



CHICAGO POLICE DEPARTMENT
UNIFORM & EQUIPMENT SPECIFICATIONS
RESEARCH AND DEVELOPMENT DIVISION

DATE OF
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SPECIFICATION NO.
9161.174

ITEM
Three Season Jacket

PAGE 1 OF 9

ITEM: JACKET, Waist Length, Duty, Sworn members. (alternate)

AFTER THE ISSUANCE DATE OF THIS SPECIFICATION ALL THREE SEASON JACKETS WILL ADHERE TO THE FOLLOWING SPECIFICATIONS.

DESIGN: This jacket is a three-season, waist-length style with 2-way full-length zippered front hidden by a double storm flap to create a waterproof fly down the front of the jacket with (6) hidden snaps attached. Two front yokes set on both sides with a hidden agenda flap for pull down application. Integrated dual duty collar attached to the zipper and storm flap with hidden draw-string hood. Two 2-way patch pockets with flap closures and hand warmer lining. Two additional vertical set-in security pockets aligned 1 inch from center seams of front storm flap. Two-piece dolman sleeves with elasticized and snapped tab cuffs. Yoked back with hidden agenda zippered in pull-down panel. Two 10-inch side vents zippered with velcro closures. Bottom band front, with elastic back band. Interior lined with one zippered pocket on each side. Zip-out, snap on removable Thinsulate liner black in color, quilted and nylon backing, with fleece body, with heavy ribbed knit collar. The liner shall have one patch pocket set on both front sections.

MATERIAL:

Shell fabric: Will be 100% Tactel 2-ply nylon with water repellent finish and back coating. Density shall be 156 x 52, weight shall be 168 xg/yd, and back coating shall be PU coated w/p 600mm. Color is Dark Navy.

Shell lining: The lower body and upper yoke linings shall be 100% polyester with a waterproof, windproof, and breathable laminate or equal. All lining joining seams 5-needled safety stitched and then sealed with a 1 inch compatible sealing tape to prevent leaking. The tape shall be applied by hot air method. All stitching through the lining shall be sealed with waterproof tape. There shall be a hanger loop of shell material centered at the neckline. There will be a 24 ligne female snap on the label carrier to secure the removable liner. The top collar of the shell fabric shall be lined with the lining fabric to form a waterproof barrier. There shall be two 24 ligne female snaps approximately 2 1/2" from the sleeve bottoms on each side to attach the removable liner cuffs. There shall be 2 inside storage pockets of shell material, with coil zipper closures, one on each, measuring approximately 9 1/2" deep by 6 1/2" wide.

The upper portion of the shell lining shall be a 100% polyester mesh knit to allow maximum ventilation through the rain shed yoke opening. The lining shall be approximately 7" high, running through the entire upper portion of the shell lining corresponding to the rain shed yoke.

Facing: There shall be inside facings of shell material with a non-woven interlining (100% polyester) approximately 1" wide on each side. There shall be a #5 18" YKK vislon-type zipper with an over the type slider set between the facings and the lining to attach the removable liner. The slider shall correspond with the matching side on the removable liner. The facing shall be backed with material and seams taped to prevent leakage.

GARMENT CONSTRUCTION:

Front: There shall be a double storm flap over the front zipper to create a waterproof fly down the front of the jacket extending into the collar. The outside fly shall measure 26 ½" long by 2 ½" wide. It shall be set double needle on the left side from the under collar to the jacket bottom. The storm flap shall be interlined and lined with lining material to prevent leakage. There shall be six hidden 24 ligne brass oxidized male snaps on the inner storm fly. The inner storm fly shall measure approximately 2 ½" long by approximately 1 ½" wide. The inner storm flap shall be interlined and set down the front double needle. The front zipper shall be a #5 two-way YKK vislon type zipper 25 ½" long. There shall be (2) rain shield yoke, on each side of the zipper. The yokes shall measure approximately 9 ¼" in length from the high point shoulder and 9 ½" in width and are designed to allow ventilation through the mesh lining as well as conceal "on demand" Hidden Agenda or equal pull down flaps. There shall be a #3-7" YKK Vislon type interchangeable zipper set into the yoke on each side to attach the corresponding Hidden Agenda front panel (See panel specifications). The yokes shall close with (3) pieces of YKK Powerhook SA200 Nylon, or equal. Hook and loop fasteners sewn vertically. Each piece of power hook shall measure approximately 2" horizontally and 5/8" vertically and shall be spaced for a clean and neat appearance. The mesh shall extend the entire side of each yoke.

