

ODEMSA Regional Air Medical Evacuation Guidelines

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2017

Old Dominion EMS Alliance, Inc.

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Members of the Old Dominion EMS Alliance (ODEMSA) Air Medical Committee oversee this plan as a cohesive team. The objective is to bring together elements of the central Virginia EMS System to help provide the ODEMSA region with excellent emergency care through the use of rotor-wing and fixed-wing aircraft and trained critical care crews in transporting patients to centers of definitive emergency care. All ODEMSA policies, procedures, and guidelines in this plan have received final approval from the ODEMSA Board of Directors.

Revised/Approved: October 2017

Regional Guidelines for Emergency Air Medical Evacuation

The Old Dominion EMS Alliance (ODEMSA) is fortunate to have the availability of multiple air medical resources within the Central Virginia region. The Virginia State Police Med-Flight 1 and Virginia Commonwealth University LifeEvac 1 are the primary medevac agencies that provide care and air transport for patients throughout the ODEMSA region. There are multiple medevac agencies surrounding the ODEMSA regions which serve as secondary resources should the need arise.

The Air Medical Committee's objective is to bring together elements of the central Virginia EMS System to help provide the ODEMSA region with excellent emergency care through the use of rotor-wing and fixed-wing aircraft and trained critical care crews in transporting patients to centers of definitive emergency care. In keeping with the goals and values as adopted by the Air Medical Committee, all policies and protocols related to the air medical evacuation of patients have been reviewed by the committee members. The Committee has developed general guidelines for both hospital and pre-hospital agencies located within the region. It is their recommendation that these items be reviewed and that all Emergency Communications Centers (ECCs) update their databases with the current contacts of each air medical resource as listed in these documents.

General Guidelines:

The transport of patients from the scene, including the mode of transportation, should be in line with State Criteria for Air Medical Transport as contained in the State Trauma Triage Plan, reproduced on Page 5 of the ODEMSA Regional Trauma Triage Plan, and included as *Attachment A*.

A suggested Air Medical Resource List Matrix is provided by ODEMSA in *Attachment B*. It is strongly recommended that requests for air medical resources be made through the city/county ECC.

The transfer of patients from local hospitals will continue to utilize existing partnerships or agreements. When the primary aircraft is unavailable, each of the air medical dispatch centers in the region has agreed to coordinate the response of the next closest appropriate air medical resource.

The centers are working with ODEMSA in providing seamless dispatch of the primary and any secondary aircraft required. The dispatch numbers for these resources are as follows:

Virginia State Police Med-Flight I	VCU LifeEvac 1	VCU LifeEvac 3
7411 Airfield Dr.	23301 Airport Rd.	345 Tailwind Lane
North Chesterfield, VA 23237	Petersburg, VA 23803	Mattaponi, VA 23110
800-468-8892	877-902-7779	877-902-7779

The ODEMSA Air Medical Committee meets quarterly. Please refer to the ODEMSA website for the current schedule www.odemsa.vaems.org or contact ODEMSA at 804-560-3300 if you have any questions or suggestions.

Resource Attachments:

Attachment A: Field Triage Decision Schematic

Attachment B: Services Map

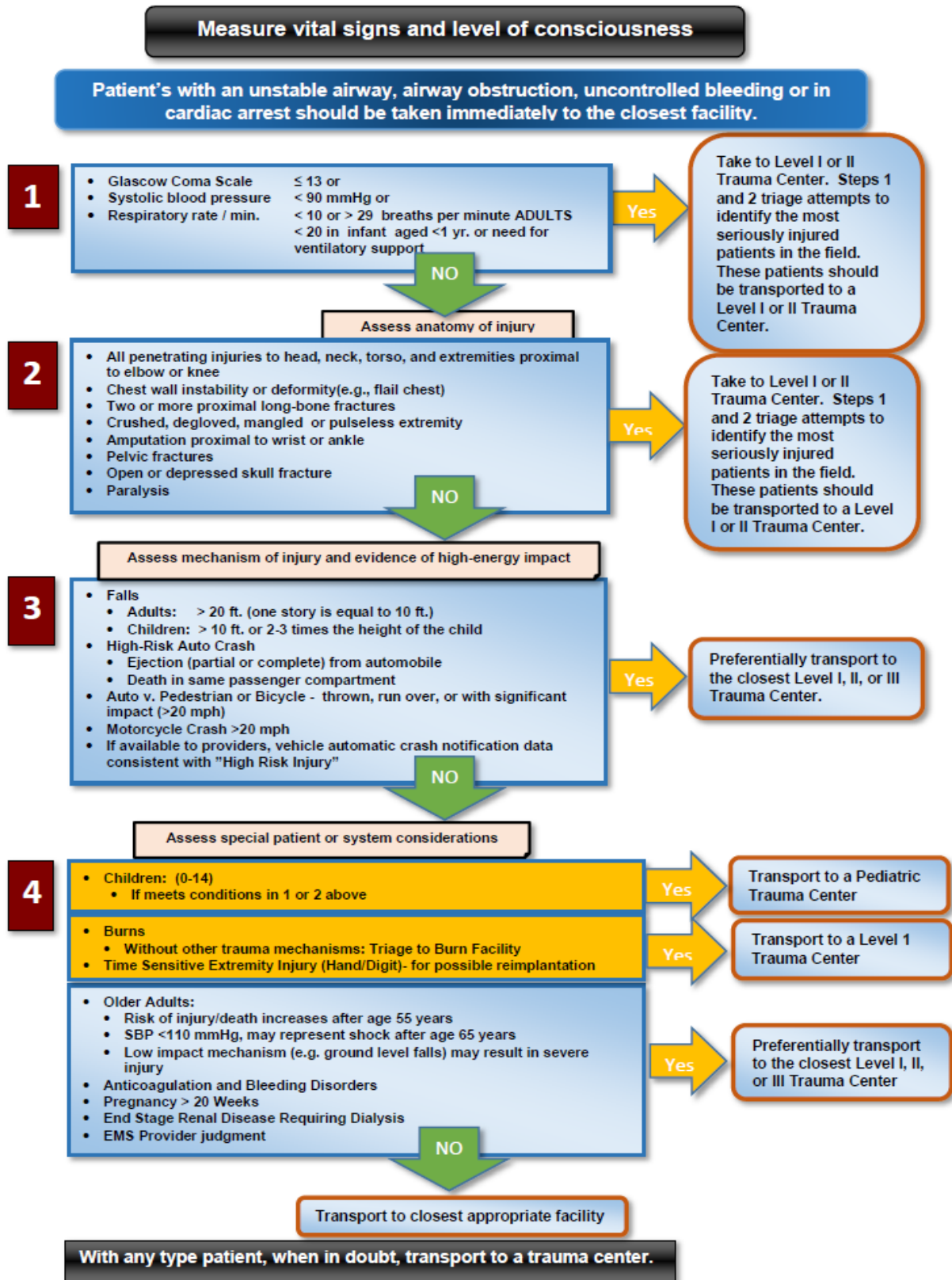
Attachment C: Air Medical List Matrix

Attachment D: State Criteria for Air Medical Transport

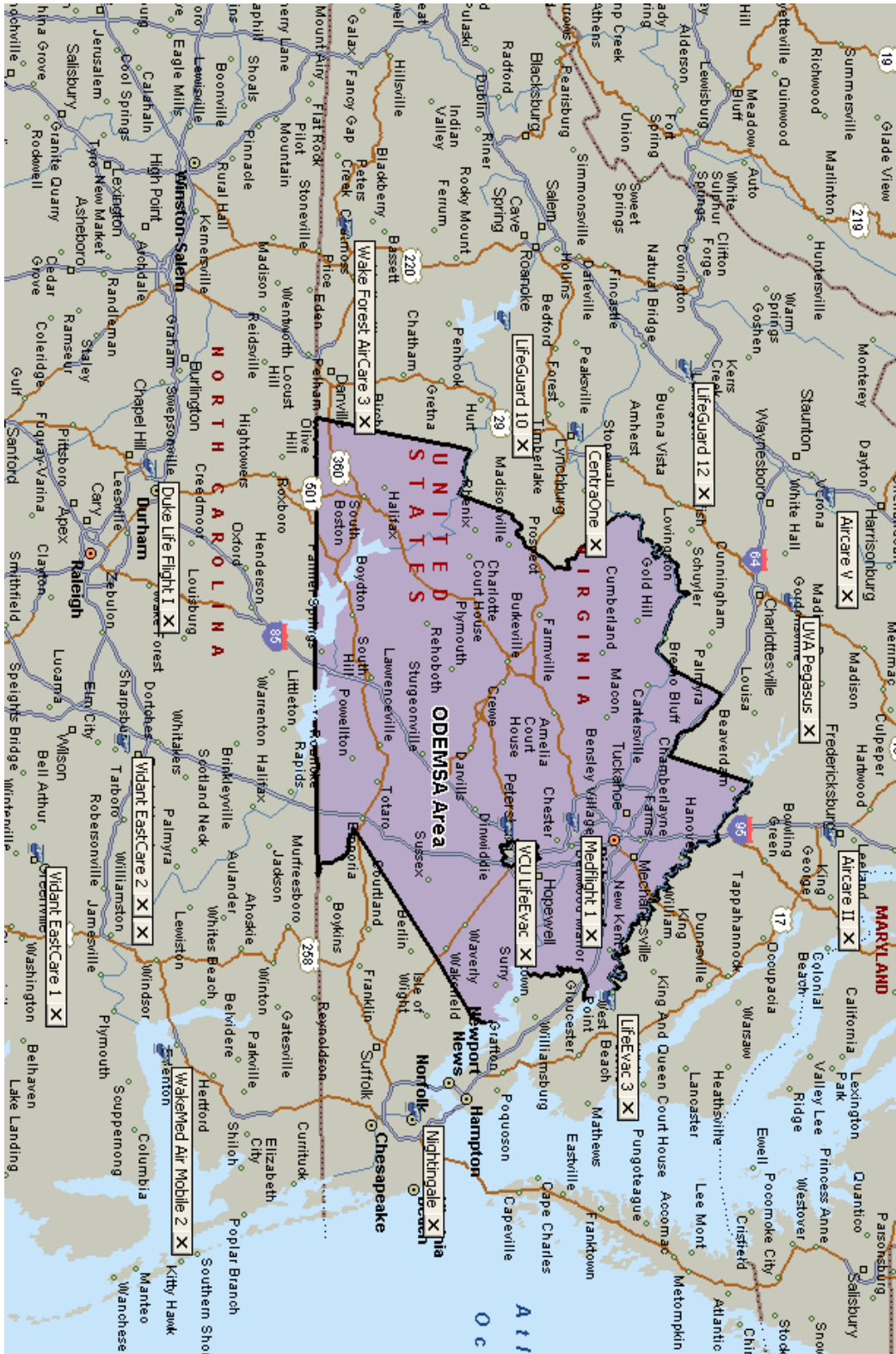
Attachment E: Air Medical Transport Guidelines for the STEMI & Stroke Patient:

Attachment F: Recommendations for Receiving Hospital Helipad Operations

Attachment A Field Triage Decision Schematic



Attachment B: Services Map



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Attachment C: Air Medical List Matrix

AMELIA COUNTY			BRUNSWICK COUNTY			BUCKINGHAM COUNTY		
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance		
1	Med-Flight 1	25	VCU LifeEvac 1	34	Pegasus	38		
2	VCU LifeEvac 1	27	Vidant Air 3	45	Centra 1	44		
3	Pegasus	61	Med-Flight 1	47	Aircare 5	51		
4	Centra 1	68	VCU LifeEvac 3	79	LifeGuard 12	52		
