

1349 **109-2-12 Standards for rotorwing ambulance aircraft and equipment.**

1350 (a) Each air ambulance operator shall comply with the requirements described
1351 in K.A.R. 109-2-11 ~~Each air ambulance operator shall comply with all Federal Aviation~~
1352 ~~Regulations as contained in 14 C.F.R. Parts 91 and 135, as in effect on January 1, 1996~~
1353 ~~, which are adopted herein by reference.~~

1354 ~~(b) Each air ambulance operator shall obtain a valid standard airworthiness~~
1355 ~~certificate for each aircraft licensed by the board. The operator shall submit a copy of~~
1356 ~~the airworthiness certificate to the board when applying for the air ambulance license.~~

1357 ~~(c) Each air ambulance operator shall ensure that the aircraft's flight controls,~~
1358 ~~throttles, and radios are physically protected from any intended or accidental~~
1359 ~~interference by the patient, air medical personnel, or equipment and supplies.~~

1360 ~~(b) (d)~~ The aircraft design configuration shall not compromise patient stability
1361 during any part of flight operations. The aircraft shall have an entry that allows loading
1362 and unloading of the patient without maneuvering the patient more than 45 degrees
1363 about the lateral axis and 30 degrees about the longitudinal axis, and does not
1364 compromise the functioning of monitoring systems, intravenous lines, or manual or
1365 mechanical ventilation.

1366 ~~(e) The operator shall ensure that the patient compartment is configured in~~
1367 ~~such a way that air medical personnel have adequate access to the patient in order to~~
1368 ~~begin and maintain both basic and advanced life support. The operator shall ensure~~
1369 ~~that the air ambulance has adequate access and necessary space to maintain the~~

1370 patient's airway and to provide adequate ventilatory support by an attendant from the
1371 secured, seat-belted position within the air ambulance.

1372 (f) Each air ambulance operator shall ensure that the aircraft is climate
1373 controlled for the comfort of both the patient and air medical personnel. The air medical
1374 crew shall take precautions to prevent temperature extremes that could adversely affect
1375 patient care.

1376 (g) Each aircraft shall have at least one stretcher installed and secured in the
1377 patient compartment according to FAA part 135 guidelines, and which meets the
1378 following requirements:

1379 (1) accommodates a patient who is in the 95 percentile for an adult male, six ft.
1380 tall, 212 lbs. or 96.2 kg;

1381 (2) is capable of elevating the patient's head at least 30 degrees for patient
1382 care and comfort; and

1383 (3) has two patient securing straps.

1384 (d) Each air ambulance operator shall ensure that all equipment, stretchers,
1385 and seating are so arranged as not to block rapid egress by air medical personnel or
1386 patients from the aircraft. The operator shall ensure that all equipment on board the
1387 aircraft is affixed or secured in either approved racks or compartments or by strap
1388 restraint while the aircraft is in operation.

1389 (e) The aircraft shall have an adequate interior lighting system so that patient
1390 care can be given and the patient's status monitored without interfering with the pilot's

1391 vision. ~~Red lighting or a reduced level of lighting shall also be provided for the pilot and~~
1392 ~~air ambulance personnel.~~

1393 ~~(j) The aircraft shall have an electric inverter or appropriate power source which~~
1394 ~~is sufficient to meet the requirements of the complete specialized equipment package~~
1395 ~~without compromising the operation of any electrical aircraft equipment.~~

1396 ~~(k) When an isolette is used during patient transport, the operator shall ensure~~
1397 ~~that the isolette is able to be opened from its secured in-flight position in order to~~
1398 ~~provide full access to the infant.~~

1399 ~~(l) The aircraft shall have an external search light which shall be:~~

1400 ~~(1) at least 400,000 candlepower illumination at 200 feet;~~

1401 ~~(2) separate from the aircraft landing lights;~~

1402 ~~(3) moveable 90 degrees longitudinally and 180 degrees laterally; and~~

1403 ~~(4) capable of being controlled from inside the aircraft.~~

1404 ~~(m) Each rotorwing aircraft shall have a two-way radio communications~~
1405 ~~system which is readily accessible to both the attendants and the pilot, and which meets~~
1406 ~~the following requirements:~~

1407 ~~(1) allows communications between the aircraft and a hospital for medical~~
1408 ~~control exclusive of the air traffic control system; and~~

1409 ~~(2) allows communications between the aircraft and ground-based ambulance~~
1410 ~~services exclusive of the air traffic control system;~~