Buttons: Members with rank of **lieutenant and above** will have (4) non-functional 36 ligne gold-plated buttons (ring type) placed on front panel centered 5 ½" down from top of jacket and 6" apart. There shall be (2) 26 ligne gold-plated non-functional buttons (ring-type) placed ½" from centered bottom of lower pocket flaps

Back: The back shall have a rain shed yoke with a 2" turn up design to conceal the Hidden Agenda type I.D. flap system. The yoke shall be fully lined with waterproof/ breathable nylon and faced with breathable mesh. There shall be (3) YKK Powerhook SS200 Nylon, or equal hook and loop fastener closures measuring 2" x 5/8" set equidistant on the yoke facing. There shall be #3 16" YKK vislon type interchangeable zipper set into the yoke to attach the corresponding **Hidden Agenda** type back panel.

Badge tab: The tab shall be 2 ¼" in length and 1" in width sewn down. The eyelets shall be 1 ¼" from the center of one eyelet to the center the other eyelet. The tab shall sewn centered on the left front with the bottom of the tab ½" above the bottom of the front yoke.

Nameplate tab: The tab shall be 2 1/4" in length and 1/2" in width when sewn down. The eyelets shall be 1 3/4" from the center of one eyelet to the center of the other eyelet. The tab shall be sewn centered on the right front with the edge of the tab 1 3/4" from the bottom edge of the front yoke.

HIGH VISIBILITY PULL DOWN PANELS: (See attached graphic)

The high visibility described in this specification are an integral part of the Chicago Police Department authorized duty jacket. The panels shall conform to the technical specifications and no substitutions will be allowed without prior written approval by the Chicago Police Department Research and Development Division. The high visibility panels provide retro-reflective material and fluorescent color on both the front and rear of the jacket, providing enhanced personnel conspicuity, immediate recognition as a member of the Chicago Police Department.

Panels: The base panel shall be fabricated from a tough weather and solvent resistant fabric backed tape that will be sewn on the panel carriers that zip on/off the jacket .

Base panel: The base panel is composed of silver cube corner (microprism) retro- reflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilized polymeric film. The prism surfaces are coated with a vacuum deposition of aluminum to provide a mirror surface to the prism facets. A knit fabric backing is provided to facilitate sewing. The base panel shall be constructed of a primary base and a color layer. The silver primary base shall be constructed of the following layers (from top to bottom).

- Microprism
- Metalization
- PSA then Knit Fabric

Table 1: **Typical Values for silver Primary Base**

Observation Angle Degrees	Entrance Angle			
	5	20	30	40
0.2	1000	950	800	400
0.33	400	375	325	250
1.	35	33	30	20

(All values in cd/lux/m²)

On top of the silver primary base there shall be a layer. The color layer shall be constructed of the following layers of material (from top to bottom):

- Enhanced Surface Protection
- 6mil Fluorescent Yellow-Green Vinyl

The finished base panel shall be lime-green and screen processed using a custom-shade grey, opaque ultra-violet ink with the Chicago Police Department "checkerboard" pattern: each checker shall be approximately 5/16"x 9/16" and form a pattern around the perimeter of each panel. All inks to screen this image to the panel must provide superior exterior performance for outdoor exposure to rain, snow, UV-exposure, etc.

