



Santa Barbara County

Air Support Unit

Hoist Procedures



Procedures Manual



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Chapter 1-Rescue Checks and Basic Hoist Procedures

Step 1: Harnesses of all Crew Members and Crew Chief are checked prior to loading the aircraft.

Step 2: Once fire watch is completed, Crew Chief loads aircraft and connects harness pick off strap to double connection point on cabin wall. Crew Chief then holds up harness connection so Rescuer 1 can visually verify the connection.

Step 3: Pre-Flight Checklist:

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 4: Complete rescue check part 1 while over scene. Pilot will initiate rescue check.

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis.** . Discussion among all Rescuers, Crew Chief and Pilot. Discussion should detail the plan with regard to risk vs gain to include identifying landmarks for deployment sites, deployment method of rescuers, communications, weather, sea state, hazards/obstacles, and any other factors that could affect the mission. All members are required to concur on the plan, as well as voice any questions or concerns. The first Risk Analysis will be the longest in a series of evolutions. Subsequent Risk Analysis may be shortened if there are no new developments in the situation.
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

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Step 5: Complete rescue check part 2 (Rescuer/Rescue device check)

- 1. Load check Rescuer/Rescue device. (in cabin and on skid)**
- 2. Crew Chief & Rescuer/Rescue device rigged and ready at the skid.**
- 3. RESCUE CHECK PART 2 COMPLETE.**

** For multiple deployments, reevaluate risk analysis as needed.*

PROCEDURE

- Crew Chief directs Rescuer to come down to cabin floor and announces to Pilot “checking Rescuer”. Rescuer disconnects helmet from ICS cord and connects to Motorola handheld adapter (for water rescue, Rescuer will don water helmet).
- Rescuer dons any equipment needed for the rescue.
- Crew Chief hands hook to Rescuer.
- Rescuer connects hook to top D Ring on harness.
- Crew Chief performs load check in cabin.
- Crew Chief announces “stepping out to skid” and transitions from cabin to skid.
- Crew Chief gives thumbs up to Rescuer, who disconnects red strap and acknowledges with thumbs up signaling readiness to be brought out to the skid.
- Once Rescuer is on the skid and situated with 2nd load check complete, Crew Chief announces “Crew Chief/Rescuer 1 rigged and ready at the skid. Rescue check part 2 is complete”.
- Pilot states “Conn me in, clear to deploy”. Crew Chief gives Rescuer a thumbs up, Rescuer acknowledges with thumbs up signaling the start of the deployment. Crew Chief states “Deploying Rescuer”.

**In the event that the hoist needs to be aborted prior to being committed to the operation, Pilot or Crew Chief shall state “Abort Hoist” followed by a discussion of why the hoist needs to be aborted and a reevaluation of the plan.*

Step 6: Conn the Pilot into location. When transitioning to a new direction, the Crew Chief shall separate the old and new direction with a “Hold”; E.g. “Forward and right 10. Hold. Easy back”.

Command	Meaning
Forward____	Move helicopter forward____ feet.
Back____	Move helicopter back____ feet.
Left____	Move helicopter left____ feet.

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Right___	Move helicopter right___ feet.
Forward and right___	Combination command.
Up	Increase altitude.
Down	Decrease altitude.
*Hold	Hold position relative to the target.
Easy (Left, right, etc.)	Move helicopter slowly in direction indicated.
Cease commands	Cease commands but continue advisory reports.
<i>*A hold command shall be given before any change in direction.</i>	

Advisory Reports (Common reports, not comprehensive)

Lost target

Rescuer below skid.

Rescuer halfway down/up.

Rescuer on deck.

Swimmer away.

Swimmer OK.

Clear for back and left.

Victim loading in basket.

Hook is clear.

Prepare to take the load.

Taking the load.

Victim/basket entering the cabin.

Cabin secure.

Main and tail rotors clear.

Step 7: Recover Rescuer/Victim

PROCEDURE

- *Rescuer signals Pilot/Crew Chief using hand signal and/or radio when ready for pick*

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up. Crew Chief announces "Prepare to take the load, taking the load". For heavy lifts, initial load may be taken by the aircraft rather than the hoist. This option shall be discussed during risk analysis.

- *Crew Chief performs load check while Rescuer/Victim are lifted less than 5' from the ground.*
- *Crew Chiefs performs hoist while providing conning commands to pilot.*
- *Once Pilot states "cease commands", Crew Chief will cease conning commands but will continue advisory commands.*

Step 8:

RESCUE CHECK PART 3 (DEPARTURE)

- 1. Hoist secure and power off.**
- 2. Door closed.**
- 3. Personnel readied in cabin.**
- 4. Cable cutters pinned.**
- 5. Clear for forward flight.**
- 6. RESCUE CHECK PART 3 COMPLETE**

Chapter 2-Hoist from the Water

When approaching victims in the water the Pilot will position the helicopter with the victim(s) in the one to two o'clock position, outside the rotor wash. The number and condition of victim(s) will dictate whether a direct basket recovery of victim(s) or deployment of Rescue Swimmer(s) will be used. Conditions to consider when selecting a recovery method are:

- Number and condition of victims.
- Visible injuries.
- PFDs
- Sea state
- Sea predators

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The Rescue Swimmer shall participate in the on scene evaluation in determining the best method of victim recovery. The Rescue Swimmer has the authority to refuse deployment if they feel the situation is beyond his/her capabilities. Three methods are available for deploying the Rescue Swimmer; Free Fall, Direct, and Harness. Free Fall shall be used only in daylight. Direct and Harness deployments may be used anytime a Free Fall deployment is not feasible (debris in water, low visibility, questionable water depth, sea state, high winds). Direct deployments are used when it is desirable for the Swimmer to remain attached to the hook (high surf, swiftwater, predators present in the water). Night deployments shall require chem lights on the Swimmer, hook, and rescue device.

Rescue Swimmer Deployment Procedures-Free Fall

Deployment of Rescue Swimmer for a Free Fall is similar to the procedure for a Hover Step. Once Swimmer has deployed, the helicopter will maintain a position back and left, maintaining visual contact of Swimmer and victim outside the rotor wash. Once Swimmer secures the victim, the evolution essentially turns into a standard hoist procedure.

