

# **6th Annual Santiago High School Raider Challenge**



**Saturday, 4 November 2023**

**Santiago High School**

**1395 Foothill Blvd**

**Corona, CA 92881**

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# PURPOSE

This Standard Operating Procedure (SOP) defines the policies and procedures to be followed in the conduct of the Santiago Raider Challenge hosted by Santiago High School AFJROTC.

## **SECTION I – GENERAL PROVISIONS**

### **1. Operations:**

- a. The Santiago Raider Competition will be conducted on 4 Nov 2023 in accordance with (IAW) the policies and procedures set forth in this SOP.
- b. Upon arrival, teams must check-in at the designated team check-in table. A copy of the final events schedule will be provided to teams at this time. **There will not be a Commander's Call.**
- c. Entry fees are posted in Attachment 1. **All entry forms (Atch 1) must be received by 20 October 2023.** Late entries will be considered on a case by case basis. Entry fees may be paid on the day of the event, with prior notification. Start times will be determined by a random drawing; however, special consideration will be given to those teams located outside the Inland Empire area. Start times will be posted on our website [https://santiago.cnusd.k12.ca.us/programs\\_\\_\\_activities/afjrotc/santiago\\_drill\\_meet\\_and\\_raider\\_challenge](https://santiago.cnusd.k12.ca.us/programs___activities/afjrotc/santiago_drill_meet_and_raider_challenge) NLT **27 October 2023.**
- d. There will be 4 categories of the Raider Challenge:
  1. Physical Team Test (PTT)
  2. Litter Carry
  3. Logistics Relay
  4. Single Rope Bridge
- e. Maximum number of teams for the event is 30 teams. Units may enter a **maximum of two teams** for the competition. There will be THREE DIVISIONS of competition (Male, Mixed, and Female)
- f. Concept of Operations: Teams must report to the competition Command Post (CP) according to Attachment 1. At check in, units who have not paid to enter the event will be required to make payment. Additionally, all other forms will be checked and verified. **Team forms will be kept during the competition by the school's instructor to expedite evacuation if required.**
- g. TEAM COMPOSITION: Teams will be made up of six (6) raider team members. Only four (4) cadets can compete in each event, with the exception of the single rope bridge where all six (6) team members will participate. MIXED TEAMS must have a minimum of TWO females in every event. MALE TEAMS are generally comprised of all male members, however due to

injury or personal preference; the team may contain females in any quantity. FEMALE TEAMS are just that, teams comprised solely of female team members. An extra team member can only be traded out at the discretion of the team's commander between events. The same four members that start an event must finish that event.

h. Proposed Itinerary:

- 1) 0800-0830 Teams report in with necessary paperwork and fees
- 2) 0830-0900 Preparation for events
- 3) 0900-1330 Team rotation through events
- 4) 1330 Closing ceremony

## **2. SCORING:**

- a. All teams will be ranked on team performance against the entire field for each event. A point value will be given based on each team's individual place on that event. The overall winner will be the team with the least number of total points for the entire competition.
- b. Complaints can be handled as follows:
  - 1) Instructors and Cadet Team Commanders are the only individuals authorized to file complaints.
  - 2) Complaints must be filed with the event prior to leaving that station. If a team leaves the station, the complaint will not be acknowledged.

## **3. UNIFORM AND EQUIPMENT:**

- a. All instructors will follow their department guidance for uniform wear during competitions. Instructors may wear utility uniforms in order to match cadet uniforms but is not required.
- b. Minimum uniform for participants includes military utility pants, boots or running shoes. Teams may wear unit t-shirts, sweat shirts in lieu of military utility blouse.
- c. Equipment:
  - 1) Guidon for ceremony (Optional).
  - 2) Additional equipment for each event.

## **4. CEREMONIES AND AWARDS:**

- a. 1st, 2nd, and 3rd place overall team trophies for each division. (All four (4) events completed by the team)
- b. 1st, 2nd, and 3rd place category team posters for each division.

**5. CADET LIABILITY:** Instructors must ensure that each cadet participating in the Raider competition has **personal medical coverage**. All cadets must have all forms filled out **prior to the event's start**.

**6. SAFETY:** Safety Requirements:

- 1) Risk Management Program methodology will be incorporated into training and competitions.
- 2) Cadet Buddy Teams and the "Buddy Team" process will be incorporated into training and competitions.
- 3) All cadre and cadets will be thoroughly briefed on pertinent safety regulations prior to the start of the competitions. The event cadet officer-in-charge (OIC) or cadet non-commissioned-officer-in-charge (NCOIC) will conduct a safety briefing for cadets prior to the start of each event. Competition judges must attend briefings.

## **Section II**

### **SECTION II – PTT**

#### **Event #1- Physical Team Test (PTT)**

1. **TASK:** To test the team's strength, stamina, strategy, and endurance over a distance under ½ mile total using a variety of physical obstacles.
2. **CONDITION:** During daylight under safe weather conditions Team members will take the PTT.
3. **STANDARD:** Team consistency for this event is four (4) cadets. No alternate is authorized once the event has begun. The team must finish the event with the same cadets that started the event. The event begins with all cadets crawling through a tunnel. Then running roughly 50 yards to then pick-up & carry 10 water jugs and 2 ammo cans for 30 yards. Cadets then run roughly 50 yards and approach a 4' wide, 40" high vault. All go OVER the vault (Cannot "HURDLE", i.e., jump over without supportive contact) any vault. Cadets then run 50 yards to navigate through a serpentine maze designed in a back & forth pattern approximately 20 yards in length. This maze is accessed ONLY in column formation. Cadets then immediately navigate the agility ladder. Every cadet will ATTEMPT to run through the ladder (no penalty for stumbling or accidentally missing a hole so long as the attempt is made). Teams then run forward another 50 yards and reach the railroad tie. The railroad tie can be moved using as many or as few cadets as your team requires. The team will MOVE the railroad tie (note: push, pull, drag, your call) roughly 60' to the far marker (entire railroad tie must CLEAR the marker). The railroad tie is released, and the cadets then run 30 yards to the Tire Flip Area. They will flip ONE large tire, ONE TIME in the tire flip box, then move a short distance to the Event Turn Around Point. ALL CADETS MUST circle this point in either direction, and run through the entire course in reverse (moving the tire back, railroad tie back, moving the water/ammo cans back, to the starting position where they were found) thereby completing the course.
4. **UNIFORM/EQUIPMENT:** This event will be conducted in JROTC sanctioned utility pants, t-shirt and appropriate footwear designed for running or a cross training tennis shoe. An alternate t-shirt may be worn, but only if the entire team has an approved team logo t-shirt and all cadet members are wearing the team shirt or PT clothes.
5. **SCORING:** This event will be graded in accordance with the following score sheet. The team with the fastest Total Run Time will be declared the winner of the event. Times will be scored to the 100ths. Example: 2:12.76, 2 minutes, 12 seconds, .76 of a second. This should greatly minimize the chance of a tie. In the rare case of a tie: First tie breaker: the team who did not acquire any penalties during the course will be declared the winner. In the event the tied teams had penalties, the team with the least penalty time will be declared the winner.

## Section II

### PTT SCORE SHEET

Initials
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School Name: \_\_\_\_\_

Team Name: \_\_\_\_\_

#### Reason for Disqualification:

\_\_\_ Failure to start event when called by the meet official without cause.

\_\_\_ Mishandling/destruction of an Obstacle/Equipment due to malicious or careless actions

\_\_\_ Team member receiving illegal physical assistance.

(Point of emphasis – injured cadets CANNOT be CARRIED, they can be assisted by other cadets, but not carried)

\_\_\_ Failure to maintain correct team gender numbers required (Mixed with <1 females, etc.)

