

CHAPTER 2
UNIFORM ITEMS
REVISED JULY 2026
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CHAPTER 2

UNIFORM ITEMS

1. BADGE.



Picture 2-1
Badge

- a. Scope. This specification sets forth the requirements for the badges of the CHP. The badge enhances the visibility of the wearer as a uniformed member of the Department.
- b. Applicable Specifications. State-issued item subject to bid specifications.
- c. Requirements.
 - (1) Badges shall be struck from 14-gauge colored metal that is corrosion and tarnish resistant. The front of the badge shall be **14 karat (K) 1/10 gold filled (GF)**. The finished product shall have a minimum thickness of .050 inches. The weight of a finished badge shall be a minimum of 45 grams and a maximum of 55 grams.
 - (2) Cloisonné hard fired jeweler's enamel or epoxy resin shall be used to fill all characters. All characters filled with enamel or epoxy resin shall be "stoned" down to the level of the surrounding metal. Finished letters and numbers must stand out sharp, clear, and distinct. All enamel or epoxy surfaces shall be free from holes, pitting, or other imperfections. The enamel shall be Thompson Enamel #643.
 - (3) The Great Seal of the State of California shall be affixed by sweat solder or brazing within the .015 inch recess area provided in the badge center. The

insert shall be domed to the same contour as the recess after the badge is domed. The diameter of The Great Seal shall be a minimum of 1.15 inches and a maximum of 1.30 inches. The Great Seal shall be devoid of enamel, epoxy, and all other defects.

(4) A four- or five-digit badge number provided by the CHP shall be applied to each badge using roman style font as indicated on the purchase order.

(5) The lettering around The Great Seal which reads "CALIFORNIA HIGHWAY PATROL" shall be uppercase and block style.

(6) All seven points of the finished badge shall touch on a circle with a diameter of 7.6 to 8.0 centimeters.

(7) The domed height shall be 14 millimeters (mm) (± 1 mm).

(8) There shall be a 1/16 inch width, smooth border around the outer edge of the seven star points.

(9) Badges shall be fitted with a heavy joint, 13-gauge pin with point and large roller-type catch. The catch and pin stem shall be nickel silver. The joint and catch shall be properly aligned and soldered on the reverse side of the badge with #2 silver solder. The catch shall be positioned at the bottom center of the badge and shall open towards the top. The pin shall rest in a vertical position when attached to the uniform and seated properly in the catch opening. The length of the pin shall be sufficiently in length to extend beyond the catch so it cannot be pulled off when fastened. The pin tip shall be pointed but shall not prick the wearer when touched.

(a) Joint: B.A. Ballou Co. #061051.

(b) Pin: B.A. Ballou Co. #810519.

(c) Catch: B.A. Ballou Co. #046802.

(10) Each completed badge shall be permanently marked (e.g., metal stamped) with the manufacturer's name, logo, or trademark. The finished material identification (e.g., "14K 1/10 GF") shall be located on the back side of the badge in a location that allows visual access to the marks but does not cause marring or distortion of the opposite side of the badge.

(11) Badges shall be finished with 24K gold electroplate as defined in the Federal Trade Commission's (FTC) Guides for the Jewelry, Precious Metals, and Pewter Industries. Gold electroplating shall cover the front and back of the badge. Each badge shall have the designation "24K Gold Electroplated" or

an FTC-approved alternative stamped on the back to guarantee the electroplating conforms to FTC regulations for 24K gold electroplate.

(12) Badges shall be coated front, back, and edge with a clear gloss baking enamel to a minimum thickness of 1 mm. The enamel shall not color with age and shall be resistant to abrasion. The finish shall be uniform with no surface imperfections.

(13) All badges shall be highly polished on the front and back with surfaces free from scratches and pits.

(14) Size, relative position, and orientation of components and lettering shall be consistent from badge to badge.

d. Badge Attachments. When applicable, "RETIRED" and "IN MEMORIAM" ribbons shall be 14K 1/10 gold filled. Lettering shall be roman style and filled with blue (Thompson #643) cloisonné or epoxy resin. Ribbons must be domed to fit the curvature of the badge. The ribbons shall be replaceable and secured by two 1/8 inch solid rivets at the **top** of the badge.

e. Workmanship.

(1) All letters, characters, doming, configuration features, etc., are to be uniform in size, shape, depth, color, and appearance, within each badge and from badge to badge, providing symmetry and an esthetically appealing item.

(2) Assembly components shall be oriented, so visual variations of alignment are not detectable. The pin shall securely hold the badge on the uniform at the proper orientation and position, so the wearer is readily identifiable.

(3) Characters and features shall be well formed and clearly defined. Scoops, overstrikes, solder, cracks, pin holes, voids, laminations, buffing compound, fingerprints, enamel flakes, unfilled characters, blisters, etc., are not permitted.

f. Acceptable Brands. Badges from the following manufacturers have been evaluated by staff from the Department of General Services (DGS), Procurement Division, Engineering Branch, and the CHP. The badges were determined to meet the requirements of this specification and to display an acceptable level of quality.

(1) Metis Inc.

(2) Sun Badge Company.

2. HAT/CAP PIECE.



Picture 2-2
Hat/Cap Piece

- a. Scope. This specification sets forth the requirements for cap pieces for the CHP. The cap piece is worn on the campaign hat and formal cap by uniformed members of the CHP and shall be configured as indicated in the applicable bid specification.
- b. Applicable Specifications. State-issued item subject to bid specifications.
- c. Requirements.
 - (1) The cap piece shall be free from defects (e.g., scratches, blemishes) that will affect appearance and serviceability. All letters, characters, configuration features, etc., shall be uniform in size, shape, depth, color (unless otherwise specified), and display a uniform appearance.
 - (2) Cap pieces shall depict a motorcycle wheel, tire, and flying wings with one banner ribbon on top and one banner ribbon on the bottom of the product. The top ribbon shall state "CALIFORNIA", and the bottom ribbon shall state "HIGHWAY PATROL."
 - (3) The base material shall be constructed of brass alloy. The thickness of the finished product shall measure 1.8 mm ($\pm .1$ mm). Each completed cap piece shall be permanently marked with the manufacturer's name, logo, or trademark on the back side of the product in a location that allows visual access to the marks but does not cause marring or distortion of the opposite side of the cap piece.

(4) Cap pieces shall be finished with 24K Heavy Gold Electroplate (HGE) as defined in the FTC Trade Practice Guides for the Jewelry Industry. The gold electroplating shall cover the front and back of the cap piece. Each cap piece shall have the designation “24K HGE” or an FTC-approved alternative stamped on the back to guarantee the electroplating conforms to FTC regulations for 24K HGE.

(5) The cap piece shall be highlighted by buffing to produce a shadow effect. The back of the cap piece shall be evenly filled with no gaps or holes in the metal. The metal shall be polished and coated front and back with a baked epoxy clear lacquer or equal product to preserve the finish. The finish shall be uniformly applied with no surface cracks or imperfections. The finished cap piece shall be capable of withstanding deformation and removal of the finish when manually polished with an untreated flannel cloth.

(6) The cap piece shall be fabricated using the drop hammer stamp process, not by embossing or similar manufacturing process. The edges shall be clean, smooth, and free of burrs. The cap piece measurements are as follows:

(a) Width. Shall measure 62.0 mm ($\pm .1$ mm), measured from wing tip to wing tip.

(b) Height. Shall measure 66.0 mm ($\pm .1$ mm), measured from the curvature apex of the top ribbon to the curvature apex of the bottom ribbon.

(c) Tire Sidewall. Shall measure a minimum 4.0 mm and shall not exceed a maximum of 4.5 mm in width. The presence of tire tread on the outermost portion of the tire shall be visible with the naked eye.

(d) Wing Extension. Wings shall extend beyond the top banner ribbon a minimum 12.5 mm and shall not exceed a maximum of 13.0 mm. The length of the wing extension shall be measured from the outermost edge of each side of the top banner ribbon. Both wings shall flare outward and be symmetrical, as shown in paragraph 2. of this guide.

(e) Banner Ribbon. Shall measure 6.1 mm ($\pm .1$ mm).

(f) Threaded Post Fasteners. The back side of the cap piece shall incorporate two screw-type post fasteners with #4-45 NF thread and shall measure a minimum 9.5 mm and shall not exceed a maximum of 11.0 mm in length. The post fastener shall be spaced 29.5 mm apart ($\pm .1$ mm), measured center-to-center, and aligned vertically on the centerline. The top fastener shall be positioned on the back cap piece opposite of the center point of the wheel, on the vertical centerline. The post fastener attachment to the cap piece shall be permanent and accomplished by

silver solder or fusion process. Threaded thumb screw nuts shall be used to interlock with the post fasteners. The screw nuts may be knurled, milled, or grooved.

(7) Lettering on both banner ribbons shall be block style, uppercase, and recessed. Lettering shall be filled with #300 hard blue vitreous French enamel, filed, and stoned down to the level of the surrounding metal. The application of the enamel shall be free of gaps, holes, smearing, or chipping, and shall not run over to the edge of the banner ribbons. The finished lettering shall stand out clear, distinct, uniform, and evenly spaced.

(8) When manufactured to intermember with the CHP campaign hat or formal cap, the finished cap piece and fasteners (excluding the thumb screw nuts) shall weigh a minimum of 1.5 ounces and shall not exceed a maximum of 2.5 ounces.

d. Workmanship.

(1) All letters, characters, doming configuration features, etc., are to be uniform in size, shape, depth, color, and appearance within each cap piece and from cap piece to cap piece, providing symmetry and an esthetically appealing product. Each cap piece shall be arched about the vertical axis a minimum of 9.0 mm and shall not exceed a maximum 11.0 mm in height (when placed upon a flat plate with holes relieving the screw posts).

(2) Assembly components shall be oriented so when the thumb screw is attached to the post fastener, the cap piece is held in position on the head piece at the proper orientation, and variations of alignment are not visibly detectable.

(3) Characters and features shall be well formed and clearly defined. Scoops, overstrikes, solder, cracks, pin holes, voids, laminations, buffing compound, fingerprints, enamel flakes, unfilled characters, blisters, etc., are not permitted.

3. MOTORCYCLE CAP PIECE.



Picture 2-3
Motorcycle Cap Piece

- a. Scope. This specification sets forth the requirements for the cap piece, intended to be worn on the motorcycle helmet by uniformed members of the CHP.
- b. Applicable Specifications. State-issued item subject to bid specifications.
- c. Requirements.
 - (1) The cap piece shall be free from defects (e.g., scratches, blemishes) that will affect its appearance and serviceability. All letters, characters, configuration, features, etc., are to be uniform in size, shape, depth, and color (unless otherwise specified), and shall display a uniform appearance. Good manufacturing practices shall be used.
 - (2) Motorcycle cap pieces shall depict a motorcycle wheel, tire, and flying wings with a ribbon on top and bottom. Ribbons shall be comprised as described in paragraph 2.c.(2) of this chapter.
 - (3) The base material shall be constructed of a brass alloy with a minimum thickness of .060 mm and shall not exceed a maximum of .075 mm. Each completed cap piece shall be permanently marked (e.g., metal stamped) with the manufacturer's name, logo, or trademark, and the finish material identification on the back side in a location that allows visual access to the marks but does not cause marring or distortion of the obverse.
 - (4) Cap pieces shall be finished with 24K HGE as defined in the FTC's Trade Practice Guides for the Jewelry Industry. The gold electroplating shall cover the front and back of the cap piece. Each cap piece shall have the designation 24K HGE or an FTC-approved alternative, stamped on the back to guarantee the electroplating conforms to FTC regulations for 24K HE.

(5) The cap piece shall be highlighted by buffing to produce a shadow effect. The back of the cap piece shall be evenly filled with no gaps or holes in the metal. The metal shall be polished and coated front and back with a baked epoxy clear lacquer or equal product to preserve the finish. The finish shall be uniformly applied with no surface cracks or imperfections. The finished cap piece shall be capable of withstanding deformation and removal of the finish when manually polished with an untreated flannel cloth.

(6) The cap piece shall be fabricated using the drop hammer stamp process, not by embossing or similar manufacturing process. The edges shall be clean, smooth, and free of burrs. The cap piece measurements are as follows:

(a) Width. Shall measure 62.0 mm ($\pm$.1 mm), measured from wing tip to wing tip.

(b) Height. Shall measure 66.0 mm ($\pm$.1 mm), measured from the curvature apex of the top ribbon to the curvature apex of the bottom ribbon.

(c) Tire Sidewall. Shall measure a minimum 4.0 mm and shall not exceed a maximum of 4.5 mm in width. The presence of tire tread on the outermost portion of the tire shall be visible with the naked eye.

(d) Wing Extension. Wings shall extend beyond the top banner ribbon a minimum 12.5 mm and shall not exceed a maximum of 13.0 mm. The length of the wing extension shall be measured from the outermost edge of each side of the top banner ribbon. Both wings shall flare outwardly and be symmetrical, as shown in paragraph 3. of this guide.

(e) Banner Ribbon. Shall measure 6.1 mm ($\pm$.1 mm).

(7) The finished cap piece shall weigh a minimum of 1.5 ounces and shall not exceed a maximum of 2.5 ounces.

(8) When manufactured for use with the **CHP motorcycle helmet only**, the cap piece shall be made in a spherical configuration, producing a curvature radius of 4.0 inches. The back of the cap piece shall be devoid of post fasteners and screw units. Three pieces of double-sided tape, thickness of 1/8 inch, shall be strategically positioned on the back of the cap piece. One piece shall be positioned horizontally behind the top banner ribbon. The other two pieces shall be positioned diagonally behind the wing areas, one on each side.

(9) Lettering on both banner ribbons shall be block style, uppercase, and recessed. Lettering shall be filled with #300 hard blue vitreous French enamel, filed, and stoned down to the level of the surrounding metal. The application of the enamel shall be free of gaps, holes, smearing, or chipping, and shall not

run over to the edge of the banner ribbons. The finished lettering shall stand out clear, distinct, uniform, and evenly spaced.

d. Workmanship. All letters, characters, doming configuration features, etc., are to be uniform in size, shape, depth, color, and appearance within each cap piece and from cap piece to cap piece, providing symmetry and an aesthetically appealing item.

4. MODULAR MOTORCYCLE HELMET CAP PIECE.



Picture 2-4
Modular Motorcycle Helmet Cap Piece

a. Scope. This specification sets forth the requirements for the cap piece for the LS2 Advent X Carbon Modular motorcycle helmet utilized by uniformed members of the CHP.

b. Applicable Specifications. State-issued item subject to bid specifications.

c. Requirements.

(1) The cap piece shall be free of defects (e.g., scratches, blemishes) that will affect its appearance and serviceability. All letters, characters, configuration, features, etc., are to be uniform in size, shape, depth, and color (unless otherwise specified), and shall display a uniform appearance. Good manufacturing practices shall be utilized.

(2) Motorcycle cap pieces shall depict a motorcycle wheel, tire, and flying wings with a ribbon on top and bottom. Ribbons shall be comprised as described in paragraph 2.c.(2) of this chapter.

- (3) The base material shall be flexible plastic/polymer/abs with a minimum thickness of .90 mm and shall not exceed a maximum thickness of 1.0 mm.
- (4) Cap pieces shall be finished in a durable gloss gold plating.
- (5) The cap piece shall be fabricated to show depth and detail throughout the design. The edges and details shall be clean, uniform, smooth, and free of defects and burrs. The cap piece measurements are as follows:
- (a) Width. Shall measure 48.0 mm (± 1 mm), measured from wing tip to wing tip.
 - (b) Height. Shall measure 53.0 mm (± 1 mm), measured from the curvature apex of the top ribbon to the curvature apex of the bottom ribbon.
 - (c) Tire Sidewall. Shall measure a minimum 5.25 mm and shall not exceed a maximum of 6.0 mm in width. The presence of tire tread on the outermost portion of the tire shall be visible with the naked eye.
 - (d) Wing Extension. Wing tips shall measure 2.0 mm below the upper ribbon apex curvature so as to fit within the helmets forward upper air vent. Both wings shall flare outwardly and be symmetrical, as shown in paragraph 4 of this guide.
 - (e) Banner Ribbons. The top ribbon shall measure a minimum of 6.0 mm and shall not exceed a maximum of 6.5 mm in width. The lower ribbon shall measure a minimum of 5.5 mm and shall not exceed a maximum of 6.0 mm in width.
- (6) The cap piece shall be capable of lying flat upon the curvature of the helmet. The back of the cap piece shall be covered completely with a durable high strength adhesive backing to all edges and ribbons to ensure a semi-permanent placement upon the helmet.
- (7) Lettering on both banners shall be block style. The lettering shall be blue in color, uniform and centered upon the ribbons both vertically and horizontally. The lettering shall be smooth upon the ribbons and be of a durable printing process to ensure adhesion to the gold metal color plating. The lettering shall be a gloss finish to match the gloss of the gold.
- d. Workmanship. All letters, details, characters, and configuration features, etc., are to be uniform in size, shape, depth, color, finish, and appearance within each cap piece and from cap piece to cap piece, providing symmetry and an esthetically appealing item.

5. HEADWEAR.

a. Cap—Formal: Commissioners, Chiefs, and Assistant Chiefs.



Picture 2-5

Cap—Formal: Commissioners, Chiefs, and Assistant Chiefs

- (1) Material. Two-ply, all-wool elastique, 19 1/2 to 20 ounces.
- (2) Frame. Inband to be 2 inches of two-ply herringbone composition covered with lining. To have an outband of cloth measuring 1 3/4 inches finished.
- (3) Sweat Band. To be all leather 1 7/8 inches felled with six stitches to an inch.
- (4) Cover. Crown to measure 10 3/4 inches in diameter with front measuring 4 inches to the piping, sides to be 2 1/4 inches with back measuring 2 inches. These dimensions are for a size 7 1/8 cap. Circumference may vary 1/4 inch in proportion to head size.
- (5) Piping. Cloth to be same material as cover, sewn in, between crown and quarters.
- (6) Eyelets. To have two eyelets at the front of the cap, 1 1/8 inches apart from center-to-center, and with the top eyelet 1 3/4 inches above the band to hold the departmental cap piece. To have two metal eyelets on each side properly spaced for ventilation.

(7) Braid. Material to be 1 1/2 inch nylon cap braid with 1/4 inch gold, two-vellum braid, stitched 1/4 inch above bottom of braid extending around back of cap from button to button. Color of 1 1/2 inch in width braid to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart. Color of 1/4 inch braid to be gold, shade 96, as shown in Rice's Braids of Quality color chart. Style to be one piece of such size as to fit around outside of finished frame and to be removable.

(8) Chin Strap. Material to be two-vellum, gold color nylon. Style to be in two parts, each 1/2 inch in width and 9 5/8 inches in length. One end to form a slide. Eyelets to be placed at each end to accept a 22 1/2 ligne departmental button.

(9) Stay. To be two-ply genuine hair cloth reinforced with a 1 inch in width, steel wire covered with gold satin lining, sewn on frame, measuring 3 inches in width at the top, tapering down 2 1/2 inches at the bottom, mounted with top 2 inches above frame.

(10) Grommet. To be foam rubber grommet (e.g., United States [U.S.] Patent #2536135) or other material equal in ability to maintain the shape of the cap.

(11) Visor. To be 30-degree or 35-degree angle with black cloth top and a green suede, or dark green or black hard leather bottom finish, to be sewn onto frame. Length of visor to be 2 inches. Top of visor to be embroidered design of two arcs of gold nylon thread oak leaves, as illustrated in paragraph 5.a. of this chapter.

(12) Buttons. To have one 22 1/2 ligne departmental button (e.g., gold Eureka buttons placed on green jackets and Commissioners' and Chiefs' caps) placed on each side to hold chin strap.

(13) Lining. To be gold rayon satin completely covered with plastic sweat protector.

b. Felt Campaign Hat—Formal.



Picture 2-6
Felt Campaign Hat—Formal

(1) Material. Felt to be equal to or better than the 868 Special, as manufactured by Stratton Hats, 5-mm to 5 1/2 mm width. The color to be California Tan and shall substantially match that of other uniform items. It must evidence a minimum discoloration at 100 hours FADE-O-METER, according to U.S. Military Specification A-A-50526B dated January 12, 1988. Test and Unit of Measure shall be "Colorfastness to Light" 100 hours FTMS 191 Method 5660. Color shall be blended with finest metallic dyes only to achieve the minimum discoloration.

(2) Fur Content. Stratton Hat #127 or equal quality. The felt shall be made of a fur mixture containing a minimum of 10 percent fine Hares Fur (Arete IHXX-all white best) with the balance (90 percent) of the felt content to be composed of French Domestic Rabbit Fur fibers only. Certification of Compliance by the manufacturer shall be tendered stating the mixture does not contain any piece furs which are cut, boiled, or chopped, nor any reused or repossessed pieces. Original gross weigh out of mixture shall be 8 ounces for medium size hoods, plus or minus 1/8 ounce for larger or smaller sizes. Finished weight, due to felting process, shall be no more than 3/4 of an ounce less than the starting weight.

(3) Crown. To be made of a single layer of felt forming a Montana peak traditional four-dent style, 5 1/2 inches in height. Stiffened and made water resistant with a heavily spirit-proofed formula consisting of shellac and alcohol only.

(4) Brim. To be made of a double thickness, straight flat felt, 3 inches in width, with a minimum thickness of 3 mm with a raw edge. Stiffened and made water resistant with a heavily spirit-proofed formula consisting of shellac and alcohol only.

(5) Bursting Strength. The felt shall have a minimum bursting strength of 175 pounds according to U.S. Military Specification A-A-50526B, dated January 12, 1988. Test and Unit of Measure shall be "Bursting Strength" FTMS 191 Method 5120.

(6) Sweat Band. To be (first selection) genuine leather, 1 5/8 inches in width, with a minimum of 1 inch of Oil Silk lining, filled with head culture foam attached to leather and reed cloth, with an average of 8 to 10 stitches to an inch with a tacked-bow back.

(7) Eyelets. To have three tan, enameled metal eyelets in the crown, one on each side and one in the back, 2 3/4 inches above the brim. On the front of the crown there shall be two eyelets 1 1/8 inches apart from center to center with the top eyelet 2 1/2 inches above the brim to hold the departmental hat/cap piece. Brim shall have one 3/8 inch oval, metal eyelet on each side of the brim, adjacent to, and centered on the crown to accommodate the head strap.

(8) Hat Band. To be a 3/4 inch in width (9-ligne), yarn-dyed grosgrain nylon band, pattern #5551, with finished edges extending around the bottom of the crown. Shall have a minimum of three evenly spaced tacking stitches at both ends with four additional stitches evenly spaced at the base of the crown inhibiting ribbon movement. Flat bow shall be 4 inches in length and tacked in each corner. The flat bow shall be centered on the left side of the crown. Color of the hat band and flat bow to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(9) Brim Cord. To be a 3/16 inch in width nylon cord, to lie on the brim around the bottom of the crown. Each end of the cord to have a 1 1/4 inch double acorn with a 1 1/8 inch single-slide acorn. Both double acorns to lie on the brim and to the center-front of the crown. The single-slide acorn to lie on the brim against the center-front of the crown. Color of cord and acorns to vary by rank as follows:

(a) Officer. Cord and acorns to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(b) Sergeant, Lieutenant, and Captain. Cord to be horizontally braided, striped with royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart and Gold CD metallic mylar. Acorns to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(c) Assistant Chief, Chief, Assistant Commissioner, Deputy Commissioner, and Commissioner. Cord and acorns to be Gold CD metallic mylar.

(10) Head Strap. To be 3/8 inch, black leather with adjustable silver buckle. To have button-snapped leather loops for securing to the hat through the oval eyelets and over brim cord.

(11) Size Availability. Hats must be available in a full range of sizes with specific molds for manufacturing each, as follows:

(a) 6 3/4, 6 7/8, 7, 7 1/8, 7 1/4, 7 3/8, 7 1/2, 7 5/8, 7 3/4, and 7 7/8.

(b) The following oval shapes must be available in each of the above sizes:

1 Wide Oval: 1 1/8 inches longer than in width.

2 Regular Oval: 1 3/8 inches longer than in width.

3 Long Oval: 1 7/8 inches longer than in width.

4 Extra-Long Oval: 2 1/8 inches longer than in width.

(c) Regardless of the type of oval shape, the brim width must measure 3 inches at all distances from the crown.

c. Straw Campaign Hat.



