



Number:	COTS-EM-11a
Title:	REGIONAL HELICOPTER AIR AMBULANCE (HAA) COMMUNICATION AND SAFETY GUIDELINES
Approved by:	COTS Board of Trustees; COTS Emergency Services Advisory Board
Initial Approval Date:	2011
Revision Dates:	2021; 2022 name/logo ;2023 added cover page
Next Review Date:	2024



REGIONAL HELICOPTER AIR AMBULANCE (HAA) COMMUNICATION AND SAFETY GUIDELINES

INTENT

The intent of these guidelines is to standardize communication processes between helicopter air ambulance (HAA) programs and receiving hospitals to minimize risks associated with HAA transport.

COTS endorses the State of Ohio Helicopter Air Ambulance (HAA) Communications Plan.

It is COTS expectation that all HAA programs Inbound to/outbound from COTS member hospitals in the Greater Columbus Area will follow the State of Ohio HAA Communications Plan (See Attachment A).

NOTE: The Greater Columbus Area can be loosely defined as ten (10) nautical miles from the cities center.

Medflight has been identified by COTS member hospitals as the Coordinating Communications Center (CCC).

The Ohio Association of Critical Care Transport (OACCT) offers recommendations for the Safety of Helicopter Operations (See Attachment B) and education/guidance on Helicopter Shopping (Attachment C).

Attachment B includes information on:

- Helipad Risk Assessment
- Notice to Airmen (NOTAM)
- Central Clearing House for hospital operations

MARCS is the preferred mode of communication for a cabin-to-hospital patient report in aeromedical transports. If MARCS is not available, a patient report should be placed to the receiving hospital via another applicable radio frequency or relayed by the aeromedical program's communications center or the MedFlight Communications Center.

SCOPE

These guidelines pertain to COTS member hospitals and to HAA programs that transport patients to and from these hospitals.

ASSUMPTIONS

1. Multiple HAA services transfer patients in and out of Central Ohio to/from COTS member hospitals.
2. Participating HAA services should have or work towards attaining a MARCS radio system for communications with COTS member hospitals.
3. Central Ohio hospitals vary in their communication capabilities with HAA services; some hospitals have centralized communication centers while others communicate with HAA personnel via an emergency department staff member.
4. Hospital Helipad Operations must notify MedFlight (***Coordinating Communications Center***) without delay of any known helipad issues including but not limited to the presence of construction cranes in the vicinity, helipad debris, patient-transport elevator issues, etc.

INBOUND HAA PROGRAM COMMUNICATIONS TO HOSPITAL STAFF

All HAA Programs Inbound to COTS member hospitals in the Greater Columbus Area will follow the **State of Ohio HAA Communications Plan** (See Attachment A).

Patient Report

1. HAA Communications Centers should notify the receiving facility as soon as practical of any inbound HAA transport and the estimated time of arrival.
2. Patient report should be provided by the HAA cabin personnel 5 to 15 minutes prior to the patient's arrival on the helipad. Pilots should keep in mind that they may be required to move their HAA in the event of other incoming patients.
3. Patient report details provided by the incoming HAA staff should at minimum adhere to the **COTS Regional Patient Care Handoff Communication Guideline** (see ATTACHMENT D).
4. HAA cabin report directly to the hospital should be given via MARCS radio, if possible.
5. If direct report via MARCS is not possible, the patient report should be communicated to the receiving emergency department via the HAA program's communication center. MedFlight Communication Center, COTS CCC, can be utilized to relay the patient report to the receiving hospital.
6. In-flight phones can be used to relay report into the receiving emergency department, if no other mode is available.

IN THE EVENT OF A LARGE-SCALE DISASTER, HOSPITAL MARCS RADIOS MAY BE REQUIRED TO MIGRATE FROM THEIR HOSPITAL-SPECIFIC CHANNEL TO A UNIFIED TALK GROUP CHANNEL as part of the disaster response. These unified channels differ among Ohio's Homeland Security Regions. Hospitals who utilize a MARCS radio for routine HAA communications must always maintain at least one other MARCS radio that can migrate to a unified talk group in the event of a disaster. For some hospitals, this may require the installation of additional MARCS radio and/or antenna equipment.

POST-LANDING AND OUTBOUND COMMUNICATIONS

All HAA programs will follow the **State of Ohio HAA Communication Plan** (See Attachment A).