Step 1: Pre-Flight Checklist

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 2: Rescue Check Part 1

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis. (Completed/concurred by all personnel)**
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

Step 3: Rescue Check Part 2(Rescue Swimmer Check)

- 1. Load check Rescuer. (NOT PERFORMED FOR FREE FALL)**
- 2. Crew Chief & Rescuer rigged and ready at the skid.**



3. RESCUE CHECK PART 2 COMPLETE

PROCEDURE

- Pilot announces "below 30 feet, complete Rescue Check Part 2 for a Free Fall deployment of Swimmer". Pilot shall remain below 30' during Rescue Check Part 2.
- Crew Chief acknowledges and announces "Rescue Check Part 2 for a Free Fall deployment of Swimmer".
- Crew Chief announces "stepping out to skid" and transitions from cabin to skid.
- Crew Chief directs Swimmer to come down to cabin floor and announces to Pilot "checking Swimmer". Swimmer will don water rescue helmet, fins and rescue device.
- Once Swimmer has completed configuring gear and rescue device, Crew Chief gives a thumbs up to Swimmer. Swimmer acknowledges with a thumbs up and disconnects from the red strap. Crew Chief maintains a grip on Swimmer's harness as he/she climbs out to skid.
- Crew Chief announces "Crew Chief/Swimmer rigged and ready at the skid. Rescue Check Part 2 is complete".
- Pilot announces to Crew Chief "Conn me in".
- Crew Chief utilizes standard commands to Conn in Pilot. Once Pilot announces "lost target", Crew Chief shall increase attentiveness in providing Conning commands due to Pilot's loss of reference.
- Once on target, Pilot announces "under 15 feet, clear to deploy Swimmer". DO NOT DEPLOY SWIMMER CLOSER THAN 5 FEET FROM VICTIM.
- Crew Chief removes hand from harness and taps swimmer three times on the shoulder, signaling Swimmer is clear to deploy.
- Once Swimmer deploys, Crew Chief announces "Swimmer away. Swimmer OK. Clear for back and left".
- The Swimmer will secure the victim utilizing any of the methods discussed in Chapter 6.
- Rescuer signals Pilot/Crew Chief using hand signal and/or radio when ready for pick up. Crew Chief announces "Prepare to take the load, taking the load". For heavy lifts, initial load may be taken by the aircraft rather than the hoist. This option shall be discussed during risk analysis.
- During pick up, to prevent Swimmer from becoming entangled in the cable, the Crew Chief shall pay out only enough slack so the Swimmer can move freely. The cable shall not be allowed to coil in the water.
- The victim shall be brought into the cabin first.



Rescue Swimmer Deployment Procedures-Direct Deployment

In a Direct Deployment, the Rescue Swimmer remains attached to the hook throughout the evolution. The Swimmer is placed near the victim, attaches the Quick Strop and signals for pickup. The Rescue Swimmer and victim are hoisted together and the victim is loaded into the cabin first.

Step 1: Pre-Flight Checklist

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 2: Rescue Check Part 1

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis. (Completed/concurred by all personnel)**
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

Step 3: Rescue Check Part 2(Rescue Swimmer Check)

- 1. Load check Rescuer.**
- 2. Crew Chief & Rescuer rigged and ready at the skid.**
- 3. RESCUE CHECK PART 2 COMPLETE**

PROCEDURE

- Pilot announces "complete Rescue Check Part 2 for a Direct deployment of Swimmer". Crew Chief repeats "Rescue Check Part 2 for Direct deployment".
- Crew Chief directs Swimmer to come down to cabin floor and announces to Pilot "checking Swimmer". Swimmer will don water rescue helmet, fins and rescue device.

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- Crew Chief hands hook to Swimmer.
- Rescuer connects hook to top D Ring on harness.
- Crew Chief performs load check in cabin.
- Crew Chief announces "stepping out to skid" and transitions from cabin to skid.
- Crew Chief gives thumbs up to Swimmer, who disconnects from the red strap and acknowledges with thumbs up signaling readiness to be brought out to the skid.
- Once Swimmer is on the skid and 2nd load check is complete, Crew Chief announces "Crew Chief/Swimmer 1 rigged and ready at the skid. Rescue check part 2 is complete".
- Pilot states "Conn me in, clear to deploy." Crew Chief gives Rescuer a thumbs up, Rescuer acknowledges with thumbs up signaling the start of the deployment. Crew Chief states "Deploying Swimmer".
- Crew Chief conns in Pilot using standard commands and advisory reports, while simultaneously lowering Swimmer's fins to a position just above the water surface. If Swimmer begins spinning during deployment, Crew Chief may momentarily dips fins until stabilized. In high surf/swell conditions, the distance from the Swimmer to the water surface will need to be increased.
- Once Pilot announces "lost target", Crew Chief shall increase attentiveness in providing Conning commands due to Pilot's loss of reference.
- When the helicopter is in position with Swimmer approximately 2-3 feet from the victim, the Swimmer is lowered into the water and the Crew Chief announces "Swimmer in the water, hold position".
- To prevent Swimmer from becoming entangled in the cable, the Crew Chief shall pay out only enough slack so the Swimmer can move freely. The cable shall not be allowed to coil in the water.
- The Swimmer will secure the victim with the Quick Strop.
- Rescuer signals Pilot/Crew Chief using hand signal and/or radio when ready for pick up. Crew Chief announces "Prepare to take the load, taking the load". For heavy lifts, initial load may be taken by the aircraft rather than the hoist. This option shall be discussed during risk analysis.
- The victim shall be brought into the cabin first.

Rescue Swimmer Deployment Procedure-Harness Deployment

In a Harness Deployment, the Rescue Swimmer detaches from the hook and swims to the victim. Hoist procedures are similar to a standard land based hoist. As the Crew Chief conns the Pilot into the victim's location, he/she will hold the helicopter in a position as to not affect the victim with rotor wash. Once the Swimmer is off the hook, the Pilot will be cleared for back and left. The Swimmer will then swim to and secure the victim. Pick up of Swimmer and victim is then accomplished by standard hoist procedures.