Picture 2-7
Straw Campaign Hat

(1) Material. A #1 Quality Bedford Hemp Braid, tight weave, 5 mm to 5 1/2 mm in width. The color to be California Tan and which substantially matches that of other uniform items.

(2) Crown. To be made of a single layer of hemp braid forming a Montana peak traditional four-dent style, 5 1/2 inches in height. Stiffened and made water resistant with a double dip of #21 sizing by Kempen Paint Company.

(3) Brim. To be made of a two-ply layer of straight flat hemp braid sewn together, 3 inches in width, with a minimum thickness of 3 mm with a raw edge. Stiffened and made water resistant with a triple dip of #21 sizing by Kempen Paint Company.

(4) Sweat Band. To be (first selection) genuine leather, 1 5/8 inches in width, with a minimum of 1 inch of Oil Silk lining filled with head culture foam, attached to leather and reed cloth, with an average of eight to ten stitches to an inch with a tacked-bow back.

(5) Eyelets. To have three tan, enameled metal eyelets in the crown, one on each side and one in the back, 2 3/4 inches above the brim. On the front of the crown there shall be two eyelets 1 1/8 inches apart from center to center, with the top eyelet 2 1/2 inches above the brim to hold the departmental hat piece. Brim shall have one 3/8 inch oval, metal eyelet on each side of the brim, adjacent to, and centered on, the crown to accommodate the head strap.

(6) Hat Band. To be a 3/4 inch in width (9 ligne), yarn-dyed grosgrain nylon band, pattern #5551, with finished edges extending around the bottom of the crown. The band shall have a minimum of three evenly spaced tacking stitches at both ends, with four additional stitches evenly spaced at the base of the crown inhibiting ribbon movement. Flat bow shall be 4 inches in length and tacked in each corner. The flat bow shall be centered on the left side of the crown. Color of the hat band and flat bow to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(7) Brim Cord. To be a 3/16 inch in width nylon cord, to lie on the brim around the bottom of the crown. Each end of the cord to have a 1 1/4 inch double acorn with a 1 1/8 inch single-slide acorn. Both double acorns to lie on the brim and to the center-front of the crown. The single-slide acorn to lie on the brim against the center-front of the crown. Color of cord and acorns to vary by rank as follows:

(a) Officer. Cord and acorns to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(b) Sergeant, Lieutenant, and Captain. Cord to be horizontally striped with royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart, and Gold CD metallic mylar. Acorns to be royal blue, #7416/16, shade 063, as shown in Rice's Braids of Quality color chart.

(c) Assistant Chief, Chief, Assistant Commissioner, Deputy Commissioner, and Commissioner. Cord and acorns to be Gold CD metallic mylar.

(8) Head Strap. To be 3/8 inch, black leather with adjustable silver buckle. To have button-snapped leather loops for securing to the hat through the oval eyelets and over brim cord.

(9) Size Availability. Hats must be available in a full range of sizes with specific molds for manufacturing each, as follows:

(a) 6 3/4, 6 7/8, 7, 7 1/8, 7 1/4, 7 3/8, 7 1/2, 7 5/8, 7 3/4, and 7 7/8.

(b) The following oval shapes must be available in each of the above sizes:

1 Wide Oval: 1 1/8 inches longer than in width.

2 Regular Oval: 1 3/8 inches longer than in width.

3 Long Oval: 1 7/8 inches longer than in width.

4 Extra-Long Oval: 2 1/8 inches longer than in width.

(c) Regardless of the type of oval shape, the brim width must measure 3 inches at all distances from the crown.

d. Formal Motor Cap.



Picture 2-8
Formal Motor Cap
Crown Folded and Pinned Down



Picture 2-9
Formal Motor Cap
Crowns Unpinned

(1) Material. Two-ply, all-wool in CHP silver tan color.

(2) Frame. Black poly plastic.

(3) Adjustable Sweat Band ("Adjust-A-Size"). U.S. Patent No. 4,481,681 held by Hankin Brothers Cap Company, Buffalo, New York.

(4) Cover. Eight-point style with crown to measure 10 3/4 inches in diameter with front measuring 4 inches to the piping, sides to be 2 1/4 inches with back measuring 2 inches. These dimensions are for a size 7 1/8 cap. Circumference may vary 1/4 inch in proportion to head size.

(5) Buttons. Gold California State Seal.

(6) Eyelets. To have two eyelets at the front of the cap, 1 1/8 inches apart from center-to-center, and with the top eyelet 1 5/8 inches above the band to hold the departmental cap piece vertical. To have two metal eyelets on each side properly spaced for ventilation.

(7) Braid. Material to be 1 1/2 inch in width nylon braid. Color of 1 1/2 inch in width braid to be Royal Blue, #424. 1 1/2 inch Lacquered made by Grip Flex. Braid to be sized to fit around outside of finished frame and to be removable.

(8) Grommet. Plastic .250" OD X .170" ID.

(9) Visor. To be 30-degree or 35-degree angle with black patent leather, to be sewn onto frame. Length of visor to be 2 inches.

(10) Lining. Black.

(11) Strap. To be MA Hessberg CS12-OG (Old Gold) 1/2 inch in width Nylon strap.

(12) Size Availability. Hats must be available in a full range of sizes with specific molds for manufacturing each, as follows:

(a) Small: 6 1/2, 6 5/8, 6 3/4, and 6 7/8.

(b) Medium: 7, 7 1/8, and 7 1/4.

(c) Large: 7 3/8, 7 1/2, and 7 5/8.

(d) X-Large: 7 3/4, 7 7/8, and 8.

e. Helmet—Tactical Riot.



Picture 2-10
Helmet—Tactical Riot



Picture 2-11
Helmet—Tactical Riot

(1) Scope. The tactical riot helmet is a Personal Armor System Ground Troops (PASGT)-style helmet. The helmet system shall meet or exceed all end item performance requirements of U.S. military specifications for PASGT helmets, MIL-H-44099A.

(2) Applicable Specifications. State-issued item subject to bid specifications.

(3) Requirements.

(a) Design. The helmet is to be constructed of Kevlar ballistic fabric, designed with a low center of gravity, and a configuration which extends further over the neck and ears (covering the vital head and neck area) than a conventional steel helmet. The helmet includes a three-point retention (e.g., chin strap, nape strap, and nape pad) to include an elongated chin strap. The helmet has a cradle-type suspension and is offset from the head to provide space for deformation caused by projectiles as well as allowing for increased ventilation. The helmet assembly has four basic components: helmet shell, suspension assembly, headband assembly, and three-point retention (chin strap) assembly. The helmet system shall be compatible with the Millennium Chemical Biological Radiological Nuclear Mask and the Aetco FS40 face shield.

(b) Performance. The helmet must withstand an impact force of 40 foot-pounds without fracture or deformation and shall meet or exceed all performance requirements in accordance with U.S. military specification for

PASGT Helmets, MIL-H-44099A. The helmet shall exceed the Probable Ballistic Limit (V-50) of 2,000 feet per second, in accordance with MIL-H-44099A, when tested in accordance with MIL-STD-662E. The helmet shall also meet or exceed the ballistic penetration requirements of the National Institute of Justice (NIJ) Standard 0106.01, for ballistic helmets. Samplings for inspection shall be performed in accordance with MIL-STD-105. The helmet and face shield shall be manufactured new. Used, modified, demonstrator, or prototype commodities will not be accepted.

(c) Shell. The shell shall be constructed of a multilayered composite of laminated, coated aramid cloth for ballistic resistance. The shell shall be configured to ensure there are at least 19 layers of resin-coated Kevlar fabric throughout any cross-sectional area of the helmet. A rubber edging covers the entire periphery of the shell. The rubber edging shall remain firmly bonded to the helmet. Unbonded areas up to a total of 2 inches in length will be permitted, providing no individual unbonded area is more than 1/2 inch in length and 1/8 inch in width. The helmet shell shall be designed to allow for, and constructed with, a uniform full-liner padding (excluding ear cup section) to minimize ballistic impact attenuation. The shell interior padding shall incorporate a shock absorbing padding not less than 1/4 inch and not more than 3/8 inch in thickness. The padding shall provide ventilation capability and minimize heat buildup. The padding shall be permanently attached to the helmet shell with a weather resistant, nontoxic adhesive.

(d) Suspension Assembly. The suspension assembly shall consist of two looped, one front, and one rear crown strap, made of 1 inch nylon webbing, a fixed neck strap to which the ends of the crown strap are attached, and a crown nylon drawstring and adjustable tab with hook-and-loop closure. The suspension assembly shall be anchored to the helmet shell by the attachment of six A-nut and screw fasteners.

(e) Headband. The headband shall be made of dyed black, soft leather (that will not transfer to the wearer's skin), padded and lined with a nylon web strap. A rear buckle shall be used to adjust for proper head size. The headband shall attach to the suspension via six hook-and-loop fasteners.

(f) Retention (Chin Strap) Assembly. The retention assembly is an integrated assembly system consisting of a three-point black nylon chin strap, black nylon nape strap, nape pad, molded and soft lined chin cup, and an elongated black nylon chin strap, for use with protective masks. The chin straps shall have quick release fasteners that are interchangeable and ambidextrous.

(g) Coating. A polyurethane hard coating, with walnut flour finish, shall cover the exterior shell and edge beading in accordance with MIL-C-46168. The coating shall completely and uniformly cover the shell surface and edging.

(h) Riot Face Shield. The face shield shall be made of 3/16 inch polycarbonate, attached to an aluminum frame and mounting hardware, and securely fastened to the helmet using the existing screw holes on each side of the helmet. The face shield shall comply with NIJ Standard 0104.02 dated October 1984.

(i) Sizing. The helmet shall be marked in the inside with the applicable size using the letters: S (small), M (medium), L (large), or XL (extra-large), the manufacturer's trademark or symbol and the mold number and date of manufacture.

(j) Weight. The weight of the finished helmet assembly with suspension assembly, headband, retention strap assembly, nape pad, and impact liner shall be as described in Picture 2-12.

<u>SIZE</u>	<u>WEIGHT (±5 ounces)</u>
Small	51
Medium	53
Large	57

Picture 2-12
Helmet—Tactical Riot Sizing

(k) Instruction Booklet. An instruction booklet shall be furnished with each helmet. It shall include fitting and helmet adjustment procedures.

(l) Acceptable Brands.

1 Helmet: Gentex, model PASGT.

2 Face shield: Aetco, #FS40.

f. Modular Integrated Communications Helmet.



Picture 2-13
Modular Integrated Communications
Helmet (Front at 45-Degree Angle)



Picture 2-14
Modular Integrated Communications
Helmet (Back)



Picture 2-15
Modular Integrated Communications
Helmet (Interior)

- (1) Scope. The tactical riot helmet is a Modular Integrated Communications Helmet (MICH).
- (2) Applicable Specifications. State-issued item subject to bid specifications.
- (3) Requirements.
- (a) Performance/Threat Level.
- 1 All helmets shall have been evaluated by a National Institute of Justice (NIJ) approved laboratory and be found to meet or exceed the following ballistic standards:
- a Ballistics Protection: NIJ-STD-0101.06 Level IIIA
- b Fragmentation Protection: STANAG 2920 & MIL STD 662F
- (b) Design. The helmet must be of the MICH style.
- (c) Shell. The helmet shell shall be manufactured utilizing a scratch-resistant, non-reflective flat paint. The shell shall be black in color. There shall be a 1 inch by 4 inch loop patch centered 1 inch above the front ledge of the shell. There shall be a 2 inch by 2 inch loop patch centered 3 inches above the rear ledge of the shell. There shall be a 1 inch by 6 inch loop patch centered on the rear ledge of the shell.
- (d) Helmet Liner Pad. The helmet liner pads shall be composed of a soft material that attaches to the interior of the helmet utilizing Velcro. The pads shall be removable to allow for replacement or repositioning by the wearer.
- (e) Headband Ratchet Retention System. The helmet shall be equipped with an adjustable ratchet-style retention system that allows the wearer to adjust the tension of the helmet with one hand.
- (f) Retention (Chin Strap) Assembly. The helmet shall be equipped with a four-point adjustable chin strap that can be released via a buckle with one hand.
- (g) Materials/Assembly. All materials shall be new and without flaws.

(h) Riot Face Shield. The face shield shall be of a “quick detach” design capable of being detached and reattached to the helmet without tools. The face shield shall be no longer than 6 inches in length and no thicker than 1/8 inch. The face shield shall incorporate a rubber seal to provide a liquid barrier between the helmet and the face shield. The face shield shall have the capability of being raised and lowered, and lock in the raised and lowered positions. The face shield must be available separately for purchase. The face shield shall meet or exceed the following standards:

- 1 NIJ 0104.02 standard for face shields.
- 2 MIL-V-43511C standard for fragmentation.

(i) Sizing. The helmet shall be marked in the inside with the applicable size using the letters: S (small), M (medium), L (large), or XL (extra-large), the manufacturer’s trademark or symbol and the mold number and date of manufacture.

(j) Weight. The weight of the finished helmet assembly with suspension assembly, headband, retention strap assembly, nape pad, and impact liner shall be as described in Picture 2-16.

<u>SIZE</u>	<u>WEIGHT (±5 ounces)</u>
Small	2.6 lbs.
Medium	2.6 lbs.
Large	2.8 lbs.
Extra Large	3.3 lbs.

Picture 2-16
Modular Integrated Communications Helmet Sizing

(k) Acceptable Brands.

- 1 Helmet: Point Blank, model Full Cut MICH.
- 2 Face shield: Point Blank, Riot Face Shield.

g. Helmet—Motorcycle.



Picture 2-17
Helmet—Motorcycle

(1) Scope. This specification establishes the requirements for helmets used by CHP officers for head protection against hazardous impacts that may be encountered during regular patrol on motorcycles.

(2) Applicable Specifications.

(a) State-issued item subject to bid specifications.

(b) American National Standards Institute (ANSI) Specifications for Protective Headgear for Vehicular Users, ANSI Z90.1, latest edition, and supplements.

(c) Snell Memorial Foundation 1995 Standard for Protective Headgear for Use with Motorcycles and Other Automotive Vehicles.

(3) Requirements.

(a) The helmet shall provide maximum protection that is consistent with acceptable weight, shall be attractive in appearance, and comfortable to wear for required periods of duty.

(b) The helmet shall be a regular police motorcycle helmet which shall cover as much of the head as possible (3/4 face coverage) including temple and mastoid without interfering with vision or head mobility. It shall afford the wearer sufficient vision within the following ranges:

1 Horizontal vision: Minimum 90 degrees.

2 Vertical vision: Minimum 45 degrees.

(c) The helmet and retention system shall meet the requirements of the American National Standard Specification for Protective Headgear for Vehicular Users, ANSI Z90.1, and the Snell Memorial Foundation Standards for Protective Headgear (1995 or later). A certificate of authorization issued by Snell for the model offered shall be available for review by the state.

(d) Materials commonly known to cause skin irritation or disease shall not be used on parts that come in contact with the skin. The materials used in the manufacture of various parts shall be of durable quality to minimize characteristic deterioration caused by aging or other circumstances of use to which the helmet is normally subjected.

(e) The helmet weight range shall be no less than 48 ounces for the X-small helmet and no more than 52 ounces for the XXX-large helmet.

(f) The helmet shall be available in seven sizes, ranging from X-small to XXX-large.

(g) The helmet shall have a smooth external surface and include protection for the ears. A neoprene protective trim shall cover the edge of the shell.

(h) The helmet shall be sufficiently vented to afford comfort to the wearer. The vents shall be controllable with either an open/close operation or a removable plug.

(i) The liner material shall be of the energy absorbing, non-resilient type. The liner shall be easily removable, washable, and provide comfort to the wearer.

(j) The retention system shall consist of two nylon throat straps (one long strap and one short strap) and a high quality nylon reinforced, vinyl, wrap-around harness that provides comfort for the neck area. The nylon throat strap shall be securely fastened to the wrap-around harness and riveted directly to the helmet shell in appropriate positions on each side of the helmet shell. The two-piece nylon throat strap shall provide for adjustment and secure positioning of the helmet on the head via a pair of D rings attached to the end of the short nylon throat strap. This feature allows the remaining long portion of the nylon throat strap to be threaded through the D rings. A 1 inch by 3/16 inch strip of nylon strap shall be

permanently attached to the inside D ring to facilitate separation of both D rings prior to securing the helmet on the head.

(k) A fabricated visor, covered and trimmed with black patent vinyl, shall be permanently attached to the front of the shell, and provided with a gold-colored, metal, expandable band along its upper border. Both ends of the visor and trim band shall be secured with gold plated buttons with threaded, screw-type posts. These buttons shall be inscribed with a replica of the California State Seal. The visor shall be positioned and terminate at the sides of the helmet in a manner that provides unrestricted horizontal and vertical vision to the wearer.

(l) The colors shall be comparable to the following Pantone Matching System Colors: blue (PMS #300C), gold (PMS #873U), black (PMS #3C2X), and white (White). The helmet shall be protected by a final clear coat application.

(m) The helmet noise exposure shall not exceed a decibel A-weighted filter rating of 89, as specified by the Department of Industrial Relations, Division of Occupational Safety and Health. The helmet shall attenuate noise so the wearer can be exposed to approximately ten hours of typical street and freeway noise exposure, per day, without sustaining hearing damage.

(n) The helmet shall be constructed so the wearer can receive and transmit radio transmissions with clarity while in motion. The helmet must be adaptable to current departmental communications equipment (radio headset), with its installation providing a secure and comfortable fit to the wearer.

(o) Workmanship shall conform to good commercial practice and be consistent with that used in the fabrication of protective headgear.

(p) Vendor shall possess the capability to refurbish helmets within a six-week period.

(q) Helmet manufacturer shall have liability insurance that covers the models offered.

(r) The date of manufacture and Snell registration number shall be permanently affixed to the inside of the helmet. The U.S. Department of Transportation sticker shall be permanently affixed to the exterior in the rear, lower portion of the helmet.

(4) Acceptable Brands List.

(a) The following helmets have been evaluated by the DGS, Procurement Division, and CHP, and have been found to meet the requirements of this specification and display a level of quality which is acceptable.

1 Shoei, R-Air LE.

2 Arai, Classic LE.

(b) Other manufacturers may be considered for inclusion on the acceptable brands list. A request for evaluation must be submitted in writing to the CHP, Business Services Section, Purchasing Services Unit; Attention: Purchasing Manager, 601 North 7th Street, Sacramento, CA, 95811.

h. Helmet—Motorcycle Modular.

(1) Scope. This specification establishes the requirements for the use of an approved modular helmet for head protection against hazardous impacts that may be encountered during patrol on motorcycles.

(2) Applicable Specifications.

(a) State-issued item subject to bid specifications.

(b) United States Department of Transportation (DOT) FMVSS 218 (Federal Motor Vehicle Safety Standard) certification or higher.

(c) Economic Commission for Europe “P” and “J” certifications for both closed and open face configurations.

(3) Requirements.

(a) The helmet shall provide maximum protection that is consistent with acceptable weight, shall be attractive in appearance, and comfortable to wear for required periods of duty.

(b) The helmet shall be a regular police motorcycle-type helmet which shall cover as much of the head as possible when in the “open” mode, 3/4 face coverage, including the temple and mastoid without interfering with vision or head mobility. The helmet shall cover the jaw, mouth, and chin when in the “closed” mode, full face coverage. When in the open mode, the chin bar shall rotate over and back into a locked position to the

rear of the helmet. While in the open mode, the helmet shall afford the wearer sufficient vision within the following ranges:

1 Horizontal vision: Minimum 90 degrees.

2 Vertical vision: Minimum 45 degrees.

(c) The helmet retention system shall meet the requirements of the American National Standard Specification for Protective Headgear for Vehicular Users, ANSI Z90.1.

(d) A certificate from the manufacturer for the model offered shall be available for review by the state.

(e) Materials commonly known to cause skin irritation or diseases shall not be used on parts that meet the skin. The materials used in the manufacture of various parts shall be of durable quality to minimize characteristic deterioration caused by aging or other circumstances of use to which the helmet is normally subjected.

(f) The helmet weight range shall be no less than 50 ounces (1,420 grams) for the X-small helmet and no more than 64 ounces (1,830 grams) for the XXX-large helmet.

(g) The helmet shall be available in seven sizes ranging from X-small to XXX-large.

(h) The helmet shall have a protective edge coping.

(i) The helmet shall be sufficiently vented to afford comfort to the wearer. The vents shall be controllable with a manual open/close operation.

(j) The liner material shall be made of an energy absorbing, non-resilient type material.

(k) The retention system shall consist of two nylon throat straps (one long strap and one short strap) with a high-quality nylon wraparound harness and a soft fabric cover which contacts the wearer's skin. The straps shall be riveted to each side of the helmet. The two-piece strap shall be fastened by a ratchet closure with a quick release. The helmet straps shall be adjusted so at least four of the pawls on the non-ratchet strap can be inserted into the ratchet mechanism.

(l) Only the clear visor of sufficient thickness shall be installed on the helmet which can be utilized in the open mode and the closed mode for additional eye and face protection. The interior retractable sun shield shall be gray in color.

(m) The colors shall be comparable to the following Pantone Matching System (PMS) colors: blue (PMS #300C), gold (PMS #873U), and black (PMS #3C2X). The helmet color shall be approved by the Department prior to purchasing. The helmet shall be protected by a final clear coat application.

(n) The helmet noise exposure shall not exceed a decibel A-weighted filter rating of 89, as specified by the Department of Industrial Relations, Division of Occupational Safety and Health. The helmet shall attenuate noise so the wearer can be exposed to approximately ten hours or typical street and freeway noise exposure per day without sustaining hearing damage.

(o) The helmet shall be constructed so the wearer can receive and transmit radio transmissions with clarity while in motion. The helmet must be adaptable to current and future departmental communications equipment (radio headset), with its installation providing a secure and comfortable fit to the wearer.

(p) Workmanship shall conform to good commercial practice and be consistent with that used in the fabrication of protective headgear.

(q) The helmet manufacturer shall have liability insurance that covers the models offered.

(r) The date of manufacture shall be permanently affixed to the interior of the helmet. The DOT sticker/markings shall be permanently affixed to the lower rear portion of the helmet.

i. Helmet—Aviation.

(1) Scope. This specification establishes the requirements for helmets used by CHP officers for head protection during airborne operations.

(2) Applicable Specifications. State-issued item subject to bid specifications.

(3) Requirements.

(a) Material. Fiberglass; must meet current military specifications for aviator's helmets (Gentex Corporation or equivalent).

(b) Color. White.

(c) Accessories. To be equipped with dual visors, one clear and one tinted, with a single visor housing. When not in use, the helmet and accessories shall be stored in the Department-issued carrying bag.

j. Helmet—Mounted.

(1) Scope. This specification establishes the requirements for helmets used by CHP officers for head protection during mounted patrol operations.

(2) Applicable Specifications. State-issued item subject to bid specifications.

(3) Requirements.

(a) Material. Outer helmet to be made of Acrylonitrile Butadiene Styrene (ABS) plastic. The visor to be made of ABS plastic or high-density polyethylene. Inside shell liner to be made of expandable polystyrene.

(b) Color. Shell to be finished blue and gold with a durable, high-gloss finish. All leather parts showing to the outside, when worn, to be finished black.

(c) Style. To have hard shell to deflect blows, resist penetration, and spread the force of impact. To have an energy-absorbing and face-attenuating liner within the shell. To have a suspension system within the liner to accommodate and position the helmet properly on the head.

(d) Chin Strap. Material to be nylon, black in color, 3/4 inch in width with overall length of 12 to 14 inches.

k. Helmet—Bicycle.

(1) Scope. This specification establishes the requirements for helmets used by CHP officers for head protection during bicycle patrol operations. Helmets worn by CHP officers shall meet the U.S. Consumer Product Safety Commission standard.

(2) Applicable Specifications. State-issued item subject to bid specifications.

(3) Requirements.

(a) Material. Outer shell to be made of polyethylene terephthalate with glycol modifier. Interior foam to be made of expanded polystyrene foam, with a roll cage located inside the foam, made of super tough nylon. Interior “roc-loc” retention system to be made of super tough nylon with a pad made of Polartec or a similar type of material to enhance comfort and ventilation. The visor is to be made of high-density polyethylene.

