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.8 ALS level equipment: To function at the ALS level, the following additional equipment is required:

1. Advanced Airway and Ventilatory Support Equipment:
  - a. Laryngoscope and tracheal intubation supplies, including laryngoscope blades, bag-valve- mask and oxygen supplies, including PEEP valves; appropriate for ages and potential needs of patients transported. At minimum, one Laryngoscope handle; one each adult, pediatric and infant blades;
  - b. Two of each size of assorted disposable endotracheal tubes according to the scope of the licensee's service and patient mixture with assorted stylets, syringes;
  - c. End-tidal CO<sub>2</sub> detectors (may be made onto bag valve mask assemblies or separate); End-tidal CO<sub>2</sub> continuous wave-form monitoring capabilities available.
  - d. Alternate airway management equipment. Equipment for alternative airways on-board transport vehicles at all times and protocol for management of missed airway attempts.
2. IV Equipment and Supplies:
  - a. IV supplies and fluids are readily available.

- b. Sterile crystalloid solutions in plastic containers, IV catheters, and administration tubing sets;
  - c. Hanger for IV solutions or a mechanism to provide high flow fluids if needed; All IV hooks are padded, flush mounted, or so located to prevent head trauma to the medical transport personnel in the event of a hard landing in the aircraft.
  - d. Tourniquets, tape, dressings;
  - e. Suitable equipment and supplies to allow for collection and temporary storage of two blood samples;
  - f. A container appropriate to contain used sharp devices - needles, scalpels - which meets OSHA requirements.
3. Medications: Security of medications, fluids and controlled substances shall be maintained by each air ambulance licensee. Controlled substances are in a locked system and kept in a manner consistent with Drug Enforcement Agency (DEA) regulations and approved by the service's medical director. Medication inventory techniques and schedules shall be maintained in compliance with all applicable local, state and federal drug laws.
  4. Medications shall be easily accessible.
  5. There is a method to check expiration dates of medications and supplies on a regular basis.
  6. The Bureau of EMS and the Committee on Medical Direction, Training, and Quality Assurance (MDTQA) will approve pharmaceuticals available for use by EMS providers. A list of 'Required', 'Optional', and 'Transport only' drugs for EMS providers in the State is compiled and maintained by the BEMS and the MDTQA.
  7. A current list of fluids and medications approved for initiation and transport by Mississippi EMS providers is available from the BEMS office or the BEMS website ([www.ems.ms.gov](http://www.ems.ms.gov)). *NOTE: A System Medical Director may make requests for changes to the list. These requests should be submitted in writing to the BEMS. All requests must detail the rationale for the additions, modifications, or deletions.*
    - a. The medical director can modify the medication inventory as required to meet the care needs of their patient mix and in compliance with section (111.06-3C) below.

- b. The licensee shall have a sufficient quantity of needles, syringes and accessories necessary to administer the medications in the inventory supply.
  - c. The medical director of the licensee may authorize the licensee with justification to substitute medication(s) listed provided that he first obtains approval from BEMS, and provided further that he signs such authorization.
8. Cardiac Monitor-Defibrillator –
- a. D.C. battery powered portable monitor/defibrillator with paper printout and spare batteries, accessories and supplies.
  - b. 12-lead cardiac monitor, defibrillator and external pacemaker are secured and positioned so that displays are visible.
  - c. Extra batteries or power source are available for cardiac monitor/defibrillator or external pacemaker.
  - d. Defibrillator is secured and positioned for easy access.
  - e. Pediatric paddles/pads are available if applicable to the scope of care of the medical transport service.
  - f. A defibrillator with appropriate size pads and settings must be available for neonatal transports (if neonatal transports are conducted).
9. External pacemaker on board or immediately available as a carry-on item.
10. Non-Invasive Automatic Blood Pressure Monitor
11. IV Infusion Pump capable of strict mechanical control of an IV infusion drip rate. Passive devices such as dial-a-flows are not acceptable. A minimum of three IV infusion pumps (may be in the same device if individually metered lines with back up available) are on the aircraft or immediately available for critical care transports and as appropriate to the scope of care.
12. Electronic Monitoring Devices - Any electronic or electrically powered medical equipment to be used on board an aircraft should be tested prior to actual patient use to insure that it does not produce Radio Frequency Interference (RFI) or Electro Magnetic Interference (EMI) which would interfere with aircraft radio communications or radio navigation systems. This may be accomplished by reference to test data from organizations such as the military or by actual tests performed by the licensee while airborne.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.9.9 To function at the CCLS or SPECIALTY level of care the following additional equipment shall be available as required to the scope of care of the medical transport service:

1. Mechanical Ventilator - A mechanical ventilator that can deliver up to 100% oxygen concentration at pressures, rates and volumes appropriate for the size of patient being cared for.
2. Isolette - for services performing transport of neonatal patients.
3. Intraaortic Balloon Pump (IABP)
4. Invasive Line (ARTERIAL AND SWAN-GANZ CATHETERS) monitoring capability.

*SOURCE: Miss. Code Ann. §41-59-5*

#### **Subchapter 10 Equipment Maintenance and Inspection Program:**

Rule 3.10.1 The licensee shall have a program to inspect and maintain the effective operation of its medical equipment. The program should include daily or periodic function checks and routine preventive inspection and maintenance. There should be a plan for securing replacement or backup equipment when individual items are in for repair. There should be manufacturer's manuals as well as brief checklist available for reference. The equipment maintenance and inspection program shall include:

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.10.2 Daily or periodic checks - shall include a checklist based on the manufacturer's recommendations which verifies proper equipment function and sterile package integrity.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.10.3 Routine preventive maintenance - shall include a program of cleaning and validating proper performance, supply packaging integrity.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.10.4 A documentation system which tracks the history of each equipment item.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.10.5 A procedure for reporting defective or malfunctioning equipment when patient care has been affected.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.10.6 High Visibility Safety Apparel for Staff: Each air ambulance must be equipped with high visibility safety apparel for each person staffing or participating in the operation of the vehicle. All garments must meet the requirements of the American National Standard for High Visibility Apparel ANSI/ISEA 107-2004 Performance Class 2 or Performance Class 3, or the ANSI/ISEA 207-2006 Standard. All garments must have labels, affixed by the manufacturer in accordance with the standard, that indicate compliance with the Performance Class 2, Performance Class 3, or 207-2006 standard.

*SOURCE: Miss. Code Ann. §41-59-5*

### **Subchapter 11 Violations**

Rule 3.11.1 Violations should be corrected at the time of the inspection, if possible.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.11.2 Violations of the requirements set forth in this section will require appropriate corrective action by the licensee.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.11.3 Category "A" Violations: Category "A" violations require the air ambulance aircraft be immediately removed from service until it has been reinspected and found to be in compliance with these regulations. Category "A" violations include: Missing equipment or disposable supply items; Insufficient number of trained air medical personnel to fill the services staffing requirements; The provider has no medical director; Violation or non-compliance of FAR or OSHA mandates.

*SOURCE: Miss. Code Ann. §41-59-5*

Rule 3.11.4 Category "B" Violations: Category "B" violations must be corrected within 72 hours of receiving notice and a written report shall be sent to BEMS verifying the correction. Category "B" violations include: Unclean or unsanitary equipment or aircraft environment; Non-functional or improperly functioning equipment; Expired shelf life of supplies such as medications, IV fluids and items having limited shelf life; Package integrity of sealed or sterile items is compromised; Failure to produce requested documentation of patient records, attendant training or other reports required by BEMS.

*SOURCE: Miss. Code Ann. §41-59-5*

### **Subchapter 12 Suspension; Revocation of License**

Rule 3.12.1 May occur as outlined in 41-59-17 and 41-59-45. Appeals from decision of the board can also be referred to in 41-59-49.

SOURCE: Miss. Code Ann. §41-59-5

Rule 3.12.2 A Mississippi licensed ambulance service shall comply with the Mississippi State Trauma Plan as approved by the Mississippi State Department of Health, Bureau of Emergency Medical Services. Licensed service must follow the state patient destination criteria and treatment protocols for the patient as delineated by these regulations. All Medical Control Plans shall comply with the Mississippi State Trauma Plan and all other applicable system of care plans as directed by the Mississippi State Department of Health, Bureau of Emergency Medical Services.

SOURCE: Miss. Code Ann. §41-59-5

**Subchapter 13 Medical Control: See Appendix 1.**