Table 1: Finished Base Panel fluorescent yellow-green chromatically coordinates (From ANSI/SEA 107-1999)

	x	y
1.	0.387,	0.610
2.	0.356,	0.494
3.	0.398,	0.452
4.	0.460,	0.540

Table 2: Typical values for fluorescent yellow-green finished base panel

Observation Angle Degrees	Entrance Angle			
	5	20	30	40
0.2	800	760	640	320
0.33	320	556	260	200
1.	28	26.4	24	16

(All values in cd/lux/m²)

PANEL CARRIERS :

Front: Panel carrier shall measure approximately 7.5" wide x 4" long. The panel carrier shall be constructed of (2) layers of 160 denier Cordura Nylon sewn together with properly finished edges and non-woven inter-lining. The panel carrier shall have the slide fastener side of a 7.5" #3 YKK interchangeable vislon zipper (or equal) sewn onto to top seam so that the zipper can be used to zip on the other side of the zipper track on the jacket. The lower back panel corners shall have an approximately 1" square of Power Hook (or equal), sewn approximately 1/4" from the edges. The Power hook squares shall match corresponding Power hook loop pieces on the yoke lining of the jacket. The front base panels shall be sewn to the front panel carriers with a stitch line going all the way around the base panel approximately 1/4" to 1/8" from the edge of the base panel. The base panel should be positioned as far down the panel carrier as practical.

Back: Panel carrier shall be constructed like the front carrier panels but shall measure approximately 16" long x 5" wide and using a 16" #3 YKK interchangeable vislon type zipper. The back base panel shall be sewn to the back panel carrier with a stitch line going all the way around the base panel approximately 1/4" to 1/8" from the edge of the base panel. The base panel should be positioned as far down the panel carrier as practical.

Titles: Various titles shall be available for personalization by division: each title must utilize the Euro-style font, be CAD-cut for uniform consistency and fabrication from GP430 Blue material (or equivalent), tough weather and solvent resistant tape designed to be fused on to high visibility base panels. All titles and lettering must be sized per Chicago Police Department Specifications, including any specialized units requiring special titles and /or designations. In order to ensure uniformity all titles must be pre-approved by Chicago Police Department Research and Development Division.

Collar: The collar shall be made of (2) piles of shell material with an interlining sewn to the top collar for stability and measure 3 3/4" high. The collar points shall be well shaped and symmetrical. There shall be a 7" nylon coil zipper opening on the under collar centered approximately 1" from the neckline and 2 1/2" from the collar edge for the drop-in hood.

Sleeves: The sleeves shall be two-piece, semi-modified dolman construction for complete freedom of movement. There shall be a black enameled eyelet located approximately 1/2" up from each cuff to allow for drainage. There shall be a 9" #3 nylon coil access zipper at the joining seams of the 2 under-sleeves located approximately 10" (size large) from the underarm seams to allow there interior access to sew on patches without perforating the waterproof liner. The shoulder shall have an inside facing on the sleeve side.

Cuffs: There shall be a cuff formed of (2) pieces of shell fabric approximately 1 5/8" wide at the bottom . Half of the cuff shall be elastic stretched and sewn with (2) threads. There shall be a cuff tab adjustment approximately 1 1/4" wide tapering to approximately 3/4" wide by 3" long with a female snap. The top half of the cuff shall be interlined and shall have 3 male snaps for cuff adjustment.

Epaulets: There shall be an epaulet centered at each shoulder starting approximately 1" from the neckline. The epaulets shall measure 7" long by 2" wide at the shoulder point, graduating to 1 3/4" at the narrow end . The epaulet shall be set with a cross-stitch 2" wide and shall have a 24 ligne enameled snap closure at the point.