SYSTEM IMPROVEMENT PROCESS

All HAA programs that transport patients in and out of the Greater Columbus Area to COTS member hospitals are invited to abide by these guidelines for increased safety of patients and staff. Participating hospitals and HAA programs are expected to contact each other within two business days if lapses in communications occur. Similarly, both stakeholder groups are accountable for their own performance improvement related to gaps in communications. System level concerns can/may be brought to COTS via contacting the COTS President.

If lapses in communications occur between HAA programs and hospitals that pose a safety risk, the events should be submitted directly to the Ohio Association of Critical Care Transport (OACCT) Safety Chair for review at safetycommitteechair@oacct.org

ACKNOWLEDGEMENT

Similar work to this Central Ohio initiative has been done in other regions of the state. Acknowledgement is given to University Air Care of Cincinnati, Dayton CareFlight, and the membership of the Ohio Association of Critical Care Transport for sharing their communication operations policies with COTS and partnering with us to meet our mission.

For more information about these guidelines, contact COTS President at 614-240-7419.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

STATE OF OHIO HAA COMMUNICATIONS PLAN

INTRODUCTION:

In June 2008, a catastrophic mid-air collision near Flagstaff, AZ resulted in the death of two patients, five rotor-wing crewmembers and the destruction of two aircraft. The National Transportation Safety Board has determined that the probable cause of the accident was that both pilots failed to see and avoid the other helicopter on approach to the helipad. Contributing to the accident were the failure of one of the pilots to follow arrival and noise abatement guidelines and the failure of the other pilot to follow communications guidelines.

In order to mitigate the potential of this occurrence in our state, the Ohio Association of Critical Care Transport (OACCT) developed this document in 2009, and the Air Medical Providers (AMPs), providing helicopter EMS, who are OACCT members agree to its content, in an effort to enhance safety amongst and between helicopters operating in the same geographical region.

In 2014, the Ohio Association of Critical Care Transport (OACCT) elected to revise the State of Ohio HAA Communication Plan. This Communication Plan is reviewed and updated as needed by OACCT.

This communication plan is intended to supplement current FAA regulated procedures, such as ATC contact and airport advisories, and not to alter or replace them.

PURPOSE:

To enhance safety and reduce air-traffic conflicts near hospital helipads and scene locations by:

1. Standardizing communication procedures for all aircraft intending to take off or land at a scene or hospital helipad.
2. Supplementing FAA and Aircraft Operator procedures.

ASSUMPTIONS:

1. The first priority is always the safety of all concerned.
2. No helicopter shall land on or depart from any hospital helipad or scene location unannounced.
3. Part 135 Operators have published Scene and Hospital Communications Procedures contained in their respective General Operations Manual (GOM).
4. The Transferring Facility bears the onus of deciding mode of transfer AND for activating the transferring helicopter program, as is consistent with EMTALA [§489.24(f), paragraph 7].
5. Every aeromedical program coordinates dispatch of its own helicopters.

DEFINITIONS:

1. **Communications Center:** A Part 135 operator or hospital aeromedical program call center responsible for receiving and processing HAA transport requests. The responsibilities of each Communications Center are listed in the Communications Centers Expected Communications section below.
2. **Coordinating Communications Center (CCC):** Any Communications Center for a large metropolitan area who has volunteered to coordinate the flow of HAA traffic into and out of that metropolitan

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

area. The responsibilities of each CCC are listed in the Communications Centers Expected Communications section below.

NOTE: Not all large metropolitan areas will have a CCC.

3. **HAA:** Helicopter Air Ambulance.
4. **Hospital Helipad:** A designated improved landing area intended to be utilized only by HAA aircraft to pick-up or drop-off medical patients at a medical facility/hospital.
5. **Helipad Operations:** The department/designated point of contact within a hospital/medical facility that is responsible for providing access to the helipad and ensuring that the helipad is ready for use. The responsibilities of Helipad Operations are listed in the Helipad Operations Expected Communications section below.
6. **Part 135:** The Federal Aviation Administration (FAA) Federal Aviation Regulation (FAR) section under which a HAA transport is conducted. Operations under Part 135 require an Air Carrier Certificate issued by the FAA.
7. **Receiving Hospital:** A hospital or medical facility that an HAA delivers patients into for higher levels of care.
8. **Scene Location:** An un-improved landing area intended to be utilized only by HAA aircraft for the sole purpose of picking-up medical patients. Also referred to as a Landing Zone or LZ. Examples of scene locations include an open field or parking lot.
9. **Shall:** Indicates a mandatory procedure.
10. **Should:** Indicates a recommended but not mandatory procedure.
11. **Transferring Hospital:** A hospital or medical facility that is utilizing HAA to transport a patient out of their facility to a facility that can provide higher levels of care.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