5	VCU LifeEvac 3	68	Duke LifeFlight	80	Med-Flight 1	56		
6	Aircare 2	71	Centra 1	83	VCU LifeEvac 1	62		

CHARLES CITY COUNTY			CHARLOTTE COUNTY			CHESTERFIELD COUNTY		
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance		
1	VCU LifeEvac 3	19	Centra 1	38	Med-Flight 1	0		
2	Med-Flight 1	26	LifeGuard 10	60	VCU LifeEvac 1	14		
3	VCU LifeEvac 1	28	VCU LifeEvac 1	64	VCU LifeEvac 3	46		
4	Nightingale	53	LifeGuard 12	66	Aircare 2	61		
5	Aircare 2	66	Med-Flight 1	67	Pegasus	71		
6			Duke LifeFlight	70				

CUMBERLAND COUNTY			DINWIDDIE COUNTY			GOOCHLAND COUNTY		
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance		
1	Med-Flight 1	40	VCU LifeEvac 1	0	Med-Flight 1	31		
2	Pegasus	44	Med-Flight 1	22	Pegasus	41		
3	VCU LifeEvac 1	47	VCU LifeEvac 3	58	VCU LifeEvac 1	44		
4	Centra 1	55	Nightingale	75	Aircare 2	44		
5	Aircare 5	65	Aircare 2	81	VCU LifeEvac 3	64		
6	Aircare 2	67	Pegasus	85				