(b) Color. Shell to be finished blue and gold with a durable high-gloss finish. All leather parts showing to the outside, when worn, to be finished black.

(c) Style. To have strong exterior shell, interior foam, and roll cage to disperse force of impact to keep the helmet in one piece for safety and provide internal reinforcement. To have an adjustable retention component which accommodates and positions the helmet properly on the head.

(d) Chin Strap. Material to be made of nylon webbing.

I. Cap—Cold Weather.



Picture 2-18

Cap—Cold Weather (Flaps Up)



Picture 2-19

Cap—Cold Weather (Flaps Down)

(1) Scope. This specification establishes the requirements for cold weather knit caps used by CHP officers.

(2) Applicable Specifications. State-issued item subject to bid specifications.

(3) Requirements.

(a) Material. Closely woven nylon or closely woven, water-repellent Dacron combination (65 percent Dacron, 35 percent viscose). Insulation with Dupont Dacron with quilted, satin head liner. Fur trim ear flaps and visor to consist of black or blue mouton fur, or black or blue Dynel fur.

(b) Color. Dark blue.

(c) Style. There shall be a snap arrangement for holding the visor to the crown. There shall also be two blue or black front badge grommets (eyelets) placed on the visor. The grommets shall be placed to allow the cap piece to be centered vertically on the cap bill. Grommet locations shall be as follows: the bottom grommet shall be a minimum of 1 3/4 inches from the bottom of the cap bill and the top grommet shall be 1 1/8 inches above the lower grommet, measured center to center.

(d) Acceptable Brands.

1 Blauer Manufacturing Co., model #110.

2 Alblum "Trooper," model #215.

m. Knit Cap (Beanie).



Picture 2-20
Knit Cap (Beanie) Front



Picture 2-21
Knit Cap (Beanie) Back

(1) Requirements.

(a) Material. A 100 percent acrylic with the departmental winged-wheel embroidered on the front. The winged-wheel shall measure 62.0 mm ($\pm .1$ mm), measured from wing tip to wing tip, and 66.0 mm ($\pm .1$ mm), measured from the curvature apex of the top ribbon to the curvature apex of the bottom ribbon.

(b) Color. Dark navy blue.

(c) Reflective Stripe. Shall measure 10 mm in height and be silver in color.

(d) Style. The beanie shall fold upwards at 3 1/4 inches to allow the winged-wheel and reflective stripe to be centered both vertically and horizontally on the fold.

(e) Available at the Academy PX.

n. California Highway Patrol Cotton Utility (Baseball) Fitted Cap.



Picture 2-22
(Baseball) Fitted Cap
(Front)



Picture 2-23
(Baseball) Fitted Cap
(Side)



Picture 2-24
(Baseball) Fitted Cap
(Back)

(1) Material. Minimum 92 percent cotton, direct embroidered five-color, shield-shaped patch, approximately 2 3/4 inches by 3 3/8 inches, placed on front of cap.

(2) Color. Navy Blue.

(3) Style. Sold in the Academy PX only.

o. California Highway Patrol Six-Panel Adjustable Snapback (Baseball) Cap.



Picture 2-25
Snapback (Baseball)
Cap (Front)



Picture 2-26
Snapback (Baseball) Cap
(Side)



Picture 2-27
Snapback (Baseball) Cap
(Back)

(1) Material. Crown, bill, button, and back panels shall be polyester twill, sweatband shall be plush spandex, direct embroidered five-color, shield-shaped patch, approximately 2 3/4 inches by 3 3/8 inches, placed on front of cap.

(2) Color. Navy Blue.

(3) Style. Sold in the Academy PX only.

p. Scalp Guard.



Picture 2-28
Scalp Guard

(1) Scope. This specification establishes the requirements for scalp guards used by CHP employees.

(2) Applicable Specifications. State-issued item subject to bid specification.

(3) Requirements.

(a) Material. Durable shell molded from high-density polyethylene or equal.

(b) Color. Shell to be blue or white.

(c) Style. To have a hard shell to disperse force of impact. To have a four-point, thermoplastic suspension system and replaceable, absorbent sweatband.

6. SHIRT.

a. Formal.



Picture 2-29
Shirt—Formal (Front and Back)

(1) Material. Shall be from a CHP accepted mill and shall be two-ply, 45 percent wool/55 percent Dacron polyester gabardine, 11 to 11 1/2 ounces, dry clean only. Color to be California Tan; all fabric shall be stock dyed only.

(2) Front. To be coat style. The left front shall have a center placket, 1 3/4 inches in width, extending from the collar stand to the bottom of the shirt. There are to be four rows of stitching on the center, two on each side. There are to be six vertical buttonholes in the center, spaced 3 1/2 inches apart. The right front shall have a button stand that is 7/8 inch in width, double stitched the full length. There shall be six buttons securely attached to the button stand, corresponding to the buttonholes in the center front.

(3) Pockets. To have two patch-type breast pockets with rounded corners, to finish 5 5/8 inches in width and 6 1/4 inches in length. The top of both pockets is to be stitched. The pockets are to be set to the shirt with two rows of stitching. The left pocket is to have a pencil opening about 1 1/4 inches in width. Each pocket shall have a scalloped flap 5 3/4 inches in width. These shall be die cut and die creased to assure uniform shape and size. The top stitching and the setting of the flaps shall be done with two rows of stitching. The outside points of the flaps shall be secured to the pockets by means of hook-and-loop fasteners.

(4) Badge Tab. To be a patch of the basic material on the outside of the left front about 1 inch above the center of the pocket flap. The patch is to have two metal eyelets 1 1/8 inches apart for the insertion of the badge.

(5) Collar. To consist of two pieces: top and stand. The points are to be 3 inches in length, the shape is to conform to the shirt. There is to be a tie space of 1/4 inch when the collar is buttoned. The top shall be made of three pieces, two pieces of self-cloth and one whole lining, which is to be fused to the top of the collar and stitched with two rows of stitching around the edges, 1/4 inch apart. The inner stand and inner yoke to be lined with matching sateen twill of proper preshrunk finish. The band is to be fastened with one button. There shall be one horizontal buttonhole.

(6) Shoulder Straps. The shoulder straps shall be pointed at the end toward the neck of the shirt. The other end shall be sewn in the sleeve head seam. The pointed end shall be fastened with one button. The shoulder straps are to be made of double the thickness of the same material as the shirt. The shoulder straps are to measure 2 inches at the sleeve head seam and are to taper to 1 3/8 inches. The points are to be set about 1/2 inch from the collar. The shoulder straps are to be double stitched all around. The double stitch is to be through the shoulder straps only; it is not to catch the shoulder straps to the shirt. The shoulder straps are to be cross stitched diagonally across from each end and terminating at the sleeve head seam.

(7) Sleeves. Sleeves are to be tapered and whole. They are to have an elbow reinforcement running from the cuff to above the elbow. The reinforcement is to be double stitched around and caught in the sleeve closing seam. There is to be a button on the under facing of the sleeve vent, and a buttonhole in the elbow reinforcement for the purpose of closing the vent. The cuffs are to be 2 7/8 inches in width with a barrel round finish. They are to be topstitched with two rows of stitching and closed with two buttons. The sleeves are to be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(8) Shoulder Patches. Departmentally approved shoulder patches are to be provided by the employee and sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. To be sewn on garment with colorfast black thread, not cross stitched.

(9) Bottom Hem. The front and back are to be hemmed together forming a continuous hem.

(10) Back. The back is to have a double-thickness yoke. The outside thickness is to be of the basic material, and the inside thickness is to be of matching satins as used in the collar stand. The yokes are to be finished 3 inches at the center and are to be joined to the back of the shirt with two rows of stitching. They are also to be joined to the front of the shirt with two rows of stitching.

(11) Buttons. All buttons shall be made from 24-ligne melamine and shall match the fabric.

(12) Collar Stays. The collar stays shall be of good quality Stalar vinyl, 2 1/2 inches in length, and 3/8 inch in width. They shall be sewn to the lining of the collar leaf, so no stitches show through the outside of the collar.

(13) Interlining. Collar to be lined with the HV2621 top fuse. Collar stand to be 55 Durapress. Cuffs to be 55 Durapress. Center to be lined with 55 Durapress. Flaps to be lined with crease and tack.

(14) Size Marking. The neck size and sleeve length shall be contained in a label in the neck of the shirt.

NOTE: The shirt for female officers may be designed to include two, four, or six darts; two may be horizontal darts, two may be front darts, and two may be back darts, providing front and back darts are placed on the crease. Pocket width and depth may vary with garment size but shall not be less than 4 1/2 inches in width or 5 inches in depth.

b. Long-Sleeved Shirt (Blend).



Picture 2-30
Long-Sleeved Shirt (Front)



Picture 2-31
Long-Sleeved Shirt (Back)

(1) Material. Shall be from a CHP accepted mill and shall be two-ply, 65 percent polyester/35 percent rayon, 11 to 11 1/2 ounces, dry clean only. Color to be California Tan; all fabric shall be stock dyed only.

(2) Front. To be coat style. Each front shall have a facing 1 3/4 inches in width, extending from the neckline to the bottom of the shirt, provided by a turn under of the material. The left front is also to have a lined box pleat 1 1/2 inches in width finish, running full length of the shirt, topstitched 1/4 inch from both edges. The center front shall contain six vertical buttonholes placed 3/4 inch from the edge and 3 1/2 inches apart. There shall be six 22-ligne, melamine buttons on the front, securely attached and corresponding to the buttonholes.

(3) Pockets. To have two patch-type pockets with rounded corners, to finish 5 5/8 inches in width and 6 1/4 inches in length. The top of both pockets is to be stitched. The pockets are to be set to the shirt with two rows of stitching. The left pocket is to have a pencil opening about 1 1/4 inches in width. Each pocket shall have a scalloped flap 5 3/4 inches in width. These shall be die cut and die creased to assure uniform shape and size. The top stitching and the setting of the flaps shall be done with two rows of stitching. The outside points of the flaps shall be secured to the pockets by means of hook-and-loop fasteners.

(4) Badge Tab. To be a patch of the basic material on the outside of the left front about 1 inch above the center of the pocket flap. The patch is to have two metal eyelets 1 1/8 inches apart for the insertion of the badge.

(5) Collar. Convertible collar shall be one piece and shall measure 3 1/4 inches long at points and 1 5/8 inches in width at back. The collar shall be made with permanent collar stays. There is to be a tie space of 1/4 inch when the collar is buttoned. Inner stand and inner yoke to be lined with matching sateen twill of proper, preshrunk finish. There shall be one horizontal buttonhole.

(6) Shoulder Straps. The shoulder straps shall be pointed at the end toward the neck of the shirt. The other end shall be sewn in the sleeve head seam. The pointed end shall be fastened with one button. The shoulder straps are to measure 2 inches at the sleeve head seam and are to taper to 1 3/8 inches. The points are to be set about 1/2 inch from the collar. The shoulder straps are to be cross stitched diagonally across from each end of this stitch to the sleeve head seam. The shoulder straps are to be double stitched all around. The double stitch is to be through the shoulder straps only; it is not to catch the shoulder straps to the shirt.

(7) Sleeves. Sleeves are to be straight and whole. They are to have an elbow reinforcement running from the cuff to above the elbow. The reinforcement is to be double stitched around and caught in the sleeve closing seam. There is to be a button on the under facing of the sleeve vent, and a buttonhole in the elbow reinforcement for the purpose of closing the vent. The cuffs are to be 2 7/8 inches in width with a barrel round finish. They are to be topstitched with two rows of stitching and are closed with two buttons. The sleeves are to be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(8) Shoulder Patches. Departmentally approved shoulder patches are to be provided by the employee and sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. To be sewn on garment with colorfast black thread, not cross-stitched.

(9) Bottom Hem. The front and back are to be hemmed together forming a continuous hem.

(10) Back. The back is to have a double thickness yoke. One thickness is to be of the basic material; the inside thickness is to be of matching satins as used in the collar stand. The yokes are to finish 3 inches at the center and are to be joined to the back of the shirt with two rows of stitching.

(11) Buttons. All buttons shall be made from 22-ligne melamine and shall match the fabric.

(12) Collar Stays. The collar stays shall be of good quality Stalar vinyl, 2 3/4 inches in length and 3/8 inch in width. They shall be sewn to the lining of the collar leaf, so no stitches show through the outside of the collar.

(13) Interlining. All interlining is to be of sanforized cotton, finest grade. The collar leaf is to have 250 Durapress. The center front is to have 55 Durapress. The flaps are to be lined with 8600 crease and tack.

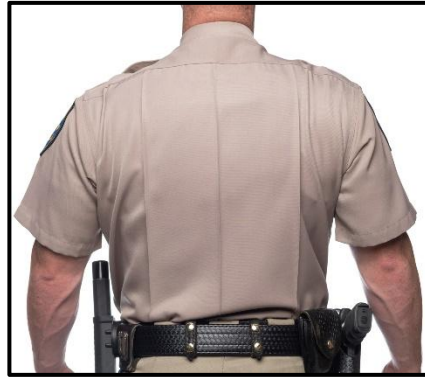
(14) Size Marking. The neck size and sleeve length shall be contained in a label in the neck of the shirt.

NOTE: The shirt for female officers may be designed to include two, four, or six darts; two may be horizontal darts, two may be front darts, and two may be back darts, providing front and back darts are placed on the crease. Pocket width and depth may vary with garment size but shall not be less than 4 1/2 inches in width or 5 inches in depth.

c. Short-Sleeved Shirt (Blend).



Picture 2-32
Short-Sleeved Shirt (Front)



Picture 2-33
Short-Sleeved Shirt (Back)

(1) Material. Shall be from a CHP accepted mill and shall be two-ply, 65 percent polyester/35 percent rayon, 11 to 11 1/2 ounces. Dry clean only. Color to be California Tan; all fabric shall be stock-dyed only.

(2) Front. To be coat style. Each front shall have a facing, 3 inches in width, extending from the neckline to the bottom of the shirt, provided by a turn under of the material. The left front is also to have a lined box pleat 1 1/2 inches in width, finished, running full length of the shirt. This is to be topstitched, 1/4 inch from both edges. The center front shall contain six vertical buttonholes placed 3/4 inch from the edge and 3 1/2 inches apart. There shall be six 22-ligne melamine buttons on the front, securely attached and corresponding to the buttonholes.

(3) Pockets. To have two patch-type pockets with rounded corners, to finish 5 5/8 inches in width and 6 1/4 inches long. The top of both pockets is to be stitched. The pockets are to be set to the shirt with two rows of stitching. The left pocket is to have a pencil opening about 1 1/4 inches in width. Each pocket shall have a scalloped flap 5 3/4 inches in width. These shall be die cut and die creased to assure uniform shape and size. The top stitching and the setting of the flaps shall be done with two rows of stitching. The outside points of the flaps shall be secured to the pockets by means of hook-and-loop fasteners.

(4) Badge Tab. To be a patch of the basic material on the outside of the left front about 1 inch above the center of the pocket flap. The patch is to have two metal eyelets 1 1/8 inches apart for the insertion of the badge.

(5) Collar. Convertible collar shall be one piece and shall measure 3 1/4 inches long at points and 1 5/8 inches in width at back. The collar shall be made with permanent collar stays. There is to be a tie space of 1/4 inch when the collar is buttoned. Inner stand and inner yoke to be lined with

matching sateen twill of proper preshrunk finish. The collar is to be topstitched with two rows of stitching. There shall be one horizontal buttonhole.

(6) Shoulder Straps. The shoulder straps shall be pointed at the end toward the neck of the shirt. The other end shall be sewn in the sleeve head seam. The pointed end shall be fastened with one button. The shoulder straps are to measure 2 inches at the sleeve head seam and are to taper to 1 3/8 inches. The points are to be set about 1/2 inch from the collar. The shoulder straps are to be cross stitched diagonally across from each end of this stitch to the sleeve head seam. The shoulder straps are to be double stitched all around. The double stitch is to be through the shoulder straps only; it is not to attach the shoulder straps to the shirt.

(7) Sleeves. Sleeves are to be straight, whole, and have a 1 inch hem. The finish shall be 9 1/2 inches in length from shoulder seam. The sleeves must be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(8) Shoulder Patches. Departmentally approved shoulder patches are to be provided by the employee and sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. Patches are to be sewn on garment with colorfast black thread, not cross stitched.

(9) Bottom Hem. The front and back are to be hemmed together forming a continuous hem.

(10) Back. The back is to have a double thickness yoke. One thickness is to be of the basic material, and the inside thickness is to be of matching satins as used in the collar stand. The yokes are to be finished 3 inches at the center and are to be joined to the back of the shirt with two rows of stitching.

(11) Buttons. All buttons shall be made from 22-ligne melamine and shall match the fabric.

(12) Collar Stays. The collar stays shall be of good quality Stalar vinyl, 2 3/4 inches in length, and 3/8 inch in width. They shall be sewn to the lining of the collar leaf, so no stitches show through the outside of the collar.

(13) Interlining. All interlining is to be of sanforized cotton, finest grade. The collar leaf is to have 250 Durapress, the center front is to have 55 Durapress. The flaps are to be lined with 8600 crease and tack.

(14) Size Marking. The neck size and sleeve length shall be contained in a label in the neck of the shirt.

NOTE: The shirt for female officers may be designed to include two, four, or six darts; two may be bust darts, two may be front darts, and two may be back darts, providing front and back darts are placed on the crease. Pocket width and depth may vary with garment size but shall not be less than 4 1/2 inches in width or 5 inches in depth.

d. Short-Sleeved Shirt (Gabardine).

(1) Material. Shall be from a CHP-accepted mill and shall be two-ply, 45 percent wool/55 percent Dacron polyester gabardine, 11 to 11 1/2 ounces, dry clean only. Color to be California Tan; all fabric shall be stock-dyed only.

(2) Front. To be coat style. The left front shall have a center facing 1 3/4 inches in width, extending from the collar stand to the bottom of the shirt. There are to be four rows of stitching on the center, two rows on each side. There are to be six vertical buttonholes in the center, spaced 3 1/2 inches apart. The right front shall have a button stand, 7/8 inch in width and double stitched the full length. There shall be six buttons securely attached to the button stand, corresponding to the buttonholes in the center front.

(3) Pockets. To have two patch-type breast pockets with rounded corners, to finish 5 5/8 inches in width and 6 1/4 inches long. The top of both pockets is to be stitched. The pockets are to be set to the shirt with two rows of stitching. The left pocket is to have a pencil opening about 1 1/4 inches. Each pocket shall have a scalloped flap 5 3/4 inches in width. These shall be die cut and die creased to assure uniform shape and size. The top stitching and the setting of the flaps shall be done with two rows of stitching. The outside points of the flaps shall be secured to the pockets by means of hook-and-loop fasteners.

(4) Badge Tab. To be a patch of the basic material on the outside of the left front about 1 inch above the center of the pocket flap. The patch is to have two metal eyelets 1 1/8 inches apart for the insertion of the badge.

(5) Collar. Convertible collar shall be one piece and measure 3 1/4 inches long at points and 1 5/8 inches in width at back. The collar shall be made with permanent collar stays. There is to be a 1/4 inch tie space when the collar is buttoned. The leaf is to be topstitched with two rows of stitching. The band is to be lined with sateen twill of preshrunk finish. There are to be two rows of stitching through the sateen twill lining and the inner lining. The band is to be fastened with one button.

(6) Shoulder Straps. The shoulder straps shall be pointed at the end toward the neck of the shirt. The other end shall be sewn in the sleeve head seam. The pointed end shall be fastened with one button. The shoulder straps are to measure 2 inches at the sleeve head seam and are to taper to 1 3/8 inches.

The points are to be set about 1/2 inch from the collar. The shoulder straps are to be cross stitched diagonally across from each end of this stitch to the sleeve head seam. The shoulder straps are to be double stitched all around. The double stitch is to be through the shoulder straps only; it is not to catch the shoulder straps to the shirt.

(7) Sleeves. Sleeves are to be straight, whole, and have a 1 inch hem. The finish shall be 9 1/2 inches long from shoulder seam. The sleeves must be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(8) Shoulder Patches. Departmentally approved shoulder patches are to be provided by the employee and sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. Shoulder patches are to be sewn on garment with colorfast black thread, not cross stitched.

(9) Bottom Hem. The front and back are to be hemmed together forming a continuous hem.

(10) Back. The back is to have a double thickness yoke. The outside thickness is to be of the basic material; the inside thickness is to be of matching satins as used in the collar stand. The yokes are to finish 3 inches at the center and are to be joined to the back of the shirt with two rows of stitching.

(11) Buttons. All buttons shall be made from 22 ligne melamine and shall match the fabric.

(12) Collar Stays. The collar stays shall be of good quality Stalar vinyl, 2 3/4 inches in length, and 3/8 inch in width. They shall be sewn to the lining of the collar leaf, so no stitches show through the outside of the collar.

(13) Interlining. All interlining is to be of sanforized cotton, finest grade. The collar leaf is to have 250 Durapress. The center front is to have 55 Durapress. The flaps are to be lined with 8600 crease and tack.

(14) Size Marking. The neck size and sleeve length shall be contained in a label in the neck of the shirt.

NOTE: The shirt for female officers may be designed to include two, four, or six darts; two may be bust darts, two may be front darts, and two may be back darts, providing front and back darts are placed on the crease. Pocket width and depth may vary with garment size but shall not be less than 4 1/2 inches in width or 5 inches in depth.

7. TROUSERS.



Picture 2-34
Trousers (Front)



Picture 2-35
Trousers (Back)

a. Trousers—Formal.

(1) Material. Shall be from a CHP accepted mill and shall be two-ply, all-wool elastique, 19 1/2 to 20 ounces. Dry clean only. Color to be California Tan; all fabric shall be stock dyed only.

(2) Style. To be of the slack type, plain without pleats. To have separate waistband, with rise of sufficient height to allow the bottom of the belt to rest on the hip bones. Waistband to incorporate “Snug Tex” band with three rows of rubber and to be cut in two separate pieces 2 inches in width, backed with a fully shrunk canvas interlining, and lined with the best quality twill. Knee of trouser leg to measure 18–22 inches. Bottom of trouser leg to measure 17-21 inches. There shall not be a difference of more than 2 inches between knee width and bottom width. When wearer’s size precludes these dimensions, they may be altered so long as variation is proportionate to the wearer’s size. Bottoms to be plain with 2 to 3 inch turn-ups, hollowed in front, to allow trousers to rest on the shoe without any break. All seams to be plain, pressed open, and overcast. Trouser fly to have a “Talon” zipper or equal. To have an anchor button, in addition to two fly buttons, attached at the waistband. A metal hook-and-loop may be used instead of fly buttons on the outer waistband.

NOTE: The trousers for female officers may be designed to include two or four waist darts and may be cut from a female trouser pattern.

(3) Belt Loops. To have five to seven tunnel belt loops, 1 1/2 inches in width and 2 inches in length, to allow for a 2 inch maximum width belt. One loop to be placed at the rear seam with the other loops being proportionately spaced in the back, on the hips, and in front. Top of the hip and front loops to be sewn into the waistband seam. The rear seam loop may be sewn to the outside waistband.

(4) Pockets. To have two hip and two side (vertical or semi-corner) pockets. One watch pocket and two club pockets may be eliminated at the officer's option. Pockets to be made of good, heavy drill or printz material (greenleaf specifications). All pocketing to be properly serged.

(a) Opening of hip pockets to be 6 inches in width, placed horizontally 4 1/2 inches below top of trouser waistband, 1 inch to the rear of the outside leg seam. Opening is to be heavily bar-tacked, welt-edged, have a minimum depth of 6 1/2 inches, and be constructed with or without pocket flaps.

(b) Vertical side pocket opening to begin 3 inches below top of waistband, forming a 6 inch, vertical opening along the outside leg seam. Opening is to be heavily bar-tacked and have a minimum depth of 4 1/2 inches, measured from the bottom of the opening.

(c) Semi-corner pocket opening to begin at bottom of waistband, 4 1/2 inches to the front of the outside leg seam, and to terminate at the outside leg seam 4 1/2 inches below the bottom of the waistband. Opening is to be heavily bar-tacked and have a minimum depth of 6 inches, measured from the bottom of the opening.