PILOTS

EXPECTED COMMUNICATIONS

Use of VHF 123.025 (Helicopter Air-to-Air):

Pilots *shall* utilize this frequency to announce their position and intentions whenever inbound to or departing from any scene location or hospital helipad. **Pilots *shall* make all their calls on 123.025 whether or not there is known traffic in the vicinity.** The following information *shall* be given:

- Ten (10) NM from landing
- Five (5) NM from landing
- Final for landing
- Landed safely
- Liftoff (**prior to departure**)
- Five (5) NM from departure site
- Ten (10) NM from departure site
- Clear of the area

Pilots *shall* use the following format for radio calls on the helicopter air-to-air frequency:

- Area of hospital or scene
- Aircraft Call Sign
- Location relative to the hospital or scene
- Altitude
- Landing, departing or over-flight intentions
- Name of the hospital or scene.
- Area of hospital or scene

EXAMPLE: "Columbus downtown traffic, (aircraft Call sign), 10 NM to the east @ one-thousand eight hundred feet, inbound for landing @ OSU, Columbus downtown traffic."

RECEIVING HOSPITAL HELIPAD PROCEDURES

Inbound to the Receiving Hospital:

Pilots *shall* communicate with their Communications Center **or** with the Coordinating Communications Center (if there is a CCC in the metropolitan area):

- Prior to departing the Transferring Hospital or Scene Location giving an estimated time of departure, destination, and estimated time en-route to the Receiving Hospital.
- While enroute, providing updates or changes as necessary.

In addition to the procedures above, Pilots *shall* make all the required radio calls on the helicopter air-to-air frequency.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

NOTE: Upon landing at the Receiving Hospital the pilot will remain available by mobile phone or portable radio to clear the helipad for other inbound aircraft if necessary.

Outbound from the Receiving Facility:

Pilots *shall* communicate with their Communications Center **or** the Coordinating Communications Center (if there is a CCC in the metropolitan area):

- **Prior to liftoff** giving direction of departure.
- While enroute, providing updates or changes as necessary.

In addition to the procedures above, Pilots *shall* make all the required radio calls on the helicopter air-to-air frequency.

TRANSFERRING HOSPITAL/SCENE LOCATION PROCEDURES

If the Scene or Transferring Hospital is located within the boundaries of an airport traffic area, Class B, C, or D airspace, the pilot shall use the appropriate airspace frequency. If the Transferring Hospital has procedures for radio communications prior to landing (contacting security via radio etc.) those procedures should be followed.

Pilots should also utilize the helicopter air-to-air frequency for additional safety.

If a scene is located outside the boundaries of an airport traffic area, Class B, C, or D airspace, the pilot shall use the helicopter air-to-air frequency to communicate their position and intentions as outlined above.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

COMMUNICATIONS CENTERS

EXPECTED COMMUNICATIONS

Inbound Procedures:

Inbound Helicopter's Communications Center:

Shall communicate with the Receiving Hospital's Helipad Operations and/or the Coordinating Communications Center (if there is a CCC in the metropolitan area):

- As soon as possible with information provided by their inbound aircraft.
- When updates or changes occur.

Shall communicate with their aircraft:

- Information received from Helipad Operations and/or the CCC.
- When updates or changes occur.

Coordinating Communications Center:

Shall communicate to the Inbound HAA aircraft's Communications Center or directly with the aircraft if applicable:

- Any known hazards including if there are other aircraft on hospital helipads in the metropolitan area.
- Information received from other HAA Communications Centers concerning HAA aircraft operating into or out of the metropolitan area.
- When updates or changes occur.