1411 ~~(3) allows communications with air traffic control; and~~

1412 ~~(4) allows the attendant to communicate at all times with medical control~~
1413 ~~exclusive of the air traffic control system.~~

1414 ~~(n) Each air ambulance operator shall ensure that the air ambulance shall have~~
1415 ~~on board, at all times, the following safety equipment:~~

1416 ~~(1) at least one 2-1-2 pound Halon fire extinguisher. The fire extinguisher~~
1417 ~~shall be accessible to both the pilot and air medical personnel in the patient~~
1418 ~~compartment. The air ambulance operator shall ensure that each fire extinguisher is~~
1419 ~~fully charged with a valid inspection certification;~~

1420 ~~(2) one battery-operated hand-held lantern with a power source of at least six~~
1421 ~~volts or two flashlights with a minimum of two "C or D-cell" battery capacity;~~

1422 ~~(3) appropriate survival equipment for the mission and terrain of the service's~~
1423 ~~geographic area of operations; and~~

1424 ~~(4) a "no smoking" sign posted in the patient and pilot compartments.~~

1425 ~~(2) Each rotorwing air ambulance shall have two suction apparatus, one of~~
1426 ~~which shall be electrically powered, with wide bore tubing, a large reservoir and various~~
1427 ~~sizes of suction catheters. One suction unit shall be portable. The second may be~~
1428 ~~either portable or built into the aircraft. Both suction units shall have an air flow of at~~
1429 ~~least 28 liters per minute and a vacuum of at least 300 millimeters of mercury.~~

1430 ~~(o) Each air ambulance operator shall ensure that each rotorwing air~~
1431 ~~ambulance is equipped with an internal medical system which includes the following~~
1432 ~~equipment.~~

1433 ~~(1) Each rotorwing air ambulance shall have a gaseous or liquid medical~~
1434 ~~oxygen supply which is sufficient to provide the patient with up to 15 liters per minute~~
1435 ~~flow for the specific mission and duration of the flight, and is contained in at least two~~
1436 ~~separate containers, one of which shall be portable.~~

1437 ~~(A) The air ambulance operator shall ensure that the oxygen delivery system,~~
1438 ~~all necessary regulators, gauges and humidity accessories are available to the air~~
1439 ~~medical personnel during in-flight operations.~~

1440 ~~(B) The air ambulance operator shall ensure that oxygen flow meters and~~
1441 ~~outlets are padded, flush mounted, or located to prevent injury to air medical personnel.~~

1442 ~~(2) Each rotorwing air ambulance shall have two suction apparatus, one of~~
1443 ~~which shall be electrically powered, with wide bore tubing, a large reservoir and various~~
1444 ~~sizes of suction catheters. One suction unit shall be portable. The second may be~~
1445 ~~either portable or built into the aircraft. Both suction units shall have an air flow of at~~
1446 ~~least 28 liters per minute and a vacuum of at least 300 millimeters of mercury.~~

1447 ~~(p) Each air ambulance operator shall equip each rotorwing air ambulance with~~
1448 ~~medical supplies and equipment which includes the following:~~

1449 ~~(1) airway management equipment including tracheal intubation equipment,~~
1450 ~~adult and pediatric bag valve masks and ventilatory support equipment;~~

1451 ~~(2) a cardiac monitor/defibrillator and an extra battery or power source;~~

1452 ~~(3) advanced cardiac life support drugs and therapeutic modalities as indicated~~
1453 ~~by the air ambulance operator's medical protocols;~~

1454 ~~(4) neonate specialty equipment and supplies for neonatal missions as~~
1455 ~~indicated in the service's medical protocols;~~

1456 ~~(5) advanced trauma life support treatment modalities as indicated in the~~
1457 ~~service's medical protocols;~~

1458 ~~(6) a pulse oximeter and an intravenous infusion pump; and~~

1459 ~~(7) blood borne and body fluid pathogen protection equipment as described in~~
1460 ~~K.A.R. 109-2-8 (p).~~

1461 ~~(q) Each air ambulance operator shall comply with the requirements described~~
1462 ~~in K.A.R. 109-2-11 (n) and (o).~~

1463 ~~(r) Each air ambulance operator shall ensure that all medical equipment is maintained~~
1464 ~~according to the manufacturer's recommendations and does not interfere with the~~

1465 ~~aircraft's navigation or on-board systems. (Authorized by and implementing K.S.A.~~

1466 ~~1995 Supp. 65-6110; effective May 1, 1987; amended July 17, 1989; amended Jan. 31,~~

1467 ~~1997.)~~