GREENSVILLE COUNTY			HALIFAX COUNTY			HANOVER COUNTY		
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance		
1	VCU LifeEvac 1	31	Centra 1	41	Med-Flight 1	24		
2	Med-Flight 1	46	LifeGuard 10	50	Aircare 2	37		
3	Vidant Air 3	61	Duke LifeFlight	53	VCU LifeEvac 1	39		
4	Nightingale	70	UNC	60	VCU LifeEvac 3	42		
5	VCU LifeEvac 3	71	LifeGuard 12	75	Pegasus	62		
6	Duke LifeFlight	89	VCU LifeEvac 1	85				

Air Medical List Matrix (Continued)

HENRICO COUNTY			LUNENBURG COUNTY		MECKLENBURG COUNTY	
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance
1	Med-Flight 1	13	VCU LifeEvac 1	46	VCU LifeEvac 1	57
2	VCU LifeEvac 1	26	Med-Flight 1	51	Duke	57
3	VCU LifeEvac 3	34	Centra 1	59	Centra 1	64
4	Aircare 2	49	Duke	75	Med-Flight 1	67
5	Pegasus	71	LifeGuard 10	80	Vidant Air 3	67
6			Pegasus	83	UNC	67

NEW KENT COUNTY			NOTTOWAY COUNTY		POWHATAN COUNTY	
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance
1	VCU LifeEvac 3	13	VCU LifeEvac 1	30	Med-Flight 1	23
2	Med-Flight 1	29	Med-Flight 1	34	VCU LifeEvac 1	34
3	VCU LifeEvac 1	35	Centra 1	64	Pegasus	50
4	Aircare 2	58	Pegasus	64	Aircare 2	55
5	Nightingale	59	VCU LifeEvac 3	75	VCU LifeEvac 3	63
6			Aircare 2	83		

PRINCE EDWARD COUNTY			PRINCE GEORGE COUNTY		SURRY COUNTY	
	Air Resource	Distance	Air Resource	Distance	Air Resource	Distance
1	Centra 1	42	VCU LifeEvac 1	16	VCU LifeEvac 3	28
2	VCU LifeEvac 1	52	Med-Flight 1	21	VCU LifeEvac 1	33
3	Med-Flight 1	52	VCU LifeEvac 3	31	Med-Flight 1	38
4	Pegasus	62	Nightingale	55	Nightingale	38
5	LifeGuard 12	67	Aircare	74	Aircare 2	83
6	LifeGuard 10	70				

SUSSEX COUNTY		
	Air Resource	Distance
1	VCU LifeEvac 1	22
2	Med-Flight 1	36
3	VCU LifeEvac 3	50
4	Nightingale	53
5	Vidant Air 3	80
6	Aircare 2	93

Reviewed January 2018

Attachment D: State Criteria for Air Medical Transport*

Criteria for Air Medical Transport

The use of Medevac services can assist with trauma patients reaching definitive trauma care in a timely fashion. EMS providers will have to weigh the risks and benefits, including conditions such as transport time and weather conditions. When air medical transport is determined applicable, the MOST appropriate Medevac service [Helicopter EMS (HEMS)] available at the time of the incident should be utilized to transport the trauma patient to the closest appropriate hospital.

Scene transports by helicopter:

- ✓ All patients transported by air must meet the clinical triage criteria for transport the closest appropriate Level I or II trauma center or burn center; *OR*
- ✓ The patient requires a level of care greater than can be expected by the local ground provider.

AND any one (1) of the following:

- ✓ Difficult access situations: Wilderness rescue, Ambulance egress or access impeded at the scene by road conditions, weather or traffic.
- ✓ Time/distance factors
- ✓ ETA to a local hospital by ground greater than ETA to the trauma center by helicopter.

Interhospital transport by helicopter:

- ✓ All trauma patients transported by air should meet the clinical trauma triage criteria for transport to the closest Level I or Level II trauma center or burn center
- ✓ The patient must require a level of care greater than can be provided by the local hospital.
- ✓ The patient requires time critical intervention, out of hospital time needs to be minimal, or distance to definitive care is long.

*Virginia Office of EMS, Medevac Resources Information, A Guide to Air Medical Services in Virginia, March 2011

Attachment E: Air Medical Transport Guidelines for the STEMI & Stroke Patient:

- When presented with a STEMI or Stroke patient, EMS Providers should weigh the risks and benefits of Medevac services in getting definitive, appropriate cardiovascular and/or neurovascular care *within the time parameters as specified in the ODEMSA Regional Protocols*. Particular consideration must be made for those patients wearing Left Ventricular Assist Devices (LVADs) or similar devices, as well as those patients requiring Hypothermic Interventions, due to Return of Spontaneous Circulation (ROSC).
 - Recognized hospitals specializing in Left Ventricular Assist Devices (LVADs)

Chippenham Medical Center	St. Mary's Hospital
VCU Health Systems	
 - Recognized Percutaneous Coronary Intervention (PCI) centers include:

Chippenham Medical Center	Henrico Doctors Hospital (Forest)
Memorial Regional Medical Center	Southside Regional Medical Center
St. Francis Medical Center	St. Mary's Hospital
VCU Health Systems	
- With duration of Stroke symptoms of less than 3.5 hours, scene and transport times should be minimized so the patient may receive the maximum benefit of intravenous thrombolytic therapy (tPA). Onset of symptoms is defined as the last **witnessed** time the patient was symptom free. All hospitals located within the ODEMSA region are Acute Stroke Capable hospitals.
 - Recognized Primary Stroke Centers (PSC) include:

Chippenham Medical Center *	Henrico Doctors Hospital (Forest) *
John Randolph Medical Center	Johnston Willis Hospital *
Memorial Regional Medical Center*	Parham Doctors Hospital
Retreat Doctors Hospital	Richmond Community Hospital
Southside Regional Medical Center	St. Francis Medical Center
St. Mary's Hospital *	VCU *
VCU Community Memorial Hospital	

***PCS centers with Neuroendovascular capabilities**
- Providers should remember there is an increased risk of stroke after a myocardial infarction (MI). Positive predictors of stroke after MI include: advanced age; diabetes;

***Providers should reference the 2018 ODEMSA Regional Protocol Section 2 Adult Cardiovascular Emergencies and 3.5 Adult General Medical Emergencies – Cerebrovascular Accident (Stroke).**

Attachment F: Recommendations for Helipad Operations for Receiving Hospitals

Purpose:

While all hospitals have an obligation to ensure a safe area of operations for medevac aircraft, ODEMSA recognizes that hospitals that receive patients by air should meet a higher standard of safety and operational proficiency. This is due to the changed duties and roles of participants for receiving facilities, the expected increase in traffic, potential for multiple aircraft and the uncertain timing of aircraft arrival.

This document is meant to act as a template for operations, to highlight areas that may not be intuitive to facilities that do not regularly receive patients by air and to guide facilities to available resources.

Scope:

Hospital helipad operations may involve several departments of a facility; including Safety/Security, Risk Management, Emergency Medicine, specific Service Line Administrators, Nursing and Administration. This document will highlight some areas that should be included in helipad operations such as policies and infrastructure discussed in the following headings; risk management, communication, training of responders, emergency response, and policy communication and infrastructure.

Infrastructure:

Hospitals intending to receive patients by air should have a designated, secure landing area, located away from existing towers/obstructions. The landing area should be a hard surface with no steps. This facilitates use of a wheeled stretcher for the safety of the patient, flight crew and receiving team. Ideally, no section of the designated path should require the patient to be carried, as this requires a large number of resources and increases potential risk.

The landing area should be marked in such a way that it is clearly visible from the air, day or night. This can be done with painting of a red "H" for day operations and use of marking lights for night operations. Lights should be ground level if possible, so as not to be an obstruction, and able to withstand the high winds of the rotor wash on takeoff and landing. Helipad lighting should not be pointed directly at aircraft or anticipated approach path where it could be a distraction to the pilot.

Landing areas should be enclosed with a barrier to prevent pedestrian or vehicle traffic from entering during helipad operations. This significantly reduces the manpower needed to secure the area as reduction of entry points reduces the amount of resources needed to insure security. Low fences are adequate for providing security. Concrete barriers add the benefit of controlling the wind and preventing damage to property and injury to persons.

Training:

Landing area responders should have initial and ongoing training regarding operations. This training should include hazard awareness, fire suppression, aircraft safety and communication.

Recommendations for Helipad Operations for Receiving Hospitals (continued)

Local medevac resources should be consulted regarding training. In addition, the National EMS Pilots Association (NEMSPA) has resources available including a free training video at www.nemspa.org.

Military Aircraft:

The limitations of the landing area should be known and military aircraft should be taken into account. If the area is not sufficient to accommodate the larger military aircraft, a secondary landing area should be identified for their use. In the event of a major disaster, the potential for military aircraft to be involved in operations cannot be overlooked.

Disclaimer:

The information contained in this document is intended to be used as a guideline only. Local laws and regulations take precedence.

Additional Resources:

*FAA Advisory Circular AC 150/5390-2 Heliport Design
The 2011 NFPA 418: Standard for Heliports*