Outbound Procedures:

Outbound Helicopter's Communications Center:

Shall communicate with the Receiving Hospital's Helipad Operations and the Coordinating Communications Center (if there is a CCC in the metropolitan area):

- As soon as possible with information provided by their outbound aircraft and
- When updates or changes occur.

Shall communicate with their HAA aircraft:

- Information received from the Receiving Hospital or CCC.
- When updates or changes occur.

Coordinating Communications Center:

Shall communicate to the Outbound Helicopter's Communications Center or directly with the aircraft, if applicable:

- Any known hazards including if there are other aircraft on hospital helipads in the metropolitan area,
- Information received from other HAA Communications Centers concerning aircraft operating into or out of the metropolitan area and
- When updates or changes occur.

Should monitor the helicopter air-to-air frequency if possible.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

HELIPAD OPERATIONS

EXPECTED COMMUNICATIONS

Helipad Operations is expected to notify the Communications Centers in their area of any change in the status of their helipad as these changes occur. Communications Centers must also be notified of all hazards such as construction, slick surfaces, etc. as soon as possible.

Inbound Aircraft Procedures:

When an aircraft is inbound to a hospital the Communications Center of the inbound aircraft or the Coordinating Communications Center (if there is a CCC in the metropolitan area) will contact Helipad Operations at the receiving hospital to alert them about the inbound aircraft. During this communication, Helipad Operations *shall* communicate to the Inbound Aircraft's Communications Center or the CCC:

- Any changes in helipad status (i.e. closures/maintenance)
- Any known hazards associated with the helipad. Examples of hazards include, but are not limited to: construction cranes in the vicinity, slick surface due to ice etc.

Outbound Aircraft Procedures:

When an aircraft is departing the hospital Helipad Operations *shall* communicate to the Outbound Helicopter's Communications Center or Coordinating Communications Center if applicable:

- Any known aircraft inbound to the helipad with ETA
- Any known changes since landing.

Attachment A: State of Ohio HAA Communication Plan (Updated 09/25/2020 by OACCT)

PROCESS MEASURES:

1. Feedback from programs will be solicited at OACCT meetings or when deemed necessary.
2. Follow-up from programs will be forwarded to the respective programs.

INTERFACES:

1. OACCT Safety Committee
2. Respective aircraft operator groups
3. Respective Part 135 operators flight communications procedures
4. Airman's Information Manual (AIM) Chapter 10-2-4

RESPONSIBILITY:

1. Pilots are expected to follow this procedure any time they fly in the State of Ohio.
2. Program Directors and Pilot supervisors at each program should educate crews on the procedure and assure compliance

AUTHORITY:

The OACCT General Membership with recommendations from the Safety Committee and Communications Committee has the authority to update and make changes to these procedures.

REFERENCES/RESOURCES:

1. CAL-AAMS Air to Air Communications
2. Minnesota Air Medical Council Communications procedures
3. TAAMS – HEMS Communications and Coordination
4. Middle Tennessee area communications plan
5. NEMSPA recommended practices
6. CareFlight Deconfliction Plan
7. Airman's Information Manual Chapter 10

Attachment B: Safety of Helicopter Operations Letter to Hospitals



Date: Updated 09/25/2020

TO:

CEO
Risk Management Department
Security Department

Date:

FROM: Ohio Association of Critical Care Transport
President
Safety Committee Chairperson

RE: SAFETY OF HELICOPTER OPERATIONS

To Whom It May Concern:

The Ohio Association of Critical Care Transport (OACCT) represents a unified voice for the critical care medical transport community in the State of Ohio. OACCT is committed to continually improving clinical and operational safety practices for both patients and crew members through research, education, and rigorous commitment to quality improvement.

Presently, OACCT is working to improve the safety of air medical operations throughout the State of Ohio. We are writing to ask for your assistance to improve operational safety practices. OACCT desires to collaborate with hospitals to ensure awareness and compliance with current Federal Aviation Administration (FAA), U.S. Department of Transportation (U.S. DOT), National Fire Protection Agency (NFPA) and Commission on Accreditation of Medical Transport System (CAMTS) standards to enhance safety of helicopter operations in the State of Ohio.

OACCT has identified three initiatives for which we believe will significantly improve the safety of helicopter operations in the State of Ohio:

- Helipad Risk Assessment
- NOTAM (Notice to Airmen) – Point of contact – reporting changes or known hazards
- Central Clearing House within hospitals for helipad operations.

