

1468 **109-2-13 Standards for fixed-wing ambulance aircraft and equipment.** ~~(a) Each air~~
1469 ~~ambulance operator shall comply with all Federal Aviation Regulations as contained in~~
1470 ~~14 C.F.R. Parts 91 and 135, as in effect on January 1, 1996, which are adopted herein~~
1471 ~~by reference.~~

1472 ~~(b) Each air ambulance operator shall obtain a valid standard airworthiness certificate~~
1473 ~~for each aircraft licensed by the board. The operator shall submit a copy of the~~
1474 ~~airworthiness certificate to the board when applying for the air ambulance license.~~

1475 ~~(a) (e)~~ The operator shall ensure that each air fixed wing ambulance is multi-engined
1476 and meets the following requirements:

- 1477 (1) ~~rated for instrument flight (IFR);~~
- 1478 (2) ~~equipped with an emergency locator transmitter (ELT);~~
- 1479 (3) ~~certified and equipped for known icing conditions; and~~
- 1480 (4) ~~pressurized during patient transports according to the service's medical~~
1481 ~~protocols, and operational protocols policies, or both.~~

1482 ~~(b) (d)~~ Each air ambulance operator shall ensure that the aircraft's flight controls,
1483 ~~throttles, and radios are physically protected from any intended or accidental~~
1484 ~~interference by the patient, air medical personnel, or equipment and supplies. The pilot~~
1485 ~~or pilots shall be sufficiently isolated from the patient care area to minimize in-flight~~
1486 ~~distractions or interference.~~

1487 ~~(e) The aircraft design shall not compromise patient stability during any part of flight~~
1488 ~~operations. The aircraft shall have an entry that allows loading and unloading of the~~
1489 ~~patient without maneuvering the patient more than 45 degrees about the lateral axis and~~

1490 ~~30 degrees about the longitudinal axis of the patient, and does not compromise~~
1491 ~~functioning of monitoring systems, intravenous lines, or manual or mechanical~~
1492 ~~ventilation.~~

1493 ~~(f) Each air ambulance operator shall ensure that the patient compartment is configured~~
1494 ~~in such a way that air medical personnel have adequate access to the patient in order to~~
1495 ~~begin and maintain both basic and advanced life support. The operator shall ensure~~
1496 ~~that the air ambulance has adequate access and necessary space to maintain the~~
1497 ~~patient's airway and to provide adequate ventilatory support by an attendant from the~~
1498 ~~secured, seat-belted position within the air ambulance.~~

1499 ~~(g) Each air ambulance operator shall ensure that the aircraft is climate controlled for~~
1500 ~~the comfort of both the patient and air medical personnel. The air medical crew shall~~
1501 ~~take precautions to prevent temperature extremes that could adversely affect patient~~
1502 ~~care.~~

1503 ~~(h) Each aircraft shall have at least one stretcher installed and secured in the patient~~
1504 ~~compartment according to FAR part 135 guidelines, and which meets the following~~
1505 ~~requirements:~~

1506 ~~(1) accommodates a patient who is in the 95 percentile for an adult male, six ft.~~
1507 ~~tall, 212 lbs. or 96.2 kg;~~

1508 ~~(2) is capable of elevating a patient's head at least 30 degrees for patient care~~
1509 ~~and comfort; and~~

1510 ~~(3) has two patient securing straps.~~

1511 ~~(i) Each air ambulance operator shall ensure that all equipment, stretchers, and seating~~
1512 ~~are arranged so as not to block rapid egress by air medical personnel or patients from~~
1513 ~~the aircraft. The operator shall ensure that all equipment on board the aircraft is affixed~~
1514 ~~or secured in either approved racks or compartments or by strap restraint while the~~
1515 ~~aircraft is in operation.~~

1516 ~~(j) Each air ambulance operator shall ensure the aircraft has an adequate interior~~
1517 ~~lighting system so that patient care can be provided and the patient's status monitored~~
1518 ~~without interfering with the pilot's vision. The air ambulance operator shall ensure the~~
1519 ~~aircraft cockpit is capable of being shielded from light in the patient care area during~~
1520 ~~night operations. Red lighting or a reduced lighting level shall also be provided for the~~
1521 ~~pilot and air ambulance personnel.~~

1522 ~~(k) The aircraft shall have an electric inverter or appropriate power source which is~~
1523 ~~sufficient to meet the requirements of the complete specialized equipment package~~
1524 ~~without compromising the operation of any electrical aircraft equipment.~~

1525 ~~(l) When an isolette is carried during patient transport, the air ambulance operator shall~~
1526 ~~ensure that the isolette is able to be opened from its secured in-flight position in order to~~
1527 ~~provide full access to the infant.~~

1528 ~~(c) (m)~~ Each fixed-wing air ambulance shall have a two-way radio communications
1529 system which is readily accessible to both the attendants and the pilot, and which shall
1530 meet the following requirements:

1531 (1) allows communications between the aircraft and a hospital;

1532 ~~(2) allows communications between the aircraft and ground based ambulance~~
1533 ~~services;~~

1534 ~~(3) allows communications with air traffic control; and~~

1535 ~~(2) (4) allows an attendant to communicate at all times with medical control~~
1536 ~~exclusive of the air traffic control system.~~

1537 ~~(n) Each air ambulance operator shall ensure that the air ambulance shall have~~
1538 ~~on board, at all times, the following safety equipment:~~

1539 ~~(1) at least one 2-1-2 pound Halon fire extinguisher. The fire extinguisher shall~~
1540 ~~be accessible to both the pilot and air medical personnel in the patient compartment.~~
1541 ~~The air ambulance operator shall ensure that each fire extinguisher is fully charged with~~
1542 ~~a valid inspection certification;~~

1543 ~~(2) one battery-operated hand-held lantern with a power source of at least six~~
1544 ~~volts or two flashlights with a minimum of two "C or D-cell" battery capacity;~~

1545 ~~(3) appropriate survival equipment for the mission and terrain of the service's~~
1546 ~~geographic area of operations; and~~

1547 ~~(4) a "no smoking" sign posted in the patient and pilot compartments.~~

1548 ~~(d) (e) Fixed-wing ambulance aircraft shall have on board patient comfort equipment~~
1549 ~~including:~~

1550 ~~(1) one pillow;~~

1551 ~~(2) two complete sets of linen;~~

1552 ~~(3) two blankets;~~

1553 ~~(4) one waterproof cot cover;~~

- 1554 (1) ~~(5)~~ one urinal; and
- 1555 (2) ~~(6)~~ one bedpan;
- 1556 ~~(7)~~ one emesis basin or convenience bag; and
- 1557 ~~(8)~~ potable water.

1558 ~~(p) Each air ambulance operator shall ensure that each fixed-wing air ambulance is~~
1559 ~~equipped with an internal medical system which includes the following equipment.~~

1560 ~~(1) Each fixed-wing air ambulance shall have a gaseous or liquid medical~~
1561 ~~oxygen supply which is sufficient to provide the patient with up to 15 liters per minute~~
1562 ~~flow for the specific mission and duration of the flight, and is contained in at least two~~
1563 ~~separate containers, one of which shall be portable.~~

1564 ~~(A) The air ambulance operator shall ensure that the oxygen delivery system,~~
1565 ~~all necessary regulators, gauges, and humidity accessories are available to the air~~
1566 ~~medical personnel during in-flight operations.~~

1567 ~~(B) The air ambulance operator shall ensure that oxygen flow meters and~~
1568 ~~outlets are padded, flush mounted, or located to prevent injury to air medical personnel.~~

1569 ~~(2) Each fixed-wing air ambulance operator shall have two suction apparatus,~~
1570 ~~one of which shall be electrically powered, with wide bore tubing, a large reservoir and~~
1571 ~~various sizes of suction catheters. One suction unit shall be portable. The second may~~
1572 ~~be either portable or built into the aircraft. Both suction units shall have an air flow of at~~
1573 ~~least 28 liters per minute and a vacuum of at least 300 millimeters of mercury.~~

1574 ~~(q) Each air ambulance operator shall equip each fixed-wing air ambulance~~
1575 ~~with medical supplies and equipment which includes the following:~~

- 1576 ~~(1) airway management equipment including tracheal intubation equipment,~~
- 1577 ~~adult and pediatric bag-valve masks and ventilatory support equipment;~~
- 1578 ~~(2) a cardiac monitor/defibrillator and an extra battery or power source;~~
- 1579 ~~(3) advanced cardiac life support drugs and therapeutic modalities as indicated~~
- 1580 ~~by the operator's medical protocols;~~
- 1581 ~~(4) neonate specialty equipment and supplies for neonatal missions as~~
- 1582 ~~indicated by the service's medical protocols;~~
- 1583 ~~(5) a pulse oximeter and an intravenous infusion pump; and~~
- 1584 ~~(6) blood borne and body fluid pathogen protection equipment as described in~~
- 1585 ~~K.A.R. 109-2-8 (p).~~

1586 ~~(r) Each fixed wing air ambulance operator shall comply with the requirements~~

1587 ~~described in K.A.R. 109-2-11 (n) and (o).~~

1588 ~~(s) Each air fixed wing air ambulance operator shall ensure that all medical~~

1589 ~~equipment is maintained according to the manufacturer's recommendations and does~~

1590 ~~not interfere with the aircraft's navigational, radio communications or other on board~~

1591 ~~systems.—(Authorized by and implementing K.S.A. 1995 Supp. 65-6110; effective Jan.~~

1592 ~~31, 1997.)~~

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