Pockets: There shall be two 2-way hand warmer patch front pockets with inverted pleats, measuring approximately 7 1/4" long by 6 1/2" wide with flap closures. The pocket shall be interlined with a non-woven interfacing material. The hand warmer pocket shall be lined with a non-pill micro fleece for warmth and comfort. The pocket flap shall be attached to the front joining seam and shall measure 3 1/4" long by 7" wide and shall have mitered corners. There shall be (2) ligne 24 snap flap closures. The pockets shall be bar tacked at both the topsides and the hand warmer opening. There shall be an 8 x 3/4" set-in bag security pocket with a YKK vislon type zipper closure set 3/4" from the storm flap and 3/4" from the hand warmer pocket on both sides. The pocket shall be approximately 6 3/4" deep.

Bottom band: The front bottom band shall be constructed of (2) plies of shell fabric, finishing 2" wide and lined with a non-woven interlining. There shall be (2) ligne 24 oxidized male snaps on each side. Spaced approximately 1 1/2" apart, to attach the side vents closure tab when the zipper vent is worn open.

Back band: shall be constructed with heavy-duty elastic inserted between the folded shell fabric, stretched and stitched with two threads. A 4" by 1 5/8" tab of 2 plies of shell fabric with a ligne 24 female snap shall be provided to close the zipper vent when worn open. A corresponding brass oxidized ligne 24 male snap shall provide to fold the tab back when not in use.

Side vents: There shall be two 10" side vents with nylon coil zipper closures to allow access to duty weapons and other equipment items on either side, with a snap tab closure. There will be (2) brass enameled eyelets located above the side vents on each side to allow for water drainage. The sides vents shall be backed on the inside by a double fly closure of shell fabric. The closure shall start at the top of the zipper and each piece shall measure approximately 8 1/4" long x 2 1/4" wide. The flaps shall be held together by (2) velcro hook and loop squares placed at the top and the bottom of the double fly. Each square shall measure approximately 1" x 1".

Hood: There shall be a 3-piece hood constructed of shell fabric and lined with waterproof/ breathable lining that shall drop in between the shell and the lining at the collar. The hood shall be attached to the bottom of the zipper opening on the under collar. The under collar opening shall be approximately 1" from the neckline and 2 1/2" from end of the collar and close with a 7" nylon coil zipper. All hood lining seams shall be taped with 1" waterproof tape applied by the hot air method to prevent leakage. There shall be an elasticized draw cord, barrel locks and capped ends for hood adjustment inserted into the front of the hood.

Removable liner: The liner shall be a full body zip in/zip out liner. The liner color shall be constructed of 100% nylon 70 denier (106 x 88) nylon quilted to 3M Thinsulate type . The body shall be lined with a 100 % micro fleece (non pill).

Collar(liner): There shall be a 100% 1 x1 nylon stretch knit . There shall be a male snap centered at the neckline to attach the liner to the shell garment . There shall be (2) male snaps located at the bottom of the liner on each side with corresponding snaps sewn into the shell lining. There shall be (2) #5 YKK vislon type 17" zippers with over the top sliders that correspond to the facing zippers in the shell garment. The sleeves shall be constructed of 100% nylon / 70 denier 106 x 88 quilted back to back of 3M Thinsulate. There shall be a knit gusset located under each arm approximately 4" by 7 3/4". There shall be (2) male 24 ligne oxidized snaps at each sleeve bottom to correspond with the female snaps of the shell garment. The sleeves will have (2) vents approximately 4" long to accommodate the side vents of the shell garment. The bottom and cuff shall be finished with 100% nylon binding. There will be (2) inside pockets of shell fabric, one on each side measuring approximately 7" deep and 5 1/2" wide.