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Step 1: Pre-Flight Checklist

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 2: Rescue Check Part 1

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis. (Completed/concurred by all personnel)**
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

Step 3: Rescue Check Part 2(Rescue Swimmer Check)

- 1. Load check Rescuer.**
- 2. Crew Chief & Rescuer rigged and ready at the skid.**
- 3. RESCUE CHECK PART 2 COMPLETE**

PROCEDURE

- *Pilot announces "complete Rescue Check Part 2 for a Harness deployment of Swimmer", Crew Chief repeats "Rescue Check Part 2 for Harness deployment".*
- *Crew Chief directs Swimmer to come down to cabin floor and announces to Pilot "checking Swimmer". Swimmer will don water rescue helmet, fins and rescue device.*
- *Crew Chief hands hook to Swimmer.*
- *Rescuer connects hook to top D Ring on harness.*
- *Crew Chief performs load check in cabin.*
- *Crew Chief announces "stepping out to skid" and transitions from cabin to skid.*
- *Crew Chief gives thumbs up to Swimmer, who disconnects from the red strap and acknowledges with thumbs up signaling readiness to be brought out to the skid.*



- *Once Swimmer is on the skid and 2nd load check is complete, Crew Chief announces "Crew Chief/Swimmer 1 rigged and ready at the skid. Rescue check part 2 is complete".*
- *Pilot states "Conn me in, clear to deploy". Crew Chief gives Rescuer a thumbs up, Rescuer acknowledges with thumbs up signaling the start of the deployment. Crew Chief states "Deploying Swimmer".*
- *Crew Chief conns in Pilot using standard commands and advisory reports. Timing should be such that the Swimmer enters the water while the victim is still outside of the rotor wash.*
- *Once Pilot announces "lost target", Crew Chief shall increase attentiveness in providing Conning commands due to Pilot's loss of reference.*
- *Once the Swimmer has disconnected from the hook, Crew Chief announces "Swimmer away, Swimmer OK" and clears Pilot for back and left.*
- *The Swimmer will secure the victim utilizing one of the methods discussed in Chapter 6.*
- *Rescuer signals Pilot/Crew Chief using hand signal and/or radio when ready for pick up. Crew Chief announces "Prepare to take the load, taking the load". For heavy lifts, initial load may be taken by the aircraft rather than the hoist. This option shall be discussed during risk analysis.*
- *During pick up, to prevent Swimmer from becoming entangled in the cable, the Crew Chief shall pay out only enough slack so the Swimmer can move freely. The cable shall not be allowed to coil in the water.*
- *The victim shall be brought into the cabin first.*

Chapter 3-Hoist from Vertical Surfaces (Cliff Rescue)

The Direct Deployment may be used to perform rescues from vertical surfaces such as cliffs. The evolution involves the helicopter hovering above the cliff and maneuvering to keep the Rescuer in positive contact with the cliff surface. The Rescuer remains attached to the hook for the entire evolution with the cable supporting the Rescuer's weight. Similar to a rappel, the Rescuer can traverse the cliff face until they reach the victim. In order to prevent debris and rocks from falling on the victim, a "J" or "Reverse J" travel path is taken. With a "J" path, the Rescuer is deployed above and right of the victim, and above and left for the "Reverse J". Topography will dictate which travel path is most appropriate.

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Planning and a thorough risk analysis are critical to the evolution. Pilot, Crew Chief and Rescuers should collectively determine the feasibility of the plan. Landmarks shall be positively identified in relation to the travel path. The final decision to perform the rescue shall be made by the Pilot.

Rescuer Direct Deployment Procedures-Cliff Rescue.

Step 1: Pre-Flight Checklist

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 2: Rescue Check Part 1

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis. (Completed/concurred by all personnel)**
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

Step 3: Rescue Check Part 2(Rescuer Check)

- 1. Load check Rescuer.**
- 2. Crew Chief & Rescuer rigged and ready at the skid.**
- 3. RESCUE CHECK PART 2 COMPLETE**

PROCEDURE

- Pilot announces "complete Rescue Check Part 2 for a Direct deployment of Rescuer". Crew Chief repeats "Rescue Check Part 2 for Direct deployment".*
- Crew Chief directs Rescuer to come down to cabin floor and announces to Pilot "checking Rescuer". Rescuer disconnects helmet from ICS cord and connects to Motorola handheld adapter.*

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- *Rescuer dons rescue device.*
- *Crew Chief hands hook to Rescuer.*
- *Rescuer connects hook to top D Ring on harness.*
- *Crew Chief performs load check in cabin.*
- *Crew Chief announces "stepping out to skid" and transitions from cabin to skid.*
- *Crew Chief gives thumbs up to Rescuer, who disconnects from the red strap and acknowledges with thumbs up signaling readiness to be brought out to the skid.*
- *Once Rescuer is on the skid and 2nd load check is complete, Crew Chief announces "Crew Chief/Rescuer 1 rigged and ready at the skid. Rescue check part 2 is complete for a Direct Deployment".*
- *Pilot states "Conn me in, clear to deploy". Crew Chief gives Rescuer a thumbs up, Rescuer acknowledges with thumbs up signaling the start of the deployment. Crew Chief states "Deploying Rescuer".*
- *In order to avoid pendulum effect of the Rescuer, horizontal movement of the helicopter should be minimized prior to Rescuer making positive contact with the cliff surface. This can be accomplished by maintaining a stable hover above the insertion point prior to Rescuer deployment. If swing is observed, the Rescuer may be required to be hoisted back to the skid to eliminate swing.*
- *Crew Chief announces "Rescuer in contact with surface" as Rescuer begins to traverse cliff. Crew Chief remains cognizant of Rescuer's hand signals during traverse. Constant communication is required between Crew Chief and Pilot to keep Rescuer plum with the hoist and maintain positive contact with the cliff. If positive contact is lost, the Crew Chief shall advise the Pilot and begin recovery of the Rescuer to a safe position and begin deployment again.*
- *Upon reaching the victim, the Rescuer may request a small amount of slack in the cable to assist in packaging the victim.*
- *It is critical the Crew Chief does not begin recovery of Rescuer and victim until the hand signal is observed from the Rescuer. Premature recovery has the potential for destabilizing the victim.*
- *Once victim is packaged and Crew Chief receives hand signal or radio communication from Rescuer, Crew Chief will Conn Pilot away from cliff face. The rescue will then transition into a short haul or recovery of the Rescuer/victim into the cabin. This determination will be made during Risk Analysis based on factors affecting the rescue such as topography, weather and the availability of a short haul site.*



Chapter 4-Hover Step Rescuer Deployment

The Hover Step is a quick and efficient method of deploying multiple rescuers from a hovering helicopter. Even though no hoist evolution is required for the rescuer deployment, Rescue Checks are still performed to complete a safe operation.