\_\_\_ Other (explain) \_\_\_\_\_

#### Penalties:

\_\_\_ Finish with only Three Cadets (1 minute penalty)

\_\_\_ # Occurrences of a cadet crossing back over finish line after completing event (30 seconds each)

\_\_\_ # Occurrences of Equipment not placed in correct position by team during race (30 seconds each)

(Point of emphasis – ensure all cans are placed down with enough care and deliberation they do not FALL OVER)

\_\_\_ # Cadets not executing obstacles as prescribed (1-minute each cadet)

\_\_\_ # Occurrences of Cursing / Unsportsmanlike Conduct (1-minute each)

\_\_\_ Team False Start (30 seconds)

\_\_\_ Other (explain) \_\_\_\_\_

TEAM RAW TIME \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
Minutes Seconds Hundredths

TEAM FINAL TIME (after penalties) \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

Judge Signature \_\_\_\_\_

## **SECTION III – LITTER CARRY**

### **Event #2- LITTER CARRY**

1. **Task:** Safely transport a simulated casualty on a litter, 200 yards, maneuvering through obstacles
2. **Condition:** Teams will be provided a simulated casualty on a litter, during daylight hours, and under existing weather conditions. Each team will consist of four (4) raiders, uniform will be full raider meet field uniform.
3. **Standard:** Transport the casualty on the litter without the simulated casualty falling off the litter. Teams may walk or run the course. Team members can be utilized in any manner directed by the team captain, there is no restriction of how many raiders can carry the litter. All (4) team members must participate in the event. ONLY competing raiders are allowed on the course. If a team member sustains an injury other team members may assist/ carry teammate to finish line.
4. **Scoring:** This event will be graded in accordance with the following score sheet. The team with the fastest **Total Run Time** will be declared the winner of the event. Times will be scored to the 100ths. *Example: 2:12.76, 2 minutes, 12 seconds, .76 of a second.* This should greatly minimize the chance of a tie. In the rare case of a tie: **First tie breaker:** the team who did not acquire any penalties during the course will be declared the winner. In the event the tied teams had penalties, the team with the least penalty time will be declared the winner. If all the previous tie breakers are considered or if neither team had penalties and a tie remains the team with the highest CPFC score during the CPFC Challenge will be declared the winner.
5. **Equipment:** A litter will be provided for each lane used, sandbags or equivalent weighing a total of 100 pounds, an obstacle course, and predetermined obstacles throughout the course. Graders will have a stop watch that keeps time to the hundredths.
6. **Guidelines:**  
**Course Layout:** One lane will be utilized with three obstacles. Obstacles will be set up so teams may negotiate in less than a minute. Time will start when the grader says, “GO”, and stop when the litter and the last raider on the team crosses the start/ finish line. No land obstacle will be more than 5 feet high, contain any wire, such as barb, etc., or other material that may put raiders at risk of injury. Examples are but are not limited to: holes in the ground, roots protruding out of the ground, stumps, poison ivy, etc.



**OBSTACLE CATEGORIES:**

Teams must lift a casualty over an obstacle no more than 5 feet high without touching the obstacle.

Teams must negotiate the litter through a course similar to a Leadership Reaction Course.

Teams will carry the litter over a set number of track hurdles.

## Section IV Appendix 1

### LITTER CARRY SCORE SHEET

Team Name: \_\_\_\_\_

Run Time: \_\_\_\_\_

Total Penalty Time: \_\_\_\_\_

TOTAL RUN TIME: \_\_\_\_\_

**DISQUALIFICATION: TEAM FAILS TO FINISH WITH 4 MEMBERS OR DOES NOT COMPLETE THE COURSE.**

#### **PENALTIES:**

- Simulated casualty touches the ground: 5 minutes
  - If litter tips over and casualty touches the ground
  - If casualty falls off litter
  - Each time casualty touches the ground is a penalty

# of penalties: \_\_\_\_\_

- Team fails to negotiate obstacle: 3 minutes
  - Team goes around obstacle intentionally
  - Team misses obstacle
  - Penalty for each obstacle

• # of penalties: \_\_\_\_\_

- Team fails to properly negotiate course: 1 minute
  - Litter touches ground, penalty each touch
  - Litter touches any part of obstacle
  - Litter or casualty touches water during water obstacles
  - One penalty per obstacle regardless of how many touches

# of penalties: \_\_\_\_\_

SCORER SIGNATURE: \_\_\_\_\_

## **SECTION IV – LOGISTICS RELAY**

### **Event #3 Logistics Relay**

1. **TASK:** A 4 member raider team will negotiate a series of four relay events to achieve an overall timed team score.
2. **CONDITION:** given a flat open field measuring 100 yards. Each team will break down into 2 man buddy teams that will be pre-positioned along the relay course. Each team will have two 2-man buddy teams. Each 2 man team will be assigned two specific relay tasks to be accomplished within a set distance. (*For actual site lay out refer to the illustration*)
3. **STANDARD:** The entire team will participate, once a member has been assigned to complete specific phases of the relay he or she cannot be utilized for any other part of the race. Once the 2 man buddy teams have been pre-positioned at their assigned start points the command will be given by the lane evaluator to “GO”. The time will start once the command is given and will continue thru each phase of the relay. The time will stop once the last relay buddy team crosses the finish line.
4. **RELAY EVENTS:**
  - #1 Tire Flip:** The tire should be comparable in size and weight of a bus tire or 2 ½ Ton Truck Tire. The event coordinator may elect to include the tire rim for additional weight if desired.
  - #2 Free Weight Carry:** This will be free weights weighing between 50 to 75 pounds suspended on a galvanized pipe.
  - #3 Ammo Box:** This will be an ammo type box weighing between 35 to 50 pounds. On this relay phase the two man team must carry or push the box under and thru a low crawl obstacle.
  - #4 Litter Carry:** This will be a litter weighing 100 pounds.
5. **UNIFORM/EQUIPMENT:**
  - (1) Pair of tennis shoes or boots may be worn
  - (1) ABU/BDU jacket (**OPTIONAL**)
  - (1) ABU/BDU trousers
  - (1) ABU/BDU belt
  - (1) Tan ABU/BDU T-shirt or team T-shirt
6. **Scoring:** Scoring of this event is a straight timed relay. The time will start at the command of the lane evaluation and the time will stop when the final relay team (litter carry) crosses the finish line. The team with the overall fastest time will be determined the winner and will hold the 1<sup>st</sup> place position. Points for the event will be accessed based on the overall team standings; i.e. team finishing in 5<sup>th</sup> place will be accessed 5

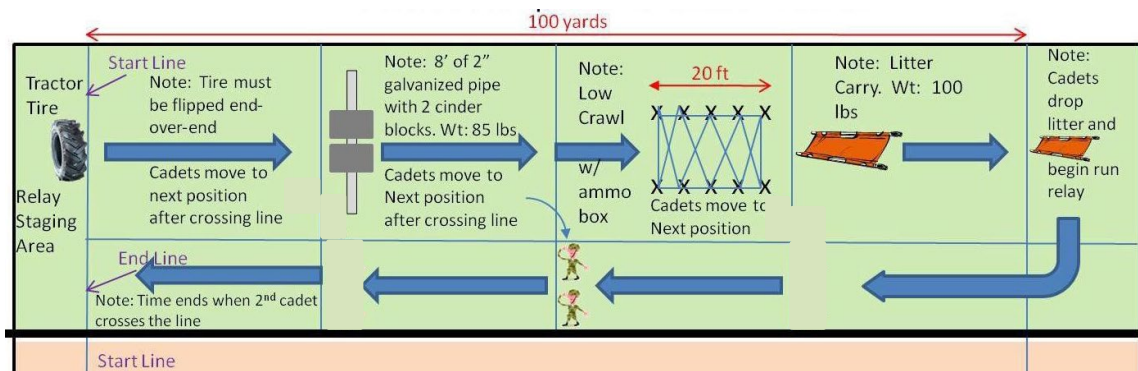
points for this event.

7. **Penalties:** Penalties will be assessed for the following violations:

- a. Starting before the command of “GO” is given= 10 sec
- b. Relay team starting before preceding relay team crosses their end line= 10 sec
- c. Crossing into another team’s lane=10 sec
- d. Throwing or tossing relay item= 10 sec
- e. Dropping the litter during movement=10 sec
- f. Dropping and not recovering personal equipment during conduct of each buddy teams relay event= 10 sec
- g. Failure to have both buddy team members carry and drag assigned item= 10 sec

*Not a 10 second penalty will be accessed for each infraction committed during the race. I.e. dropping the litter 2 times will incur a 20 second penalty*

**Event #3 – Logistics Relay layout.**



## Section V - Appendix 1

### LOGISTICS RELAY SCORE SHEET

**TEAM NAME:** \_\_\_\_\_

**LETTER DESIGNATION:** \_\_\_\_\_

**TOTAL RUN TIME:** \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ (must carry out finishing times to 2 one hundredths of a second or two places)

**PENALTY TIME:** \_\_\_\_\_ Total combined seconds.

**OVERALL FINISHING TIME:** \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_

**Evaluator Signature:** \_\_\_\_\_

**Raider Commander Signature:** \_\_\_\_\_

## **SECTION V – SINGLE ROPE BRIDGE**

### **Event #4 Single Rope Bridge**

1. **TASK:** Construct a one-rope bridge and cross a simulated obstacle. This exercise will provide a competitive, standardized rope bridge event in order to facilitate teamwork, motivation, and esprit de corps.
1. **CONDITION:** At any location with a minimum of 52 feet between “anchor points” (e.g. poles, trees, etc.). This creates a 40-foot crossing area with a 6-foot safety zone extending out from each of the two anchor points. Cadets will use the bridging equipment listed in “Keys to a successful one-rope bridge crossing” (see Page 16), during daylight hours, in existing weather conditions.
2. **STANDARD:** Teams will be given one opportunity to conduct a successful rope bridge crossing.
3. **REQUIREMENTS:** The information below contains the minimum instruction to be given at the beginning of the event. The OIC/NCOIC may add to it, as appropriate.
  - a. Pre-crossing requirements:
    1. There can be no pre-tied knots in the main rope.
    2. The rope cannot overlap itself in any manner.
    3. The FIRST and LAST man to cross must have an Australian rappel seat with the snap link/carabiner.
    4. All other team members (#2-5) must have a Hip Rappel/Swiss Seat with snap link/carabiner. Seats must be tied IAW this instruction.
    5. No part of the rope or a team member may be forward of the anchor point before the start.
    6. A 6-foot safety zone extending from each anchor point will be clearly marked and visible.
    7. Instructors will ensure that all Swiss seats and Australian rappel seats are tied properly before the team executes the one-rope bridge event.
  - b. Crossing Requirements:
    1. Time will begin when the team captain says, “GO.” Time will continue to run until the team captain tells the timer, “STOP.”
    2. The first and last man crossing must be secured into the main rope using an end of the rope bowline (a half hitch “safety” knot is not required).
    3. The #1 man must temporarily secure the rope to itself after crossing (e.g. the #1 man must wrap the rope around the far side anchor point and temporarily secure the rope by closing the snap link/carabiner on the main rope and yell, “Temporary secure!”).
    4. Team members #2-5 must have on a Swiss seat tied IAW this instruction.
    5. Only two members may be snapped onto the main rope at the same time.
    6. Team members cannot snap into the main rope until both anchor points are fully secured.
    7. Team members or their equipment (other than the first and last man crossing) may not touch the obstacle or the 6-foot safety zone markers on either side of the obstacle.
    8. At least one foot must remain above the rope at all times during the crossing.

9. All knots must be untied from the main rope and the rope may not lie over itself when time is called.
10. The only knot authorized for the transport tightening system is the wireman's knot.
11. No anchor knots may be disassembled while a cadet is snapped into the bridge.  
NOTE: Two additional snap links may be utilized in the wireman's knot to facilitate untying the wireman's knot after crossing has taken place.
12. Far and near side anchor points must be tied with a round turn with two half hitches (the entire rope must pass through the first half hitch, a quick release can then be tied in the second half hitch).  
NOTE: If the rope is tightened to a point where the transport tightening system is pulled against the anchor point and the round turn with two half-hitches cannot be secured between the transport tightening system and the anchor point, a safety violation penalty will be assessed and the team must correct the problem prior to anyone crossing the obstacle. The time will not stop while this corrective action takes place.

#### **4. GENERAL INFORMATION**

- a. The score for the crossing will determine placement of the team. The score sheet will be utilized to calculate times, reps, penalty points, and overall event placement.
- b. A team will consist of 6 cadets. A team with 5 team members may compete but will be assessed a four minute time penalty which will be added to their event time. Teams cannot compete with less than 5 members.
- c. The rope bridge equipment and anchor points will be inspected by OIC/NCOIC for safety and serviceability.

5. **UNIFORM/EQUIPMENT:** Each team member will cross the obstacle with complete ABU/OCPs. Safety helmets will be used (host unit will provide, if the team does not possess helmets). Units who do not have necessary ABU/OCP items in inventory may substitute appropriate clothing, but prior coordination must be made with Santiago AFJROTC.

#### **6. SCORING:**

- a. Teams will be ranked based on their overall times. The team with the lowest time will be ranked 1st and will receive an appropriate score, based on how many teams compete in the one-rope bridge event.
- b. Penalty times will be added to the overall time for scoring purposes.

#### **7. PENALTIES**

- a. 10-second penalties for minor violations will be assessed as follows:
  1. Having equipment or personnel forward of the near side anchor point prior to the start.
  2. Failure to secure into the main rope with an end-of-the-rope bowline (1st and last man only).
  3. Failure of the #1 man to temporarily secure the rope to itself after crossing (the #1 man must wrap the rope around the far side anchor point and temporarily secure the rope by closing the snap link/carabiner on the main rope).

4. Team member on rope prior to anchor point being secure.
  5. Touching the obstacle (including the marked 6-foot boundary lines or the ground between the boundary lines).
  6. Equipment/hair/body touches the ground/obstacle while crossing.
  7. Equipment left on the near side
  8. Equipment is left in the obstacle (e.g. cover, extra snap link/carabiner, any contents from a cadet's pocket, etc.)
  9. Knots left in the main rope or the rope lying over itself when time is called (except the wireman's knot; see "2-minute penalties..." below).
    - i. NOTE: Individual penalties are assessed "per individual". Example of "per individual": If an individual cadet has multiple violations regarding a specific violation type (e.g. tying of the swiss-seat with two or more incorrect knots or touching the obstacle more than once while crossing) he or she will only be assessed one 10-second penalty for that violation type. Additional 10-second penalties may be assessed for any other violation type or any other team member committing similar violations.
  10. Carabiners/snap links still attached to swiss seats and Australian rappel seats when team captain yells, "Stop!" at completion. (NOTE: This will be cumulative, meaning if 3 cadets still have their carabiners attached to their swiss/rappel seats at event completion, the team will be assessed 3 10-second penalties)(30)
  11. Failure to keep at least one foot above the rope during the crossing.
    - ii. NOTE: Feet may drop below the rope when physical contact is made with individuals who have already crossed who are pulling the individual the last few feet across the safety boundary.
- b. 2-minute penalties for major violations will be assessed as follows:
    1. The wireman's knot is not removed from the main rope.
    2. An individual not crossing.
    3. More than two members on the rope at any time.
    4. Running across the obstacle, slack rope (#2-5 man only).
    5. Calling time before all knots are out of the rope (e.g. team elects to take penalty instead of trying to get knots out, or if a team neglects to take out a knot).
  - c. 3- minute penalties for safety violations will be assessed as follows:
    1. Failure to use the wireman's knot for the transport tightening system.
    2. Failure to correctly tie a round turn with two half hitches at each anchor point.  
NOTE: the entire rope must pass through the first half hitch, a quick release can then be tied in the second half hitch.
    3. Tightening of the main rope to the point that the transport tightening system is against the anchor point, preventing the proper tying of the round turn with two half hitches.
    4. Failure to complete the One-Rope Bridge will disqualify participants from overall placement.