BARRIER MEMBRANE MATERIAL:

Membrane: The membrane shall be 2 layers and shall be 100% polyester 50 denier micro-fiber cloth, 72 warp and fill, with a nominal weight of 2.7 oz/yd². The yarn count shall be 104 x 2 yarns per inch. The bottom layer shall be 100% polyester non-porous film with built in hydrophilic molecular zones. Lining shall have a minimum following physical properties:

Moisture vapor transmission rate:

(G/m squared/24 hr)	500 Minimum	ASTM E 96-93 1/
Procedure B	4000 Minimum	ASTM E 96-93 1/
Hydrostatic Resistance (psi)	100 Minimum	FED-STD -191A 5512 3/

After 10 Laundry Cycles	No leakage	FED-STD -191A 5516
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After 10 Dry Clean Cycles	No Leakage	FED-STD- 191A 5516
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**Waterproof /Breathable Barrier Membrane
MUST MEET OR EXCEED THE FOLLOWING SPECIFICATION**

Property	Nominal Values (U.S. units)	Nominal Values (SI units)	
Finish Fabric Wt.	2.67 - 3.5 (Oz./yd squared)	92 - 120 (g/m squared)	ASTM D3776-96
Tensile Strength	Warp	30(Ibf)	135 N
	Fill	30(Ibf)	135 N
Trap Tear	Warp	8 Ibf	36 N
	Fill	8 Ibf	36 N

Snaps: All snaps throughout this garment shall be high compression nipple snaps.

Emblems: There will be one Chicago Police Department emblem sewn on the left sleeve, centered with the epaulet, 1" below the shoulder seam.

There will be one Chicago Flag emblem sewn on the right sleeve, centered with the epaulet, 1 1/4" down from the sleeve seam.

Sizes:

Small- 6 XL Regular

Medium- 6XL Longs

Small- 6XL Short

LABELS:

Manufacturer identification: Each manufacturer will affix its identification label to the back portion of the jacket and removable liner.

Care label: Each manufacturer will affix an instruction label to the jacket and removable liner for maintenance, care, and cleaning for the jacket.

Department Approved Label: Each manufacturer will position their respective label on the right inside lining of the garment . This label will state that the garment is approved for use by Chicago Police Department members.

**AUTHORIZATIONS/
RESTRICTIONS:**

Manufacturer Specification Guarantee/ Identification

Agreement: No manufacturer may suggest that their garment is an approved Chicago Police Department uniform/ equipment item without prior inspection of a completed sample and written authorization by the Director, Research and Development Division.

1. The **Antron Nylon** jacket manufactured under Uniform Specification number 10.01005 will be replaced with the current authorized Three-Season jacket on **01 January 2005**.
2. The **Antron Nylon** round crown cap manufactured under Uniform Specification no. 3.0116 will be replaced with the current authorized round crown cap on **01 January 2005**
3. The **Antron Nylon Trooper** cap manufactured under Uniform Specification no. 3.0117 will be replaced with the current authorized cap on **01 January 2005**.
4. A member using a current **Cordura** jacket that conforms to Uniform Specification numbers 3.1502A and 9161.173 is hereby informed that a wear-out period for the authorized garment will be ending on **01 January 2008**. At that time the current **Tactel Three Season** jacket will be the only authorized cloth jacket for use.
5. A member using the **Cordura** round crown cap manufactured under Uniform Specification No.3.0166 is hereby informed that a wear-out period for the authorized uniform item will be ending on **01 January 2008**. At that time the **Tactel** round crown cap under Uniform Specification No. 3.0166A, will be the only authorized field round crown cap.
6. A member using the **Cordura Trooper** cap manufactured under Uniform Specification No. 3.0177 is hereby informed that a wear-out period for the authorized garment will be ending on **01 January 2008**. At that time **Tactel Trooper** cap authorized under Uniform Specification No.1.0177A, will be the only authorized trooper hat.

Authenticated:



Philip J. Cline
Superintendent of Police

SPECIFICATION FOR STYLE SH3465C

The Chicago Police Department Standard Duty Jacket

Standard Graphic: The Standard Graphic shall conform to the following dimensions/sizes and lettering:

1) Rear Panel (see Figure A): Overall size - 4.626" x 16"

"CHICAGO" - 1.15" x 13"

"POLICE" - 1.73" x 12.98"

2) Front Panels (see Figure B): Overall size - 3" x 7"

"CHICAGO" - 1.15" x 6.3"

"POLICE" - 1.78" x 6.721"

Figure A:



Figure B:



