

# Prolonged Field Care – 10+ Critical Skills

TCCC – Tactical Casualty Combat Care remains the foundation of the Special Operations Combat Medic (SOCM) skillset. The following list expands upon those skills, augmenting the medical capabilities of the SOCM by adding basic nursing, critical care, diagnostic, and medical command skills. It is not meant to replace or duplicate TCCC.

<b>1. Monitoring - Vital Signs Trending</b>	<b>2</b>
<b>2. Resuscitation</b>	<b>2/3</b>
a. <u>Fluid Resuscitation</u>	
b. <u>Whole Blood Transfusion</u>	
c. <u>Advanced IV/IO Access</u>	
<b>3. Control the Airway</b>	<b>3</b>
a. <u>Invasive Airway</u>	
<b>4. Ventilate and Oxygenate</b>	<b>4</b>
a. <u>Non-Invasive Airway Adjuncts</u>	
b. <u>Ventilation Management</u>	
<b>5. Advanced Medications</b>	<b>4/5</b>
a. <u>Sedation and Pain Management</u>	
b. <u>Antibiotics</u>	
c. <u>Improvised Drips</u>	
<b>6. Physical Exam and Diagnostics</b>	<b>5/6</b>
a. <u>Secondary Survey</u>	
b. <u>Problem List Generation</u>	
c. <u>Management Post-TCCC and Non-Emergent Conditions</u>	
<b>7. Nursing and Hygiene Skills</b>	<b>6/7</b>
a. <u>Hygiene</u>	
b. <u>Nutrition</u>	
c. <u>Wound Care</u>	
<b>8. Surgical Interventions</b>	<b>7/8</b>
a. <u>Emergent Procedures</u>	
b. <u>Non Emergent Procedures</u>	
c. <u>Surgical Sterilization</u>	
<b>9. Telemedicine Consult</b>	<b>8</b>
<b>10. Package and Prepare for Evacuation/Flight</b>	<b>9</b>
<b>11. Medical Logistics and Leadership</b>	<b>9/10</b>
a. <u>Communication</u>	
b. <u>Medical Command</u>	
c. <u>Medical Planning</u>	

1. Monitoring - Vital Signs Trending
<input type="checkbox"/> Recognize Normal and Abnormal Vital Signs
<input type="checkbox"/> Recognize Normal and Abnormal Pediatric Vital Signs
<input type="checkbox"/> Blood Pressure Monitoring
<input type="checkbox"/> BP measurement with sphygmomanometer
<input type="checkbox"/> Improvised BP Estimation
<input type="checkbox"/> Pulse Monitoring
<input type="checkbox"/> Use of Pulse-Oximeter
<input type="checkbox"/> Temperature Monitoring (Oral, Rectal, Transdermal)
<input type="checkbox"/> Pain Scale Monitoring
<input type="checkbox"/> Alertness Scale Monitoring (AVPU, GCS)
<input type="checkbox"/> Measurement of Blood Glucose and trending as appropriate
<input type="checkbox"/> Placement of Foley Catheter for urine collection
<input type="checkbox"/> Measurement and Recording of total fluid intake/output
<input type="checkbox"/> Monitoring of Foley Catheter Output
<input type="checkbox"/> Monitoring of Chest Tube Output
<input type="checkbox"/> Monitoring of NG Tube Output
<input type="checkbox"/> Vital Signs Documentation – Temporal Charting for Trending
<input type="checkbox"/> Trending Vital Signs
<input type="checkbox"/> Recognize subtle shifts/trends in vital signs
<input type="checkbox"/> Analyze vital sign trends to predict decompensation/pathology
<input type="checkbox"/> Know how to place a patient on an automated vital signs monitor (Tempus vs ProPack or similar product)
<input type="checkbox"/> Perform EKG/rhythm analysis and recognize simple variants
<input type="checkbox"/> Recognize Normal Sinus Rhythm (NSR)
<input type="checkbox"/> Recognize Ventricular Tachycardia/Fibrillation
<input type="checkbox"/> Recognize STEMI and NSTEMI

2. Resuscitation
A. Fluid Resuscitation
<input type="checkbox"/> Understand the concepts of a colloid (Hextend) vs crystalloid (NS/LR) solutions
<input type="checkbox"/> Indication / Contraindication / Calculation Crystalloid
<input type="checkbox"/> Indication / Contraindication / Calculation Colloid
<input type="checkbox"/> Hypotensive Resuscitation
<input type="checkbox"/> Burn Fluid Resuscitation