(d) Opening of club pocket to be 3 1/2 inches directly below the outside edge of, and parallel to, the hip pocket opening, 1 1/2 inches to the rear of the outside leg seam. Opening is to be heavily bar-tacked, welt-edged, and have a minimum depth of 8 1/2 inches.

(e) Watch pocket to be 3 inches in width, 4 inches deep, and have a welt edge.

(f) When the intended wearer's size precludes these dimensions, they may be altered so long as variation is proportionate to the wearer's size (e.g., trousers with a 30-inch or smaller waist may require smaller dimension pocket openings).

(5) Stitching. To be no less than 14 stitches to the inch.

(6) Seam Stripe. Vertical pockets to have a 1 inch stripe (Rice's Art 7549/1-nylon) starting at the bottom of the waistband, extending down and along the front edge of the side pockets, continuing down, gradually slanting back until centered over the outside leg seams to the bottom of the trousers. Semi-corner pockets to have a 1 inch stripe which begins at the bottom of the waistband and extends down and centered over the outside leg seams to the bottom of the trousers. Seam stripe to be two-tone color 063, royal blue, on the outside, with a center stripe of color 96, gold.

b. Breeches—Formal.



Picture 2-36
Breeches—Formal (Front)



Picture 2-37
Breeches—Formal (Back)

(1) Material. Shall be from a CHP accepted mill and shall be two-ply, all-wool elastique, 19 1/2 to 20 ounces. Dry clean only. Color to be California Tan; and all fabric shall be stock dyed only.

(2) Style. To be cut semi-mounted style with modified full peg. Waistband rise to be of a sufficient height so that the bottom of the belt will rest on the hip bones. Waistband to incorporate "Snug Tex" band with three rows of rubber and to be cut in two separate pieces 2 inches in width, backed with fully shrunk canvas interlining and lined with best quality twill. Bottoms to be finished with zippers attached in a concealed style. All seams are to be plain, pressed open, and overcast. Trousers fly to have a Talon zipper or equal, to have an anchor button in addition to two fly buttons attached at the waistband. A hook and eye may be used instead of two fly buttons at waist.

(3) Reinforcement. Seat reinforcement to be large, full size. Knee reinforcement to run 2 1/2 inches past inside seam and sewn to the outside seam, and to be stitched from 1 inch above the knee to bottom of breeches leg.

(4) Belt Loops. Same as for the formal trousers.

(5) Pockets. Side pockets to be semi-corner style and heavily bar-tacked. Hip pocket, club pocket, and watch pocket style and dimensions are the same as the formal trousers.

(6) Stitching. To be no less than 14 stitches to the inch.

(7) Seam Stripe. To have a 1 inch nylon stripe (Rice's Art 3623-nylon) starting at the bottom of the waistband, extending down, and centered over the outseams to the bottom of the breeches.

c. Trousers—Optional.

(1) Material. Shall be from a CHP accepted mill and shall be two-ply 45 percent wool/55 percent Dacron polyester gabardine, 11 to 11 1/2 ounces. Dry clean only. Color to be California Tan; and all fabric shall be stock dyed only.

(2) Other Specifications. Specifications for portions of these trousers not specifically covered shall be the same as the formal trousers.

8. AUTHORIZED JACKETS.

a. Green Dress Jacket.



Picture 2-38
Green Dress Jacket (Front)



Picture 2-39
Green Dress Jacket (Back)

(1) Material. Shall be from a CHP-accepted mill and shall be two-ply, all-wool, green elastique, 19 1/2 to 20 ounces. Dry clean only. Color and all fabric shall be stock dyed only.

(2) Style. To be semi-dress green jacket made with coat sleeves. Front to be fastened with a Talon #5 zipper, brass finish, from the bottom of the jacket, vertically to the base of the lapels. To have a two-piece back with center seam extending from the bottom of the collar to the bottom of the jacket with 1 1/2 inch outlets. To have golf pleats at the sides of the back extending from the shoulder seam to the top of the belt at the back of the jacket (see jacket illustration). The golf pleats to be stitched closed the first 3 inches below the shoulder seam. To have adjustment straps with one 24-ligne departmental button on each side at the side seams, and the adjustment straps to be sewn down. To have a half-belt stitched down in back at the approximate waistline. Jacket to be fitted to be worn loosely and straight down over the duty belt and accouterments. Length to vary in accordance with the individual, but in all cases, not to fall below the top of the hip pockets. Bottom to be made with a 4 inch bottom turn-up with lining sewn to top of turn-up, not to include a separate waistband.

NOTE: The jacket for female officers may be designed to include two or four darts; two may be bust darts and two may be front darts.

(3) Lapels. To be plain peaked with a 15-inch opening and 3 3/4 inches in width at the widest point.

(4) Sleeves. To be plain with regular turn-up, without cuffs or buttons. To have a stripe sewn on each sleeve, 3 inches from the bottom of sleeve, extending halfway around sleeve from seam to seam, and set into the seams at both sides. Sleeve stripe to be two-tone, 3/4 inch in width nylon braid, color 063, royal blue, on the outside, with a center stripe color 96, gold, as listed in Rice's Braids of Quality color chart. Sleeve length to be 1 inch below wrist bone (lower end of ulna).

(5) Facing. To be of same material as the jacket, cut in one piece, not less than 4 inches in width at the top, and 3 1/2 inches in width at the bottom.

(6) Lining. To be fully lined, not quilted, in body and sleeves, with 120-count, forestry green rayon.

(7) Collar. Width to be 1 3/4 inches at the center and back.

(8) Pockets. To have two outside breast patch pockets, properly stayed and with box pleats, 6 1/4 inches deep. Width of pockets may vary with garment size according to Picture 2-40. Bottoms to be slightly rounded. Each breast pocket to have a three-pointed flap finished 6 inches in width, 2 1/2 inches deep on the sides and center, and 2 1/8 inches deep in the hollows. Pockets to be stitched so they may not be used by stitching the tops of the pockets underneath the flaps. Each flap to have a buttonhole and correspondingly placed 24-ligne departmental button. Both sides of pocket flaps to be stitched down, leaving bottom of flaps open to allow the attaching of medals. To have three inside pockets: one horizontal-type in the right facing, one vertical-type in the left facing, and one pencil pocket placed in the left facing above the vertical pocket.

<u>Jacket Size</u>	<u>Bottom of Pocket</u>	<u>Top of Pocket</u>
37	5 1/4 inches	5 1/2 inches
38-43	5 3/4 inches	5 1/2 inches
44-up	6 inches	5 7/8 inches

Picture 2-40
Green Dress Jacket Sizing

NOTE: Pockets for female officers: width and depth may vary with garment size but shall not be less than 4 1/2 inches in width or 5 inches in depth.

(9) Epaulets. Jacket to be furnished with epaulets 2 1/4 inches in width at the sleeve head, 1 1/2 inches in width at the collar, and long enough to extend and be tacked down under the collar. To have a buttonhole running perpendicular to the collar, centered in the open end of the flap, and correspondingly placed 24-ligne departmental button so placed that the button comes flush up to the edge of the collar. Epaulet to be of two thicknesses of the same material as the jacket, and to have two rows of stitching all around, 1/4 inches apart at the edges, and to be stayed across 2 inches above the shoulder seam and cross-stitched. The cross stitching shall not attach strap to either jacket shoulder to allow attachment of rank insignia and end of aiguillette to be inserted under the strap. One black, metal, 3/16 inch eye to be placed concealed under the front and back edge of the right shoulder strap, 1/2 inch from the shoulder seam, to accommodate the hooks of the aiguillette.

(10) Stitching. Seams to be double stitched with all silk thread.

(11) Arm Shields. To be piped and made of same material as the jacket.

(12) Badge Holder. To be a tunnel-type badge holder, finished 1 inch in width and 1 3/4 inches long, made of two thicknesses of the jacket material, single stitched all around the edges. To be equipped with two metal eyelets placed 1 1/8 inches center to center. Top eyelets to be 1/4 inch from top of badge holder. Entire holder to be attached to jacket with the center of the top eyelet 2 1/2 inches above the top center of the left pocket flap.

(13) Construction. Jacket shall be tailored with good quality matching lining using Hymo-type coat fronts, employing standard practices used in coat construction. Collar to be hand-felled.

(14) Shoulder Patches. To be attached to both sleeves with the top of the patch 1/2 inch below the sleeve head seam, and in such a manner that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. To be sewn on garment with colorfast black thread, not cross-stitched.

b. Blue Patrol Jacket.

(1) Scope. This specification sets forth the requirements for a blue patrol jacket intended for use in windy, cool, cold, and/or inclement weather, by uniformed members of the CHP.



Picture 2-41
Blue Patrol Jacket (Back and Front)

(2) General.

(a) The jacket shall keep the wearer's upper body warm and dry. The style shall be fully cut to provide freedom of movement when worn over the normal uniform. The jacket shall allow access to traditional law enforcement accouterments on both sides.

(b) The jacket shall be free from any defects that will affect appearance, function, and/or serviceability. All configuration features are to be uniform in size, shape, depth, color, and display a uniform appearance.

(3) Design. The jacket shall be waist length, single-breasted, have an overlapping storm flap with zipper and snap closures, waterproofed by design with a waterproof-breathable garment insert, and with a zip-out insulated liner. There shall also be a badge holder on the left breast, a bi-swing back, underarm sleeve zippers, epaulets, two lower welted slash pockets, two inside hand pockets, a collar and collar stand, zippered side vents with snap tabs, a waistband with elasticized back, and two-piece, set-in sleeves with leather trim and sleeve tabs. There shall be a removable, quilted, insulated liner stitched to nylon face fabric, wristlets, and a detachable pile collar. The jacket shall have a Gore-Tex® LTD membrane made from pure expanded polytetrafluoroethylene, which has both hydrophobic and oleophobic properties.

(a) Uniformed employees are authorized to purchase the blue patrol jacket with the optional Radio Frequency Identification (RFID) sleeve pocket. Each sleeve shall have a 5 inch wide by 7 inch long lower patch “card” or RFID pocket, located at the sleeve front 1 inch from the cuff seam. The RFID pocket shall have a 6 1/4 inch long by 1/2 inch wide vertical welt cover and the zipper shall be a 6 inch long #3 coil. Each side of the pocket welt shall have 1/2 inch bar tacks.



Picture 2-42
Blue Patrol Jacket with RFID
Sleeve Pocket (Spiewak)



Picture 2-43
Close-up of Blue Patrol Jacket with
RFID Sleeve Pocket (Spiewak)

(4) Shell Fabric. The shell fabric shall be constructed to tolerate a minimum of ten dry cleanings without any appreciable loss of function and/or appearance. Shell fabric must be first quality fabric only; mill seconds, finishing seconds, or re-dyed fabric will not be acceptable.



Picture 2-44
Blue Patrol Jacket Inner Shell
(Front)



Picture 2-45
Blue Patrol Jacket Inner Shell
(Back)

- (a) Cloth Type: 200 denier nylon (warp) and three-ply, 70 denier taslanized nylon (filling), plain weave, treated with durable fluorocarbon water and stain release agents.
 - (b) Count: Warp, 114 (minimum); filling, 52 (minimum).
 - (c) Weight (uncoated): 5.5 ounces/square yard (± 0.25 ounces/square yard).
 - (d) Break Strength (pounds): Warp, 351 (minimum); filling, 156 (minimum).
 - (e) Tear Strength (pounds): Warp, 19 (minimum); filling, 8 (minimum).
 - (f) Shrinkage: Warp, 2 percent (maximum); filling, 2 percent (maximum).
 - (g) Color: Blue Indigo (Pantone #19-3928 TP).
- (5) Permanent, Waterproof-Breathable Lining. The permanent, waterproof-breathable lining shall be Gore-Tex® LTD liner.
- (a) Waterproof-Breathable Membrane.
 - 1 Weight (ounce/square yard): 0.75 (± 0.1).
 - 2 Breathability (MVTR; g²m/24hours): 650 (minimum).
 - 3 Hydrostatic Resistance (pounds/square inch): 60 (minimum).
 - (b) Material.
 - 1 Weight (ounce/square yard): 2.18 (± 0.1).
 - 2 Cloth Type: 100 percent texturized polyester in a plain weave with 70 denier warp and filling treated with durable fluorocarbon water and stain release agents.
 - 3 Count: Warp, 97 (minimum); filling, 102 (minimum).
 - 4 Tear Strength (pounds): Warp, 1.8 (minimum); filling, 1.8 (minimum).
 - 5 Colorfastness to Crocking: Class 4.0 (minimum).
 - (c) Seam Tape. Seam tape shall be compatible in material with the waterproof-breathable membrane. The tape shall not be affected by weather, temperature, or storage. There shall be no loose edges or puckering.

(6) Removable Insulated Lining.

(a) Taffeta Face Material.

- 1 Cloth Type: 100 percent nylon taffeta plain weave, 70 denier nylon continuous filament yarns with 34 filaments, melting point 450 degrees Fahrenheit.
- 2 Count: Warp, 104 (± 2); filling, 86 (± 2).
- 3 Weight: 1.80 ounces/square yard (± 0.25 ounces/square yard).
- 4 Breaking Strength (pounds): Warp, 125 (minimum); filling, 85 (minimum).
- 5 Tearing Strength (pounds): Warp, 3.5 (minimum); filling: 2.1 (minimum).
- 6 Shrinkage: Warp, 2 percent (maximum); filling: 2 percent (maximum).
- 7 Color: Dark navy blue (Pantone #19-4013 TP).

(b) Insulation.

- 1 Type: Thin, lightweight, compressible, micro-denier, synthetic insulation, which is breathable, moisture-resistant, and dry cleanable.
- 2 Composition: Body, Thinsulate® CDS200 or equivalent; sleeves, Thinsulate® CDS100 or equivalent.
- 3 Thickness (insulation only): Body, 0.55 inch; sleeves, 0.30 inch.
- 4 Warmth (insulation only): Body, 2.00 Clo (± 0.1 Clo); sleeves, 1.00 Clo (± 0.1 Clo).

(c) Nylon Tricot Backing.

- 1 Cloth Type: 28-gauge, 40 denier single-ply nylon tricot knit.
- 2 Count: Wales, 32 (minimum); courses, 28 (minimum).
- 3 Color: Black (Pantone #19-0000 TP, Raven).

(7) Interlining.

- (a) Cloth Type: 100 percent cotton osnaburg or equivalent.
- (b) Count: Warp, 30 (minimum); filling, 24 (minimum).
- (c) Weight: 3.45 yards/pounds (± 0.15 yards/pounds).
- (d) Break Strength (pounds): Warp, 60 (minimum); filling, 35 (minimum).
- (e) Shrinkage: Warp, 3 percent (maximum); filling, 3 percent (maximum).
- (f) Color: Black (Pantone #19-0000 TP, Raven).

(8) Binding.

- (a) Cloth Type: 100 percent nylon taffeta plain weave, 70 denier nylon continuous filament yarns with 34 filaments, melting point 450 degrees Fahrenheit.
- (b) Count: Warp, 104 (± 2); filling, 86 (± 2).
- (c) Weight: 1.8 ounces/square yard (± 0.25 ounces/square yard).
- (d) Breaking Strength (pounds): Warp, 125 (minimum); filling, 85 (minimum).
- (e) Tearing Strength (pounds): Warp, 3.5 (minimum); filling, 2.1 (minimum).
- (f) Shrinkage: Warp, 2 percent (maximum); filling, 2 percent (maximum).
- (g) Binding Color for Removable Insulation Liner: Dark navy blue (Pantone #19-4013 TP, Navy Blue).
- (h) Binding Color for Jacket Facing: Black (Pantone #19-0000 TP, Raven).

- (9) Leather Trim. The leather trim shall be genuine cowhide leather, .058-inch thickness (± 5 percent), 1/2 inch folded, cemented together and edges stained. The leather shall be sewn to the sleeve hems using filament nylon (100 percent) thread. Color: black (Pantone #19-0000 TP, Raven).

(10) Knit Wristlets.

- (a) Knit wristlets shall be 100 percent polyester, 1 inch by 1 inch rib knit, flare type. Wristlets shall measure 7 inches (diameter) by 3 inches (width).
- (b) Color: Black (Pantone #19-0000 TP, Raven).

(11) Waistband Elastic.

- (a) Type: 2 inch elastic webbing, dry cleanable.
- (b) Warp: 40/two-ply spun poly with 37-gauge extruded rubber covered with four ends of 12/one-ply spun polyester. Filling: 150/two-ply textured polyester.
- (c) Standard Stretch: 90 percent (± 10 percent).
- (d) Color: Navy blue (Pantone #19-3928 TP, Blue Indigo).

(12) Pocketing. The pocketing shall be a 2-inch by 1-inch twill, 100 percent polyester fill, polyester/rayon warp. Color: black (Pantone #19-0000 TP, Raven).

(13) Collar Pile.

- (a) Cloth Type: 100 percent acrylic face, 100 percent polypropylene back.
- (b) Weight: 28 ounces/lineal yard (minimum); 58 to 60 inches in width.
- (c) Weight Distribution: Face, 70 percent; backing, 30 percent.
- (d) Pile Height: 3/8 inch.
- (e) Finish: High luster seal finish.
- (f) Color: Dark navy blue (Pantone #19-4013 TP, Dark Navy).

(14) Snaps. Snaps shall be non-rusting, 24-ligne, nickel on brass, heavy-duty closure, black chemical cap.

(15) Buttons. Collar and sleeve liner attachment buttons shall be 24-ligne, four-hole, pure melamine plastic, conforming to Type II, Class D, Style 20 and 21 of U.S. Military Specification #V-B-871D. Color shall match the basic shell fabric. All buttons shall be affixed for heavy-duty wear and in such a manner as to maintain uncompromised adherence to the garment after a minimum of ten dry cleanings.

(16) Metal Uniform Buttons.

- (a) Epaulet and sleeve tab buttons shall be 24-ligne, gold-plated or gold color finish.
- (b) Epaulet buttons shall be Waterbury Model #109486243410906 (California State Seal, 24L Eye Back, #3 Gold), or equivalent.
- (c) Sleeve buttons shall be Waterbury Model #109486363410906 (California State Seal, 36L Eye Back, #3 Gold), or equivalent.
- (d) Toggle or cotter pin fasteners shall not be used.

(17) Zippers.

- (a) All zippers shall be black in color (Pantone #19-0000 TP, Raven).
- (b) The front zipper shall be nylon, size #8, two-way. The zipper shall extend from the bottom of the waistband to the collar seam.
- (c) Side zippers shall be 9 1/2 inch nylon coil, size #5.
- (d) Underarm sleeve zippers to be nylon coil, size #3, 8 inches in length.
- (e) Liner zipper shall be aluminum tooth-counted, 46 inches in length, size #3.

(18) Badge Holder. The badge holder shall be sewn to the left breast, constructed of two plies of outer shell fabric. It shall measure 7/8 inch in width and 2 inches in length with two eyelets evenly spaced 1 3/8 inches on the center. The eyelets shall be black aluminum, size #100.

(19) Thread. Thread for single needle lockstitch seams shall be size #50, polyester-wrapped polyester core, vat-dyed. Thread for safety stitch seams shall be polyester-wrapped polyester core, vat-dyed, size #50 in the needles, and size #70 in the loopers.

(20) Bi-Swing Back. For comfort of motion, there shall be a bi-swing back. The bi-swing shall be approximately 12 inches in length and 1 1/2 inches in depth. It shall be constructed with an elasticized anchor so the bi-swing will be returned into proper position after being extended. The elastic shall be a 1 inch elastic braid.

(21) Removable Insulated Liner. The removable insulated liner shall be a zip-out type of full body liner, with full sleeves, attached knit wristlets, and knit bi-swing insert. The knit bi-swing insert shall be sewn into the back armhole and sleeves for ease of motion. Quilting shall be stitched in a 4 inch railroad pattern (rows of single needle stitching spaced 4 inches apart horizontally). There shall be a bound cut-out in each armhole for comfort and two bound slits positioned in the left and right breasts to allow access to the pockets on the permanent lining of the jacket. The liner shall be bound throughout with the binding material as specified using Federal Standard stitch #401.

(22) Sleeves. Sleeves shall be two-piece, set-in coat style, with shoulder pads, epaulets, and sleeve tabs. The sleeve under-seams shall have an 8 inch hidden zipper sewn in. The zipper shall allow access to the shell for sewing on emblems without damaging the waterproof-breathable lining. Leather trim shall be sewn to the sleeve ends using filament nylon thread. All sleeve setting seams shall be Federal Standard stitch #301.

(23) Shoulder Patches. Departmentally approved shoulder patches are to be provided by the employee and sewn on by the vendor. One patch shall be sewn on each sleeve with colorfast black thread and shall not be cross-stitched. The top of the patch shall be centered on the sleeve, 1/2 inch below the sleeve-head seam and attached in such a manner that an imaginary line bisecting the center of the patch would be perpendicular to the ground when the garment is worn.

(24) Collar. The permanent collar and collar stand shall be made of two plies of the shell fabric plus the interlining plus the permanent waterproof-breathable lining. The interlining shall be sewn to the under collar and under collar stand using an eight-point star stitch (this is comprised of a zigzag style stitch creating a thin series of triangles with eight points vertically and horizontally). The collar shall be edge-stitched around the periphery only to maintain waterproof integrity. The collar points shall be well shaped and symmetrical. There will be three buttons or snaps on both top and under collar for attachment of the detachable pile collar. Federal Standard stitch #101 shall be used for sewing on buttons.

(25) Epaulets. The epaulet shall be made of two plies of the basic shell fabric plus the interlining. The epaulets shall be 2 1/4 inches in width at the sleeve-joining seam (where they are sewn to the shoulder) and shall taper to 2 inches in width at the narrow end. The exposed length shall extend from the sleeve-joining seam to the collar. The point of the epaulet shall finish at the collar-joining seam of the coat. The epaulet shall be box "X" stitched to the shoulder. The epaulet shall fasten using the specified 24-ligne metal uniform button.

(26) Pockets. There shall be two lower welted slash pockets. The welts shall measure 7 1/4 inches in length by 1 3/4 inches in width. The welt shall be edge-stitched 3/16 inch gauge. There shall be inside cut-in pockets in the permanent lining on both the left and right breast measuring 5 1/2 inches in width and 7 1/2 inches deep. There shall be a snap set through the inside left and right pockets to secure to the removable insulated liner.

(27) Side Vents. The jacket shall be designed with side vents to allow for easy access to equipment. There shall be side vent openings on each side with the specified zippers and a 3 inch snap tab on the inside front hem of the jacket. The zipper shall be set first to the shell and then the lining. The jacket shall be turned, and the zipper shall be topstitched through and through. Each tab shall have a gypsy snap stud (double male) or equivalent, at the end of the tab. The female portion of the snap shall be through and through the front at the bottom hem to match up with the position of the stud on the tab. Another female portion shall be set through the back bottom hem to secure the front and back when the side vent zipper is open.

(28) Waistband. Separate shell fabric waistband shall be 2 1/2 inches in width and elasticized in the back. There shall be two rows of stitching each 1/2 inch apart, centered on the waistband, and extending through the elastic. The elastic shall be securely tacked at each end. There will be a zipper sewn into each side for equipment and weapon access. Snap tabs made from shell fabric shall be sewn into the bottom of the waistband for closure of the side tab.

(29) Sleeve Tabs. The sleeve tabs shall be made from two plies of the shell fabric plus the interlining and shall be sewn into the underarm seam 2 inches from the sleeve hem. The tabs shall be pointed and measure 2 1/2 inches in width by 6 inches in length with a buttonhole at the pointed end fastened by a 24-ligne metal uniform button. The tabs shall be topstitched down to the sleeve of the jacket along both sides to where the point of the tab starts.

(30) Interlining. The following parts shall be interlined: collar, collar stand, pocket welts, epaulets, sleeve tabs, fronts, and front waistband.

(31) Facings. A full front and back facing shall be constructed of shell fabric with a concealed zipper track to accommodate 3 1/4 inches in width at the bottom of the jacket increasing gradually to approximately 5 inches at the gore and will continue until it ends at the shoulder seam of the jacket and joins the back facing. The back facing will measure 1 1/2 inches in width and will run from shoulder seam to shoulder seam.

(32) Fronts. The fronts shall have six to seven snap fasteners for closure. Two female snaps shall be set vertically through and through the waistband. Four to five hidden snaps shall be set to close the fronts with the top snap 1/4 inch down from the collar and the balance equally spaced. The fronts shall overlap to form under and over flaps with the front zipper sewn to the facing of the left side and edge set between the shell and the facing on the right side. The fronts shall be topstitched 1 1/4 inch gauge to immobilize the zipper; facings, interlining, and the left front shall have an additional row of topstitching 1 3/8 inch gauge (all stitching Federal Standard #301).

(33) Detachable Collar. The detachable collar will consist of a layer of pile fabric and one layer of polyester/cotton pocketing for the top collar portion. The undercollar portion of the detachable collar shall consist of two plies of the shell fabric. There shall be a pointed tab constructed of two plies of shell fabric set between the top and under collar at the front left edge measuring 2 inches in width at the attaching seam and 1 3/4 inches in width at the narrow end with a buttonhole. There shall be a button sewn to the under collar on the left side to secure the tab when not in use and a button sewn to the under collar on the right side to secure the collar closed around the neck. There will be three buttonholes on both sides of the detachable collar for attachment to the jacket. The detachable collar shall fit the permanent collar precisely. There should be No bunching, gaping, or distortion.

(34) Storm Flap. There shall be a double front storm flap, one on top and one under the top storm flap. The top storm flap will finish approximately 2 1/4 inches in width and will extend from the top of the waistband to the top of the collar point. There shall be six to seven metal snaps evenly spaced and centered down the storm flap. The snaps shall not be visible from the exterior and shall be designed to provide a neat and secure closure of the storm flap.

(35) Sizing. Garments shall be produced in even chest sizes and sleeve lengths ranging from 34 Short (34S) to 62 X-Long (62XL). The numerical portion of this measurement shall be derived from taking the chest measurement as defined below. The length designation shall be derived from taking the sleeve measurements as defined below.

(a) Chest. The chest measurement shall be taken by measuring around the upper torso at the fullest part of the chest.

(b) Sleeve.

1 Both sleeve measurements shall be taken with the arm bent at the elbow at a 90-degree angle, with lower arm parallel to the floor.

2 The sleeve measurement for the inseam shall be taken from the seam which connects the chest panel and the sleeve (in the area of the armpit) down the inside of the arm to the end of the sleeve.

3 The sleeve measurement for the outseam shall be taken from the base of the collar down to the point of the shoulder and down the outside of the arm to the end of the sleeve.

(c) Back. The back measurement shall be taken from the base of the collar down to the bottom hem of the jacket.

(d) Size Matrix. All measurements contained in Annex A of this chapter, Blue Patrol Jacket Size Matrix, shall be accurate to within $\pm 1/2$ inch of the stated size.

(36) Tags. Each garment shall have tags permanently attached stating country of origin, date of manufacture (month/year), size designation, and laundering instructions. Tags shall also display statement certifying that each garment is constructed with Gore-Tex® fabric and has been approved by W. L. Gore and Associates, Inc.

c. Leather Motorcycle Jacket.



Picture 2-46
Leather Jacket (Front)



Picture 2-47
Leather Jacket (Back)

- (1) Material. Genuine horsehide.
- (2) Color. Black.
- (3) Fastener. Heavyweight luggage Talon vertical or diagonal zipper.
- (4) Pockets. Two vertical welt-edge slash pockets, one on each side.
- (5) Lining. First quality, black in color. All facings of leather.
- (6) Badge Patch. Placed on left breast, stitched to the surface of the coat, with eyelet openings for departmental badge.
- (7) Rank Insignia. A leather insignia of rank shall be sewn on the leather motorcycle jacket, or gold-colored metal bar(s) or star(s) pins can be attached. Insignias shall be positioned in accordance with current insignia of rank policy.
- (8) Collar. To be fold-type with pointed ends 4 inches in length in front, sides 2 1/2 inches, back 2 inches. Collar to match coat with under-facing of same leather. To be stitched 1/16 inch from edge around entire edge of collar. Snap on, dark brown or black color fur collar optional.
- (9) Cuffs. To be of the barrel type, with leather inside facing and same stitching as collar. To be fastened with button or zipper.

(10) Waistband. To be 3 inches in width with a bottom finished hem not less than 1/2 inch, lined with canvas to prevent stretching. Waistband to include laced gores at the side to allow the waist of the coat to be adjusted to fit the wearer. An added curved section extending below the belt line at the back sides to 2 1/2 inches in the middle of the jacket back may be installed at the option of the wearer.

(11) Facings. Front to be self-faced with leather same as coat. Facing to be 2 1/2 inches in width at top and not less than 3/4 inch in width at bottom. Zippers are to be fastened between facing and front welt of coat.

(12) Sleeves. To be set in, coat style, with underarm gusset to permit freedom of upper arm motion; gusset to be perforated for underarm ventilation.

(13) Pockets. The two pockets are to be 6 1/2 inches in length with an opening of 6 inches. The closing welts are to be not less than 3/8 inch in width and are to be lined with strong canvas to prevent stretching and rolling. The front of the coat acts as lining on the outside, the actual pocket lining to be of heavy twill on the inside. Pockets are to be self-faced 3 inches from the opening.

d. Textile Motorcycle Patrol Jacket.

(1) Scope. This specification sets forth the requirements for a textile motorcycle patrol jacket intended for use in windy, cool, cold, and/or inclement weather, by uniformed motorcycle officers of the CHP. The jacket shall include a system of removable liner and/or shell to also allow use in all weather conditions.



Picture 2-48
Textile Motorcycle Patrol Jacket
(Front)



Picture 2-49
Textile Motorcycle Patrol Jacket
(Side)

(2) General.

(a) The jacket shall keep the wearer's upper body warm and dry. The style shall be cut to provide freedom of movement by the motorcycle officer when worn over the normal uniform. The jacket shall allow access to traditional law enforcement accouterments on both sides.

(b) The jacket shall be free from any defects that will affect appearance, function, and/or serviceability. All configuration features are to be uniform in size, shape, depth, and color, and display a uniform appearance.

(c) The jacket shall not include any unnecessary snaps, piping, or ornamentation that would detract from the professional law enforcement uniform appearance.

(3) Design. The jacket shall be waist length, single-breasted, with an overlapping storm flap with zipper and snap closures, waterproofed by design with a waterproof-breathable shell and a zip-out liner. There shall be a badge holder sewn onto the left breast. The jacket shall have underarm sleeve zippers, two lower zippered slash pockets, and two inside hand pockets. The jacket shall have hidden snaps to hold a traditional collar down. The jacket shall include a microphone holder loop attached to the front of the storm flap.

(a) The jacket shall be constructed of a waterproof and breathable material that allows the rider to stay comfortably dry, without excessive perspiring. The jacket shall include impact padding at the shoulders and elbows. The lightest jacket of the system shall hold the impact padding.

(b) The jacket shall have an adjustable waistband able to fit snugly enough to block out wind. There shall be impact padding at the elbow and shoulder areas. Impact padding at the spine is optional.

(4) Material. The outer shell shall be waterproof, made out of minimum heavyweight 500 denier Cordura nylon, or similar weatherproof material. All seams shall be double stitched using heavyweight nylon thread. Ballistic material, such as 600 denier ballistic polyester, or equivalent, shall be used at the impact points.

(5) Color. Black, nonfading.

(6) Fastener. Heavyweight, vertical, waterproof durable zipper, double stitched, with an overlapping dual storm flap. The outer storm flap shall be secured with hidden fasteners.

(7) Pockets. Two lower hand warmer pockets with waterproof zippered closures. The jacket shall also include inner pockets, available to the wearer with the liner installed or not.

(8) Badge Holder. The jacket shall include a badge holder, sewn at the top and bottom, to the left breast of the jacket. The bottom of the badge holder shall be centered 3 3/4 inches above the center of the pocket flap. The badge holder shall be the same color and material as the jacket. It shall measure 7/8 inch in width and 2 inches in length, with two metal eyelets evenly spaced 1 3/8 inches at the center. The eyelets shall be black aluminum, size #100, and be constructed of sufficient size and strength to hold the CHP badge in place while riding a motorcycle.

(9) Collar. The permanent collar shall be a traditional-type collar. There will be hidden snap tabs on front of each side of the collar to allow the collar to be held in place while riding the motorcycle. The collar shall be lined with microfiber, or equivalent material.

(10) Cuffs. Cuffs are to be of the barrel type, with material inside-facing. Cuffs shall be waterproof and zippered with adjustable wrist straps and have adjustable-sleeve take-up straps at the forearm and bicep to help secure elbow armor and material. The cuffs shall be lined with microfiber, or equivalent material.

(11) Impact Padding. The sleeves shall incorporate impact pads at the elbow and shoulder areas for protection in the event of a collision. The pads shall be removable, Community European-approved armor, or equivalent, with an articulated back protector. The jacket may include impact padding over the spine.

(12) Waistband. The waistband shall include an elastic band with adjustable waist straps to maintain waterproof and wind resistant integrity.

(13) Sleeves. Sleeves shall include waterproof zippered underarm vents, constructed to allow CHP shoulder patches to be sewn onto each sleeve. The waterproof zippered shoulder vents shall combine with a rear exit vent to provide flow-through ventilation. The vent opening system allows for fine-tuning of airflow through the jacket.

(14) Removable Insulated Liner. Jacket shall have a removable quilted liner with 100G polyfill insulation, Thinsulate®, or equivalent. The removable insulated liner shall be a zip-out type of full body liner, with full sleeves and attached knit wristlets. The liner shall be securely attached to the jacket at the wrists. There shall be a bound cutout in each armhole for comfort and two bound slits positioned in the left and right breasts to allow access to the pockets on the permanent lining of the jacket.

(15) Epaulets. (Optional.) The epaulet shall be made of two plies of the basic shell fabric plus the interlining. The epaulets shall be 2 1/4 inches in width at the sleeve-joining seam (where they are sewn to the shoulder) and shall taper to 2 inches in width at the narrow end. The exposed length shall extend from the sleeve-joining seam to the collar. The point of the epaulet shall finish at the collar-joining seam of the coat. The epaulet shall be sewn down to the jacket. The epaulet shall be box X stitched to the shoulder.

(16) Microphone Holder. The microphone holder loop on the outer storm flap shall be of the same material as the jacket and 1/2 to 5/8 inch in width. The microphone holder loop shall be sewn to the storm flap on the front of the jacket, between the top of the pockets and the badge tab.

(17) Sizing. Jackets shall be produced in even chest sizes and sleeve lengths ranging from 34 Short (34S) to 62 X-Long (62 XLNG). The sizing can be from X-small to XXX-large, as long as the jacket's fit maintains a professional uniform appearance.

e. Cold Weather Parka.



Picture 2-50
Cold Weather Parka (Front)



Picture 2-51
Cold Weather Parka (Back)

- (1) Material. Outside body, sleeves, and hood exterior to be 9 1/2 ounces, 50 percent nylon/50 percent rayon, and resistant to abrasions, tears, snags, water, stains, sparks, ashes, electricity, creases, weather, or wind. Lining to be 6.6 ounces. Fortrel quilted to single-ply, high-count nylon in both body and sleeves.
- (2) Color. Navy blue.
- (3) Style. Thigh length with combination collar-hood. To be loose fit with base length of 37 inches. (Butwin Sportswear Co. #242VC or equal.)
- (4) Body Length. Size 42 body length to be 37 inches with length increasing or decreasing in 1/2 inch increments for each size.
- (5) Hood. To be a pile collar-hood combination with drawstring and non-separating zipper. To be equipped with two brass snaps placed on bottom side of outside edges and two adjacent to base of collar to permit converting hood to collar by snapping.
- (6) Sleeves. To be equipped with concealed navy blue knit wristlets.
- (7) Badge Holder. To be a tunnel-type badge holder finished 3/4 inch in width and 2 inches in length with vertical eyelets. Shall be placed approximately in the center of the upper left front. Front to be reinforced for badge holder.
- (8) Shoulder Patch. To be placed on both sleeves, with the top of the patch 1/2 inch below sleeve-head seam in such a manner that a line bisecting the center of the patch would be perpendicular to the ground when the coat is worn. To be sewn on coat with colorfast black thread, not cross stitched.
- (9) Epaulets. Cross stitched epaulets to be sewn down on shoulders. Cross stitching to extend 2 1/2 inches above shoulder seam. Size to be 2 3/4 inches at shoulder seam, tapering to 2 inches. Length to be such as to extend well under collar. Each epaulet to be buttoned down with one 24-ligne departmental button.
- (10) Closure. Fly front to include double brass zipper and five concealed snaps. Top snap to be placed 1 inch from top of fly front with the other four snaps positioned below top snap approximately 6 inches on center. Front facing to include navy drawstring tunneled through eyelets in order to avoid the side vents.

(11) Pockets. To have two upper slash hand-warming pockets and two lower flap pockets. Pocket flaps to be 2 1/2 inches in length. Flap pocket to be 7 inches in width and 10 inches deep at deepest point, and 8 inches deep at shallowest point, lined with drill pocket lining and so positioned as to place top of pocket flap approximately 15 inches above coat bottom. Upper slash pocket opening to be 7 inches in width with bottom of pocket welt 4 inches above top of lower pocket flap. Slash pocket welt to be 1 1/2 inches in width. Slash pockets to be lined with Kash pocketing or orlon fleece pile for warmth. Upper pocket welts and lower pocket piping to be bar-tacked.

(12) Vents. Left and right sides of jacket to be tailored with vents to allow rapid access to wearer's sidearm and duty belt equipment. Vents shall begin at the bottom edge and extend up the side seam terminating approximately 20 inches above bottom of coat. Vents to be sealed with black or navy blue hook-and-loop fasteners.

f. Call-Out Jacket.



Picture 2-52
Call-Out Jacket (Front)



Picture 2-53
Call-Out Jacket (Front, with Cloth Badge)



Picture 2-54
Call-Out Jacket (Back)



Picture 2-55
Call-Out Jacket (Back, with CHP Identification Patch)

(1) Material. Outer shell, 100 percent polyester microfiber. Inner lining, 100 percent nylon taffeta.

(2) Color. Navy blue.

(3) Style. To be waist length, lightweight, with side elastic at hem and slightly dropped tail in back, full center front zipper closure, and fully elasticized sleeve cuffs.

(4) Pockets. Two vertical pockets on chest with hook-and-loop closure. Two zippered horizontal pockets on chest with removable ID pull-out panel in left pocket. Two vertical zippered hand warmer pockets. One zippered horizontal pocket across back with removable ID pull-out panel. Secure pocket inside jacket with hook-and-loop closure.

(5) Lettering. The letters "CHP" shall be sewn on the pull-out panel of the pocket on the back side of the jacket. Letters to be yellow gold in color, each letter being approximately 3 inches in height and 2 1/4 inches in width. Each letter shall be spaced approximately 1/2 inch apart.

(6) Shield. One cloth departmental star badge shall be sewn on the pull-out panel of the left front pocket on chest. The star shall be yellow gold in color and measure approximately 3 1/2 inches in diameter.

(7) Shoulder Patches. To be sewn on both sleeves with the top of the patch approximately 10 inches below the seam edge connecting the collar to the body of the jacket and centered on the sleeve. The shoulder patch stencil shall be the same size as the departmental uniformed shoulder patch.

9. WASHABLE WORK UNIFORM.

a. Shirt.

(1) Material. Shall be washable material, dyed California Tan. The fabric shall have colorfastness properties, be machine washable, and dry cleanable.

(2) Front. To be coat style, name plate eyelets on right chest, with pen tucked stitched creases. The left front shall have a center placket, extending from the collar stand to the bottom of the shirt.

(3) Pockets. To have two patch-type breast pockets with rounded corners, to finish 5 5/8 inches in width and 6 1/4 inches in length. The top of both pockets are to be stitched. The pockets are to be set to the shirt with two rows of stitching. The left pocket is to have a pencil opening about

1 1/4 inches in width. Each pocket shall have a scalloped flap 5 3/4 inches in width. The top stitching and the setting of the flaps shall be done with two rows of stitching. The outside points of the flaps shall be secured to the pockets by means of hook-and-loop fasteners.

(4) Badge Tab. To be a patch of the basic material on the outside of the left front about 1 inch above the center of the pocket flap. The patch is to have two metal eyelets 1 1/8 inches apart for the insertion of the badge.

(5) Collar. To consist of two pieces: top and stand, the collar of the long-sleeved shirt shall be lined with a fully banded collar.

(6) Shoulder Straps. The shoulder straps shall be pointed at the end toward the neck of the shirt. The other end shall be sewn in the sleeve head seam. The pointed end shall be fastened with one button. The shoulder straps are to be made of double the thickness of the same material as the shirt. The shoulder straps are to measure 2 inches at the sleeve head seam and are to taper to 1 3/8 inches. The points are to be set about 1/2 inch from the collar. The shoulder straps are to be double-stitched all around. The double stitch is to be through the shoulder straps only; it is not to catch the shoulder straps to the shirt. The shoulder straps are to be cross-stitched diagonally across from each end and terminating at the sleeve head seam.

(7) Sleeves.

(a) Short-Sleeved. Sleeves are to be straight, whole, and have a 1 inch hem. The finish shall be 9 1/2 inches in length from shoulder seam. The sleeves must be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(b) Long-Sleeved. Sleeves are to be tapered and whole. They are to have an elbow reinforcement running from the cuff to above the elbow. The reinforcement is to be double stitched around and caught in the sleeve closing seam. The sleeves are to be secured to the body of the shirt by means of a double needle stitch. This same stitch must be used on the side closing seams as well.

(8) Shoulder Patches. Departmentally approved shoulder patches shall be provided by the employee and sewn on by the vendor. The patches shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. To be sewn on garment with colorfast black thread, not cross-stitched.

(9) Bottom Hem. The front and back are to be hemmed together forming a continuous hem.

(10) Back. The back is to have a double thickness yoke. The outside thickness is to be of the of the basic material. The yokes are to be finished 3 inches at the center and are to be joined to the back of the shirt with two rows of stitching. They are also to be joined to the front of the shirt with two rows of stitching.

(11) Buttons. All buttons shall be made from melamine and shall match the fabric.

(12) Permanent Military Creases. There will be five pin tucked permanent military style stitched creases. One crease on each front extending from hem to shoulder joining seam. Front pockets and flaps to be centered over the crease. Three vertical creases in back starting at the bottom of the yoke, middle crease on center back line, side creases spaced equally from center crease.

b. Trousers.

(1) Material. Shall be washable material, dyed California Tan. The fabric shall have colorfastness properties, be machine washable, and dry cleanable.

(2) Style. To be of the slack type, plain without pleats. A metal hook and loop may be used instead of fly buttons on the outer waistband.

(3) Belt Loops. To have five to seven tunnel belt loops 1 to 2 inches in width and 2 inches in length to allow for a 2 inch maximum width belt. One loop to be placed at the rear seam with the other loops being proportionately spaced in the back, on the hips, and in front. Top of the hip and front loops to be sewn into the waistband seam. The rear seam loop may be sewn to the outside waistband.

(4) Pockets. To have two hip pockets, two side (vertical or semi-corner) pockets, and two club pockets. Pockets shall be tuxedo grade pocketing.

(a) Opening of hip pockets to be 6 inches in width, placed horizontally 4 1/2 inches below top of trouser waistband, 1 inch to the rear of the outside leg seam. Opening is to be heavily bar-tacked, welt-edged, have a minimum depth of 6 1/2 inches, and be constructed with or without pocket flaps.

(b) Vertical side pocket opening to begin 3 inches below top of waistband, forming a 6-inch vertical opening along the outside leg seam. Opening is to be heavily bar-tacked and have a minimum depth of 4 1/2 inches, measured from the bottom of the opening.

(c) Semi-corner pocket opening to begin at bottom of waistband, 4 1/2 inches to the front of the outside leg seam and to terminate at the

outside leg seam 4 1/2 inches below the bottom of the waistband. Opening is to be heavily bar-tacked and have a minimum depth of 6 inches, measured from the bottom of the opening.

(d) Opening of club pocket to be 3 1/2 inches directly below the outside edge of and parallel to the hip pocket opening, 1 1/2 inches to the rear of the outside leg seam. Opening is to be heavily bar-tacked, welt-edged, and have a minimum depth of 8 1/2 inches.

(e) When the intended wearer's size precludes these dimensions, they may be altered so long as variation is proportionate to the wearer's size (e.g., trousers with a 30 inch or smaller waist may require smaller dimension pocket openings).

(5) Optional Side (Hidden Cargo Pocket). Side cut-in pocket construction consists of a horizontal zipper closure with double welts and is centered over the side seams. The pocket has a depth of 9 inches and width of 8 inches. The horizontal zipper closes from front to back and has vertical bar tacks placed at each opening end. There are vertical bar tacks placed at each top side edge for reinforcement.

(6) Seam Stripe.

(a) Vertical pockets to have a 1 inch stripe starting at the bottom of the waistband, extending down and along the front edge of the side pockets, continuing down, gradually slanting back until centered over the outside leg seams to the bottom of the trousers. Semi-corner pockets to have a 1 inch stripe which begins at the bottom of the waistband and extends down and centered over the outside leg seams to the bottom of the trousers. Seam stripe is washable, pre-shrunk, and two-tone color, 063 royal blue on the outside with a center stripe of color 96 gold.

c. Breeches.

(1) Material. Shall be washable material and consist of 74 percent polyester, 24 percent wool, and 2 percent Lycra. The fabric shall be dyed California Tan, have colorfastness properties, and be machine washable and dry cleanable.

(2) Style. Shall be peg cut, semi-mounted, full style with cavalry reinforced (rounded) seat. Waistband shall be designed to allow for 2 inches of mechanical expansion, with two waistband panels with 2 1/4 inch elastic built in. The fly shall be closed with a #4 YKK brass memory lock zipper. The front and back leg creases shall incorporate permanent resin-bonded silicone.

- (a) Belt Loops. Same as for the formal breeches.
- (b) Pockets. Side pockets to be semi-corner style and heavily bar-tacked. Hip pocket, club pocket, and watch pocket style and dimensions are the same as the formal breeches.
- (c) Stitching. To be no less than 14 stitches to the inch with matching thread. All seams shall be polyester, or 100% polyester spun thread.
- (d) Seam Stripe. To have a 1 inch washable nylon stripe (Rice's Art 3623 nylon) starting at the bottom of the waistband, extending down, and centered over the outseams to the bottom of the breeches.

10. BICYCLE UNIFORM.

a. Jacket.

- (1) Fabric. Outer material to be taken from a woven fabric using a 96 end, 70-34 nylon warp with an air jet textured 2/70-66 Supplex® or similar type of material in the filling, woven at 70 picks. Fabric to be dyed and heat set before laminating. Laminate to be waterproof, breathable, windproof film based on a monolithic hydrophilic polyurethane copolymer. To have Zepel® or similar type of durable water-repellent barrier. Lining to consist of two different sewn-in lining types: knitted nylon mesh and woven nylon taffeta. The body and arms are to be made with a perspiration wicking CoolMax® or similar type of mesh. The front lining and inner cuffs are to be made of nylon taffeta.
- (2) Color. Dark blue with a black interior lining.
- (3) Style. To be command style, waist length, with oversized chest to accommodate body armor, with a mid-height collar.
- (4) Front Zipper. The exterior zipper to be made of molded, corrosive-proof plastic with an auto-locking pull and protected by double overlapping storm flaps and zips only in one direction. The interior zipper is to be made of a molded, corrosive-proof plastic and sewn beneath the exterior zipper to accommodate the zip-in/zip-out lining system and has a reversible auto-locking pull. All zippers are to be faced inside with nylon taffeta to eliminate the mesh lining being caught by the zipper.

- (5) Underarm Zipper. To be made of a 15 inch, corrosive-proof, nylon self-mending coil zipper and have an auto-locking pull. Zipper to be located 10 inches in the arm and 5 inches in the body of the jacket, hidden behind a seamless rain gutter flap, to zip only one direction, and faced inside with nylon taffeta.
- (6) Sleeves. Seams at the shoulder to be asymmetrical to permit freedom of upper arm motion. Elbows are to be articulated and reinforced with 330 denier Cordura or similar type of material.
- (7) Back. To have a back vent across the middle portion of the jacket to allow ventilation. To be bar-tacked at the center of the vent for securement.
- (8) Badge Holder. To be made of the same material as the upper portion of the jacket. To be 3/4 inch in width and 2 inches in length with two vertical eyelets set to accommodate badge stick pin. To be reinforced and placed approximately in the center of the upper left front.
- (9) Pockets. To have two exterior lower body hand pockets which close with a 7-inch, corrosive-proof, nylon, self-mending coil zipper with an auto-locking pull and protected by a 1 1/2 inch over-flap. To be 10 inches deep at its deepest point and 7 inches deep at its most shallow point. The pocket bag to be constructed with nylon taffeta. Interior pocket to be sewn into the nylon taffeta front lining. To be 6 inches deep and 6 inches in width, closed with hook-and-loop fasteners, and have a looped pull tab to gain access even with gloved hands. To have a second exterior pocket located at the upper chest area, accessible without unzipping the jacket and under the double storm flaps. The zipper to be a 6 inch, lightweight, corrosive-proof, nylon coil, self-mending teardrop pull-type, and the pocket bag to be made of nylon taffeta.
- (10) Hood. To be constructed of three pieces and permanently joined to the body at mid-collar height and made of the same material as the upper body. To be mesh lined and able to lie down into the shell and lining or roll to stay in the collar. To have a bill large enough to cover the helmet (if worn) and have an elasticized adjustable drawcord with exterior stays and ellipse adjuster.
- (11) Epaulets. To be made of the same material as the jacket body and finished approximately 3/4 inch in width and 4 inches in length. Keeper to be sewn down from the back shoulder seam to front shoulder seam and secured with two bar-tacks 1 inch from each seam.

(12) Shoulder Patches. To be placed on both sleeves with the top of the patch 1/2 inch above the elbow seam, with the line bisecting the center of the patch perpendicular to the ground when worn. To be sewn with colorfast polyester thread and seam-sealed by hand with liquid sealant to assure waterproofness.

b. Long-Sleeved Shirt.

(1) Material. To be made of 94 percent performance nylon and 4 percent Lycra stretch, with moisture management. Shall have a Teflon finish for stain, wrinkle, and snag resistance.

(2) Color. Dark navy blue.

(3) Style.

(a) Front. To be a pique polo style. Consist of two front buttons that begin linearly starting at the center of the collar.

(b) Collar. To be a convertible collar, with the outside consisting of pique polo pattern and the inside consisting of nylon. Points of the collar to be properly stayed.

(c) Epaulets. To be centered across shoulder on the shoulder seam at the left and the right. Shall be constructed of 100 percent Supplex nylon for durability.

(d) Pockets. To have one breast pocket, located no more than 1/2 inch below the sewn-on badge. The pocket shall have a Velcro enclosure located on the inside of the topmost portion of the pocket. The pocket shall measure 5 1/2 inches in width and shall include a 1 1/4 inch pen pocket on the left side. The pocket shall measure 6 inches in length at the center and shall have mitered corners at the bottom.

(e) Sleeves. Shall consist of the same material as the rest of the shirt.

(f) Badge and Name Badge. Shall have a cloth badge sewn onto the left breast area. Shall have the officer's last name embroidered onto the right breast area, using the same specifications as the blue utility uniform.

(g) Body. To be shaped to conform to the figure of the wearer.

(h) Stitching. To consist of serge-and-single needle construction with cover-stitched hems.

(i) Reflectorized Print. Shall have CHP printed on matching shirt fabric panel, which shall be sewn onto back of shirt. Logo shall be reflective silver in color and shall be 4 3/4 inches in height and 11 inches in length. The lettering shall be centered under and 3 3/4 inches from the folded collar.

(j) Trim. Shall have 3M stretch reflective piping running horizontally across the entire back of the shirt. The piping shall start directly below the reflective CHP patch.

(4) Badge Holder. Shall meet the same specifications as the formal uniform shirt.

(5) Shoulder Patches. Shall meet the same specifications as the formal uniform shirt.

c. Short-Sleeved Shirt. The short-sleeved shirt shall meet the same specifications as the long-sleeved shirt, with the exception of the sleeves.

(1) Sleeves. Shall consist of the same material as the rest of the shirt. The length shall come to within approximately 1 inch of the inside of the forearm when the wearer's arm is bent at a 90-degree angle.

d. Pants.

(1) Material. To be made of 94 percent performance nylon and 4 percent Lycra stretch, with moisture management. Shall have a Teflon finish for stain, wrinkle, and snag resistance.

(2) Color. Dark navy blue.

(3) Style. To be pull-on style, shaped to conform to the body of the wearer. Shall have tapered legs, with ankle tabs with hook-and-loop closure at the hem, as well as a zipper front fly.

(4) Belt Loops. The two front BRAT belt keepers shall be placed 6 inches from the center front snap, and the back belt keeper shall be placed in the center back. Belt keepers shall have Velcro closures to accommodate a duty belt.

(5) Pockets.

(a) Back Pockets. Shall be 5 3/8 inches by 5 1/4 inches deep with zippers and zipper facing.

(b) Side Cargo Pockets. Shall have an overall finished size of 7 1/8 inches in width and 8 inches deep with zippers and zipper facing.

(c) Pen Pocket. Above right-side cargo pocket, towards inner leg. To hold two pens.

(d) Side Protective Patches. Shall measure 5 5/8 inches by 6 1/4 inches, constructed of 100 percent nylon Taslan and placed 3 1/8 inches below the waistband at each hip. To be sewn on with two rows of single needle stitching.

(6) Optional Zip-Off Pant Legs.

(a) Zipper. A zipper is located directly below the knee. When unzipped, the pants become shorts.

(b) Length. When worn as shorts, the length shall not be higher than 1 inch above the top of the knee.

e. Shorts.

(1) Material. To be made of 94 percent performance nylon and 4 percent Lycra stretch with moisture management. Shall have a Teflon finish for stain, wrinkle, and snag resistance.

(2) Color. Dark navy blue.

(3) Style. To be pull-on style, shaped to conform to the figure of the wearer. Shall have a zipper-front fly.

(4) Belt Loops. The two front belt keepers shall be placed 6 inches from the front snap, and the back belt keeper shall be placed in the center of the back. Belt keepers shall have Velcro closures to accommodate a duty belt.

(5) Pockets.

(a) Back Pockets. Shall be 5 3/8 inches by 5 1/4 inches deep with zippers and zipper facing.

(b) Side Cargo Pockets. Shall have an overall finished size of 7 1/8 inches in width and 8 inches deep with zippers and zipper facing.

(c) Pen Pocket. Above right-side cargo pocket, towards inner leg. To hold two pens.

(d) Side Protective Patches. Shall measure 5 5/8 inches by 6 1/4 inches, constructed of 100 percent nylon Taslan and placed 3 1/8 inches below the waistband at each hip. To be sewn on with two rows of single needle stitching.

(6) Inseam.

(a) Length. Shall not be higher than 1 inch above the top of the knee.

11. TWO-PIECE RIPSTOP UTILITY UNIFORM.



Picture 2-56
Utility Uniform—Short-Sleeved
(Front)



Picture 2-57
Utility Uniform—Short-Sleeved
(Back)



Picture 2-58
Utility Uniform—Long-Sleeved
(Front)



Picture 2-59
Utility Uniform—Long-Sleeved
(Back)

- a. Material. The material used to construct the shirt and trousers shall be navy blue in color, Ripstop material.
- b. Shirt. The shirt shall be a tactical-style shirt with two chest pockets, flaps on pockets, hidden buttons, epaulets, departmentally approved cloth badge, and shoulder patches.
- c. Trousers. The trousers shall be a Battle Dress Uniform style trouser with two front pockets, two back pockets, side cargo pockets, flaps on pockets, hidden buttons or Velcro, and drawstring at bottom of pant leg, and button fly.
- d. Shoulder Patches. The departmentally approved embroidered "EUREKA" shoulder patches shall be sewn on both sleeves with the top of the patch positioned 1/2 inch below the sleeve-head seam. The emblem is to be sewn on the shirt using a #301 stitch and colorfast black thread.
- e. Name Embroidery. The embroidery shall be 5/8 inch gold-blocked lettering centered over the right pocket. Employees shall use their last name only for uniformity. Name tapes are not to be used.

NOTE: Uniformed personnel may choose to purchase a hook-and-loop system to attach an embroidered name badge over the right pocket. The fabric and color of the badge shall be the same as the uniform itself, in accordance with the embroidery guidelines described in paragraph 11.e. of this chapter. Both the portion attached to the shirt above the right pocket and the badge itself shall match the pocket width, not to exceed 1 inch in total height, and be equal in height and width to maintain a clean and professional image. Uniformed personnel choosing to utilize the hook-and-pile option are required to purchase both a name badge and an ID badge.

- f. Departmental Cloth Badge. The departmentally approved cloth badge shall be sewn on the shirt using a #301 stitch and matching colorfast thread. The center of the cloth badge shall be centered 2 inches above the top of the left pocket flap.

12. MULTIDISCIPLINARY ACCIDENT INVESTIGATION TEAM—UTILITY UNIFORM.

- a. General. The utility uniform for both uniformed and nonuniformed Multidisciplinary Accident Investigation Team (MAIT) personnel shall meet the standards set forth for the Two-Piece Ripstop Utility Uniform (paragraph 11. above) and shall include front and back patches as explained below.
- b. Patches. The utility uniform shall have a 3 1/2 inch diameter circle patch on a navy blue background with the CHP winged wheel, and the word "MAIT" in 3/4 inch silver letters. The patch is to be centered on the right front pocket.

c. Back. The uniform shall also have a back patch, 12 1/4 inches by 4 5/16 inches, a navy blue background with MAIT in 2 inch gold letters, and "INVESTIGATOR" in 1 1/4 inch gold letters. The patch is to be centered on the back of the utility uniform shirt between the shoulders.

13. ACADEMY OUTSIDE TRAINING WORK UNIFORM. Material, color, and style shall be determined by the Chief in the Office of the Assistant Commissioner, Staff.

14. JUMPSUIT—COLD WEATHER.

a. Material. Exterior shell to be Kahn Armornyl, 50 percent Antron/50 percent rayon, treated to be fire retardant and antistatic and with Dupont's Zepel water repellent.

b. Color. Navy blue special dye treated for color fastness.

c. Style. To be uninsulated with a full-length, two-way, slide-front, heavy-duty, brass or aluminum zipper. To have two inside, full-leg, brass or aluminum zippers, with brass or aluminum snap tabs at leg bottom. To be equipped with two 7 inch, side slash vents for access; hidden shoulder action back for action movement; elastic bound cuffs; and two eyelets (same color as material) under arms for ventilation (Sportcaster #OWR or equal).

d. Pockets. To have two 6 inch zippered chest patch pockets, two 8 inch zippered patch thigh pockets, one or two 8 inch zippered hip patch pockets, and one side-leg flashlight pocket, approximately 8 inches in length and 4 inches in width, placed on the right leg.

e. Badge Holder. To be placed on left front with vertical metal eyelets spaced 1 1/4 inches apart with the center of the bottom eyelet spaced 1 1/2 inches above center of left chest pocket. In lieu of the badge holder, the departmentally approved cloth badge may be affixed.

f. Departmental Cloth Badge. The departmentally approved cloth badge shall be sewn on the shirt using a #301 stitch and matching colorfast thread. The center of the cloth badge shall be centered 2 inches above the top of the left pocket flap. If the cloth badge is affixed, the uniform member's name must be embroidered in 5/8 inch gold block letters above the right pocket to comply with state and federal laws relative to the identification of law enforcement personnel. The employee shall assume responsibility for any damage due to these additions as well as all costs for the badge and name embroidery to the garment.

- g. General Construction. Seams to be safety stitched with special high-twist thread of heavy-duty, 24-weight, and to be of the highest quality without puckering or exposed loose seams. Garment may be hand washable and/or dry clean only.

15. AVIATION FIRE RETARDANT GARMENTS.

a. Flight Suits.

(1) Applicable Specifications. The item shall meet U.S. Government Military Specification FNS/PD 96-17 (MIL-C-8314A) and be tan in color (CWU-27/P).

(2) Departmental Cloth Badge. The departmentally approved cloth badge shall be sewn on the shirt using a #301 stitch and matching Nomex thread to maintain fire retardant properties. The center of the cloth badge shall be centered 2 inches above the top of the left pocket flap.

(3) Shoulder Patches. Departmentally approved embroidered EUREKA shoulder patches are to be sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. To be sewn with Nomex thread closely matching the overcast on the patch. The stitching is to be straight stitching in the overcast.

b. Gloves.

(1) Grade. The grade shall be known commercially as firsts. All materials and construction techniques shall be of the best standard practice.

(2) Sizes. The gloves shall be in whole sizes ranging from 6 to 13, which correspond to the measurement around the largest part of the palm, between the finger and thumb knuckles, but not including the thumb.

(3) Fabric. The fabric shall be a single layer of 9.6 ounce knit Nomex. The fabric shall be cut in the wales direction. The face side of the fabric shall be used as the outside of the glove.

(4) Color. Black, military-type.

(5) Leather. The leather shall be 2 to 2 1/2 ounce buckskin or capeskin. The leather shall be glove tanned. The color shall be black. All flank pockets and other weak places shall be eliminated. The skins shall be sorted for shade and thickness. The grain side of the leather shall be on the outer surface of the glove.

(6) Stitches and Seams. The gloves shall be assembled using a size D Bondex nylon thread sewn 1/16 inch from the edge plus 1/32, minus 0. Stitching shall be straight lock at 7 to 8 stitches per inch. No trimmer shall be used.

(7) Pairing. The gloves shall be matched and paired. Each pair shall be packed in a plastic bag. Each glove shall be labeled by size.

(8) Design. The palm, cuff, and the front of the fingers, thumb, and the gauntlet shall be fabricated from one piece of leather.

(a) The back of the fingers, thumb, hand, and gauntlet shall be fabricated from the Nomex fabric.

(b) The cuffs shall be made from two strips of leather and sewn together at an angle at the joint of the fingers to conform to the angle at that part of the hand.

(c) The glove shall be 13 inches in length from the tip of the fingers to the top of the gauntlet for a size 9, with length increasing or decreasing in ½ inch increments for each size.

c. Jacket.

(1) Name. The jacket shall be known as the CHP Nomex Flight Jacket.

(2) Grade. The grade shall be known commercially as firsts. All materials and construction techniques shall be of the best standard practice.

(3) Sizes. All jackets shall be cut and made to standard sizes, from 32 to 50, in 2 inch increments and in lengths of short, regular, long, and extra-long, as required.

(4) Fabric. The fabric shall be 6 1/2 ounces gabardine Nomex. The color shall be navy blue. All pockets, facing, and inserts shall be of the same material.

(5) Lining. The lining shall be an 8-ounce, needle-punched Nomex, quilted to a 2 1/4 ounce, pajama-check Nomex.

(6) Knit. The knit shall be a black 16/32 Nomex knit. Cuffs shall be 9 inches by 2 1/2 inches, black Nomex knit.

(7) Thread. The thread shall be a Nomex 36/4, color matched to the fabric being sewn.

(8) Zippers. Zippers shall be a Talon size 7 with Nomex tapes and brass teeth.

(9) Stitches and Seams. All major seams, including sleeve seams and side seams, shall be sewn with a true safety stitch and surging overlock. All other seams shall be double-sewn wherever possible.

(10) Design. The jacket shall consist of three major parts: front, back, and sleeves.

(a) The collar, cuffs, and waistband shall be made from Nomex knit.

(b) The sleeves and body of the jacket shall be fully lined with Nomex lining with the pajama-check side exposed. All seams shall be finished with the exposed edges inside. A Nomex zip-in liner may be substituted for a lined jacket.

(c) There shall be an 11 inch by 8 1/2 inch pocket on each side of the front zipper and located proportionately above the waistband. The pockets shall have a hidden, 7 inch zipper located on the edge of the pocket near the seam.

(d) There shall be a bellows pocket, with an attached pen-and-pencil pocket, on the left sleeve between the shoulder and the elbow.

(e) The back shall be tucked and pleated to allow freedom of movement.

(11) Departmental Cloth Badge. The departmentally approved cloth badge shall be sewn on the jacket using a #301 stitch and matching Nomex thread to maintain fire retardant properties. The center of the cloth badge shall be centered 2 inches above the top of the left pocket flap.

(12) Shoulder Patches. Departmentally approved shoulder patches are to be embroidered "Eureka" type and sewn on by the vendor. The patch shall be located 1/2 inch below the sleeve seam so that a line bisecting the center of the patch would be perpendicular to the ground when the garment is worn. The thread shall be Nomex and closely match the overcast of the patch. The stitching shall be straight stitching in the overcast.

16. RAINWEAR.

a. Scope. This specification sets forth minimum requirements for highly visible, breathable rainwear, intended for use in inclement weather by CHP personnel. The rainwear shall be machine washable and enhance the visibility of the wearer under less-than-ideal conditions.

b. Specifications and Standards. State-issued item subject to bid specifications.

c. General Requirements.

(1) The overall classification for the rainwear apparel (jacket and pants) supplied under this contract shall be classified as a performance Class 3, Level 2 ensemble, according to ANSI/International Safety Equipment Association (ISEA) 107-2004 standards. When worn without the rain pants, the rain jacket shall be such that it remains classified as performance Class 3, Level 2, according to ANSI/ISEA 107-2004 standards.

(2) The rainwear shall be waterproof and breathable by design and shall be guaranteed to keep the wearer dry. The construction shall be full cut to provide freedom of movement when worn over the normal CHP uniform. The rainwear shall allow access to traditional law enforcement accouterments and/or equipment on both the left side and right side of the jacket and front trouser pockets.

d. Configuration.

(1) Jacket.



Picture 2-60
Rainwear—Jacket
(Front)



Picture 2-61
Rainwear—Jacket
(Back)

(a) The jacket shall have modified raglan shoulders and sleeves, a front closure with large storm fly overlap, and shall be zipped shut with a black Delrin zipper (size #8) with two sliders for separation top and bottom. The large storm fly overlap of the jacket's front closure shall have a minimum of five snap fasteners, positioned equally and uniformly on the jacket.

(b) Side vents shall be placed on each side of the jacket and shall be 14 inches in length starting at the hem of the jacket. Each side vent shall be closed by a single snap fastener tab at the hem of the jacket and a black Delrin zipper (size #5). The zipper shall be positioned along the entire length of the side vent so as to ensure the vent is completely closed when zipped shut. There shall be a flap of membrane, or "self," material covering the zipper to prevent water intrusion at the zipper.

(c) The end of the sleeves (cuffs) shall be hemmed and have cuff tabs attached, measuring 1 1/2 inches in width by 3 inches in length. The cuff opening shall be adjusted by the attachment of the hook portion of a hook-and-loop fastener on the tabs, and a 1 inch in width by 5 inch in length loop portion of a hook-and-loop fastener, sewn approximately 1 1/4 inches from the end of the sleeve.

(d) The jacket shall have a large storm-front-style collar and be made of self-material. Overedge stitching of the collar is not acceptable.

(e) The jacket standard back length for a size medium (regular length) shall be 34 inches. Accordingly, the back and sleeve length shall increase or decrease by size as required. The jacket back shall be straight with a straight hem bottom and 1 to 1 1/4 inch turn-up, in accordance with Federal Standard 751, type EFb-1.

(f) The jacket shall have two primary pockets positioned on the front of the jacket, evenly spaced, with one on each side of the front closure. These pockets shall measure approximately 8 inches deep by 8 inches in width with an opening of approximately 8 inches at the top of the pocket ($\pm 1/4$ inch). A beveled flap, measuring 3 inches in width by 8 1/2 inches in length ($\pm 1/4$ inch), shall be positioned over the opening of each pocket. The flap closure shall close the pocket through the use of a hook-and-loop fastener strip measuring 1 inch in width by 4 to 6 inches in length. The inside lining of the pocket shall be comprised of self-material.

(g) The primary pocket shall be sewn to the outside of the jacket in such a manner so as to create an opening between the pocket and the membrane underneath, resulting in a secondary pocket. The opening of the secondary pocket shall be positioned along the outside edge of the primary pocket, opposite the front closure, and measure 6 1/2 inches ($\pm 1/2$ inch). The interior of the secondary pocket shall be as large as the area created by the perimeter stitching of the primary pocket.

(h) To maintain garment integrity and eliminate water intrusion where the stitching perforates the membrane, all stitching shall be seam-sealed on the interior of the jacket directly against the back of the outer membrane utilizing the same material as the membrane.

(i) The jacket shall have a removable, quilted, insulated liner which is black in color and stitched to nylon face fabric. If the liner does not have nylon taffeta on both sides, the upper half of the liner and sleeves shall be lined with nylon taffeta to allow the liner to slide easily over the shoulders and shirt sleeves.

(j) At each side where the liner meets the side vent of the jacket, the liner shall have a slit designed to allow the wearer access to duty belt accouterments and equipment through the side vent of the jacket. Working from the hem of the liner, the slit shall continue up along the entire side vent, ending at the topmost termination point of the side vent (refer to paragraph 16.d.[1][b] of this chapter). The seam along the edge of the slit shall be finished with seam binding or other material so as to conceal the unfinished edge of the lining material.

(k) The liner shall be a zip-in type of liner utilizing no less than #3 size Delrin zipper. The liner shall be zip-in along the front facing of the jacket and shall not be longer than the shell. The liner shall also be secured at the sleeve cuff through the use of nylon straps, 1/2 to 3/4 inch in width, sewn into the sleeve of the liner. The design of the straps shall be such that each strap is drawn through a nylon loop, 1/4 inch in width, with each nylon loop sewn into the cuff of the jacket. Once drawn through the loop, the strap shall attach to itself through the use of a single snap, ball-and-socket style fastener.

(l) A badge holder shall be positioned on the center of the left breast of the jacket. The badge holder shall be a double thickness strip of self-material, measuring approximately 7/8 inch in width by 2 inches in length, and shall be sewn to the jacket in a manner that creates an opening between the badge holder and the jacket. The badge holder shall be positioned 4 1/4 inches from the front zipper and 7 inches down from the shoulder/neck-joining seam (size large) and shall grade appropriately with size. To maintain garment integrity and eliminate water intrusion, the stitch shall be seam-sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane. The badge holder holes shall be oriented vertically, spaced 1 1/8 inches apart (center to center), and reinforced with two metal eyelets. When the badge is worn, the badge holder shall be concealed completely behind the badge.

(m) The jacket shall have microphone tabs (mic tabs) placed horizontally on each side of the upper chest area. The mic tabs shall be placed 3 1/2 inches down from the shoulder neck-joining seam and 4 inches from the center front zipper (size large) and shall grade appropriately with size. The tabs themselves shall be 2 inches in width by 1 inch in height and shall be box-tacked (1/4-inch tack) to the jacket fronts. The mic tabs shall be double thickness, made from self-material, folded and clean finished, tacked to the jacket, and the stitching shall be waterproof sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane.

(n) The jacket shall have two CHP departmental shoulder patches, one on each sleeve, stitched and centered over the reflective stripe. The patches shall comply with CHP standards (see Chapter 4, Uniform Accouterments, of this manual) the patches shall be shield-shape, measuring 4 inches in width by 4 7/8 inches in height ($\pm 1/16$ inch). The top of the patch shall be located on the sleeves 1/2 inch below the equivalent of where the sleeve seam would be and centered on the reflective stripe. The patches shall be affixed to the jacket with colorfast black thread. To maintain garment integrity and eliminate water intrusion, the stitch shall be sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane.



Picture 2-62
Shoulder Patch

(o) The specified reflective striping material (see paragraph 16.e.(3) of this chapter) shall be sewn to the jacket and all stitch holes taped with waterproof seam tape behind, utilizing the same material as the membrane. The reflective striping shall be positioned from the neck seam at each shoulder and down the sleeve vertically to intersect with the horizontal stripe above the cuff beginning 3 inches from the bottom of the sleeve hem. There shall be a horizontal stripe around the entire jacket beginning 3 inches from the bottom hem and clean finished at each side zipper. There shall also be a vertical stripe applied to the front fly and a horizontal stripe (across the back of the jacket only) under the armhole. All reflective tape shall be positioned on the jacket in a manner consistent with ANSI/ISEA 107-2004 standards for Class 3, Level 2, high-visibility apparel.

(p) Sizes for all jackets are defined as follows:

Chest	32-34	36-38	40-42	44-46	48-50	52-54	56-58
Size	XS	S	M	L	XL	XXL	XXXL

Picture 2-63

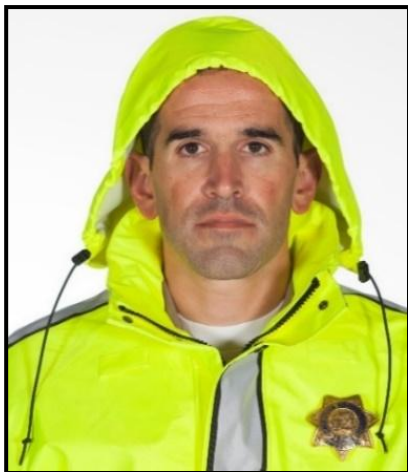
Chest Sizes for Rainwear—Jacket

Jacket Length	Short (32.5")	Regular (34")	Long (35.5")	X-Long (37")
Height	Under 5'8"	5'8"–5'11"	5'11"–6'2"	6'2" & Up

Picture 2-64

Length Measurements for Rainwear—Jacket

(2) Hood.



Picture 2-65
Rainwear—Hood
(Front)



Picture 2-66
Rainwear—Hood
(Side)

(a) The hood shall be removable with a zippered “tuck-away” design. When worn, the hood shall be capable of being drawn around the face with a black, solid-braided, round cord (drawstring), 1/8 inch thick, and black Delrin barrel clamps. The drawstring shall pass through the barrel clamp and be knotted at the end to prevent fraying and passage through the barrel clamps.

(b) The hood shall be secured to the jacket collar, within the zippered enclosure, by a strip of hook-and-loop fastener measuring 1/2 inch in width by 6 inches in length.

(3) Pants.



Picture 2-67
Rain Pants (Front)



Picture 2-68
Rain Pants (Side)



Picture 2-69
Rain Pants (Back)

(a) The pants shall be waist-high, elastic waistband type, with an overlap safety fly and front snap closure on both male and female garments.

(b) A tunnel waistband shall be made to accommodate 1 1/2 inch in width, top-quality elastic. The elastic band shall extend from one adjustment tab, around the back portion of the pant, to the other adjustment tab, and be of sufficient quality to adjust the finished size of the pants by 4 inches. The elastic shall be sewn in with two rows of stitching running horizontally along the length of the elastic. The manner of stitching shall be such that allows the elastic to stretch.

(c) The waistband shall have belt loops made of membrane material (double thickness) commencing 4 inches from the fly on each side and positioned at evenly spaced intervals around the entire waistband. There shall be a minimum of seven belt loops per garment with each belt loop measuring no more than 1 inch in width and no less than 1/2 inch in width. The belt loops shall be uniform in width, no closer than 3 inches on center to one another, and shall be sewn to the waistband in such a manner so as to create an opening that is no more than 2 inches and capable of accommodating a 1 1/2 inch belt.

(d) The pant shall contain two vertical side pocket openings (without lining), one on each side, to allow for access to undergarment pockets. The pocket welt shall measure 8 3/4 inches in width and 1 3/4 inches in length covering a cut-through opening of 7 1/2 inches to 8 1/2 inches. The open edge of the welt shall be topstitched. The top and bottom of the welt shall be tacked. The pant leg cuff shall terminate in a 1 inch hem, EFb-1 ($\pm 1/16$ inch).

(e) The pant shall also contain two set-in hip pockets. The hip pockets shall be made of membrane material measuring 7 1/2 inches in width and 9 1/4 inches in length with a beveled corner flap measuring 7 3/4 inches in width and 3 inches in length ($\pm 1/4$ inch). The pocket closure shall be with a 1 inch hook-and-loop fastener 4 1/2 inches in length. The flap shall be set 5 inches down from the top of the pant and shall be centered in the back panel. The position of the flap shall be adjusted proportionally for larger or smaller sizes.

(f) The specified reflective striping material (see paragraph 16.e.(3) of this chapter) shall be sewn to the pant and all stitch holes taped with waterproof seam tape behind. The reflective striping shall be positioned vertically along each outer leg seam and horizontally around each leg cuff beginning 3 inches from the bottom hem. All reflective tape shall be positioned on the pants in a manner consistent with ANSI/ISEA 107-2004 standards for Class E, Level 2, high-visibility apparel.

(g) The pants shall contain two side vents, one on the outside seam of each pant leg. The side vents shall begin at the approximate bottom of the kneecap of the wearer, when properly worn, and shall continue through the cuff of the pant leg. The vent openings shall be a minimum of 15 inches in length.

(h) Closure for both side vents shall be accomplished by a black Delrin zipper (size #5) that is positioned so as to ensure the side vent is completely closed, when zipped shut. The cuff of the pants shall have a tab with a snap fastener designed to be drawn across the opening of the side vent and snapped in place when the vent is zipped shut. The tab shall contain the socket portion (female end) of the snap fastener, shall be 1 inch in width by 2 inches in length, shall be made of membrane material, and shall be affixed to the pant leg at the forward edge of the side vent opening.

(i) One ball portion (male end) of the snap shall be affixed to the pant leg, aft of the side vent opening and 2 inches from the side vent so as to secure the snap fastener to the pant cuff, flush with the hem. A second ball portion (male end) of the snap shall be affixed to the pant leg, 2 inches aft of the first snap (total of 4 inches from the side vent opening). This will allow the cuff of the pant leg to be drawn in 2 inches for a tighter fit around the footwear, if desired.

(j) Waist sizes for all pants are defined as follows:

Waist	26"-28"	28"-30"	30"-34"	34"-38"	38"-42"	42"-46"	46"-up
Size	XS	S	M	L	XL	XXL	XXXL

Picture 2-70
Waist Size for Pants

Inseam Length	Short (28")	Regular (30")	Long (32")	X-Long (34")
Height	Under 5'8"	5'8"-5'11"	5'11"-6'2"	6'2" & Up

Picture 2-71
Inseam Measurements for Pants

e. Material Specifications.

(1) Jacket and Pants Material.

(a) A hundred percent polyester laminated with polytetrafluoroethylene or other type of fabric system meeting the performance requirements of this document. The material shall be fluorescent yellow in color. The background material shall be compliant with ANSI/ISEA 107-2004 standard and the requirements of this document.

(b) Both the jacket and pant shall have an inside layer comprised of 100 percent Polyester Tricot lining fabric which is white in color.

(2) Insulated Jacket Liner.

(a) The liner fabric (body) shall be comprised of 100 percent nylon taffeta plain weave, 70 denier continuous filament yarns with 34 filaments, quilted to 100 percent polyester insulation (with scrim or treated to prevent fiber migration), or to 100 percent fleece fabric. The insulation liner shall weigh no less than 300 grams per square yard in the body and 235 grams per square yard in the sleeves.

(3) Reflective Tape.

(a) The reflective tape shall be compliant with ANSI/ISEA 107-2004 standard for Class 3, Level 2 high-visibility safety apparel and shall be silver/white in color.

(b) The 2 inches in width reflective tape shall be backed by a 2 1/2 inch black grosgrain ribbon. The tape shall be placed in the center of the ribbon.

(4) Snap.

(a) Any snaps used shall be of the heavy-duty ball-and-socket type. Each snap shall be universal, 24-ligne prong-style fastener (metal or Delrin snaps). Metal snaps shall be black anodized to prevent rusting with solid color plastic caps. All snaps shall be black in color and guaranteed not to tear, split, or separate from the garment under normal use.

f. Workmanship.

(1) All major seams shall be two-needle, full-felled construction. Other seams shall be single-needle, lock stitched. All seams (anywhere the stitching perforates the membrane) shall be sealed on the inside of the garment, directly against the back of the membrane, with the same material as the membrane to ensure they are 100 percent waterproof. The sealed seam shall be class LSc2 and stitch type 301 or a comparable seam and stitch.

(2) The reflective tape attachment shall be either heat sealed or stitched to the black grosgrain ribbon. The stitched tape design shall have waterproof sealed behind with material matching the membrane. The reflective tape shall be continuous. Reflective tape with wrinkles, splices, and segmented sections are not acceptable and will be rejected.

(3) The ends of the stitches shall be bar-tacked or back-stitched, 1/2 inch minimum or crossed by another seam. Reinforcements such as bar-tacking, rivets, or grommets shall be provided at stress points. The stitching of the

rainwear shall be accomplished with a polyester or cotton polyester thread (minimum size 50 strength). The thread color shall match the color of the fabric.

(4) The rainwear shall be free from defects that will affect appearance and serviceability. All letters, characters, configuration features, etc., are to be uniform in size, shape, depth, color, and displaying a uniform appearance.

(5) All components shall be installed through two thicknesses of material or have a reinforcing insert of comparable strength. Metal shall be black anodized to prevent rusting/discoloration.

g. Performance.

(1) The background material shall be compliant with all the requirements as listed in ANSI/ISEA 107-2004 (excluding requirements for Combined-Performance Retroreflective Materials and tear resistance).

(2) The offered product shall also be compliant to the following requirements:

(a) Tear resistance of the background material: ASTM D1424-96, Elmendorf, minimum 4.9 pounds warp and 4.1 pounds fill.

(b) Seam tape durability: FED-STD-191A 5516 or other industry recognized test method; after ten laundry cycles, no leakage.

h. Insulated Liner Requirements.

(1) Weight: 1.80 ounce per square yard (± 0.25 ounce per square yard).

(2) Breaking Strength (pounds): Warp, 125 (minimum); filling, 85 (minimum).

(3) Tearing Strength (pounds): Warp, 3.5 (minimum); filling, 2.1 (minimum).

(4) Shrinkage: Warp, 2 percent (maximum); filling, 2 percent (maximum).

i. Label.

(1) Each piece of rainwear shall have a label which complies with Code of Federal Regulations, 16-CFR 303.1-45, Rules and Regulations under the Textile Fiber Products Identification Act.

(2) The label shall be durable for the appropriate number of cleaning processes.

(3) The label shall be attached to the interior of the jacket, visually accessible, and, at a minimum, contain the following information:

- (a) Name, trademark, or other means of identification, of the manufacturer.
 - (b) Identification of brand of material used.
 - (c) Country of origin.
 - (d) Size designation.
 - (e) Care/laundrying instructions.
 - (f) Space for name and identification number of wearer to be written, if desired.
- (4) A separate label shall be attached to the insulated liner, visually accessible, and, at a minimum, contain the same information as the jacket label.

NOTE: The CHP-issued non-ISEA/ANSI 107-2004 compliant Gore-Tex rainwear may be worn until no longer serviceable.

17. MOCK TURTLENECK.

- a. Material. 92 percent cotton/8 percent Lycra.
- b. Color. Navy blue.
- c. Available at the Academy PX.

18. MOCK DICKEY.

- a. Material. 92 percent cotton/8 percent Lycra.
- b. Color. Navy blue.
- c. Available at the Academy PX.

19. SCARF.

- a. Material. Silk or wool.
- b. Color. Navy blue without design.
- c. Style. Rectangular, not to exceed 12 inches in width or 60 inches in length.

20. GLOVES.

- a. Material. Leather or fabric.
- b. Color. Leather: black or natural finish. Fabric: black or tan.
- c. Style. To be either lined or unlined.

21. HONOR GUARD ACCOUTERMENTS.

- a. Ascot.
 - (1) Material. Rayon.
 - (2) Color. White.
 - (3) Style. Rectangular, break-away, bib-scarf.
- b. Gloves.
 - (1) Material. Cotton and nylon blend fabric.
 - (2) Color. White.
 - (3) Style. Plain.
- c. Aiguillette.
 - (1) Material. Nylon cord 3/16 inch in diameter. One metal ferrule 3 inches in length.
 - (2) Color. White.
 - (3) Style. Same as departmental aiguillette, except all cords shall be white.

22. FOOTWEAR.

- a. General Duty.
 - (1) Material. Black leather or Corfam. Nylon-sided boots are authorized provided they conform to the specifications below.
 - (2) Style. Entire boot or shoe to be smooth finish; to accept polishing. Toe to be plain or cap toe, with no ornamental stitching, ventilation holes, or seams. Boots with nylon-sided upper stock that is partially visible below the hem of the

trouser are authorized to be worn. The visible portion of nylon shall not extend upon any portion of the toe nor the top of the sole of the boot. The upper stock and the sole shall be stitched or glued together. Heels shall not be more than 1 1/2 inches thick (measured from the bottom of the heel to the top of the sole). Shoes or boots shall not be worn if they have a pointed toe, or a squared or beveled heel in excess of 1/4 inch. Spur straps or nonfunctioning buckles are not allowed. Boots, shoes, and shoelaces shall be black in color.

b. Boots—Motorcycle Duty.

(1) Style. To be plain-toed, smooth finish, laced over instep not to exceed 8 inches. Upper outside of top to include gore not to exceed 4 inches with lace, zipper, or strap and buckle closure. Boot laces shall be black in color.

NOTE: Boots with concealed back seam zippers may be worn when the size of the wearer's leg precludes the wearing of boots of regular construction.

(2) Upper Stock. Height to be no less than 18 inches or more than 20 inches.

NOTE: When length of wearer's leg precludes the wearing of boots within prescribed dimensions, a shorter or taller boot may be worn provided the top of the boot, after wrinkling at the ankle, is no less than 1 inch below the bone on the inside of the leg (known in the boot industry as the boot bone).

c. Boots—Flight Safety. To be of top quality, black leather, to accept polishing, zippered or laced in the front. Boots shall be 9 to 11 inches in height. Boot laces shall be black in color (Beleville 800 ST, Beleville 700/770, or equivalent).

d. Boots—Mounted Duty.

(1) Style. To be plain-toed, smooth finish, laced-over instep not to exceed 8 inches. Black calfskin vamp with black dehcord uppers. Upper outside of top to include gore not to exceed 4 inches, with lace, zipper, or strap and buckle closure. Boot laces shall be black in color. Sole to be smooth or ribbed.

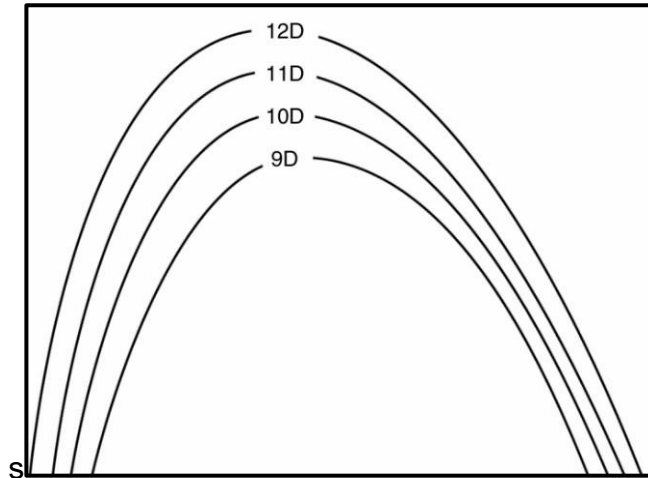
NOTE: Boots with concealed back seam zippers may be worn when the size of the wearer's leg precludes the wearing of boots of regular construction.

(2) Upper Stock. Height to be not less than 18 inches or more than 20 inches. Height of leg is measured from the sole to the top of the inside of the boot.

NOTE: When length of wearer's leg precludes the wearing of boots within prescribed dimensions, a shorter or taller boot may be worn provided the top of the boot, after wrinkling at the ankle, is not less than 1 inch below the bone on the inside of the leg (known in the boot industry as the boot bone).

e. Shoes—Bicycle Duty. To be athletic style high-top or low-top shoes. Shoes and laces shall be solid black in color.

f. Maximum Toe Point Contour. Shoes and boots with toes that have a sharper (pointed) toe than shown in Picture 2-70 are not acceptable and shall not be worn.



Picture 2-72
Maximum Toe Point Contour

g. Heel Thickness and Allowable Bevel. Shoes or boots with heels thicker than 1 1/2 inches are not to be worn. Heels with a bevel in excess of 1/4 inch are not allowed.

23. TIES.



Picture 2-73
Ties



Picture 2-74
Bow Tie

a. Necktie.

(1) Material. Dacron or wool fabric.

(2) Color. Royal blue (Number 063 as indicated in Rice's Braids of Quality color chart).

(3) Style. To be four-in-hand type, breakaway style, approximately 3 1/2 inches in width at its widest point (Wembley's Royal Blue, rease-nil #2Z54GH or #2Z54RT for CHP or equal).

b. Bow Tie. To be pretied bow bowtie with square ends. The ends shall be no less than 1 1/4 inches and nor more than 1 1/2 inches in width. The center knot shall be no less than 3/4 inch and nor more than 1 inch in width. The overall length shall be no less than 4 7/8 inches and nor more than 5 1/8 inches. Fastener shall be breakaway style, clip, or band. Color shall be Wembley's #609-77, Royal Blue, for CHP or equal.

24. HIGH-VISIBILITY REFLECTIVE SAFETY VESTS.

a. General Requirements. The High-Visibility Reflective Safety Vests shall be such that it will meet or exceed area and performance requirements for level 2/Class 2 as specified in ANSI/ISEA standard 107-2004 or ANSI/ISEA 207-2006 standard. The reflective vest shall be breathable by design. The construction shall be full cut to provide freedom of movement when worn over the normal CHP uniform. The reflective vest shall allow access to traditional law enforcement accouterments and/or equipment on all sides.

b. Configuration. The reflective vest shall be composed of three separate panels (two front and one back), designed to attach by means of hook-and-loop fasteners on the top and on the sides, forming a vest. The front of the vest shall have a black Delrin or Vislon (or equivalent) zipper (sizes #5 to #10) with one slider.

(1) Front Panels.

(a) The front panels of the reflective vest shall have two parallel strips of 1 inch reflective tape, or one, 2 inch strip of reflective tape, configured horizontally, at least 2 inches above and along the entire bottom width of the panels.

(b) The center of each front panel of the reflective vest shall have two parallel strips of reflective tape configured vertically from the shoulder to the top of the uppermost horizontal reflective tape strip. Each strip of reflective material shall be 1 inch in width. The innermost edge of the strips of reflective tape shall be separated by 2 inches.

(c) A badge holder shall be positioned on the center of the left panel of the vest between the two vertical strips of reflective tape. The badge holder shall be a double thickness strip of self-material, measuring approximately 7/8 inch in width by 2 inches in length, and shall be sewn to the vest in a manner that creates an opening between the badge holder

and the vest. The badge holder shall be positioned 7 inches down from the shoulder (size large) and shall grade appropriately with size. The badge holder holes shall be oriented vertically, spaced 1 1/8 inches apart (center to center), and reinforced with two metal eyelets. When the badge is worn, the badge holder shall be concealed completely behind the badge.

(d) The shoulder areas of the front panel shall be hemmed and seamed horizontally and shall have one strip of hook-and-loop fastener. The strip shall be no less than 1/2 inch or greater than 1 inch in width and configured along the entire length of the shoulder area.

(e) The front panels shall have mic tabs placed horizontally on each side of the upper chest area. The mic tabs shall be placed no farther than 3 1/2 inches down from the shoulder and oriented between the two vertical lines of reflective tape. The tabs themselves shall be 2 inches in width by 1 inch in height and shall be securely stitched to the front panel. The mic tabs shall be double thickness, made from self-material, folded, clean finished, and tacked to the panels.

(f) Side arm holes shall be formed by the joining of the front and rear panels and shall be 12 to 16 inches in length, for medium size (grading appropriately with size) starting at shoulder and extending to the top of the rear adjustment panels. Each arm hole shall be fitted as to allow for a maximum and uninhibited range of motion.

(2) Rear Panel.

(a) The rear panel of the reflective vest shall have two 1-inch parallel strips, or one 2 inch strip of reflective tape configured horizontally. The strips of reflective material shall be separated by 2 inches with the bottom strip configured at least 2 inches above the hem of the vest.

(b) The rear panel of the reflective vest shall have two parallel strips of reflective tape configured vertically from the shoulder down both the right and left sides of the vest, mirroring the configuration of the front panels. Each strip of reflective material shall be 1 inch in width. The strips of reflective tape shall be separated by 2 inches. The reflective tape shall start at the shoulder and run to the top of the uppermost horizontal strip of reflective tape at the bottom of the vest.

(c) The shoulder areas of the rear panel shall be hemmed and seamed horizontally and shall have one strip of hook-and-loop fastener. The strip shall not be less than 1/2 inch or greater than 1 inch in width and configured along the entire length of the shoulder area.

(d) The reflective vest shall be unisex, provide a maximum amount of flexibility, and be able to fit within the following size requirements while still meeting the ANSI requirements:

Chest	32-42	44-50	52-58
Size	SM-M	L-XL	XXL-XXXL

Picture 2-75

Chest Sizes for High-Visibility Reflective Safety Vest

(3) Side Adjustment Panels.

(a) Side adjustment panels shall extend no less than 8 inches (adjusting accordingly to size), horizontally, from the lower portion of the vest panels. The side adjustment panels shall be no less than 4 1/2 inches in width and have two strips of reflective tape configured horizontally along the entire length. The strips of reflective tape should be a prolongation of the lower, horizontal strips of reflective tape that are configured along the rear and front vest panels.

(b) Each side adjustment panel shall have at least a 2 inch by 4 inch section of the hook portion of a hook-and-loop fastener affixed vertically, designed to attach to the pile portion of the hook-and-loop fastener on the front panel of the vest.

(c) A 2 inch in width pile portion of the hook-and-loop fastener should be positioned horizontally between the two horizontal 1 inch strips of reflective tape, or two 1 inch in width strips of hook-and-loop fastener should be positioned above and below the 2 inch strip of reflective tape. The hook-and-loop fastener shall be configured along the entire width of the vest to allow for maximum adjustability. The hook-and-loop fastener shall be the same color as the reflective vest.

c. Material Specifications.

(1) Vest Material. The material shall be 100 percent polyester durable knit. The vest material shall be light and flexible and able to withstand a wide variety of temperatures and conditions. The vest shall be fluorescent yellow (Pantone color 388, or equivalent), and shall be compliant with ANSI/ISEA 107-2004 standards for Level 2/Class 2 or ANSI 207-2006, high-visibility safety apparel.

(2) Reflective Tape.

(a) The reflective tape shall be compliant with ANSI/ISEA 107-2004 level 2/Class 2 or ANSI 2007-2006 standards for high-visibility safety apparel and shall be silver/white in color.

(b) The reflective tape shall be backed by a 1 3/8 inch, black grosgrain ribbon (or equivalent), measuring exactly 1/8 inch in width from the edge of the reflective tape to the outermost edge of the outlining border for contrast. The width of the border shall be consistent throughout the entire garment.

(3) Snaps. Any snaps used shall be of the heavy-duty ball-and-socket type. Each snap shall be universal, 24-ligne, prong-style fastener (metal or Delrin snaps). Metal snaps shall be black anodized to prevent rusting with solid color plastic caps. All snaps shall be black in color and guaranteed not to tear, split, or separate from the garment under normal use.

d. Workmanship.

(1) All major seams shall be two-needle or single-needle lock stitched. Other seams shall be single-needle lock stitched.

(2) The reflective tape and backing attachment shall be permanently affixed. The reflective tape shall be continuous. Splices or segmented sections are not acceptable and will be rejected. All wrinkles created as a result of the tape attachment shall be repaired.

(3) The ends of the stitches shall be bar-tacked or back-stitched, 1/2 inch minimum, or crossed by another seam. Reinforcements such as bar-tacking, rivets, or grommets shall be provided at stress points.

(4) The reflective vest shall be free from defects that will affect appearance and serviceability. All letters, characters, configuration features, etc., are to be uniform in size, shape, depth, and color and display a uniform appearance.

(5) All components shall be installed through two thicknesses of material or have a reinforcing insert of comparable strength. Metal shall be black anodized to prevent rusting/discoloration.

25. TACTICAL FLIGHT VEST.

a. Material. Black synthetic (e.g., nylon, polyester) mesh material of a Modular Lightweight Load-carrying Equipment (MOLLE) design for the attachment of equipment pouches.

(1) All MOLLE panels and fasteners shall be bar-tack stitched for durability and retention.

(2) At a minimum, binding seams and zipper attachments shall be double stitched.

- b. Zippered front for retention.
- c. Ability to be worn over Department-issued, soft body armor.
- d. Load bearing/weight dispersing.
- e. Shall have on the front of the vest:
 - (1) Upper left chest: Cloth CHP badge.
 - (2) Upper right chest: Aviation identification nameplate with departmental wings.
- f. Accessories authorized for use on the Tactical Flight Vest (TFV) shall be black in color and limited to the following:
 - (1) Holster with retention for departmentally issued firearm.
 - (2) Double magazine pouch for departmentally issued firearm magazines.
 - (3) Handcuff case.
 - (4) Collapsible straight baton holder.
 - (5) Oleoresin capsicum (OC) spray holster (OC shall not be carried during flight operations).
 - (6) Radio holder.
 - (7) Flashlight holder.
 - (8) Small miscellaneous pouches for survival equipment, medical equipment, folding knife, etc.
 - (9) Administration pouch for cellular telephone, steno pad, etc.
 - (10) Helicopter Emergency Egress Device and Personal Helicopter Oxygen Device pouches.
- g. Any additional equipment the wearer wishes to include on their TFV must be approved by the Office of Air Operations.

26. LOAD BEARING VESTS.

- a. Load Bearing Vest (Silver-Tan and Tan).

- (1) Manufacturers. Point Blank and Safariland.
- (2) Material. Combination of 500-denier Cordura and/or laser cut material with 100 percent nylon woven fabric and 100 percent nylon hex rip stop.
- (3) Color. Point Blank Silver-Tan per CHP specifications. Safariland Tan 12200.
- (4) Outer Carrier Specifications.
 - (a) Safariland Modular Lightweight Load-carrying Equipment (MOLLE), or Point Blank modular Lightweight Load-carrying Equipment (MOLLE) or laser-cut pouch attachment system must support at least three rows of load bearing support in an average size.
 - (b) Upper portion of the carrier must include two bellowed breast pockets with shirt carrier appearance, center creases, and a split breast pocket feature to accommodate a modern cell phone and a notepad in the same pocket. Pocket flaps must support tan buttons used by CHP.
 - (c) Shoulder portion should include tailored epaulets that support tan buttons used by CHP.
 - (d) Shall be center opening with no visible zipper.
 - (e) Front Opening Features (Safariland).
 - a Internal loading front plate pocket.
 - b Back top loading plate pocket.
 - c Removable elastic bellyband.
 - d Laser cut shoulder mic tabs.
 - e Laser cut center camera tabs on zipper cover.
 - f Spacer mesh on shoulders.
 - g Hidden gun pocket.
 - h Two front center zipper pockets.
 - i Comm channels.

- (f) Shall have an RCB pouch built in on both sides of the carrier that will have a retention system.
- (g) Shall support a body camera to be mounted in accordance with policy contained in MM 25-014, Body-Worn Camera.
- (h) Should have no fewer than two attachment points for a radio microphone, one near each shoulder.
- (i) Shall have hidden side adjustment in the rear of the carrier to maintain professional appearance. Submissions that incorporate exposed Velcro in the side adjustment will be rejected.
- (j) Shall have adjustable, open shoulder closure to ensure that ballistic armor is positioned at the appropriate position on wearers of varying body types. Shoulder adjustment must be concealed to maintain a professional appearance.
- (k) Rear of the outer carrier should have three sewn creases equally spaced across the back.
- (l) Interior of the outer carrier should incorporate 3D spacer mesh on the front and back to allow airflow.
- (m) All submissions must incorporate plate pockets of appropriate size based on the size of the carrier.
- (n) Outer carrier must be designed and produced by the same manufacturer as the armor submission for compatibility.
- (o) Outer carrier must have an internal ballistic suspension system to prevent bunching and rolling of ballistic panels. Outer carriers that utilize concealed vest shoulder straps in a closed shoulder design will not be accepted.
- (p) Outer carrier must be designed to accommodate CHP configuration of badge and nameplate per department standards.
- (q) Outer carrier must incorporate a hidden drag strap on the inside of the rear collar. Designs with exposed drag straps will not be accepted.
- (r) Outer carrier must have binding on the bottom edge to prevent fraying.

(s) Specific Features (Safariland).

- a Uniform pocket shirt design.
- b Internal chest welt pockets under flaps.
- c Traditional MOLLE load bearing.
- d Shoulder straps clean.
- e Removable shoulder epaulets.

(5) Cleaning Instructions. To ensure durability, performance, and proper maintenance of the load bearing vest, the following cleaning instructions shall be strictly adhered to:

(a) Remove ballistic panels.

- 1 Carefully remove the ballistic panels from the front and back compartments of the outer shell. The outer shell must be completely dry before reinserting ballistic panels.

(b) Remove ID panels and pouches.

- 1 Detach all ID panels, name tapes, and modular pouches. Failure to do so can cause permanent damage, especially if machine washing or dry cleaning.

(c) Close or remove Velcro fasteners.

- 1 Before cleaning, ensure that all Velcro fasteners are either securely closed or completely removed to prevent material damage during washing or drying.

(d) Machine wash.

- 1 The carrier outer shell may be cleaned using an automatic washing machine, but only on the “permanent press” or “durable press” cycle at medium water temperature (not to exceed 120 degrees Fahrenheit).

(e) Detergent use.

- 1 Use low-suds detergent according to the manufacturer’s directions. Avoid any detergent with harsh chemicals; detergents safe for baby clothing are ideal.

(f) Drying.

1 Air dry is preferred. If using a machine dryer, use only a low-temperature setting. High heat may lead to shrinkage or material degradation.

(g) Dry cleaning.

1 Only the outer shell may be commercially dry cleaned. Ensure all ID panels and pouches are removed. Dry cleaning frequency is at the user's discretion. Once per quarter is recommended depending on operational exposure.

(h) Spot cleaning (optional).

1 Use a soft cloth or soft-bristle brush with mild soap and cold water to gently treat localized stains.

(i) Additional instructions.

1 **Do not** use bleach. Bleach will damage the fabric and compromise carrier integrity.

2 **Do not** machine wash or dry the ballistic panels.

3 Ensure the outer shell is completely dry before reassembling or reinserting ballistic components.

b. Load Bearing Vest (Midnight Navy).

(1) Manufacturer. Point Blank.

(2) Material. Combination of 500-denier Cordura and/or laser cut material.

(3) Color. Midnight navy per CHP specifications.

(4) Outer Carrier Specifications.

(a) The MOLLE or laser cut pouch attachment system must support at least three rows of load bearing support in an average size.

(b) Upper portion of the carrier must include two bellowed breast pockets with shirt carrier appearance (square pockets), **no** center creases, split breast pocket feature to accommodate modern cell phones and notepad in the same pocket. Pocket flaps must have **Velcro and no buttons**.

- (c) Shoulder portion should include tailored epaulets that support blue buttons used by CHP.
- (d) Shall be center opening with no visible zipper.
- (e) Shall have a RCB pouch built in on both sides of the carrier that will have a retention system.
- (f) Shall support a body camera to be mounted in accordance with policy.
- (g) Should have no fewer than two attachment points for a radio microphone, one near each shoulder.
- (h) Shall have hidden side adjustment in the rear of the carrier to maintain professional appearance. Submissions that incorporate exposed Velcro in the side adjustment will be rejected.
- (i) Shall have adjustable, open shoulder closure to ensure that ballistic armor is positioned at the appropriate position on wearers of varying body types. Shoulder adjustment must be concealed to maintain a professional appearance.
- (j) Rear of the outer carrier shall not have creases across the back.
- (k) Interior of the outer carrier should incorporate 3D spacer mesh on the front and back to allow airflow.
- (l) All submissions must incorporate plate pockets of appropriate size based on the size of the carrier.
- (m) Outer carrier must be designed and produced by the same manufacturer as the armor submission for compatibility. Third party submissions will be rejected.
- (n) Outer carrier must have an internal ballistic suspension system to prevent bunching and rolling of ballistic panels. Outer carriers that utilize concealed vest shoulder straps in a closed shoulder design will not be accepted.
- (o) Outer carrier must be designed to accommodate CHP configuration of badge and nameplate per department standards.
- (p) Outer carrier must incorporate a hidden drag strap on the inside of the rear collar. Designs with exposed drag straps will not be accepted.

(q) Outer carrier must have binding on the bottom edge to prevent fraying.

(r) Shall be maintained and kept clean using the same specifications listed in paragraph 26.a.(4).

(s) No jacket shall be worn under or over the vest. Only approved undershirts shall be worn.

c. Load Bearing Equipment Items. Only the following items may be attached to the LBV. Equipment holders shall match the color and material of the LBV.

(1) Rapid Containment Baton and holder.

(2) Oleoresin capicum spray and holder.

(3) Medical pouch.

(4) Radio and holder.

(5) Handcuff case.

(6) Mobile video and audio recorder microphone and holder.

(7) Body worn camera.

d. Base Layer Uniform Shirts.

(1) Blue Base Layer Uniform Shirt.

(a) Color. Blue.

(b) Material. Shall be 65/35 polyester/cotton blend with ARMS Technology, 4.1 ounce 2-way mechanical stretch woven with 2mm by 2mm double micro ripstop, Teflon® stain repellent finish, double dye fabric for superior 50 color fastness, 100 percent polyester anti-snap jersey body with wicking and anti-odor finish, 230 gsm full dull knit jersey, melamine buttons.

(c) Fabric. Knit fabric on front and back of body and running gusset. Full running gusseted construction under the arm. Wicking knit fabric under arm for better breathability.

(d) Design. Woven fabric on sleeves, collar, placket and yoke. Split yoke construction for lateral shoulder stretch.

(e) Front. Full frontal polyester panel seamless comfort. Mic loop on lower front placket.

(f) Collar. No curl collar with integrated collar stay. Hidden button down collar.

(g) Buttons. Two button plus lower hook/loop placket closure to relieve hot spots under body armor.

(2) Tan Base Layer Uniform Shirt.

(a) Color. Tan.

(b) Models. Short-sleeved Spiewak SBL70CA (Poly/Wool). Long-sleeved Spiewak SBL75CA (Poly/Wool). Short-sleeved Spiewak SBL60CA (Ripstop). Long-sleeved Spiewak SBL65CA (Ripstop).

(c) Material. Primary shirt fabric shall be 74/24/2 with Nanotex designed for moisture wicking and soil resistance, excellent color retention and easy care.

(d) Optional Fabric. A hundred percent Sorbtek Ripstop with EXS Stretch. Knit mesh fabric shall be a S9T110 birdseye mesh with anti-bacterial and moisture wicking treatments.

(e) Style. Shall be constructed to give the appearance of a standard uniform shirt when worn with the External Vest Carrier with the body of the shirt to be made of anti-bacterial and moisture wicking knit mesh for comfort.

(f) Tailoring. This garment shall be constructed according to the principles set forth in the specifications. All stitches shall be of the proper tension and size so as to avoid puckering after the shirt has been laundered and to give best durable press performance. All sewing shall be with polyester core thread to match the shirt fabric. The collar shall be single-stitched 1/4 inch from edge. The pockets, flaps, and epaulets shall be edge-stitched. The shirtsleeve bottom shall be finished with a 1 inch clean finish.

(g) Front. The front shall have a center facing 1 1/2 inch wide placket extending from the collar extending approximately 6 inches down the front of the shirt (based on size large). The placket shall have an interlining for stability and a neat appearance and shall be 1/4 inches top-stitched on each side.

1 The center front shall contain three vertical buttonholes placed 3/4 inches from edge and 3 inches apart. There shall be a button at the neck corresponding with the top buttonhole, which shall be set horizontally.

(h) Collar. The collar points shall be medium spread approximately 3 inches in length. The outside edge of the collar shall be stitched with a 1/4 inch edge stitch. The collar width at the back of the neck shall be 1 3/4 inch with a 2 inch collar band extension. The back of the stand shall measure 1 1/2 inches. The inside collar shall be made of 201T polyester for comfort.

1 There shall be a hidden triangle collar button-down tabs sewn underneath each collar point approximately 1 inch wide (at the attachment point) and 7/8 inches long. These tabs shall attach to hidden durable ligne 14 buttons which to keep the collar secure.

(i) Collar Stays. There shall be a collar stay sewn inside the collar along the bottom edge of each collar to hold the collar shape and still allow the attachment of collar brass.

(j) Sleeves. The sleeves shall be one piece sewn into the shoulder, tapering into the finished cuffs with pressed double pleats. The cuffs shall be attached to the sleeve with a 3/8 inch double needle stitch and shall be 2 5/8 inches in width; fastening with two durable ligne 20 4 hole 100 percent polyester buttons. The cuffs shall be made of two pieces of base shirt material with an interlining. There shall be a shirt cuff opening with a facing of shirt material 7 inch by 1 inch tapering to a point with a closure stitch across the facing 1 1/2 inch from the point. There shall be a buttonhole approximately 4 inches from the point to attach a ligne 16 durable a hundred percent polyester button. The button shall be attached to the inside facing which shall be bound with 5/8 inch bias cut shirt material for reinforcement.

1 The sleeves and side closing seams shall be attached to the body of the shirt with a merrow and a safety stitch for enforcement.

(k) Emblems. Vendor shall be responsible for sewing a CHP agency emblem centered on each sleeve 3/4 inches down from shoulder seam.

(l) Buttons. All buttons shall be 100 percent polyester and shall pass ASTM 5171-1191.84 kilogram mass dropped from a height of 67 mm.

(m) Back. The garment shall have a straight yoke back located approximately 5 inches below the collar seam. There shall be an inside yoke lined with 210T polyester for maximum comfort.

(n) Care Instructions. Machine wash—warm water. Wash dark colors separately and rinse thoroughly. Time-dry completely—medium heat—remove promptly. For best performance, use steam iron, low setting and iron under a cotton towel.

(o) Sizing. Sizes for all base layer uniform shirts are defined as follows:

1 Men. Long- and short-sleeved ranging from small to XXX-large, regular and tall length.

2 Women. Long- and short-sleeved ranging from small to XXX-large, regular length, and women's fit; female bust size: 30 through 48, even sizes only.

Small	Medium	Large	X-Large	XX-Large	XXX-Large
30/31	30/31	-	-	-	-
32/33	32/33	32/33	32/33	32/33	-
34/35	34/35	34/35	34/35	34/35	34/35
-	-	36/37	36/37	36/37	36/37

Picture 2-76

Tan Base Layer Uniform Shirt, Long- and Short-Sleeve Size Chart

e. Cold Weather Base Layer Uniform Shirts.

(1) Color. Tan or Midnight Navy blue to coincide with matching load bearing vest.

(2) Lightweight Version (SBL45CA).

(a) Material. Water-resistant three-layer softshell fabric in the upper chest and arms, treated with a Durable Water Repellent (DWR) finish. The middle layer to be a waterproof, breathable TPU membrane bonded between the outer and inner layers. Backed with 50D tricot, with an overall weight of 195 gsm.

(b) Style. Radio-Frequency Identification-blocking zippered pockets on the forearms, located on the left and right sleeves. The elasticized cuffs include a Velcro tab for size adjustment. Birdseye mesh (190 gsm) with antimicrobial and moisture-wicking properties in lower torso and underarm sections of the sleeves.

NOTE: All components will be free of perfluoroalkyl and polyfluoroalkyl substances (PFAS).

(3) Heavyweight Version (SBL59CA).

(a) Material. Water-resistant three-layer softshell fabric in the upper chest and arms, treated with a DWR finish. The middle layer to be a waterproof, breathable TPU membrane bonded between the outer and inner layers. Backed with anti-pill microfleece, with an overall weight of 315 gsm.

(b) Style. Radio-Frequency Identification-blocking zippered pockets on the forearms, located on the left and right sleeves. The elasticized cuffs include a Velcro tab for size adjustment. Birdseye mesh (190 gsm) with antimicrobial and moisture-wicking properties in lower torso and underarm sections of the sleeves.

(4) Pro Duty Softshell Pullover (111018).

(a) Material. Body 85 percent Nylon and 15percent Spandex. With four-way stretch softshell. Water and wind resistant.

(b) Style. Soft-brushed fleece-insulated arm, shoulder, and collar. Non-insulated body. Fade-, shrink-, and wrinkle-resistant. High raglan sleeve construction. Split yoke. Running side gusset for maximum movement and 1/4 zip front placket. Longer body length without bottom slit stays tucked in. Adjustable hook-and-loop cuff closure. Bartacks at all stress points. Internal locker loop and ID write bar inside. Fold-down collar. One inch drop on shirt back. Straight hem, internal locker loop, embroidered logo, zip through front neckline.

NOTE: All components to be free of PFAS.

27. EXTERNAL RIFLE RATED BODY ARMOR AND CARRIER.

a. External Rifle Rated Body Armor. All external rifle rated body armor (ERRBA) shall have stand-alone hard armor plates with an NIJ certification rating of either Level III or Level IV. Hard armor plates that have passed equivalent testing to the NIJ standard but are not NIJ certified are not acceptable.

(1) Color. Black.

(2) Material. 500- to 1,000-denier Cordura nylon. Lighter weight fabrics, such as ripstop nylon or fabrics made using organic fibers, are **not** acceptable.

b. Carrier. The carrier for the ERRBA shall be of a design that accepts front and rear armor plates. Side plates are optional. Following are additional specifications for the carrier:

- (1) Shall be Modular Lightweight Load-carrying Equipment (MOLLE) compatible and capable of incorporating the Pouch Attachment Ladder System.
- (2) Shall have hook-and-loop attachment points on the front and back to allow for identification patches that can be removed for washing of the carrier.
- (3) May be manufactured with an emergency drag handle attached to the rear.
- (4) Patches.

(a) Rear (Required).

1 Shall have a black patch with "POLICE" embroidered in nonmetallic gold lettering, attached by a hook-and-loop fastener to the back of the carrier.

a The patch shall measure approximately 3 inches in height and 10 inches in width, with the letters measuring approximately 2 1/2 inches in height.



Picture 2-77
ERRBA (Back)

(b) Front (Required).

1 Shall have the departmentally approved cloth badge attached by a hook-and-loop fastener to the left front of the carrier.

2 Shall have last name and/or identification number embroidered on a cloth patch, attached by a hook-and-pile fastener to the right front of the carrier and clearly visible (as required by California Penal Code Section 830.10).

a Shall be black in color with nonmetallic gold letters and/or numbers. The letters and/or numbers shall be a minimum of 3/8 inch and a maximum of 3/4 inch in height.



Picture 2-78
ERRBA (Front)

(c) Optional.

1 Additional black POLICE patch with nonmetallic gold lettering attached by a hook-and-loop fastener to the front of the carrier.

a The optional POLICE patch shall measure approximately 2 inches in height and 5 inches in width, with the letters measuring approximately 1 1/4 inches in height.



Picture 2-79
ERRBA (Front, with Police Patch)

2 Personnel who possess current certification as an emergency medical technician or paramedic may have a medic insignia patch affixed by a hook-and-loop fastener to either the front or back of the carrier.

a The patch shall measure approximately 2 inches in height and 4 inches in width.

b The patch shall be black in color, with a gold embroidered border, and a cross embroidered in nonmetallic red.

1/ The cross shall measure 3/8 inch in height and 3/8 inch in width and shall be centered on the patch.



Picture 2-80
ERRBA (Front, with Medic Insignia Patch)

3 No other patches are authorized for attachment to the carrier.

ANNEX A

BLUE PATROL JACKET MATRIX

Size 34	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	14	15	16	17
Sleeve—Outseam (in.)	31 1/2	32 1/2	33 1/2	34 1/2
Back (in.)	23	24	25	26
Size 36	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	14 1/2	15 1/2	16 1/2	17 1/2
Sleeve—Outseam (in.)	32	33	34	35
Back (in.)	23 1/4	24 1/4	25 1/4	26 1/4
Size 38	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	15	16	17	18
Sleeve—Outseam (in.)	32 1/2	33 1/2	34 1/2	35 1/2
Back (in.)	23 1/2	24 1/2	25 1/2	26 1/2
Size 40	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	15 1/2	16 1/2	17 1/2	18 1/2
Sleeve—Outseam (in.)	33	34	35	36
Back (in.)	23 3/4	24 3/4	25 3/4	26 3/4
Size 42	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	16	17	18	19
Sleeve—Outseam (in.)	33 1/2	34 1/2	35 1/2	36 1/2
Back (in.)	24	25	26	27
Size 44	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	16 1/2	17 1/2	18 1/2	19 1/2
Sleeve—Outseam (in.)	34	35	36	37
Back (in.)	24 1/4	25 1/4	26 1/4	27 1/4
Size 46	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	17	18	19	20
Sleeve—Outseam (in.)	34 1/2	35 1/2	36 1/2	37 1/2
Back (in.)	24 1/2	25 1/2	26 1/2	27 1/2
Size 48	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	17 1/2	18 1/2	19 1/2	20 1/2
Sleeve—Outseam (in.)	35	36	37	38
Back (in.)	24 3/4	25 3/4	26 3/4	27 3/4

ANNEX A

BLUE PATROL JACKET SIZE MATRIX *(continued)*

Size 50	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	18	19	20	21
Sleeve—Outseam (in.)	35 1/2	36 1/2	37 1/2	38 1/2
Back (in.)	25	26	27	28
Size 52	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	18 1/2	19 1/2	20 1/2	21 1/2
Sleeve—Outseam (in.)	36	37	38	39
Back (in.)	25 1/4	26 1/4	27 1/4	28 1/4
Size 54	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	19	20	21	22
Sleeve—Outseam (in.)	36 1/2	37 1/2	38 1/2	39 1/2
Back (in.)	25 1/2	26 1/2	27 1/2	28 1/2
Size 56	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	19 1/2	20 1/2	21 1/2	22 1/2
Sleeve—Outseam (in.)	37	38	39	40
Back (in.)	25 3/4	26 3/4	27 3/4	28 3/4
Size 58	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	20	21	22	23
Sleeve—Outseam (in.)	37 1/2	38 1/2	39 1/2	40 1/2
Back (in.)	26	27	28	29
Size 60	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	20 1/2	21 1/2	22 1/2	23 1/2
Sleeve—Outseam (in.)	38	39	40	41
Back (in.)	26 1/4	27 1/4	28 1/4	29 1/4
Size 62	Short	Regular	Long	X-Long
Sleeve—Inseam (in.)	21	22	23	24
Sleeve—Outseam (in.)	38 1/2	39 1/2	40 1/2	41 1/2
Back (in.)	26 1/2	27 1/2	28 1/2	29 1/2

ANNEX B
RAINWEAR SIZES

Men's Jackets

Men's Chest	32-34	36-38	40-42	44-46	48-50	52-54	56-58
Men's Size	XS	S	M	L	XL	XXL	XXXL
Jacket Length	Short		Regular		Long		X-Long
Men's Height	Under 5'8"		5'8"/5'11"		5'11"/6'2"		6'2" & Up

Women's Jackets

Women's Dress	8-10	12-14	16-18	20-22	24-26
Women's Size	S	M	L	XL	XXL
Jacket Length	Short		Regular		X-Long
Women's Height	To 5'2"		5'2"/5'6"		6'2" & Up

Men's Pants

SIZE	WAIST RANGE	INSEAM
Small	28-30-32	29-33
Medium	32-34-36	30-34
Large	36-38-40	31-35
X-Large	40-42-44	32-36
XX-Large	44-46-48	33-37
XXX-Large	48-50-52	34-38

Women's Pants

SIZE	PANT SIZE	INSEAM
Small	6-8-10	28-32
Medium	10-12-14	29-33
Large	14-16-18	30-34
X-Large	18-20-22	31-35
XX-Large	22-24-26	32-36

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ANNEX C

NEW AMERICAN NATIONAL STANDARDS INSTITUTE 107-2004 COMPLIANT RAINWEAR SIZES

Men's Jackets

Men's Chest	32-34	36-38	40-42	44-46	48-50	52-54	56-58
Men's Size	XS	S	M	L	XL	XXL	XXXL
Jacket Length	X-Short	Short	Regular	Long	X-Long		
Men's Height	Under 5'5"	5'5"/5'8"	5'8"/5'11"	5'11"/6'2"	6'2" & Up		

Men's Pants

WAIST RANGE

SIZE	HEIGHT
X-Small	26"-28"
Small	28"-30"
Medium	32"-34"
Large	36"-38"
X-Large	40"-42"
XX-Large	44"-46"
XXX-Large	46" & up

INSEAM LENGTH

Short	Under 5'8"
Regular	5'8"-5'11"
Long	5'11"-6'2"
X-Long	6'2" & Up

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