Step 1: Pre-Flight Checklist

- 1. Safety harness on and double checked.**
- 2. Crew Chief secured to aircraft and checked by Rescuer.**
- 3. Eye protection on.**
- 4. ICS cords attached.**
- 5. Rescue device/Rescuer readied in cabin.**
- 6. Cable cutters readied in cabin.**
- 7. Comm. Check----Rescuers, Crew Chief and Pilot.**
- 8. Hoist function check.**
- 9. PRE-FLIGHT CHECK COMPLETE.**

Step 2: Rescue Check Part 1

- 1. Door opened, pinned. (below 50 kts., Pilot's approval)**
- 2. Risk analysis. (Completed/concurred by all personnel)**
- 3. Power check. (Minimum 10% reserve available)**
- 4. Pilot's radios are set.**
- 5. RESCUE CHECK PART 1 COMPLETE**

Step 3: Rescue Check Part 2(Rescuer Check)

- 1. Load check Rescuer. (NOT PERFORMED FOR HOVER STEP)**
- 2. Crew Chief & Rescuer rigged and ready at the skid.**
- 3. RESCUE CHECK PART 2 COMPLETE**



PROCEDURE

- Pilot announces "Complete Rescue Check Part 2 for a Hover Step deployment of Rescuer"
- Crew Chief acknowledges and announces "Rescue Check Part 2 for a Hover Step deployment of Rescuer".
- Crew Chief directs Rescuer to come down to cabin floor and announces to Pilot "checking Rescuer". Rescuer will disconnect from ICS, plug in helmet to Motorola adapter and don any EMS gear or rescue device needed.
- Crew Chief announces "stepping out to skid" and transitions from cabin to skid.
- Once Rescuer has completed configuring gear and rescue device, Crew Chief directs Rescuer to slide over and sit at the edge of the cabin door. The Rescuer's red strap remains attached until the helicopter is in its final position and the deploy signal is given by the Crew Chief.
- Crew Chief announces "Crew Chief/Rescuer rigged and ready at the skid. Rescue Check Part 2 is complete".
- Crew Chief utilizes standard commands to Conn in Pilot.
- Once on target, Pilot announces "Clear to deploy Rescuer".
- Crew Chief taps rescuer three times on the shoulder. Rescuer disconnects from red strap and hands it to Crew Chief. Rescuer then transitions to skid and in a light-footed manner steps off the skid.
- Once Rescuer deploys and is in a safe location, Crew Chief announces "Rescuer away. Rescuer OK".

Chapter 5-Hand Signals

The following shall be the hand signals used by the Santa Barbara County Air Support Unit. Hand signals shall be used for rescues (land or water), shorthaul and longline cargo missions and other situations as necessary. All hand signals should be over emphasized in order for the flight crew to understand the intended message. The Crew Chief shall acknowledge the signal by circling his right arm. During night operations chem lights shall be used to assist with hand signals.



Ready for Pick-up: The Rescuer raises their right or left hand straight up above the head and waits for the hook.

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O.K. Rescuer raises and lowers hand above the head three to five times.



Listen to the radio: Aircraft or Rescuer does not respond to your radio calls. Rescuer or Crew Chief places hand next to the ear and moves hand left and right. This will inform the Rescuer or Crew Chief that you are trying to make radio contact. If no contact is made, continue with the appropriate hand signals.



Cable/Line up: Rescuer extends arm out to their side and waves in an up and down motion.

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Cable/Line Down: Rescuer rotates their finger and hand in a circular motion to indicate lower the cable or line.



Ten Feet from the Ground: Rescuer extends arm straight out to the side, then moving it to the front. Rescuer continues back and forth three to five times. This is to be used if rescuer is on the hook and is ten feet from the ground. This gives the Crew Chief the signal to begin slowing down for ground contact.

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Send the Second Rescuer: Starting with one arm at their side and the other straight over their head, Rescuer alternates arms back and forth three to five times.



Send the Baughman Bag and Backboard: One hand extended straight up over the Rescuer's head with the other laying over the top of their head with the hand touching the upright arm.

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Send the Screamer Suit/Screamer Suit Operation: Rescuer uses hand to form a large "S" in front of them. This signal indicates a Screamer Suit is needed or will be used for pick up.



Send the Rescue Basket: Both arms out with hands slightly above the Rescuer's head.

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Send the Strop: Both arms over the Rescuer's head with hands together at the top of their head.



Deploy the Raft: Arms crossed in front of the Rescuer's face with fists.

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Stop: Arm straight up over the Rescuer's head with a fist.



Need Assistance/Emergency: Arm over Rescuer's head, palm forward, waving left to right.

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Signal Received: This is what the Crew Chief uses to signal receipt of the ground personnel's signals. This can be accomplished with the hoist pendant in hand.



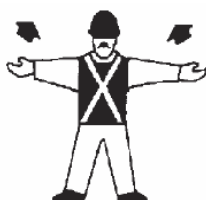
Marshalling Hand Signals



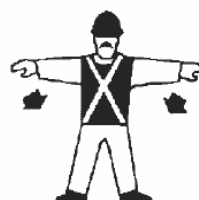
Clear to Start
Make circular motion
above head w/arm



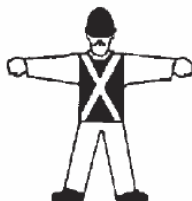
Hold on Ground
Extend arms at 45
thumbs down



Move Upward
Arms extended
sweeping up



Move Downward
Arms extended
sweeping down



Hold Hover
Arms extended
w/clenched fists



Clear to Take-Off
Arms extended in
take-off direction



Land Here
Extend arms
w/wind at back



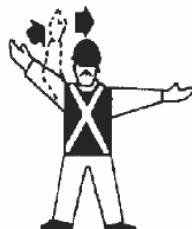
Move Forward
Arms extended &
wave copter toward you



Move Rearward
Arms downward
using shoving motion



Move Left
Right arm extended
left arm sweeps overhead



Move Right
Opposite of
move left



Move Tail Rotor
Rotate body w/one
arm extended



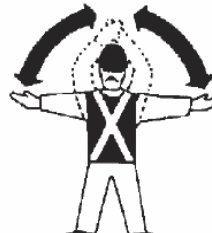
Shut Off Engine
Cross neck w/hand
palm down



Fixed Tank Doors
Open arms outward
Close arms inward



**Release
Sling Load**
Contact forearm
w/other hand



**Wave Off
Don't Land**
Wave arms &
cross overhead



Chapter 6-Rescuer Procedures/Water Rescue

Rescue Swimmer Equipment:

Harness- The TRITON is a helicopter hoistable full body rescue harness with integrated flotation (buoyancy 35 lbs). Manually or orally inflated, it is standard equipment for the Air Support Unit when involved in water rescue.



Quick Strop- The Quick Strop is used for rapid extrication of a victim. The Strop can be placed over the head of victim and positioned around the back and under the arms. The Strop also has the ability to have one strap released from the slide buckle to wrap around the victim if they cannot release their hands for the over the head donning.

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Rescue Strop- The Rescue Strop is placed under the arms and across the back; the safety strap located on the outside is pulled loose, placed over the arms, under the front of the Strop and attached across the front of the chest and adjusted to a snug fit. The arms must remain down to prevent possible slippage during hoisting.



Rescue Swimmer will determine which Strop is utilized based on incident, victim considerations and experience/preference with Strops.

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Procedure: Direct Deployment with Quick Strop

- *Rescue Swimmer has finished configuring gear, has made a selection on strop, has been briefed and accepts the mission.*
- *Rescue Swimmer will place cable with hook facing away through Rescuer's upper attachment on harness (always Rescuer first) then through connection points on Quick Strop.*
- *Quick Strop is secured over Rescuer Swimmer's preferred shoulder.*
- *Rescue Swimmer moves to floor. After Crew Chief performs load check, Rescuer will release red safety strap and hand to Rescuer two or place safely in helicopter.*
- *Give hand signal when within ten feet of water. Upon fins touching water use hand signal to stop further descent. Point to location of victim and drag fins in water to stabilize movement while maintaining visual confirmation of victim's location.*
- *Upon reaching victim, place Quick Strop from Rescue Swimmer's should over victim's head and arms. Quick Strop will be synched tight underneath victim's arms as high up as possible. Optional strap can be placed from back of Quick Strop underneath victim's legs and secured back to attachment point.*
- *Once victim is secured, Rescue Swimmer must be cognizant of cable and verify that both Rescuer and victim are clear of cable.*
- *Verify that cable is still through chest harness and Quick Strop. Observe cable management. Notify victim of the procedure. Using appropriate hand signals advise Crew Chief that Rescuer is ready for hoist.*
- *Rescue Swimmer will secure victim by wrapping Rescuers arms and legs around victim during hoist.*

Procedures Manual



- *At helicopter skid, victim will go into helicopter on his/her back with Rescue Swimmer assisting placement onto helicopter floor. Once in helicopter, secure both victim and Rescuer with red safety strap prior to disconnecting from the hook.*

Procedure: Direct Deployment with Rescue Strop

- *Rescue Swimmer has finished configuring gear, has made a selection on strop, has been briefed and accepts the mission.*
- *Rescue Swimmer will place cable with hook facing away through Rescuer's upper attachment on harness (always Rescuer first) then through connection points on Rescue Strop.*
- *Rescue Strop is secured over Rescuer Swimmer's preferred shoulder.*
- *Rescue Swimmer moves to floor. After Crew Chief performs the load check, Rescuer will release red safety strap and hand to Rescuer two or place safely in helicopter.*
- *Give hand signal when within ten feet of water. Upon fins touching water use hand signal to stop further descent. Point to location of victim and drag fins in water to stabilize movement while maintaining visual confirmation of victim's location.*
- *Upon reaching victim, place Rescue Strop from Rescue Swimmers shoulder over victim's head and arms. Rescue Strop will be synched tight underneath victim's arms as high up as possible. Victim's arms are then placed on his/her side and secondary strap is placed to secure victim.*
- *Once patient is secured, Rescue Swimmer must be cognizant of cable and verify that both Rescuer and victim are clear of cable.*
- *Verify that cable is still through chest harness and Rescue Strop. Observe cable management. Notify victim of procedure. Using appropriate hand signals advise Crew Chief that Rescue Swimmer is ready for hoist.*
- *Rescue Swimmer will secure victim by wrapping Rescuers arms and legs around victim during hoist.*
- *At helicopter skid, victim will go into helicopter on his/her back with rescuer assisting placement onto helicopter floor. Once in helicopter, secure both victim and Rescue Swimmer with red safety strap prior to disconnecting the hook.*



Free Fall and Harness deployment procedures are identical to Direct Deployment procedures with the exception of Strop placement prior to Rescue Swimmer deployment. The Strop is simply placed over the Rescuer's convenient shoulder and not attached to the hook. Once the Rescuer calls for pick up, the hook is secured to the Rescuer's harness first then the victim's Strop.

Both the Rescue Strop and Quick Strop can be utilized together for an extreme hypothermic victim. Victim will have one strop placed snug under arms and one strop placed under knees. Victim will be brought up in a semi sitting position.

Procedure: Basket Deployment with Rescue Swimmer in Water

- *Rescue Swimmer has already been deployed and is in water with victim. Rescuer has victim secured using strop.*
- *Rescue Swimmer uses appropriate hand signal and calls for the basket.*
- *Upon delivery of basket from helicopter, Rescue Swimmer assists victim into basket and advises patient of procedure.*
- *Signal helicopter that the basket with patient is ready to be hoisted. Cable management is critical, verify that victim and Rescue Swimmer are not tangled by cable.*
- *Rescue Swimmer grabs hold of side rails of basket and holds on until basket is plumb, then releases.*
- *Once basket reaches skid, Crew Chief and second Rescuer will work to secure victim and basket inside of helicopter. Use red safety strap on basket and if possible secure patient in a seatbelt on seat in helicopter.*

Procedures Manual



- *Rescuer will use appropriate hand signal and call Crew Chief for pick up. Rescuer will be hoisted into helicopter and secure themselves following procedures.*
- *Basket can handle 600 lbs. Potential to fit two victims into basket but Rescue Swimmer must understand weight restraint, size of patients and speed needed for potential rescue.*

• Chapter 6-Rescuer Procedures/Cliff Rescue

Procedure: Cliff Rescue Direct Deployment with a Pick-off Strap.

Step 1: Rescuer is readied in cabin.

- *After rescue check part 1 is finished, risks have been assessed and discussed, and Rescuers have accepted the mission, Rescuer 1 will be on the floor of the aircraft (having been called down by the Crew Chief to assess the risks of the mission during rescue check part 1). Rescuer is still attached to the red strap.*
- *Rescuer 1 obtains the pick-off strap and ensures that it is fully extended and ready for use.*
- *Rescuer 1 receives the hook from the Crew Chief and attaches it to the upper attachment point of their harness with the open part of the hook facing away from their body.*
- *Rescuer 1 attaches the pick-off strap the hook and ensures that the hook is closed and locked.*
- *Rescuer 1 disconnects from the ICS and connects to their portable radio (Motorola).*
- *Crew Chief performs load check of Rescuer 1 in cabin.*
- *Crew Chief gives Rescuer “thumbs up” signaling Rescuer will be brought out to skid. Rescuer acknowledges with “thumbs up”.*

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- *Rescuer 1 disconnects from the red strap and hands it to Rescuer 2 or safely secures it in the cabin.*
- *Crew Chief brings Rescuer out to the skid.*
- *Crew chief gives the “thumbs up” signal signifying ready to hoist. Rescuer 1 returns “thumbs up” signal when ready.*

Step 2: Rescuer deployment.

- *Rescuer 1 is lowered to the predetermined location downwind and typically above the victim (location will vary based on topography and wind direction) while giving the “down” signal.*
- *Rescuer 1 gives the “10 foot” signal when they reach approximately 10 feet above the predetermined location.*
- *Rescuer 1 proceeds to walk down the cliff face, making every attempt to maintain positive contact with the cliff face at all times (do not push off the cliff face or jump as in a rappelling fashion).*
- *Rescuer 1 and Crew Chief remain cognizant of the cable location to prevent cable from rubbing on the cliff face or other objects such as rocks or large vegetation.*
- *Once Rescuer 1 arrives at a location below and to the right or left of the victim (depending on whether they are executing a J or Reverse J pattern), Rescuer 1 gives the “stop” signal.*
- *Rescuer 1 uses directional hand signals to move in line with and below the victim.*
- *Rescuer 1 gives the “stop” signal when directly below the victim.*
- *Rescuer 1 gives the “up” signal and is raised to the victim.*

Step 3: Securing the victim.

- *While approaching the victim, Rescuer 1 should initiate verbal contact with the victim and instruct them to maintain their current position (ie not attempt to jump to the Rescuer or move in any sudden or unexpected manner).*

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- *Prior to reaching the victim, Rescuer 1 should ensure that they have one end of the pick-off strap in each hand and are ready to capture the victim.*
- *Once Rescuer 1 is at the same level as the victim, Rescuer 1 captures the victim with the pick-off strap under both of the victim's arms and around the victim's chest.*
- *Rescuer 1 will ensure that the clasp is fastened and the adjustable ends of the strap are pulled tight.*
- *Rescuer 1 will wrap their legs around the victim to further secure the victim.*

Step 4: Rescuer and victim recovery.

- *When ready to be extracted from the cliff face, Rescuer 1 gives a directional hand signal away from the cliff face.*
- *If possible, Rescuer 1 and the victim will be short hauled to a nearby, safe location where patient care can be transferred.*
- *When circumstances dictate, Rescuer 1 and victim will be hoisted to the skid and Rescuer 2 will assist with loading and securing the victim in the aircraft. Rescuer 2 may also assist Rescuer 1 into the cabin if necessary.*
- *Victim will be secured to the aircraft initially by utilizing a red strap connected to the pick-off strap already secured to the victim and then seat belting the victim into seat within the cabin.*



Chapter 8 – Bauman Bag & Screamer Suit



Step 1: Ready the Rescuer in the cabin:

- *Rescuer 1 will move to the floor of the helicopter and put on the blue medical bag and attach the Screamer Suit to their AUXILIARY lower harness attachment point. (This needs to be performed prior to or during rescue check part 2).*
- *Rescuer 2 needs to help assist Rescuer 1 while donning their gear.*

Step 2: Rigging Rescuer 1 for a hoist operation:

- *Rescuer 1 will attach the hook to their primary harness attachment point.*
- *Crew Chief will take up some slack in the hoist and load check Rescuer 1 making sure the hook is attached correctly.*
- *Rescuer 1 will remove their red strap and hand to rescuer 2.*
- *Rescuer 1 will verbal state "Coming off Coms." and remove their helmet jack from their ICS cord. Rescuer 1 will plug into their portable radio.*

Step 3: Hoist Operation: Inserting Rescuer 1:

- *"Crew Chief/Rescuer 1 rigged and ready at the skid. Rescue check part 2 is complete".*

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- *Crew Chief will take up slack in the line and bring Rescuer 1 out to the skid.*
- *Crew Chief will visually check Rescuer 1 to make sure they are loading their harness correctly.*
- *Rescuer 1 will give a "Thumbs up" hand signal to the crew chief signifying they are ready to be lowered on the hoist.*
- *Crew Chief will begin lowering Rescuer 1.*
- *At 10 feet Rescuer 1 will give an open palm outward hand signal.*
- *Once Rescuer 1 reaches the ground and has good footing, Rescuer will come off the hook.*
- *Rescuer will hold the hook in one hand and the excess cable in the other to signal to the Crew Chief that Rescuer 1 is safely off the hook and it is safe to retract the cable.*

Step 4: Victim assessment:

- *Rescuer 1 evaluates victim's condition and determines needs: C-Spine/Bauman Bag.*
- *Rescuer 1 will relay victim information to Crew chief and call for Rescuer 2.*
- *Rescuer 1 will begin providing ALS/BLS as needed.*

Step 5: Rigging Rescuer 2 for hoist operation:

- *Crew Chief will relay pertinent information to Rescuer 2 and Pilot notifying this will be a Bauman Bag evolution.*
- *Rescuer 2 places Bauman Bag on back, and secures backboard to auxiliary attachment point with large carabineer.*
- *Rescuer 2 moves to skid and attaches hook to primary attachment.*
- *Crew Chief takes up slack and performs load check. Rescuer 2 removes red strap, Crew Chief moves Rescuer 2 to skid.*
- *Rescuer 2 must control backboard with legs and foot, preventing backboard from swinging into helicopter or getting caught in between skids.*
- *Rescuer 2 will give a "Thumbs up" hand signal to the Crew Chief signifying they are ready to be lowered on the hoist.*

Step 6: Hoist Operation: Inserting Rescuer 2

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- *Rescuer 2 will be hoisted to Rescuer 1's position, or a safe position as close to Rescuer 1 as possible.*
- *At 10 ft Rescuer 2 will signal to Crew Chief.*
- *Once Rescuer 2 reaches the ground and has stable footing, they will disconnect from the hook.*
- *Rescuer 2 will hold the hook in one hand and the excess cable in the other to signify to the Crew Chief that Rescuer 2 is safely off the hook and it is safe to retract the cable.*

Step 7: Packaging the victim.

- *Rescuer 1 will contact the Crew Chief with an estimated time for packaging. ("Copter 3, Rescuer 1, we will need approximately 5 minutes to package victim".)*
- *Rescuer 2 will place backboard next to victim and take off green backpack.*
- *Rescuer 2 will then remove Bauman Bag from pack and roll it besides the backboard.*
- *Rescuer 2 will assist Rescuer 1 with any ALS or BLS procedures.*
- *Rescuer 1 and Rescuer 2 will transfer victim to backboard and secure.*
- *Victim will then be transferred into Bauman Bag and secured with 3 internal straps. (Note: at least one strap needs to be woven through backboard to minimize moment or sliding of the backboard in the bag.)*
- *Pull Velcro taught and secure 5 external straps.*
(At this time Rescuer 1 will call for pickup and get ready for extraction).
"Copter 3, Rescuer 1 ready for pickup".
- *Rescuer 1 & Rescuer 2 will place Bauman Bag with head facing the nose of the helicopter as it approaches for extrication.*
- *Rescuer 1 will then load up bag/equipment and prepare for extraction.*
- *During this time Rescuer 2 will remove gloves from bag and prepare tag line for Bauman Bag extrication.*

Step 8: Hoist Operation: Rescuer 1 extraction

- *Rescuer 1 will get in a safe position for extrication with hand raised.*
- *Crew Chief and Pilot will bring the hook to Rescuer 1.*
- *Rescuer 1 will attach the hook to their primary attachment point.*
- *Rescuer 1 will wave their hand up and down signaling they are ready to be hoisted.*



- *Crew Chief performs load check while Rescuer is lifted less than 5' from the ground.*
- *As Rescuer 1 approaches skid, they will push off and place foot on skid and climb into helicopter using the etrier.*
- *Rescuer 1 will attach themselves to red strap.*
- *Rescuer 1 will plug their helmet cord back into the ICS cable and state "back up on coms".*

Step 9: Hoist Operation: Single pick-up Bauman Bag extraction.

After rescuer 1's hoist extraction is complete, Rescuer 2 is now ready for Bauman Bag extraction.

- *Rescuer 2 will remove and don leather gloves from pack, and disconnected tagline from pack.*
- *Rescuer 2 will radio Crew Chief for tag line placement. "Copter_ Rescuer 2, would you like the tag line placed at the foot, head or hook?"*
- *Rescuer 2 will place tagline as directed, and secure any loose items on the ground and place inside green pack. Note: place green pack on back or a safe distance so it won't blow away upon helicopters approach.*
- *Once situated, Rescuer 2 will call for pickup and hold hand up for hook.*
- *Upon helicopter approach, Rescuer 2 will maintain control of the rope bag by placing a knee on it preventing bag from getting blown away or paying out more rope than intended.*
- *Once the hook is brought to Rescuer 2, they will attach it to the Bauman Bag's attachment point.*
- *Rescuer 2 will then wave upwards signaling to the Crew Chief to take up slack and load Bauman Bag.*
- *Crew Chief performs load check while Bauman Bag is lifted less than 5' from the ground.*
- *Once Bauman bag is ready for extraction Rescuer 2 will again give the raise signal(wave hand up and down), and begin tending the tag line. Rescuer 2 will maintain control of the Bauman bag by keeping slight tension on the line and stay positioned at a 45 degree angle from the helicopter at all times.*
- *As Bauman Bag approaches the helicopter and clears the skids, Rescuer 1 will pull bag into helicopter and the Crew Chief will disconnect the tag line. Rescuer 1 will secure bag to D-ring with large carabineer and place red strap on bag.*
- *Rescuer 2 will quickly gather loose rope, place inside green pack, and secure.*



Step 10: Hoist Operation: Extraction of Rescuer 2

- *Rescuer 2 will get in a safe position for extraction with hand raised.*
- *Crew Chief and Pilot will bring the hook to Rescuer 2.*
- *Rescuer 2 will attach the hook to their primary attachment point.*
- *Rescuer 2 will use standard hand signal when ready to hoisted.*
- *As Rescuer 2 approaches the skid, they will push off with hands, places foot on skid and climb into helicopter using etrier.*
- *Once inside Rescuer 2 will attach themselves to red strap.*
- *Rescuer 2 will plug their helmet cord back into the ICS cable and state "back up on coms".*
- *Crew Chief will secure doors and conclude Bauman bag evolution.*

Double pick-up Bauman Bag

The Bauman bag double pick-up may be utilized when there is someone competent to man the tag line on the ground. This method can save time and minimize hoists.

****Follow steps 1-8**

- *Rescuer 2 will radio to Crew Chief that this will be a double pickup Bauman bag evolution.*
- *Rescuer 2 will instruct Firefighter or other designated person at the scene on how to tend the tag line.*
- *Rescuer 2 will remove the leather gloves and hand them to the designated person and instruct them to put gloves on.*
- *Rescuer 2 will remove the double pick up strap "blue strap" and secure carabineer to primary attachment.*
- *Rescuer 2 will radio Crew Chief for tag line placement. "Copter_ Rescuer 2, would you like the tag line placed at the foot, head or hook?"*
- *Rescuer 2 will remove rope bag from green pack, place tagline as directed, and hand the rope bag to the tending person.*
- *Rescuer 2 will secure any loose items on the ground and place inside green pack. Note: Green pack can be left on scene with person tagging line, or taken with.*

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- *Rescuer 2 will prepare for extraction by double-checking blue strap, positioning Bauman bag attachments, and assure person tagging line knows what to do.*
- *Once situated, Rescuer 2 will call for pickup, hold hand up for hook, and take a knee besides bag.*
- *Crew Chief and Pilot will bring hook to Rescuer 2.*
- *Rescuer 2 will attach hook to blue strap first, then to the Bauman bag attachments.*
- *Rescuer 2 will then wave upwards signaling to the Crew Chief to take up slack and load Bauman Bag. At this time Rescuer 2 can adjust the slack as needed on the blue strap prior to extraction.*
- *Once rescuer and Bauman Bag are ready for extraction Rescuer 2 will give standard hand signal for raising the hoist.*
- *Crew Chief performs load check while Rescuer/victim are lifted less than 5' from the ground.*
- *The person tagging the line will maintain control of the Bauman Bag by keeping slight tension on the line and stay positioned at a 45 degree angle from the helicopter at all times.*
- *As Bauman Bag approaches the helicopter and clears the skids, Rescuer 1 will pull bag into helicopter. Rescuer 2 or Crew Chief will disconnect the tag line once Bauman bag is inside helicopter. Rescuer 1 will secure bag to D-ring with large carabineer and place red strap on bag.*
- *Once inside, Rescuer 2 will attach themselves to red strap, remove hook and hand to Crew Chief.*
- *Rescuer 2 will plug their helmet cord back into the ICS cable and state "back up on coms"*
- *Crew chief will secure doors and conclude Bauman Bag evolution.*



Screamer Suit



Step 1: Ready the rescuer in the cabin:

- Rescuer 1 will move to the floor of the helicopter and put on the blue medical bag and attach the Screamer Suit to their AUXILIARY lower harness attachment point. (This needs to be performed prior to or during rescue check part 2).
- Rescuer 2 assists Rescuer 1 with donning their gear.

Step 2: Rigging Rescuer 1 for a hoist operation:

- Rescuer 1 will attached the hook away from themselves to their top PRIMARY attachment point.
- Crew Chief will take up some slack in the hoist and load check Rescuer 1 making sure the hook is attached correctly.
- Rescuer 1 will come off red strap by removing their own red strap and handing it to Rescuer 2 who is assisting them.
- Rescuer 1 will verbal state "Coming off Coms." and remove their helmet jack from their ICS cord. Rescuer 1 will plug into their portable radio.

Step 3: Rescuer Deployment:

- Crew Chief will take up slack in the line and bring Rescuer 1 out to the skid.

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- *Rescuer 1 will attempt to control their movement out of the helicopter onto the skid.*
- *Rescuer 1 & Crew Chief will verify that Rescuer's harness and attachment to the hook is loading correctly.*
- *"Crew Chief/Rescuer 1 rigged and ready at the skid. Rescue check part 2 is complete".*
- *Rescuer 1 will give a "Thumbs up" hand signal to the Crew Chief signifying they are ready to be lowered on the hoist.*
- *Rescuer 1 needs to be mindful of the skids while being lowered.*
- *At 10 feet Rescuer 1 will give standard hand signal.*

Step 4: Coming off the Hook

- *Once Rescuer 1 reaches the ground and has good footing or gets lowered to their back, come off the hook.*
- *Hold the hook in one hand and the excess cable in the other to signify to the Crew Chief that Rescuer 1 is safely off the hook and it is safe to retract the cable.*

Step 5: Patient assessment:

- *Rescuer 1 will evaluate the victim and make a decision regarding packaging.*
- *If Rescuer 1 decides that the victim does not meet criteria for a backboard and Bauman Bag BUT the victim is in a situation that requires them to be hoisted, Rescuer 1 will move into a Screamer Suit evaluation.*

Step 6: Single Patient Screamer Suit Pick Up:

- *Rescuer 1 will contact the helicopter and describe the victim's condition and the decision to do a "Single victim Screamer Suit Pick Up", WITH an estimated time of pick up.*
- *Rescuer 1 will remove the Screamer Suit from it's bag.*
- *Screamer Suit will be placed on the victim similar to donning a jacket:*

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1. Place eye protection and helmet on the victim.
 2. The inner strap will be buckled first
 3. All 3 circle rings will be collected and connected with the one carabineer.
 4. Lock the gate down wards of the carabineer.
 5. If it is safe to do so or multiple victims are a possibility, secure the empty screamer suit bag to the victim for return packaging of the screamer suit.
- *Rescuer 1 will contact the helicopter and call for "Single victim Screamer Suit Pick Up"*
 - *Rescuer 1 will move the victim a safe pick up location.*
 - *Brief the victim that they are to a no point touch the hook, carabineer, or ring attachments.*
 - *Give the victim as much information as possible about protecting themselves from the helicopter skids, being an active participant in getting into the helicopter, and to sit down in the seat they are directed to once in the helicopter.*

Step 7: Patient Pick up:

- *Rescuer 1 will have the victim's carabineer and rings loaded correctly in one hand and the other hand outstretched towards the helicopter signaling that the Rescuer is ready for pick up.*
- *Crew Chief and Pilot will bring the hook to Rescuer 1.*
- *Rescuer 1 will attach the hook away from the victim to their carabineer.*
- *Rescuer 1 will again remind victim to not touch the hook, carabineer, or rings and to actively protect themselves from the skids and to help themselves into the helicopter.*
- *Once Rescuer 1 is ready for the victim to be hoisted they will use standard hand signal to the helicopter.*
- *Rescuer 1 will continue to have control of the victim to prevent them from swinging while leaving the ground during the hoist operation.*
- *Crew Chief performs load check while victim is lifted less than 5' from the ground.*

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Step 8: Bringing the victim into the helicopter:

- *Rescuer 2 will be on the floor at the door of the helicopter holding the etrier to help the victim into the helicopter (Provide for safety, preventing the victim from grabbing the small side door).*
- *Rescuer 2 will direct the victim into an appropriate seat (with the forethought of multiple victims).*
- *A red strap will be secured to the victim.*
- *Victim will be seat belted into the seat.*
- *If there are multiple victims, the screamer suit will need to be removed and repackaged while the victim remains in their seat, seat belted in.*
- *Do not remove the screamer suit if the victim is a solo rescue.*
- *Place hearing protection on the victim and inform the flight crew "The victim is on coms".*

Step 9: Pick up of Rescuer 1:

- *Contact the helicopter and call for "Pick up of Rescuer 1".*

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- *Rescuer 1 will get in a safe position and use standard hand signal for pick-up.*
- *Crew Chief and Pilot will bring the hook to Rescuer 1.*
- *Rescuer 1 will attach the hook away from themselves to their primary attachment point.*
- *Once Rescuer 1 is ready to be hoisted they will use standard hand signal to the helicopter.*
- *Crew Chief performs load check while Rescuer is lifted less than 5' from the ground.*
- *Rescuer 1 will need to protect themselves from the skids and slowly enter the ship.*
- *Rescuer 1 will go to an available open seat if possible and attach themselves to red strap provided by Rescuer 2.*
- *Rescuer 1 will plug their helmet cord back into the ICS cable and state "Rescuer 1 back up on coms".*

Double Pick up Screamer Suit

- *Complete Step 6*
- *Rescuer 1 will have the victim's carabineer and rings loaded correctly in one hand and signal for pick up with the other hand.*
- *Crew Chief and Pilot will bring the hook to Rescuer 1.*
- *Rescuer 1 will attach the hook away from them, 1st into the Rescuer's primary attachment point, then into the victim's carabineer.*
- *Rescuer 1 will again remind victim to not touch the hook, carabineer, or rings and to actively protect themselves from the skids and to help themselves into the helicopter.*
- *Once Rescuer 1 is ready to be hoisted with the victim, they will use the standard hand signal to the helicopter.*
- *Crew Chief performs load check while Rescuer/victim is lifted less than 5' from the ground.*
- *Rescuer 1 will place one leg either between the victim's legs or both legs outside both sides of the victim (Whichever offers the Rescuer the most control of the victim).*
- *Victim's back will be oriented towards the helicopter.*
- *Rescuer 1 will bring the victim up onto the skids and then onto the floor of the helicopter with the victim on their back.*
- *Red Strap will be attached to the victim.*
- *Red Strap will be attached to Rescuer 1.*

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- *Rescuer 2 will direct the victim into an appropriate seat (with the forethought of multiple victims).*
- *Victim will be seat belted into the seat.*
- *If there are multiple victims, the Screamer Suit will need to be removed and repackaged while the victim remains in their seat, seat belted in.*
- *Do not remove the Screamer Suit if the victim is a solo rescue.*
- *Place hearing protection on the victim and inform the flight crew "The victim is on coms".*