<input type="checkbox"/> Rate Calculation / Rule of Tens
<input type="checkbox"/> Urinary Output Adjustment
<input type="checkbox"/> Initiation and calculation of maintenance Fluids
<input type="checkbox"/> Demonstrate use of in-line fluid warmers
<b>B. Whole Blood Transfusion</b>
<input type="checkbox"/> Understand the concepts of fresh whole blood transfusion (FWBT)
<input type="checkbox"/> Understand the concepts of blood products (PRC, platelets, FFP, FDP)
<input type="checkbox"/> Understand the concept of a Walking Blood Bank and the difference between an emergency and contingency walking blood bank
<input type="checkbox"/> Indications/Contraindications for use of blood products and FWBT
<input type="checkbox"/> Demonstrate the use of an Eldon card for field blood typing
<input type="checkbox"/> Understand and Manage blood transfusion reactions
<b>C. Advanced IV / IO Access</b>
<input type="checkbox"/> Initiate a Saline Lock
<input type="checkbox"/> Initiate an Intravenous Infusion
<input type="checkbox"/> Manage a patient with an intravenous infusion
<input type="checkbox"/> Initiate an peripheral <b>interosseous</b> device <b>Intraosseous</b>
<input type="checkbox"/> Initiate a sternal <b>interosseous</b> device
<input type="checkbox"/> Alternative fluid delivery mechanisms
<input type="checkbox"/> Nasogastric
<input type="checkbox"/> Per Rectum
<input type="checkbox"/> Oral Rehydration Salts (Packaged or Improvised)

<b>3. Control the Airway</b>
<b>A. Invasive Airway Interventions</b>
<input type="checkbox"/> Indication/Contraindications invasive airway
<input type="checkbox"/> Perform Surgical and Emergency Cricothyrotomy
<input type="checkbox"/> Perform Endotracheal Intubation
<input type="checkbox"/> Perform Video Assisted Laryngoscopy
<input type="checkbox"/> Rapid Sequence Intubation (RSI) medications
<input type="checkbox"/> Perform Laryngeal Mask Airway (LMA) Intubation
<input type="checkbox"/> Perform Post-Intubation Care-Checklist
<input type="checkbox"/> Confirm placement of invasive device (capnography, tube fogging, etc)
<input type="checkbox"/> Management and Securing of invasive airway device
<input type="checkbox"/> Management of Airway Secretions - Perform Tracheal Suction
<input type="checkbox"/> BVM with PEEP Valve, Raise Head of Bed to 30-45°, Filter and Humidify Air
<input type="checkbox"/> Replacement of broken/faulty invasive airway device

## 4. Ventilate and Oxygenate

### A. Non-Invasive Airway Adjuncts

- Understand the physiology of the 'Pulmonary toilet'
- Patient Positioning and Lung Recruitment
- Administer Supplemental Oxygen
- Employ Positive End Expiratory Pressure (PEEP)
- Provide Bag Valve Mask ventilation
- Perform Nasopharyngeal Airway Placement

### B. Ventilator Management


- Provide Ventilation using a BVM and PEEP Valve
- Management of portable ventilator
- Understand the difference between oxygenation and ventilation
- Adjust Tidal Volume, Respiratory Rate, Oxygen Concentration, and airway pressures to manage the ventilator patient
- Troubleshoot ventilator malfunction (DOPE algorithm or similar)

## 5. Advanced Medications

### A. Sedation and Pain Management

- Understand the difference between pain control/analgesia and sedation
- Pain control with oral medications
- Pain control with IV / IO/ IM/ IN medications
- Sedation with IV /IO / IM/ IN medications
- Reversal of pain medication overdose
- Perform pain control with local anesthesia or nerve block
- Understand the mechanism, physiology, and complications of common pain meds
  - Opioids
  - Benzodiazepines
  - Sedative hypnotics/barbituates
  - Ketamine
  - Propofol

### B. Antibiotics

- Provide Tailored Antibiotic Prophylaxis for specific traumatic wounds:
  - Penetrating Abdominal Wounds
  - Penetrating Chest Wounds 
  - Deep Extremity Wounds
  - Open Fractures
- Provide Recognition and treatment of common infections in non-ambulatory patients

<input type="checkbox"/> Provide tetanus prophylaxis as appropriate
<b>C. Improvised Drips</b>
<input type="checkbox"/> Mathematics/Calculations for improvised IV drips
<input type="checkbox"/> Establish IV Ketamine drip and titrate rate to pain control/sedation goal
<input type="checkbox"/> Establish IV epinephrine drip

<b>6. Physical Exam and Diagnosis</b>
<b>A. Secondary Survey – ICU Diagnostic Exam</b>
<input type="checkbox"/> Perform an AMPLE (Allergies, Medication, PMHx, Last Meal, Event Details) history
<input type="checkbox"/> Perform Mental Status Exam (AVPU, GCS, or other)
<input type="checkbox"/> Perform Complete Secondary Survey
<input type="checkbox"/> Perform Bedside Ultrasound as indicated
<input type="checkbox"/> eFAST Exam
<input type="checkbox"/> Evaluation for PTX or Hemothorax
<input type="checkbox"/> Evaluation of Volume Status (cardiac and IVC Ultrasound)
<input type="checkbox"/> Diagnosis of long bone fracture with Ultrasound
<input type="checkbox"/> Evaluation for foreign body
<input type="checkbox"/> Perform Point of Care Labs and interpret results
<input type="checkbox"/> i-STAT or EPOC
<input type="checkbox"/> Basic Glucometer
<input type="checkbox"/> POC Lactate
<input type="checkbox"/> Urinalysis Test Strips
<input type="checkbox"/> Re-Triage multiple patients following initial resuscitation
<b>B. Differential Diagnosis and Critical Care Planning</b>
<input type="checkbox"/> Generate a Problem List (System or Priority Based)
<input type="checkbox"/> Generate a Differential Diagnosis for each problem
<input type="checkbox"/> Use physical exam and diagnostic tools to refine differential diagnosis
<input type="checkbox"/> Generate a Critical Care task list
<input type="checkbox"/> Create a schedule for recurring procedures/critical care tasks
<input type="checkbox"/> Generate a Diagnostic task list
<input type="checkbox"/> Recognize signs and symptoms of emerging/developing medical conditions
<input type="checkbox"/> recognize development of hypotension
<input type="checkbox"/> recognize development of circulatory shock
<input type="checkbox"/> recognize development of local infection
<input type="checkbox"/> recognize development of SEPSIS and Septic Shock


<input type="checkbox"/> recognize development of Intracranial Hypertension (ICH)
<b>C. Management of post-TCCC and Non-Emergent Conditions</b>
<input type="checkbox"/> Recognition of emergent versus non-emergent conditions in the traumatic patient
<input type="checkbox"/> Understand the pathophysiology of traumatic injuries and development of secondary injuries and complications
<input type="checkbox"/> Prolonged management of Extremity Injuries
<input type="checkbox"/> Dislocation Reduction and Stabilization
<input type="checkbox"/> Fracture Splinting, Reduction, and Traction
<input type="checkbox"/> Amputation Debridement and Packaging
<input type="checkbox"/> Prolonged management of Spinal Injuries
<input type="checkbox"/> Prolonged management of Traumatic Wounds
<input type="checkbox"/> Prolonged management of Crush Injury/Compartment Syndrome
<input type="checkbox"/> Prolonged management of Closed Head Injury
<input type="checkbox"/> Prolonged management of Blunt Chest Injury
<input type="checkbox"/> Prolonged management of Blunt Abdominal Injury

<b>7. Nursing and Hygiene Skills</b>
<b>A. Nursing Procedures</b>
<input type="checkbox"/> Perform Urinary Catheterization (Foley Catheterization)
<input type="checkbox"/> Perform Urinary Catheter Care (irrigation, replacement)
<input type="checkbox"/> Perform Nasogastric (NG) tube placement
<input type="checkbox"/> Perform Nasogastric (NG) tube Care (irrigation, suction, feeding)
<input type="checkbox"/> Manage IV and IO lines and tubes
<input type="checkbox"/> Flush Saline Locks regularly
<input type="checkbox"/> Calculate Maintenance Fluids Rates
<input type="checkbox"/> Calculate Drip Rates using standard IV tubing
<input type="checkbox"/> Calculate Drip Rates using 'Dial-a-flow' IV tubing
<input type="checkbox"/> Adjust drip rates to patients' response to therapy
<input type="checkbox"/> Management of Advanced Airway Adjuncts
<input type="checkbox"/> Suction using manual or machine suction
<input type="checkbox"/> Perform Pulmonary Nursing Care/Pulmonary Toilet
<input type="checkbox"/> Evaluate and Repair/Replace Defective Airway Device
<input type="checkbox"/> Management of chest tube and chest tube collection drain (suction, irrigation)
<b>B. Preventative Care and Nutrition</b>
<input type="checkbox"/> Prevention of Deep Venous Thrombosis (tissue massage/limb mobilization)
<input type="checkbox"/> Prevention of Pressure Ulcer/Bedsore (rotating patient positioning)

