

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  
1473 certificate for each aircraft licensed by the board. The operator shall submit a copy of  
1474 the 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-  
1476 engined 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  
1483 controls, 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  
1488 flight operations. The aircraft shall have an entry that allows loading and unloading of  
1489 the patient without maneuvering the patient more than 45 degrees about the lateral axis

1490 and 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  
1494 configured in such a way that air medical personnel have adequate access to the  
1495 patient in order to begin and maintain both basic and advanced life support. The  
1496 operator shall ensure that the air ambulance has adequate access and necessary  
1497 space to maintain the patient's airway and to provide adequate ventilatory support by an  
1498 attendant from the secured, seat-belted position within the air ambulance.

1499 (g) Each air ambulance operator shall ensure that the aircraft is climate  
1500 controlled for the comfort of both the patient and air medical personnel. The air medical  
1501 crew shall take precautions to prevent temperature extremes that could adversely affect  
1502 patient 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,~~  
1512 ~~and seating are arranged so as not to block rapid egress by air medical personnel or~~  
1513 ~~patients from the aircraft. The operator shall ensure that all equipment on board the~~  
1514 ~~aircraft is affixed or secured in either approved racks or compartments or by strap~~  
1515 ~~restraint while the aircraft is in operation.~~

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

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

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

1528 ~~(c) (m)~~ Each fixed-wing air ambulance shall have a two-way radio  
1529 communications system which is readily accessible to both the attendants and the pilot,  
1530 and which shall 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~~  
1549 ~~equipment 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  
1559 ambulance is equipped with an internal medical system which includes the following  
1560 equipment.

1561 ~~(1)~~ Each fixed-wing air ambulance shall have a gaseous or liquid medical  
1562 oxygen supply which is sufficient to provide the patient with up to 15 liters per minute  
1563 flow for the specific mission and duration of the flight, and is contained in at least two  
1564 separate containers, one of which shall be portable.

1565 ~~(A)~~ The air ambulance operator shall ensure that the oxygen delivery system,  
1566 all necessary regulators, gauges, and humidity accessories are available to the air  
1567 medical personnel during in-flight operations.

1568 ~~(B)~~ The air ambulance operator shall ensure that oxygen flow meters and  
1569 outlets are padded, flush mounted, or located to prevent injury to air medical personnel.

1570 ~~(2)~~ Each fixed-wing air ambulance operator shall have two suction apparatus,  
1571 one of which shall be electrically powered, with wide bore tubing, a large reservoir and  
1572 various sizes of suction catheters. One suction unit shall be portable. The second may  
1573 be either portable or built into the aircraft. Both suction units shall have an air flow of at  
1574 least 28 liters per minute and a vacuum of at least 300 millimeters of mercury.

1575 ~~(q) Each air ambulance operator shall equip each fixed-wing air ambulance~~  
1576 ~~with medical supplies and equipment which includes the following:~~

1577 ~~(1) airway management equipment including tracheal intubation equipment,~~  
1578 ~~adult and pediatric bag-valve masks and ventilatory support equipment;~~

1579 ~~(2) a cardiac monitor/defibrillator and an extra battery or power source;~~

1580 ~~(3) advanced cardiac life support drugs and therapeutic modalities as indicated~~  
1581 ~~by the operator's medical protocols;~~

1582 ~~(4) neonate specialty equipment and supplies for neonatal missions as~~  
1583 ~~indicated by the service's medical protocols;~~

1584 ~~(5) a pulse oximeter and an intravenous infusion pump; and~~

1585 ~~(6) blood borne and body fluid pathogen protection equipment as described in~~  
1586 ~~K.A.R. 109-2-8 (p).~~

1587 ~~(r) Each fixed wing air ambulance operator shall comply with the requirements~~  
1588 ~~described in K.A.R. 109-2-11 (n) and (o).~~

1589 ~~(s) Each air fixed wing air ambulance operator shall ensure that all medical~~  
1590 ~~equipment is maintained according to the manufacturer's recommendations and does~~  
1591 ~~not interfere with the aircraft's navigational, radio communications or other on board~~  
1592 ~~systems. (Authorized by and implementing K.S.A. 1995 Supp. 65-6110; effective Jan.~~  
1593 ~~31, 1997; amended P-\_\_\_\_\_.)~~

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