Helipad Risk Assessment: A helipad risk assessment was developed to evaluate FAA, U.S. DOT, and CAMTS standards compliance. Helipad risk assessments include items such as:

- Windsock (lit/unlit/none)
- Lighting (permanent/temporary/none)
- Beacon (yes/no)
- Fire Extinguisher (yes/no)
- Helipad Security (fence/guard/staff/both/none)

Attachment B: Safety of Helicopter Operations Letter to Hospitals

- FAA Identifier
- As well as other associated hazards.

NOTAM: A Notice to Airmen or NOTAM is information that could affect a pilot's decision in regard to a flight, an approach, or a landing area. OACCT recommends any helipad construction, repairs, relocations, closures, or potential hazards (such as nearby construction, newly erected cranes or towers, etc.) are reported to an OACCT member in your area or by notifying OACCT via email (safety@oacct.org).

Central Clearing House for hospital helipad operations: On occasion, more than one person or unit may request air medical transport simultaneously. When requesting air medical transport, OACCT recommends hospitals designate a "central clearing house" or single point of contact such as a house supervisor, ED charge nurse, or security staff member be included in the notification process. When requesting an air medical transport, the requestor should be prepared to answer two safety questions:

- Has this requested been turned down by any other air medical programs due to weather?
- Are any other air medical programs inbound to your facility?

We welcome additional questions and further discussions regarding these initiatives. We welcome you to join us at our next regularly scheduled OACCT meeting to be held at (insert time) on (insert month, day) at (insert location) or you may contact an OACCT member in your area. You may visit our website (www.oacct.org) for a complete listing of OACCT members.

We ask you to confirm the appropriate person(s) and contact information for follow-up and future communication from the Ohio Association of Critical Care Transport. Please email point(s) of contact and contact information to safety@oacct.org.

Thank you for your time and consideration.

Respectfully,

President
Ohio Association of Critical Care Transport
E-mail: president@oacct.org
Website: www.oacct.org

Safety Committee Chairperson
Ohio Association of Critical Care Transport
Email: safety@oacct.org
Website: www.oacct.org

Attachment B: Safety of Helicopter Operations Letter to Hospitals

References

Commission on Accreditation of Medical Transport System (CAMTS). Retrieved from <http://www.camts.org/>

National Fire Prevention Agency. Retrieved from <http://www.nfpa.org/>

NFPA 407 Standard for Aircraft Fuel Servicing. This standard applies to facilities with aircraft refueling capabilities. This document is available online but must be purchased.

NFPA 409 Standard for Hangars. This standard applies to facilities with an aircraft hangar or storage facility. This document is available online but must be purchased.

NFPA 418 Standard for Heliports. This standard specifies the minimum requirements for fire protection for heliports. It specifies size and location of fire extinguisher, access for Fire Departments, slope of the pad surface and proximity to other hazards. This document is available online but must be purchased.

Federal Aviation Administration. (n.d.). Retrieved from

http://www.faa.gov/documentLibrary/media/Advisory_Circular/draft_150_5390_2C.pdf

This advisory circular (AC) provides standards for the design of helipads. Specifically, Chapter 4 addresses hospital heliports. This document is available free online.

United States Department of Transportation. (n.d.). Retrieved from <http://www.dot.gov/>

Attachment C: HELICOPTER SHOPPING: OACCT GUIDANCE SENT WINTER 2020



TO: CEO
Risk Management Department
Security Department

Date:

FROM: Ohio Association of Critical Care Transport
President
Safety Committee Chairperson

RE: "HELICOPTER SHOPPING"

To Whom It May Concern:

The Ohio Association of Critical Care Transport (OACCT) represents a unified voice for the critical care medical transport community in the State of Ohio. OACCT is committed to continually improving clinical and operational safety practices for both patients and crew members through research, education, and rigorous commitment to quality improvement.

OACCT exists to serve the providers of all air medical transport systems in Ohio. Its purpose is to encourage and support actions their members take in regards to maintaining standards and a safety culture that exceed the Federal minimums for operations.

An analysis of HAA (Helicopter Air Ambulance) fatal accidents reveals a dangerous operational practice known as "helicopter shopping." "Helicopter shopping" refers to the practice of calling, in sequence, various operators until an operator agrees to take a flight assignment - without notifying the subsequent operators of the reason(s) the flight was declined by another service, or that another service had in fact already been contacted.

For example, a dispatch center or transferring hospital might call an air ambulance operator for a transport, and the operator turns the flight down for reasons such as weather conditions are not favorable for flight, aircraft capabilities, or aircraft maintenance issues. Subsequent calls are made to other operators, each without mentioning the previous refusals, until an operator, unaware of the complete situation, agrees to accept the flight assignment. This practice can lead to an unsafe condition in which an operator initiates a flight that would have been declined if all of the facts surrounding the assignment had been properly disclosed.

We recognize that the refusal of one operator may indeed have nothing to do with another operator's determination to accept or refuse a patient transport assignment. For example, certain operators may not be able to accept a particular assignment due to local weather conditions, while subsequently called operators may be able to complete the assignment without encountering those weather conditions, due to their geographic location. Also, one operator may not be able to accept an assignment because of a mechanical problem on the aircraft which grounds or limits use (such as a lighting failure prohibiting night operations).

Attachment C: HELICOPTER SHOPPING: OACCT GUIDANCE SENT WINTER 2020

We believe it is imperative that full disclosure of previous operators' responses to requests for patient transfer be passed on to the subsequent operators for use in the operator's risk management evaluation, particularly if an original flight request was denied due to weather. Accordingly, we are asking you to promote full disclosure of the reasons for refusal of an EMS flight assignment by one or more operators when contacting subsequent operators with a flight request.

When requesting an air medical transport, the requestor should be prepared to answer two safety questions:

- Has this requested been turned down by any other air medical program(s) due to weather?
- Are any other air medical program(s) inbound to your facility?

EMS is one form of commercial transportation where the customer (patient) does not have the "choice" with whom he/she travels. It is our obligation, as guardians of the public trust and safety, to ensure we provide the safest possible transportation system.

Your role in improving aviation safety is critical to reducing the number aviation related EMS accidents. Thank you for your time and consideration on this matter of high public interest.

If more assistance is needed, please feel free to contact an OACCT member in your area. For a complete listing of OACCT members, please visit our website (www.oacct.org).

Respectfully,

President
Ohio Association of Critical Care Transport
E-mail: president@oacct.org
Website: www.oacct.org

Safety Committee Chairperson
Ohio Association of Critical Care Transport
Email: safety@oacct.org
Website: www.oacct.org

Listed below are several organizations and resources available to aid in further education and development regarding critical care air and ground transport:

Association of Air Medical Services (AAMS)	www.aams.org
National EMS Pilots Association (NEMSPA)	www.nemspa.org
Air Medical Physicians Association (AMPA)	www.ampa.org
Air Medical Safety Advisory Council (AMSAC)	www.amsac.org
Air and Surface Transport Nurses Association (ASTNA)	www.astna.org
Commission on Accreditation of Medical Transport Systems (CAMTS)	www.camts.org
Helicopter Association International (HAI)	www.rotor.com
International Association of Flight Paramedics (IAFP)	www.flightparamedic.org
National Association of EMS Physicians	www.naemsp.org

Attachment D: Patient Care Handoff Communication Guideline



PATIENT CARE HANDOFF COMMUNICATION GUIDELINE

PURPOSE

The purpose of this tool is to create a standardized approach to handoff communication during transfer of care from the prehospital emergency medical services (EMS) provider to the hospital care provider. These guidelines are for voluntary use by COTS EMS and hospital partners.

BACKGROUND

The Institute of Medicine (1999; 2009) estimated deaths related to medical errors at 44,000 and as high as 98,000 per year in the United States (U.S.). Makary and Daniels (2016) report that medical errors may result in 251,000 deaths per year in the U.S.; 9.5% of all U.S. deaths annually. A large part of these medical errors involves communication breakdown when patient care is handed off from one healthcare provider to another.

The Joint Commission (TJC) (2014) defines a handoff as a “transfer and acceptance of patient care responsibility achieved through effective communication.” The purpose of the handoff should be to ensure continuous and safe patient care. The roles of a quality handoff include:

- Sender – sends or transmits the patient data and releases patient care to the receiver;
- Receiver – receives the patient data and accepts care of the patient.

Substandard handoffs can cause serious or fatal consequences including but not limited to: delay in treatment, inappropriate treatment, care omission, increased length of hospital stay, readmissions, increased costs, inefficient care from rework, and minor and/or major patient harm (TJC, 2014).

PROCEDURE

- When the demographic information has been received and the accepting agency is ready to receive patient report, a **TIMEOUT** will be called by emergency medicine physician, nursing, or prehospital staff and a patient care handoff report will occur.
 - **“Attention please: EMS Timeout”.**
- All staff participating in the **TIMEOUT** will be expected to stop and listen to the EMS handoff report prior to patient transfer from EMS to hospital staff.
- Transfer of the patient from the EMS cot to the hospital bed will occur after the handoff report is complete.
- **Caveat:** When a patient requires emergent attention to airway, breathing, or circulation or at the discretion of the hospital team leader, the transfer of patient care may occur prior to a formal handoff report. Once an initial patient assessment is completed and the patient is considered stable by the hospital team leader, then a formal **“EMS Timeout”** handoff report can occur.
- EMS will provide the handoff report using the **MIST mnemonic (APPENDIX A)**.
 - **The EMS Timeout Handoff Report will be limited to 30-45 seconds.**
- When EMS completes the handoff report, the EMS member giving the handoff report will ask the hospital staff **“Are there any questions?”**
 - If yes, those questions will be answered.
 - If no, the EMS member giving the handoff report will state **“EMS Timeout Report is complete, please transfer {patient name}”.**

This same process should be used during all healthcare provider patient care handoffs.

Attachment D: Patient Care Handoff Communication Guideline



APPENDIX A: MIST MNEMONIC

COTS supports the use of this guideline and the **MIST** mnemonic when performing a **Patient Care Handoff Report** during transfer of care from one healthcare provider to another.

M	Age/Sex (include patient’s name), Mechanism of Injury; or Medical Complaint/History
I	Injuries (time of injury, list head to toe); Inspections (time of onset, brief medical exam/findings)
S	Vital Signs (first set and significant changes, include glucose)
T	Treatment (obtain transfer of care signature)

REFERENCES

Air & Surface Transport Nurses Association, Emergency Nurses Association, & International Association of Flight and Critical Care Paramedics (2019). Responsible “helicopter shopping” through selective resource management. *AirMed Journal*, 38(3), 143-146. <https://doi.org/10.1016/j.amj.2019.02.007>

Institute of Medicine (1999). To err is human: Building a better health system.

Institute of Medicine (2009). To err is human: To delay is deadly.

Joint Commission for Transforming Healthcare (2014). Improving transitions of care: Handoff communications.

Makary, M. & Daniels, M. (2016). Medical errors: The third leading cause of death in the US. *BMJ*, 3534. doi:doi.org/10.1136/bmj.i2139

Friese, G. (2016). How to improve EMS handoffs at emergency departments. <https://www.ems1.com/ems-education/articles/63741048-How-to-improve-EMS-patient-handoffs-at-emergency-department/>

Southwest Texas Regional Advisory Council (2016). Regional EMS time out report version 8. Retrieved from [http://www.strac.org/files/Prehospital/EMS Time Out \(MIST\) Poster 2016,Oct.pdf](http://www.strac.org/files/Prehospital/EMS_Time_Out_(MIST)_Poster_2016,Oct.pdf)



	UPDATES	
DATE	TRACK CHANGES	STAFF Member
May 24, 2011	Drafted and approved by COTS Board of Trustees	Exec Director
May 27, 2014	Revised and approved by COTS Board	
August 28, 2018	Revised and approved by COTS Board Reviewed by the Ohio Association of Critical Care Transport (OACCT)	Exec Director
November 17, 2020	<ul style="list-style-type: none"> • Updated all references to air medical to be helicopter air ambulance or HAA per industry standard. • Added under System Improvement section: System level concerns can/may be brought to COTS via contacting the President, so it reflects same wording as HAA Request guideline. • Added Responsible helicopter shopping reference to MIST addendum • Incorporated OACCT updates Attachment A & B (reviewed by OACCT Sept 2020) 	Exec Director
March 26, 2021	Replaced title exec dur with President	President
February 18, 2022	Updated logo and COTS name	President
March 31, 2023	Added cover page	President