<input type="checkbox"/> Basic Hygiene/Prevention of Infection
<input type="checkbox"/> Removal of soiled clothing
<input type="checkbox"/> Perform regular patient bathing/washing
<input type="checkbox"/> Basic Oral Care (brushing teeth/gums)
<input type="checkbox"/> Develop a Dietary Plan and Provide Basic Nutrition
<b>C. Wound Care</b>
<input type="checkbox"/> Wound Cleaning and Irrigation
<input type="checkbox"/> Wound Debridement and Basic Reduction
<input type="checkbox"/> Perform a Sterile Dressing/Packing Change
<input type="checkbox"/> Long Term Management of Burn Wounds
<input type="checkbox"/> Application of burn specific dressing (Sulfamylon, Microdex)
<input type="checkbox"/> Prevention of evaporative heat and fluid loss
<input type="checkbox"/> Prevention of infection +/- antimicrobial burn ointment
<input type="checkbox"/> Amputation Stump Management/Care

<b>8. Surgical Interventions</b>
<b>A. Emergency Procedures (some overlap with TCCC)</b>
<input type="checkbox"/> Understand the Physiology of Blunt Chest and Abdominal Trauma
<input type="checkbox"/> Understand the Physiology of Penetrating Chest and Abdominal Trauma
<input type="checkbox"/> Place Occlusive Chest Dressing
<input type="checkbox"/> Perform Emergent Needle Thoracentesis for tension PTX
<input type="checkbox"/> Perform Emergent Needle Thoracentesis for tension Hemothorax
<input type="checkbox"/> Perform Tube Thoracostomy (Chest Tube)
<input type="checkbox"/> Secure Chest Tube
<input type="checkbox"/> Establish Chest Tube Collection Device
<input type="checkbox"/> Apply manual, automated, or water seal suction
<input type="checkbox"/> Understand the Physiology of Crush Injury
<input type="checkbox"/> Recognize Compartment Syndrome
<input type="checkbox"/> Perform Emergent Fasciotomy (encourage telemed guidance)
<input type="checkbox"/> Understand the Physiology of Circumferential Burns
<input type="checkbox"/> Perform Escharotomy (encourage telemed guidance)
<input type="checkbox"/> Lateral Canthotomy
<b>B. Non-Emergent Procedures</b>
<input type="checkbox"/> Tourniquet Conversion to Pressure Dressing
<input type="checkbox"/> Vessel Ligation
<input type="checkbox"/> Loop <b>Stich</b> <b>Stitch</b>

<input type="checkbox"/> Figure 8 stich
<input type="checkbox"/> Cut-down stitch
<input type="checkbox"/> Fracture Reduction and Stabilization
<input type="checkbox"/> Shoulder Dislocation
<input type="checkbox"/> Elbow Dislocation
<input type="checkbox"/> Hip Dislocation
<input type="checkbox"/> Patellar Dislocation
<input type="checkbox"/> Ankle Dislocation
<input type="checkbox"/> Digital Dislocation
<input type="checkbox"/> Suprapubic Catheterization (encourage telemedicine guidance)
<input type="checkbox"/> Abscess Incision and Drainage
<input type="checkbox"/> Understand the physiology of basic wound repair
<input type="checkbox"/> Wound cleaning and irrigation
<input type="checkbox"/> Wound Debridement
<input type="checkbox"/> Primary Closure via Sutures / Staples
<input type="checkbox"/> Secondary Closure and Wound Packing
<input type="checkbox"/> Identification and Removal of foreign body
<input type="checkbox"/> Management of traumatic amputations
<b>c. Surgical Sterile Technique</b>
<input type="checkbox"/> Establishing a sterile field
<input type="checkbox"/> Perform surgical hand and arm scrub
<input type="checkbox"/> Putting on a sterile gown and gloves
<input type="checkbox"/> Aseptic Surgical Technique
<input type="checkbox"/> Field Sterilization of Tools
<input type="checkbox"/> Chemical Sterilization
<input type="checkbox"/> Physical Sterilization

<b>9. Telemedicine Consult</b>
<input type="checkbox"/> Recognize the need for medical consultation 
<input type="checkbox"/> Prepare 'Call Sheet' to present patient to the consultant
<input type="checkbox"/> Present the patient to the consultant in a clear and concise manner
<input type="checkbox"/> Include key vitals, physical exam findings
<input type="checkbox"/> Include pictures, laboratory data, and videos
<input type="checkbox"/> Present the consultant with a clear and concise clinical question
<input type="checkbox"/> Perform telemedicine using a variety of media:
<input type="checkbox"/> Email (w/wo pictures, videos)

<input type="checkbox"/> Cell Phone/Sat Phone
<input type="checkbox"/> Real-Time Video Conference
<input type="checkbox"/> Secure Communications
<input type="checkbox"/> Perform telemedicine assisted/guided surgical procedure

## 10. Package and Prepare for Evacuation/Flight

<input type="checkbox"/> Prepare the ambulatory patient for evacuation
<input type="checkbox"/> Prepare the litter bound patient for evacuation on standard litter
<input type="checkbox"/> Prepare the litter bound patient for evacuation on improvised litter
<input type="checkbox"/> Secure interventions to patient to prevent disruption during evacuation/flight
<input type="checkbox"/> Secure large medical devices (ventilators, monitors) to litter for transport
<input type="checkbox"/> Package the patient to prevent hypothermia using HPMK/blanket and beanie cap
<input type="checkbox"/> Protect patients' eyes (sunglasses) and ears (earplugs) during flight
<input type="checkbox"/> Prepare interventions for unpressurized flight (replace air filled balloons with water, etc)
<input type="checkbox"/> Prepare to provide en-route care in CASEVAC vehicle
<input type="checkbox"/> Prepare emergency and pain medications for administration prior to evacuation/flight
<input type="checkbox"/> Package the patient for ease of access for managing interventions
<input type="checkbox"/> Package the patient for ease of access for vitals monitoring
<input type="checkbox"/> Prepare handoff documentation (TCCC/PFC Card) for receiving team
<input type="checkbox"/> Perform a clear and concise patient handoff to the receiving team

## 11. Medical Logistics and Leadership

<b>A. Medical Communication</b>
<input type="checkbox"/> Effectively communicate the patient's medical condition and treatment plan to the team leadership in simple and easy to understand terms
<input type="checkbox"/> Effectively communicate the patient's medical triage category (urgent, urgent surgical, priority, routine), stability, and conditional requirements to the Team Leader/Sergeant
<input type="checkbox"/> Communicate to the patient (if awake) their medical condition and treatment plan in simple and easy to understand terms
<input type="checkbox"/> Send Situation Reports (SITREPs) to higher medical and unit command
<input type="checkbox"/> Communicate with higher command to arrange MEDEVAC/CASEVAC and request additional resources/supplies
<input type="checkbox"/> Assist command in Initiating ISOS patient causality report
<b>B. Medical Command</b>
<input type="checkbox"/> Understand the need to utilize non-medical team members to assist with medical tasks and medical logistics in a PFC scenario and communicate this need to the team leadership

<input type="checkbox"/> Develop a patient treatment plan checklist for use by the team
<input type="checkbox"/> Develop a nursing care checklist for use by the team
<input type="checkbox"/> Assign secondary/nursing assistant tasks to non-medical team members
<input type="checkbox"/> Checking and Assessing Vitals
<input type="checkbox"/> Nursing Care Tasks
<input type="checkbox"/> Airway maintenance and care (who is squeezing the BVM)
<input type="checkbox"/> Recorder
<input type="checkbox"/> Supply/logistics (acquiring medical supplies, preparing CASEVAC, etc)
<input type="checkbox"/> Communication (SITREPs, MIST reports, 9-line, Telemedicine, etc)
<input type="checkbox"/> Develop a work-rest cycle to ensure adequate crew rest including the medic
<input type="checkbox"/> Create a set of 'wake-up criteria' (normally in the form of abnormal vitals signs, medication changes, etc) for team members to call the medic
<input type="checkbox"/> Cross-train non-medical team members in basic medical skills to serve as shift leaders (basic vitals taking, recording, nursing care, etc)
<input type="checkbox"/> Performing interval 'rounding' with the team to keep all team members informed of the patient's condition and updated treatment plan
<b>C. Medical Planning</b>
<input type="checkbox"/> Medical Supply Planning:
<input type="checkbox"/> Anticipate long-term medical supply requirements and deficiencies
<input type="checkbox"/> Request re-supply through local resources or higher command
<input type="checkbox"/> Understand the location and capabilities Host Nation Civilian Medical Facilities
<input type="checkbox"/> Understand the location and capabilities of friendly Host Nation Military Medical Units
<input type="checkbox"/> Request use of Host Nation Medical Resources as appropriate
<input type="checkbox"/> Patient movement/transport
<input type="checkbox"/> Plan safe, low-risk, and efficient routes for medical transport
<input type="checkbox"/> Determine best vehicle of transport for the desired movement
<input type="checkbox"/> If moving across borders or landing aircraft on contingency plans, determine the need for country clearance and contact embassy for clearance as appropriate
<input type="checkbox"/> Discuss the need for security during all phases of patient care and transport and work with the team leader/sergeant to develop contingency plans

\*Note: This list is formatted around the '10 Essential PFC Capabilities.' It was cross-referenced with a variety of SOF resources to ensure both accuracy and completeness.