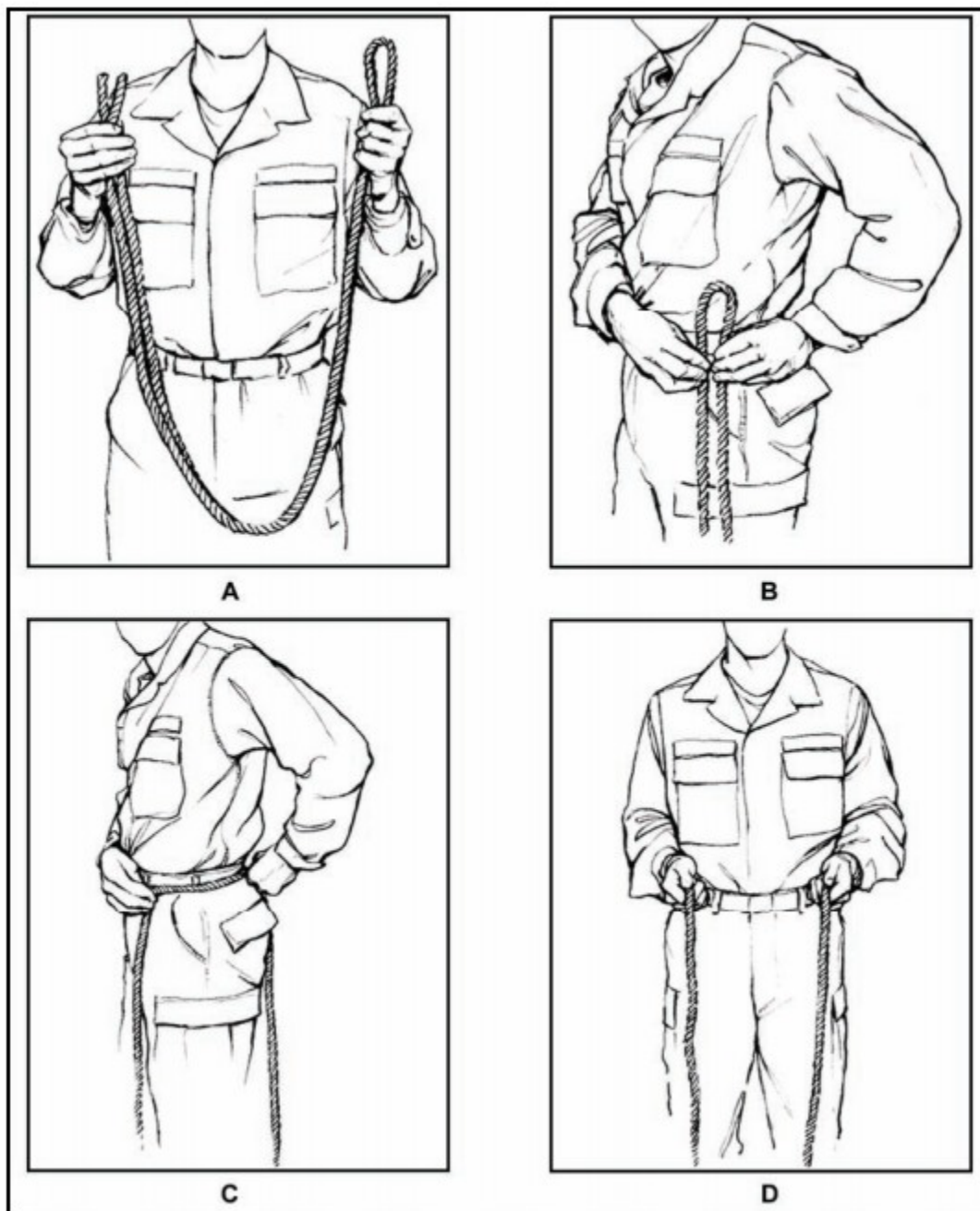
## 8. GENERAL

- a. **EVENT CONCLUSION.** The event is concluded when all team members have their hands on their head and the team captain yells, "Stop!" At that point, the judge will inspect all aspects of the rope, obstacle, carabiners, and cadets to ensure that their hands are on their heads.



- b. **AUSTRALIAN RAPPEL SEAT.** Find the center of the sling rope. Reach down and grab hold of the two remaining ends. While holding on to the two ends of the rope, reach behind you and grasp the other end of the rope and bring it around to the front of your waist. You should have the center of the rope and the two ends of the rope in front of you and the rope is doubled around your waist. Now take the double rope, tie a square knot, and secure it with over hand knots. Rotate the square knot to the opposite side of your break hand. Attach the snap link. Insert the snap link with the gate down and the opening towards the body. Rotate the snap link one half turns so that the gate opens down and away from the body.
- c. **HIP/SWISS RAPPEL SEAT.** Refer to TC 21-24, Chapter 1, Section III, Rappelling Procedures, para 1-7 for illustrations and detailed instructions of tying this seat. 4.j.iii.1-2 below is an excerpt from TC 21-24:
- d. **SEAT HIP RAPPEL:** When using the seat-hip rappel, friction is created by a snaplink that is inserted in a sling rope seat and fastened to the rappeller. This method provides a faster and more controlled descent than other methods. Wear gloves to prevent rope burns. An alternate technique is to insert a second snaplink into the first snaplink (attached to rappel seat) and run the rope through the second snaplink. This allows easier disengagement from the rappel rope without running the entire rope through the first snaplink. To disengage from the rappel rope using the alternate technique, release the tension from the rope by opening the gate of the first snaplink and removing the second snaplink (with the rope attached).
- e. **THE SWISS RAPPEL SEAT:**
  1. Place the midpoint (center) of the length of the sling rope on the hip opposite the brake hand (the brake hand is the strong hand) (Figure 1-3 A, B, C).
  2. Bring the sling rope around the waist above the hip bone. Tie a double overhand knot over the navel (Figure 1-3 D, E, F, G, H).
  3. Let the two free ends of the sling rope fall to the ground in front (Figure 1-3 I).
  4. Bring the two free ends of the sling rope down between the legs and up over the buttocks. Ensure that the two free ends do not cross (Figure 1-3 J).
  5. Pass the ends of the ropes over the rope that is tied around the waist at the two points above the center of the two rear seat pockets (Figure 1-3 K).
  6. Grab the free end of the rope that is on the left side of the body with the left hand, and the free end of the rope that is on the right side of the body with the right hand.
  7. Squat down and simultaneously pull on both running ends of the ropes and stand up. This will tighten the seat.
  8. Take the two running ends of the rope down and back over the waist rope from the inside. Bring the running ends back under the ropes that are going across the buttocks (Figure 1-3 L).
  9. Tie the two running ends with a square knot and two overhand knots on the hip opposite the brake hand (Figure 1-3 M, N).
  10. Place any excess rope in the trouser pocket near the square knot (Figure 1-3 O, P).
  11. With the gate down and the hooked end of the snaplink against the navel, place the end of the snaplink through the single rope that is around the waist and the two

ropes forming the doublehand knot (Figure 1-3 Q). Rotate the snaplink a half turn so the gate is facing up and will open away from the body (Figure 1-3 R, S, T).



**Figure 1-3. Construction of rappel seat.**

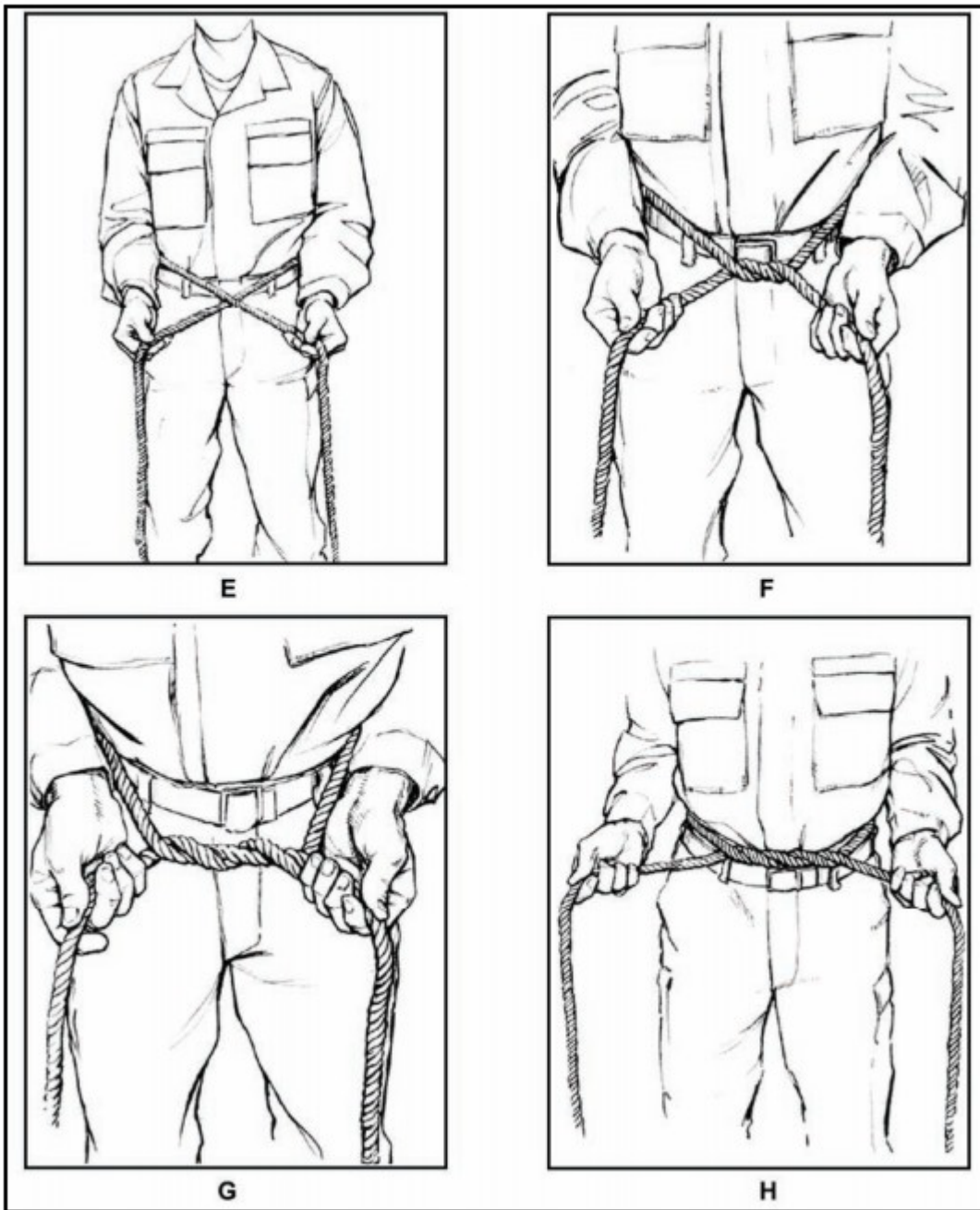
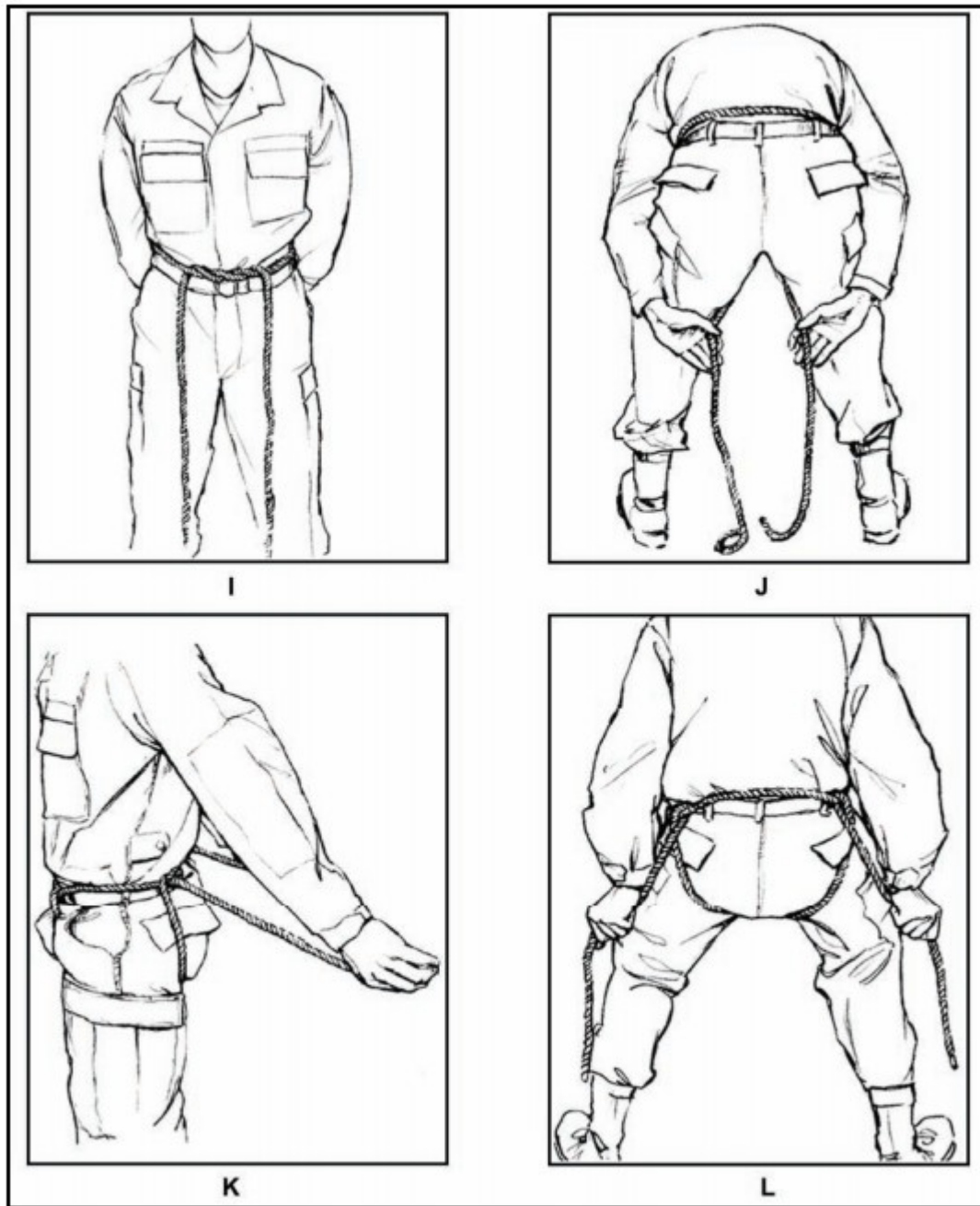
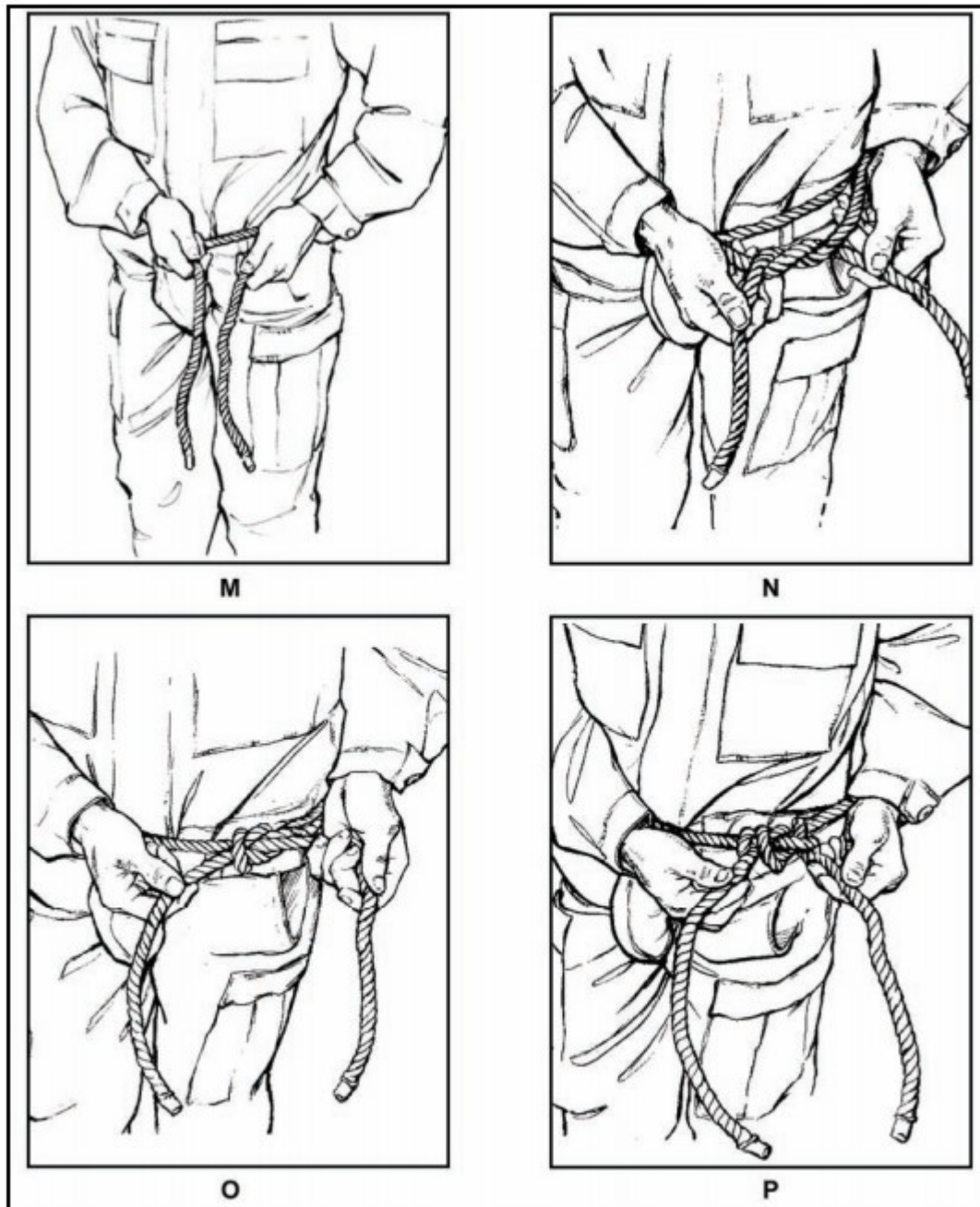


Figure 1-3. Construction of rappel seat (continued).

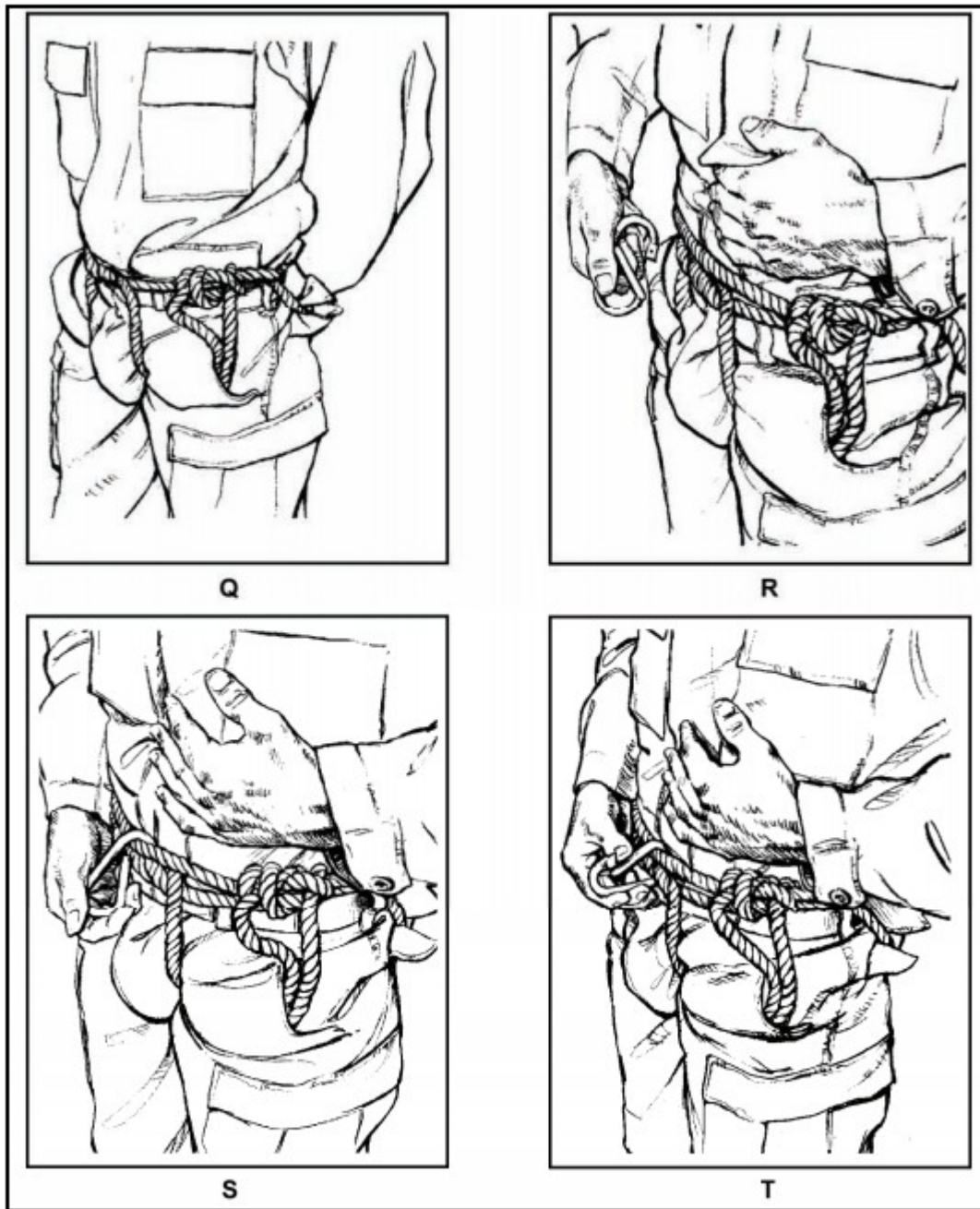


**Figure 1-3. Construction of rappel seat (continued).**



**Figure 1-3. Construction of rappel seat (continued).**





12. To hook up using the seat-hip method, perform the following:
13. Place the square knot with two overhand knots toward the anchor point for all seat-hip rappels.
14. Grasp the two ropes with both hands and drop them through the gate of the snaplink. (At this point, two ropes should be running through the snaplink.)

15. Using the hand closest to the anchor point, pull the slack toward the anchor point. Rotate the slack under and then over the top of the snaplink.
16. Drop the two ropes a second time through the gate of the snaplink. (At this point, four ropes should be running through the snaplink.).
17. Place the guide hand on the rope between the anchor point and the snaplink (palm facing up).
18. Place the brake hand around the running end of the rope (palm facing down). Place the brake hand with the rope in the small of the back.

## 9. KEYS TO A SUCCESSFUL SINGLE-ROPE BRIDGE CROSSING

- a. The single-rope bridge is constructed using a 100 foot or longer, 7/16" Main Rope (There are many types of rope available. The Main Rope must be approved for Climbing/Rappelling). The rope is anchored with an anchor knot on the far side of the course (round turn with two half hitches) and is tied at the near end with a tightening system. A one-rope bridge may be built many ways; however, they all share common elements to safely emplace and use the bridge: two suitable anchors, good loading and unloading, a tightening system, and a rope tight enough for ease of crossing.
- b. Bridging Equipment. The one-rope bridge kit will include:
- c. A Main Rope (7/16" nylon) 100 foot or longer in length.
- d. A sling rope and one snap link for each member (Sling Rope will meet the criteria for the Main Rope but may be any length. Snap link must be approved for climbing/rappelling).
- e. Three snap links (approved for Climbing/Rappelling) for the tightening system (two snap links may be used in the Wireman's knot).
- f. Preparation of cadets and equipment
- g. The #1 and #8 man tie an Australian Rappel Seat with snap link. The #2 through #7 man tie on Swiss seats with snap links for use in transporting across the rope-bridge.
- h. The main rope will be laid out in a fashion so that it does not overlap itself in any way prior to starting construction.
- i. Construction
  1. STEP 1. The #1 man ties an end of the line bowline in the main rope; attaches loop to the snap link in the Australian Rappel Seat, then moves across the obstacle. Another man belays the #1 man to the far side. An anchor point should be established approximately 52 feet from the anchor point (starting point).
  2. STEP 2. When the #1 man has reached the far side, he/she moves to his/her anchor point, detaches the snap link from his waist and wraps the rope around the anchor point. He temporarily secures the rope by closing the snap link on the main rope.
  3. STEP 3. One man on the near side ties a wireman's knot as close to the obstacle as possible and places a snap link into the loop of the knot (two additional snap links may be used in this knot for ease of disassembly). The opening gate must be up and away from the loop. If two snap links are used, the opening gates will be opposite. At that time, team members route the remainder of the rope around the near side anchor point and hook the rope into the snap link, then the #1 man pulls the wireman's knot out at least two meters from the near side anchor point. This is due to the stretch factor and slack in the Main Rope.
  4. STEP 4. The far side man (#1 man) secures the rope to the anchor point using a round turn with two half hitches (a quick release may be tied in the second half hitch, but the half hitch must go over all wraps, not just one side).

5. STEP 5. Team members on the near side tighten the Main Rope. A transport tightening system is used to tighten and secure the one-rope bridge. The tightening system is secured on the near side utilizing a round turn and two half hitches (a quick release may be tied in the second half hitch, but the half hitch must go over all wraps, not just one side).

j. Method of crossing.

1. Team members tie a rappel seat with snap link facing up and away from the body. Progress is made by snapping into the rope and rotating under the rope, then pulling with the hands and arms. Feet and legs may also be used to assist movement on the rope.
2. Only two team members may be snapped in on the rope at any time. No part of the body (including hair) or equipment may touch the obstacle while crossing.
3. Disassembly of the rope.
4. The #6 man disassembles the transport system on the near side, but not the wireman's knot.
5. The #6 man secures an end of the bowline (on the main rope) to his Australian Rappel Seat using the snap link (the bowline may be tied at any time during construction of the bridge).
6. The #6 man ensures that the rope is not wrapped around the anchor point and moves around the obstacle. If the rope is still around the obstacle, the #8 man must return to correct it.
7. Once the #6 man is across the obstacle, one or two cadets disassembles the wireman's knot while the rest of the team ensures that all other knots are taken out of the rope and that the rope is not laid on itself.
8. When the team captain is satisfied that all knots are removed from the rope and that all equipment is accounted for, he will place hands on head and call "STOP" and time will cease.

10. REFERENCES:

- a. Cadet Command Regulation 385-10, Cadet Command Safety Program, 6 June 2003
- b. FM 3-91.61, Military Mountaineering, 2000
- c. TC 21-24 RAPPELLING, January 2008

**NOTE: An acceptable tutorial on constructing a single-rope bridge can be found by getting on YouTube and searching "one rope bridge" -- the top video that shows up (from Hunt AFJROTC) is a good training reference.**



## Section VI Appendix 1

### **RAIDER CHALLENGE** **SINGLE ROPE BRIDGE SCORE SHEET**

TEAM NAME & # \_\_\_\_\_

PENALTY POINTS WILL BE ASSESSED AS FOLLOWS:

Penalty Type	# of penalties	Penalty reference (Circle)													Time penalty assessed
Minor		a	1	2	3	4	5	6	7	8	9	10	11		
Major		b	1		2		3		4		5				
Safety		c	1		2		3		4						
Totals															

NOTE: Reference Section VI paragraph 8 of SOP for penalty references.

**TIME**

\_\_\_\_\_

**TOTAL PENALTY POINTS**

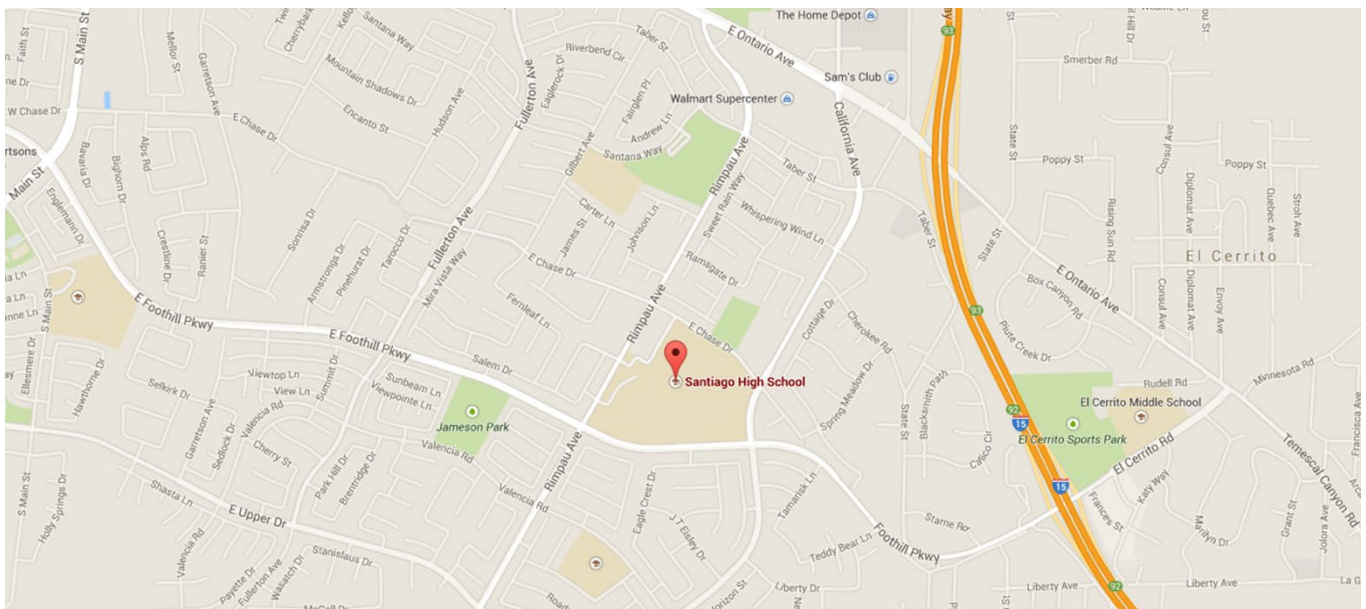
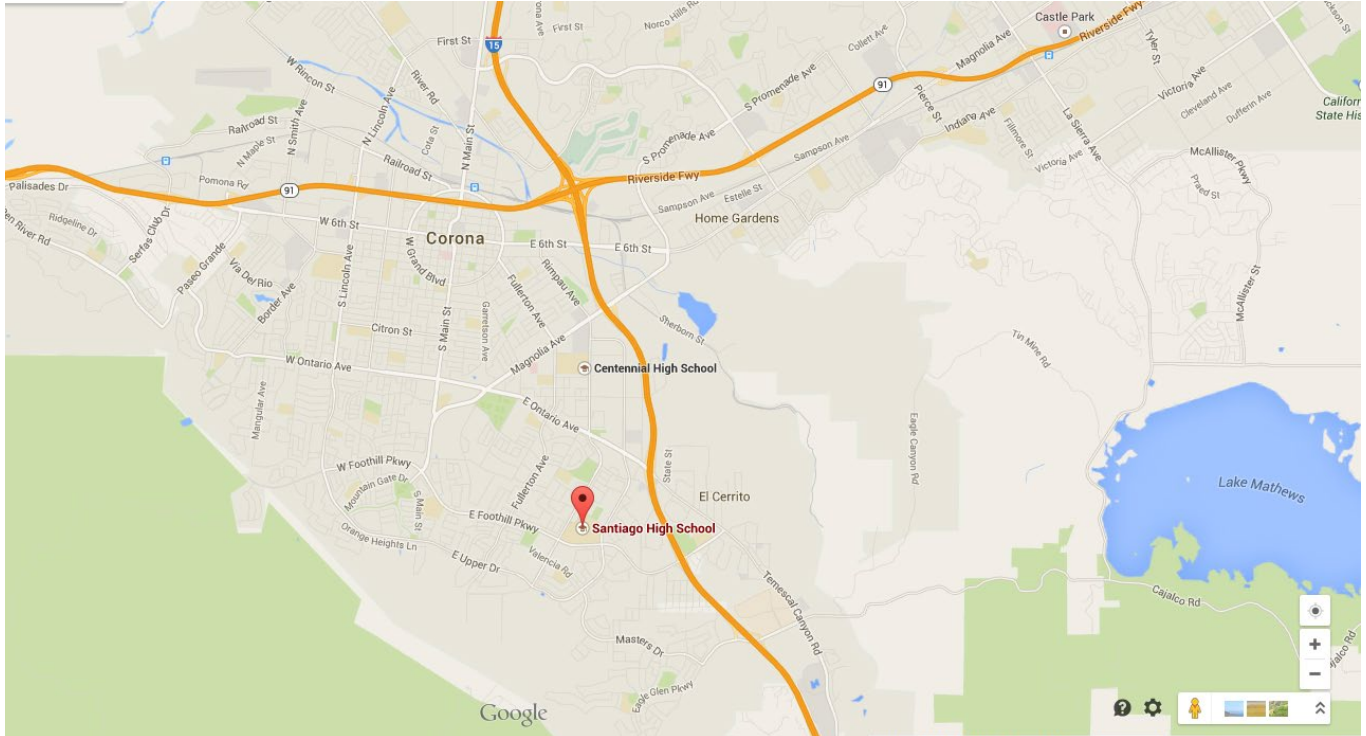
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**TIME + PENALTIES**

\_\_\_\_\_

# Attachment 1

## MAP TO SANTIAGO HIGH SCHOOL



# SANTIAGO HIGH SCHOOL CAMPUS MAP



MEMORANDUM FOR: Area Air Force Junior ROTC Units

FROM: Santiago Air Force Junior ROTC Unit CA-20065

SUBJECT: Santiago High School Raiders Challenge Entry Form

1. School Name: \_\_\_\_\_  
(Print Please)

2. Please indicate the division your team(s) will be entering (TOTAL NUMBER OF TEAMS PER SCHOOL IS **TWO**):

a. \_\_\_\_\_ MALE @ \$50.00 each Team Name(s): \_\_\_\_\_

b. \_\_\_\_\_ MIXED @ \$50.00 each Team Name(s): \_\_\_\_\_

c. \_\_\_\_\_ FEMALE @ \$50.00 each Team Name(s): \_\_\_\_\_

3. Confirm which events your team(s) will be participating in

a. \_\_\_\_\_ PTT

b. \_\_\_\_\_ Litter Carry

c. \_\_\_\_\_ Logistics Relay

d. \_\_\_\_\_ Single Rope Bridge

3. Please make checks payable to Santiago AFJROTC.

4. The Command Post will be located on the South side of the Bldg. T-107.

Mail this Entry form and check to:  
Santiago High School AFJROTC  
1395 Foothill Parkway  
Corona, CA 92881

### Liability Clause

**A liability clause must be signed, and submitted to SHS AFJROTC, by all competing cadets**

I, \_\_\_\_\_, hereby certify that Santiago High School, in the city of Corona, the Corona-Norco Unified School District, the Department of the Air Force, and the Air Force JROTC program cannot be held liable or responsible for any injuries or damages sustained, and/or property lost or stolen while attending the 1st Annual Santiago Air Force Raider Challenge, held on the campus of Santiago High School, Corona, CA, on 4 November 2023.

\_\_\_\_\_  
Competing Cadet Name (Last, First,  
MI)

\_\_\_\_\_  
Signature of Competing Cadet

**All cadets who are under eighteen (18), must have a person with legal custody sign below.**

I, as the legal parent or guardian, of the above-named student, accept the terms of this Liability Clause, and agree to abide by it.

\_\_\_\_\_  
Parent/Guardian Name (Last, First, MI)

\_\_\_\_\_  
Signature of Parent/Guardian



### Liability Clause

**A liability clause must be signed, and submitted to SHS AFJROTC, by all competing cadets**

I, \_\_\_\_\_, hereby certify that Santiago High School, in the city of Corona, the Corona-Norco Unified School District, the Department of the Air Force, and the Air Force JROTC program cannot be held liable or responsible for any injuries or damages sustained, and/or property lost or stolen while attending the 1st Annual Santiago Air Force Raider Challenge, held on the campus of Santiago High School, Corona, CA, on 4 November 2023.

\_\_\_\_\_  
Competing Cadet Name (Last, First,  
MI)

\_\_\_\_\_  
Signature of Competing Cadet

**All cadets who are under eighteen (18), must have a person with legal custody sign below.**

I, as the legal parent or guardian, of the above-named student, accept the terms of this Liability Clause, and agree to abide by it.

\_\_\_\_\_  
Parent/Guardian Name (Last, First, MI)

\_\_\_\_\_  
Signature of Parent/Guardian